The Effectiveness Of Jigsaw Technique In Teaching Reading Towards Students’ Reading Skills
(An Experimental Study at the First Grade Students Of Madrasah Aliyah Mathla’ul Anwar
Pusat Menes In 2008/2009 Academic Year)

A THESIS
Submitted As a Requirement to Get Sarjana Pendidikan Degree Of
Mathla’ul Anwar University

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THE FACULTY OF TEACHING AND EDUCATION SCIENCE
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THE EFFECTIVENESS OF JIGSAW TECHNIQUE IN TEACHING READING TOWARDS STUDENTS’ READING SKILLS

(An Experimental Study At The First Grade Students of Madrasah Aliyah Mathla’ul Anwar Pusat Menes In 2008/2009 Academic Year)

A Research Paper

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ABSTRACT

ANONYMOUS : “The Effectiveness of Jigsaw Method in Teaching Reading Towards Students’ Reading Skills at The First Grade Students at Madrasah Aliyah Mathla’ul Anwar Pusat Menes in 2008/2009 Academic Year”

The main objective of teaching English is to develop students’ language skills in order to make them have ability in using it as a means of communication in their daily life. According to English curriculum, English teachers have to develop students fundamental skills; listening, speaking, reading, and writing. Most of students still have low competency in four skills and language components. English is difficult and boring lesson for them, especially in reading. One of its reasons is teachers’ skill and technique of teaching English. The writer thinks that one solution to solve the problem is that the English teacher should have an appropriate technique in teaching reading. One of technique is jigsaw technique. Jigsaw technique is the technique in teaching where the student work in jigsaw group and study together in each group to become an expert in their own group. From this point of view, the writer does the research entitled “The Effectiveness of Jigsaw Technique in Teaching Reading towards Students’ Reading Skills at The First Grade Students of Madrasah Aliyah Mathla’ul Anwar Pusat Menes in 2008/2009 Academic Year”.

In this research, the writer uses quantitative approach that based on the result of proposing item tests to respondents of the research. Meanwhile, the method which used in this research is experimental method, here the writer conducted test as an instrument of the research.

In this research the writer did through several steps to get the data. Firstly, the writer chose the first grade students of Madrasah Aliyah Mathla’ul Anwar Pusat Menes as population (134 students) also took 50 % from it (66 students) as sample randomly, 17 students from class X.A, 17 students from class X.B, 14 students from class X.C, 10 students from class X.D and 10 students from class X.E. the writer divides students as sample to two groups, they were 33 students as experimental class and 33 students as control class. Secondly, the writer taught reading using jigsaw technique in experimental class, while in the control class the writer taught using inquiry technique. The treatment was processed by a pre-test, treatment and ended by post test. It was done to know which one was more effective technique towards students’ reading skills. After that, the writer calculated and analyzed the data. The last step was reporting the result.

The result of post-test shows us that the mean at experimental class is higher than at control class. The result of calculation of the t-test shows that $t=6.88$ is higher that $t=1.67$ in 5% level significant. These tell us that teaching reading using jigsaw technique is effective to improve students’ reading skills. The research hypothesis is “there is effectiveness of using jigsaw technique in teaching reading towards students, reading skills”. From all data above, the writer concludes that his hypothesis is justifiable.
CURRICULUM VITAE

**ANONYMOUS** was born in Singapore, on 2 July 1985. His father is **Mr. ANONYMOUS** and his mother is **Mrs. ANONYMOUS**. As the fourth child from five children, he has three elder sisters and a young brother. He lives in Orchid Road Singapore.

The writer begun his study in SDN 2 Menteng in 1992 and graduated in 1998 and continued his study to SMPN 1 Bulungan in 1998 and graduated in 2001. After he graduated from SMPN 1 Bulungan, he continued his study to SMAN 1 Pandeglang and graduated in 2004. The writer is very interested to English so in 2004 he decided to take English program in Mathla’ul Anwar University to get his obsession to become an English teacher. And the writer has been studying there until now.
PREFACE

Grateful to Allah almighty, the lord of the universe, the creator of everything in this universe, peace and salutation must be given to the great messenger, Muhammad SAW, as the sources of inspirations for the people.

Thank to Allah , with his blessing, the writer has finished writing his research paper entitled “THE EFFECTIVENESS OF JIGSAW TECHNIQUE IN TEACHING READING TOWARDS STUDENTS’ READING SKILLS AT THE FIRST GRADE STUDENTS OF MADRASAH ALIYAH MATHLA’UL ANWAR PUSAT MENES IN 2008/2009 ACADEMIC YEAR”.

This research paper is submitted to the English department of Mathla’ul Anwar University Banten in partial fulfillment of the requirement for sarjana pendidikan degree. The reason of writing this topic is to know the effectiveness of jigsaw technique in teaching reading towards students’ reading skills.

The writer would like to express his deep gratitude to:

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Finally, the writer is fully conscious that this research paper is still far from being perfect. However, the writer still hopes that this research paper will be great importance in the enrichment of the knowledge of the students and the English teachers. Amen.

Pandeglang, 17th September 2009

The Writer
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CHAPTER I
INTRODUCTION

1.1 Background of The Problem.

English becomes important language in the world since it is used as international language, everyone recognizes that it has an important role in cooperating with others in this universe, English holds important part in human life and contributes to all aspects, such as; social, politic, culture, technology, economic, education, and so on.

The government considers that English as the first important foreign language in Indonesia should be learned at the school beginning from elementary school to university level. It stated in the guideline (GBPP Mulok, 1994: 103) “Bahasa Inggris sebagai bahasa asing di Indonesia berfungsi untuk menghantarkan dan mengembangkan ilmu pengetahuan, teknologi, budaya dan juga untuk menjaga hubungan baik antara bahasa-bahasa di dunia.” (English as foreign language in Indonesia has function for guiding and developing knowledge, technology, culture, and also keeping good relationship among languages in the world.) It is meant, in order that, Indonesian (students) should be prepared to face the globalization era with mastery English.

There are four English basic skills, to be able to communicate, they are listening, speaking, reading and writing. Reading holds the important rule because reading is one activity which can not be released from our live to search some information or knowledge from printed text. Thus, the students should have good reading skills.

In the fact most of students still have low competence in those skills and language components. For them English is difficult and boring lesson. And it makes students less
motivation to learn English especially at school. One reason is the technique in teaching English.

Teaching English needs some method which suitable with the purpose of learning to built up the motivation of students. “Teacher will not be able to do his task if he does not mastery any method of teaching which has been formulated by the psychologist and education scientist” (Syaiful Bahari Djamrah, 1996; 72)

There are a lot of methods in teaching language such as, discussion, role playing; number head together, story mapping and discovery, but sometimes the teacher doesn’t think whether it is matching to learning goals. So it makes the method useless.

In one class usually consists of lot of students which have different background and style in learning. Barbe and Swassing in Fasilitator Magazine (2004: 31) divide style of learning into three types; they are visual learners, auditory learners, and kinesthetic learners. So the teacher should give the solution how to get them all take a part in one class with the suitable teaching technique. Aronson says; “What is clear is that our society is moving toward increased diversity and children come to the classroom with as almost as many different experiences and expectations as there are children. They have different personalities, different skills, different abilities, different cultural backgrounds, different levels of self esteem and different emotional needs. All of these must be learned efficiently“ (basic jigsaw, http/jigsaw.com, 17 February 2009)

Therefore, the teacher should be able to divide students into some group to reach the learning goals in cooperative learning method. Cooperative learning method is cooperating method in efforts to help each other between two ore more, individual and group, group and
group in finishing the problem which is faced (Abdul majid:2007). Cooperative learning has some technique, they are; Stad, discussion, mind mapping, think pair and share, jigsaw, role playing etc.

In this research the writer focuses on the jigsaw technique in teaching reading. Brown (1994: 179) states “Jigsaw technique is 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 objective.”

The reason why he uses jigsaw technique is to give students more chance for students to discuss and to find some information in printed text. The writer assumes that jigsaw technique is suitable way to motivate students in reading text. By using jigsaw technique, they acquire basic knowledge. Then, they apply that knowledge in their expert groups to discuss the guiding questions. It also gives every student a chance to be an expert. They are forced to synthesize their previous discussion into something meaningful activities.

However, many students of senior high school often have difficulties and less of motivation in reading, especially in reading long text and they are still difficult to find the passage in the printed text. Lack of vocabularies is other problem of students to understand the passage; they invite the writer to be interested in analyzing jigsaw technique which can help the students each other in their own group, to complete their weakness in reading, as one of cooperative learning model.

They are as problem, how we motivate the students mastering reading well. So the writer is really interested in investigating “THE EFFECTIVENESS OF JIGSAW
TECHNIQUE IN TEACHING READING TOWARDS THE STUDENTS’ READING SKILLS AT THE FIRST GRADE STUDENT OF THE MADRASAH ALIYAH MATHLA’UL ANWAR PUSAT MENES IN 2008/2009 ACADEMIC YEAR”.

1.2 Identification of The Problem.

Based on the backgroung above, the writer identifies some question of something that influence students’ reading mastery.

1. Do some students have difficulties in comprehending their reading?
2. Is there any way to increase the students’ reading skills?
3. What is the appropriate technique of teaching reading?
4. How do the teachers teach reading using jigsaw technique?
5. How to apply jigsaw technique in class session?
6. How do the students tell when they use jigsaw technique in their reading activities?
7. How effectiveness teaching reading using jigsaw technique?
8. Can teaching reading using jigsaw technique increase students’ reading skills?

1.3 Limitation of The Problem

The writer limite the scope of the research on” the effectiveness of jigsaw technique in teaching reading towards the students’ reading skills, at first grade students of Madrasah Aliyah Mathla’ul Anwar Menes in 2008/2009 Academic year”.

1.4 The Formulation of The Research

Based on the limitation of the problem above, the writer formulates the research as follow; Is teaching reading using jigsaw technique effective towards the students’ reading skills?
1.5 The Aim of The Research

Based on limitation and statement of the problem, the research has purpose to know the effectiveness of jigsaw technique in teaching reading towards the students’ reading skills.

1.6 The Advantages of The Research

The investigation is very important for the writer, from this research the writer takes some advantages, such as;

1. To inform the English teachers how to increase the students’ reading skills
2. To introduce a technique to the students in reading activities using jigsaw technique
3. As the answer of the writer’s curiosity on the effectiveness of jigsaw technique in teaching reading towards the students’ reading skills
4. As a support for the theory, which states that jigsaw technique in teaching reading is an effective technique for students to comprehend the text.
CHAPTER 2
THEORETICAL BACKGROUND, ASSUMPTION, AND HYPOTHESIS

2.1 Theoretical Background

2.1.1 Definition of Reading

Reading is one activity in order to get the information from printed text. Tarigan said that reading is a process which done by the reader to get the massage or information from the author through his/her written. It means that reading is part of language process because in reading is occurred the communication between the reader and the text. Byrnes says “Reading is a transaction between the text and the reader”. And Harmer (1991: 190) defines reading as an exercise dominated by the eyes and the brain. The eyes receive messages and the brain then has to work out of the significance of these messages.

Furthermore Brown (2001; 264) states “reading is a process interrelated with thinking and with other communication abilities listening, speaking, and writing. Reading is the process of reconstructing from the printed pattern on the ideas an information intended by the author”. Meanwhile, Geoffrion and Geoffrion (1985: 11) define reading as follows:

Reading is the cognitive process of inferring meaning from the visual symbol commonly called print. Reading can assume many forms and serves a diversity of personal and social process. Reading is more closely tied thought and language that to motor or perceptual process. Training the mind, not eyes or hand learning reading.
In additional “reading process is the human cognitive process of decoding symbols or syntax for the purpose of deriving meaning (reading comprehension)”.

(https://www.wikipedia.com, 8th July 2009)

Based on the opinion above the writer concludes that reading is the reader’s activity in order getting information and comprehend from printed text using eyes and brain to understand what the writer thinks in his/her written.

2.1.2 The Principals of Teaching Reading

a. Reading is not Passive Skill

Reading is an incredibly active skill, to do reading successfully. The students have to understand the argument what the words means. See the pictures, the words are painting, understand the arguments if the students do not do this, and they only start surface of the text might be quickly forget it.

As an active skill, reading should be taught in creative ways to make the students comprehend entire the text and be able to respond the text by giving the argument based on the text after they read the text.

Solahudin (2008;19) states “Reading is not only ability in read, but ability in comprehend the text.” it means that read not only read the text word by word but read is activity where the reader has the purpose in reading to comprehend about the text that they read.

b. Student need to be engaged with what they are reading as with everything in lesson.
Students who are not engaged with reading text they are actively interested in what they are doing. The reading texts are not benefit for them. They are really fired up by the topic or the task. They get much more from what they are read. Here, Teacher needs to give the motivation to the student for reading the text, by telling them about the topic, and the purpose of reading so the student will be interested by the text, and they eager to read the text. Robertson and Acklam (2000; 19) states;

> We need to give students a reason to read. There is little point in asking the students just to read a text, for example. When native speakers read, they know what they are reading and why. There are different kinds of reading. For example, the way we find a number in a telephone book is very different from the way we read a newspaper. So the students need to be given some purpose for their reading.

From the explanation above the writer concludes that before teaching reading the student must be given some motivation and made them interesting by the text. So they will not interested by what they are doing but they all focus in reading.

c. **Student should be encouraged to respond to the content of what the reading text just not the language**

It is important for students to study reading text not just they use language. The members of paragraph, they contain and how many times they use relative clause but just as important if the student must give a chance to respond the massage. The student should allow expressing their felling about the topic.

One of the purposes of reading is to comprehend the text and respond the text after we have read by giving our opinion, telling the text material to the other or answer some of question based the topic of the text.
d. **Predicting is a major factor in reading**

When the students read the text they frequently have a good idea of content, book covers give us a hunt of what article are about, and our brain start up to predicting what we are going to read and the article process of reading is ready to begin. The teacher should give student “hunt” so that they can predict what is coming too. It will make them better and more engaged reader.

In real life, whenever we read anything, we know what the context is, we are aware of the situation, the location, the kind of conversation, for example. These factors affect our ability to understand and make sense of what we read. In class, it is necessary to introduce the students to the context before they read. The context can be elicited or prompted from earlier work, the course book, pictures, and discussions and so on. Without ‘setting the scene’ like this, the tasks can become unnecessarily difficult.

e. **Match the task to the topic**

We could give students what reading text the student are going to read. We need to choose good reading task. The right kinds of question, engaging and useful puzzle etc. the most interesting text can be under mind by asking boring and appropriate questions. The most common place can be made really exciting with imaginative and challenging task

After that the students are familiar with both the context and text, they can be given more detailed comprehension questions to answer. These questions will require the students to identify specific pieces of information and can be different types. For example:
• Comprehension  where did Jim go?
• True or False  Jim went to Russia
• Multiple choices  Jim went to
  a) Russia b) China c) Canada d) Romania

f. Good teacher exploit reading text to the full

Any reading of text is full of sentences, word, ideas, description etc. good teachers integrate the reading text into interesting class sequences, using the topic or discussion and further task using the language for study and later activities.

2.1.3 The Stages of Teaching Reading

William (1984: 29) stated that there are three activities involved in reading activity namely the pre, whilst, and post reading activities

a. Pre – reading

The aims of free reading activities are;

a. to introduce and arouse interest in the topic
b. to motivate learners by giving a reason for reading
c. to provide some language preparation for the text

b. Whilst – reading

According to William (1984: 30) the purpose of this phase they are:

a. To help understanding of the text structure
b. To help understanding of the writer’s purpose
c. To clarify text content

In whilst reading there is other type work, the comprehension exercise at the end of passage is one of the typical reading activities. At the pre text questions which
are given to the students they might be asked to find the answer to the question interested within the passage; completing diagram, making list, taking notes. Whilst reading activity is begin with a global understanding of the text and then more to smaller unties a paragraph- sentences, and words, the reason for this, that the larger the unites provide a context for understanding the smaller units.

c. **Post-Reading**

The purposes of post-reading are as follow;

a. To consolidate of reflect what has been read

b. To relate the text to the learners own knowledge, interest or views.

Post –reading activity include reaction to the passage and to whilst reading activity, example; the students say whether they like the text and find it useful or not.

### 2.2 Teaching Reading Techniques

The teacher should use the technique in implementing some method in teaching in order to achieving the teaching goal. “Technique is the way which is done by someone for implementing a method” Sanjaya (123:2006). They are some technique in teaching reading as follow;

#### 2.2.1 Reading aloud

Students take turns reading section of passage, play or dialog out loudly. At the end of each students turn, the teacher use gestures, pictures, realties, example, or other means to make the meaning of the section clear.

#### 2.2.2 Question and answer exercise
This exercise is conducted only in the target language. Students are asked question and answer in full sentences so that they practice with new words and grammatical structure. They have the opportunity to ask question as well as answer them.

2.2.3 Getting student to self-correct

The teacher of this class has the students’ self-correct by asking them to make a choice between what they said and alternative answer he supplied. There are, however, other ways of getting students to self-correct. For example, teacher might simply repeat what a student has just said; using a questioning voice to signal to the student that something was wrong with it. Another possibility is for the teacher to repeat what the student said, stopping just before the error. The students know that the next word was wrong.

2.2.4 Dictation

The teacher read the passage there times. The first time the teacher reads it at a normal speed. While the student just list. The second time he reads the passage phrase, pausing long enough to allow students to write down what they have heard. The last time the teacher again read at a normal speed, and student check there works.

2.2.5 The K-W-L-H Teaching Technique

The K-W-L-H teaching technique is a good method to help student’s active prior knowledge. It is a group intuition activity developed by Donna Ogle (1986) that serves as a model for active thinking during reading.
K- Stands for helping students recall what they know about the subject.

W- Stands for helping students determine what they want to learn

L- Stands for helping students identify what they learn as they read

H- Stands for how we can learn more (other sources where additional information on the topic can be found).

Students complete the “categories” section at the bottom of the graphic organizer by; asking themselves what each statement in the “L” section (what we learned) describe.

They use these categories and the information in the “H” section (how we can learn more) to learn more about the topic. Students also can use the categories to create additional graphic organizers. They can use the organizers to review and write about what they learned.

2.2.6 Story Mapping Technique

Story mapping technique is a technique in writing which student is lead to write the text as the series of some steps called story mapping.

Idol(1987) in Edward Steven Shapiro (1996:207) “Story mapping technique is the way of teaching where the students are thought to organize the story into specific parts, including the setting, problem, goal, action and outcome”.

2.2.7 Jigsaw Technique

Jigsaw was one of the earliest of cooperative learning method. In jigsaw, each student in a five to six member group is given unique information on a topic that the whole group is studying.
2.3 Developing Reading Skills

Heryani (2000: 9) states that there are several ways of gathering information from:

2.3.1 Skimming

Soedarsono (89) states that skimming is an action for taking main point or from something.

To skim is to read through a text quickly to find the main idea of the text.

Here are the types of exercises:

a. Finding out the gist of the text
b. What is the text about
c. Giving a suitable title
d. Distinguishing the main idea of each paragraph from the supporting details or finding out which paragraph a certain main idea is stated.

2.3.2 Scanning

Soedarsono (_:89) states “scanning is a reading technique to get an information without reads the others.”

To scan is to read through a text quickly to find specific information from the text, the types of exercise are:

a. Fill in the blank
b. Yes/no question
c. WH – question

2.3.3 Intensive Reading
The purpose of this kind of reading is to get more detailed meaning in the text. Intensive reading activity involves the activities of:

a. Making summaries; students make sentence a summary of each paragraph
b. Finding out detailed information (implicit or explicit)
c. Finding out finer points.

2.3.4 Extensive Reading

To do this kind of reading is not remember the text but to remember the general information and ideas as well as for pleasure. In other words we read without understanding all the meaning of unfamiliar words, for instance, reading short story, magazine, novel, etc.

2.4 Teaching Reading Using Jigsaw Technique

2.4.1 Definition of Jigsaw Technique

Libby Goodman (1990:108) states” jigsaw is a cooperative learning strategy first described by Aaronson in 1978”. It means that jigsaw is a part of kinds of cooperative learning models.

Maria brisk and Margaret M. Harrington (2000: 83) define” the jigsaw approach is a way for students to work cooperatively and help each other to learn new material. Students take an active role their learning as they teach other students what they have learned”. As a cooperative learning method, jigsaw has to consist of group member about five to six students in one group. Aronson in Slavin (1985:7) says “jigsaw was one of the earliest of cooperative learning method. In jigsaw, each student in a five –to six- member group is given unique
information on a topic that the whole group is studying”. Furthermore, in jigsaw every student is an essential piece for their jigsaw group because every student is an expert in their jigsaw group. According to Aronson in http/www.jigsawclassroom.com “just as in jigsaw puzzle, each piece–each student’s part is essential for the completion and full understanding of the final product. If each student’s part is essential, then each student is essential; and that is precisely what makes this strategy so effective”.

Jigsaw is a unique teaching technique where the student able to learn and teach each other and every student becomes an expert here. Slavin (1985; 175) says” the unique characteristic of jigsaw is that students are given portion of the total learning task master and then teach that segment to the other members of their team. Until all of the pieces of the learning “puzzle” are in place, meaningful learning cannot occur; hence, the name jigsaw”

Based the explanation above, the writer concludes that jigsaw technique is the teacher’s ways to reach the teaching goals where the student study in a groups (four to six members) and each student has personal task which has been tough to the others members as the expert.

2.4.2 The Rules of Jigsaw Technique

Jigsaw is one of cooperative learning strategy it means that in jigsaw the student must study in a group. Aronson in Slavin (1985) says “jigsaw was one of the earliest of cooperative learning method. In jigsaw, each student in a five –
to six-member group is given. Unique information on a topic that the whole group is studying.

The jigsaw is very simple to use. Here are the stages of how jigsaw occurs in the class according to Barbara Tewksbury in [http://serc.carleton.edu/31622](http://serc.carleton.edu/31622) (accessed July 20, 2009)

a. Divide the class into teams of three to five people.

b. Divide two to five different team assignments. The number of different assignments depends on how many teams you want to have, because each team will receive a different assignment. You might give teams different reading, different data sets, samples, maps or problems, different issues for discussion, different field sites, and so on.

c. With a small class, give a different assignment to each team. If there are four different assignments, there will be four teams. For a larger class, create several #1 teams, several #2 teams, and so on. Give all the #1 teams the same assignment, etc.

d. Unless you plan to give teams time to work during class, ask each student to prepare individually before class. One effective way to prepare students is to give them focus questions to accompany the assignment and require that students prepare written responses to those questions. If you do not do something like this, some students will not come prepared to class. Rather than asking students to prepare ahead of time, you can set aside time during class for students to work in teams to do the reading/analysis (this works if the reading/analysis is
short or involves equipment that is not accessible to students outside of class and *does* guarantee that all students do the reading or analyze the data. If there are several teams of the same number (*e.g.*, four #1 teams), each team should meet separately, not as a large group.

e. Give each team time in class to discuss the preparation and to develop a strategy for teaching the material to members of other teams. It is the responsibility of each team to make sure that all of its members understand the material thoroughly and are prepared to teach it. It helps to provide guidelines for what you mean by “teach“.

f. Do not assume that individual teams will head in the right direction without some guidance. You need to make sure that each team is prepared to teach a mixed group and that students will make the points that you want them to make. You or an assistant needs to check in with each team at least once during the discussion session to make sure that the team has not missed the boat. Be gentle and *listen* – nudge, do not pontificate. Resist the temptation to direct too strongly. As long as the team is on the right track and is prepared to address the main issue adequately, let them digress and explore. What strikes them as significant might open your eyes to something you have missed.

g. When all teams are ready, reassemble the class in groups. There should be enough groups so that each group has one member from each team. Odd numbers may mean that a few groups have one extra member. In a class of 64 with four different assignments, for example, there might
have been four team #1’s each with four people, four team #2’s each with four people, and so on. Each mixed group would have a #1, a #2, a #3, and a #4, for a total of four people. There would be 16 mixed groups in such a class.

h. Each member of the group will then teach the rest of the group whatever was discussed or prepared by his/her team. The rationale, of course, is that a person only really learns something well when he/she has to teach it to someone else. Each person in the group is responsible for learning from the others in the group.

i. Some type of individual assignment should result from the peer teaching effort, and students should have that assignment in mind as they work in their groups. A written assignment might involve comparing work done by a student’s own team with that done by a different team. Alternatively, an assignment might ask a student to take all of the information presented by each team and use it to address a new issue.

j. If the size of the class permits, evaluate students in the group setting. Sit in on a group session, and evaluate each person’s ability to teach the rest of the group. Fill out the evaluation form during the session so that students can have feedback immediately after class. This is a very useful tool for helping students improve, particularly if you outline clearly what your criteria are for assigning each level in your grading scale. Knowing that they could be evaluated at any time gives students
a real incentive to come prepared, and a carefully done evaluation
gives them suggestions on how to improve. It helps if you and several
student assistants can simultaneously evaluate several groups in order
to evaluate as many students as possible during a single session, but
you can evaluate one group at each session by yourself. In a larger
class, you simply won’t evaluate any individual as often. If you can
work out a way to evaluate everyone at every session early in the
course, however, you will see faster progress in students’ abilities to
teach one another.

k. Have each group complete a task that requires the group to bring all of
the pieces together to form the “picture”. This might be a comparison
of information from each team or it might be an entirely new task that
requires information from each of the teams to solve. **This is a crucial
aspect of the jigsaw.** Without a culminating group task, the exercise is
little more than four mini-presentations by individual students without
incentive for students to teach or learn from each other.

l. Bring everyone back together toward the end of the class, and ask
each group for its most important point. Make a list of main points on
the board, going around a second time to each group if people still
have points to make. Use the time to elaborate or to emphasize
important issues. You can be sure this way that you drive home the
most important points. This also serves to confirm for the students that
they have done a good job in recognizing the important points. If you
have student assistants, ask them for additional points. This is a way to give your student assistants credibility and also to have a “plant” in the audience in case (and it does happen) one of the important points is not raised by one of the groups. As an aside, keep careful track of those points, because, for one reason or another, students have missed them and will need different reading or direction the next time in order to catch the point, if it is indeed as important as you had originally thought.

Based on the steps of jigsaw method above, the writer can concludes that the important must to be done in jigsaw is divide the students into some group consist of five to six members and each members is given different task.

2.4.3 The Beneficent of Jigsaw

As a teaching technique jigsaw has some benefits as follows:

a. **Teacher is not the sole provider of knowledge**, in jigsaw every student is an expert and every student can be a teacher for teaching each other according to what they have learned. It is mean that teacher role is as counselor. Not the only one provider but the teacher is helped by the expert.

“Although the jigsaw assignment takes time in class, the instructor does not need to spend as much time lecturing about the topic. If planned well, the overall time commitment to using the jigsaw technique during class can be comparable to lecturing about a topic.”

b. **Efficient ways to learn**, jigsaw is one of effective teaching technique in teaching reading. Here the students do not need read a long text, even the story is composed by long text because in jigsaw every student has own piece task, so it will make the student faster in read and comprehend in reading.

“Students gain practice in peer teaching, which requires them to understand the material at a deeper level than students typically do when simply asked to produce on an exam”.


c. **Student take ownership in the work and achievement**, it is like in jigsaw puzzle every piece has own color. In jigsaw the students are claimed to responsible of their own task and they should be able explain and share what they have read to the other to organize be complete task.

d. **Students are held accountable among their peers**, after the students do their task (read) and comprehend it, they should back to their jigsaw group as a responsible expert and exchange the knowledge is gotten among them.

“Each student develops an expertise and has something important to contribute to the group.” [http://serc.carleton.edu/31622](http://serc.carleton.edu/31622) (accessed July 20, 2009)
e. **Learning revolves around interaction with peers**, every student is claimed to teach their peers in their group, in jigsaw they will be done exchange knowledge each other. So in the end of the learning process the student will get the complete information even they only read their own part.

“Each student also has a chance to contribute meaningfully to a discussion, something that is more difficult to achieve in large-group discussion.” [http://serc.carleton.edu/31622](http://serc.carleton.edu/31622) (accessed July 20, 2009)

f. **Students are active participant in the learning process**, in jigsaw technique each student participate and become an essential part in classroom because they should be responsible to do their task.

“Each student also has a chance to contribute meaningfully to a discussion, something that is more difficult to achieve in large-group discussion”. [http://serc.carleton.edu/31622](http://serc.carleton.edu/31622) (accessed July 20, 2009)

g. **Built interpersonal and interactive skills**, jigsaw is a cooperating teaching method where the student work in a group, so it will bring the student to make a relation, cooperate, and share each other for finishing their task

“Jigsaw encourages cooperation and active learning and promotes valuing all students' contributions”. [http://serc.carleton.edu/31622](http://serc.carleton.edu/31622) (accessed July 20, 2009)

### 2.4.4 The Stages Of Teaching Reading Using Jigsaw Technique
There are some steps of teaching reading using jigsaw technique;

a. The teacher divides the students become some group consist of 5 to 6 students and give number to each student

b. Each group is given a different text or different part of text

c. The students read and discuss the text and find some information in the text in their group

d. After each students comprehended the text, every student who has same number make a new group

e. The students teach each other in their new group as an expert

f. After the students got the complete information from their peers, teacher give an assessment to them individually

g. Teacher make a conclusion about the material

Yasin ET all (65:2004)

2.4.5 Teaching Reading Using Inquiry Technique

Inquiry technique is a teaching technique where the students study individually to get information in the material by their self, here the teacher don’t give the explanation about the material will be learned but it’s give to the student to solve by their selves. Yasin et all (2004:134) said that inquiry is a complex idea that means many things to many people in many contexts. And Sagala (2008:196) defines” inquiry approach is a teaching approach which tries to put the basic knowledge and develop science think way, this approach lets the students learn study individually, improve creativity and solve the problem”.

Based on Sagala (2008:197) there are five rules in using inquiry technique, there are;

1. Formulate the problem to solve
2. Make a hypothesis

3. Students search the information, data and fact needed to answer the hypothesis.

4. Generalization or make a conclusion

5. Apply the conclusion or generalization in new situation

According to the statement above, the writer concludes that in teaching reading using inquiry we should take some steps as follow;

1. The teacher should formulate the problem to solve in printed text form.

2. The students make a hypothesis about the text will be read by them

3. Students search the information, data and fact needed with read the text to answer the hypothesis individually.

4. Students make a conclusion about the information they gotten in reading.

5. The Student apply the conclusion or generalization in new situation with presenting their new knowledge

6. The teacher give some question as a test for them (student) according to the text they read

2.5 Assumption

Based on the problem above, the writer proposes assumption

a. Appropriate teaching method is very important to develop students’ reading skills.

b. Reading skills can be reached by cooperating and sharing by jigsaw learning group.

c. Jigsaw technique is considered a good teaching technique to increase students’ reading skills.
2.6 The Hypothesis of Research

According to Hatch and Farhady (1982: 3), “hypothesis means a tentative statement about the outcomes of research; it can also be assumed as a question that must be answered by design experiment of series of observation”.

Based on the theory and assumption above, the writer would like to formulate the hypothesis as follow:

\( H_0 \): Jigsaw technique is not effective to used in teaching reading towards the students’ achievement in reading skills

\( H_a \): Jigsaw technique is effective to used in teaching reading towards the students’ achievement in reading skills
CHAPTER III
RESEARCH METHODOLOGY

3.1 The Aim of The Research.

The aim of the research is to know the effectiveness of jigsaw technique towards students reading skills. The result of the analysis is to find the more effective technique in teaching reading.

3.2 Time and Place of The Research

This research conducts from March 2009 up to May 2009 and writer chooses Madrasah Aliyah Mathla’ul Anwar Pusat Menes as the place of his research. The writer conducts the first grade as the object of the research.

3.3 The Operational Definition of Variables

To avoid misunderstanding concerning the use of terminology in the title of this study, that” the effectiveness of jigsaw technique in teaching reading towards students’ reading skills”. The writer thinks it is necessary to explain each term used. The terms which are used in this study as follows;

a. Jigsaw Technique means the way of teaching where the students are divided into some group to help each other to read the text in their group as an expert.

b. The Students’ Reading Skills is the result of what students have studied after teaching and learning process in the form of ability in comprehend the reading text.

3.4 Variable and The Relationship Between Variables
In this research, the writer chooses quantitative research that includes two or more variables, here; the writer decides two variables of the research entitled “the effectiveness of jigsaw method towards students’ reading skills at the first grade students of Madrsah Aliyah Mathla’ul Anwar Pusat Menes in 2008/2009 academic year”.

This topic consists of two variables, independent and dependent variables.

3.4.1 **Independent Variable or X-Variable**

Referring to the topic of the research, the independent variable is “the effectiveness of jigsaw technique”.

3.4.2 **Dependent Variable or Y-Variable**

Referring to the topic of the research, the dependent variable is “students’ reading skills”.

3.4.3 **The Relationship Between Variables**

Reading is difficult skill in learning English. Therefore, in teaching and learning process of reading, it is hoped that the teachers have the ability on how to motivate students in order that they understand and comprehend the text which they are reading.

In the reading lesson, jigsaw technique can guide students to know and to understand what the text means in short time, even the text is long. Slavin in Crawford et all, 29:2005) says”jigsaw requires students to help each other in reading a text, listening to a presentation, or carrying out a group investigation”. In other hand, jigsaw method gives more opportunities for students to express their interest, so it can motivate them to gain goal as fast as possible.
3.5 Population and Sample

3.2.1 Population

According to Burn (1996:62), “a population is an entire group of people or object or events which all have at least one characteristic in common, and must defined specially and unambiguously”. Meanwhile, Fraenkle and Wallen (1996:479) state “a population is the group to which the research would like the result of a study to be generalization, it includes all individuals with certain specified characteristics”. The writer takes tenth year student of Madrasah Aliyah Mathla’ul Anwar Menes that consists of five classes with 134 students.

3.2.1 Sample

According to Burns (1996:63) “A sample is any part of population regardless whether it is representative or not.” Meanwhile, Fraenkel and Wallen (1990:481) states “sample is the group on which information is obtained, preferably selected in such a way that the sample represents the larger group (population) from which it was selected”.

Furthermore Arikunto (2002:134) states that if the subject of population less than 100, it’s better to take all of them. But if the subjects are more than 100 or large number of subjects, we can take 10% - 15% or 20% - 25% or more”.

Based on statement above, the writer takes 50% from the total numbers of population, 66 students, as the sample of his research. The samples are selected by using random sampling technique.

Table 3.1 The Total Number of Population
<table>
<thead>
<tr>
<th>No</th>
<th>Class</th>
<th>Number of students</th>
<th>Number of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>X.A</td>
<td>35</td>
<td>17</td>
</tr>
<tr>
<td>2</td>
<td>X.B</td>
<td>34</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>X.C</td>
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<tr>
<td>4</td>
<td>X.D</td>
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<td>5</td>
<td>X.E</td>
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<td>10</td>
</tr>
<tr>
<td></td>
<td>Total number</td>
<td>134</td>
<td>66</td>
</tr>
</tbody>
</table>

3.6 Method of the Research

There are some methodologies in writing a thesis, the writer focuses on a method as based for the arrangement of the analytical concept of this study. Method is the strategy of the research, mastering by the researcher for searching and analyzing the data and then researcher makes the conclusion. In additional method is the knowledge about the way to research the data that used by the researcher in solving the problem. As Arikunto (1998:20) “method is the way that held the researcher such as: experiment or non-experiment”. In this research, the writer uses the experimental method. Singarimbun (1987:6) says “experimental research is very compatible for testing certain hypothesis and aimed for knowing the causality relation research variable”.

According to the subject of this study, in teaching reading the writer uses jigsaw technique at the experimental class and inquiry technique at the control class.
In this case, the writer takes experimental method that will be used to know how effective jigsaw technique in teaching reading towards students’ reading skills.

3.7 The Procedures of the Research

The writer does the following procedures in collecting the data needed:

a. Teaching using jigsaw technique at experimental class
   a) presenting pre-test
   b) presenting jigsaw technique (treatment)
   c) presenting post-test
b. Teaching using inquiry technique at control class
   a) presenting pre-test
   b) presenting inquiry technique
   c) presenting post-test
c. Calculating the data
d. Analyzing the data
e. drawing conclusion and making the report

3.8 Technique of The Data Collection

There are several instruments can be used by researcher to get the data from the respondents. In this research, the writer uses test to measures the students’ reading skills as the instrument to get data. Arikunto( 2006:150) defines “test is the series of questions or exercises and other tools which are used for measure skills, knowledge of intelligence, ability or talent which is owned by individual or group”. There are some kinds of test such as; personality test, aptitude test, intelligence test, attitude test, and achievement test, etc.
To collect the data, the writer gives the achievement test to the sample of the research. The writer gives 13 questions for reading skills test to the students in the multiple choice form which four options. Each correct answer will be scored one and the false has no score. So the maximum total score will be 13. The provided time for test is 30 minutes.

3.9 **Technique of Data Analysis**

Before analyzing the data using T-Test, the writer also investigate the mean and standard deviation of the student reading skills by the formula as follows;

**a. Mean**

Surjono (1999; 64) states that “the mean is the total of the score divided by total the number of tested”. To find the mean of X variable, the writer uses the following formula according to Burns (1996:33):

\[
\bar{X} = \frac{\sum X}{N}
\]

Where

\( \bar{X} \) : Mean  \\
\( \sum X \) : The sum of the gain result  \\
( N ) : the number of score

**b. Standard deviation**

Standard deviation is the square of the variance. Riduan (2003:146) states “the standard deviation is a value which shows level (degree) group variation data or standard measure of deviation from its mean”.

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The formula of standard deviation, as follows:

\[ SD = \sum X^2 - \frac{\left(\sum X\right)^2}{N} \]

- SD = Standard deviation
- \(\sum X^2\) = the sum of gain result
- N = Number of sample

Arikunto (2006:311)

c. **The Formula of t-test is:**

\[
t = \frac{M_x - M_y}{\sqrt{\frac{\sum X^2 + \sum Y^2}{N_x + N_y - 2} \left(\frac{1}{N_x} + \frac{1}{N_y}\right)}}
\]

- M_y = mean of experimental class
- M_x = mean of control class
- N = number of sample
- X = deviation of x
- Y = deviation of y

Arikunto (2006:311)

d. **the degree of freedom:**

\[ df = (N_e + N_c - 2) \]

- df = degree of freedom
- N_e = the number of experimental group
- N_c = The number of control class

With the hypothesis statistic as follows:

If t-calculation > t-table: Ho rejected and Ha accepted
If t-calculation < t-table: Ho accepted and Ha rejected
CHAPTER IV
THE RESEARCH FINDING AND THE DATA ANALYSIS

4.1 The Description of The Data

In this chapter, the writer presents the result of the achievement test of the sample both experimental class and control class. Pre-test and post test are given in teaching tenses process, if at the experimental class is used jigsaw technique, but at the control class is used inquiry technique. The test results of two groups are compared to know how whether jigsaw technique is effective or not.

4.2 Data Analysis

The data of the tests are compared in each group. It is done to know the improvement. To make easy in analysis of collecting data, the writer adopts the following steps:

a. Put the score into table of data statistic
b. Put the score into the table of distribution frequency
c. Calculate the means of each group
d. Calculate the standard deviation of each group
e. Analyze the data and calculate them by using the formula of T-test

Here are the data of pre-test and post test scores of experimental class and control class.
Table 4.1

Table score of experimental class.

<table>
<thead>
<tr>
<th>No</th>
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<th>Post-test(Y2)</th>
<th>Gain(Y)</th>
<th>Y²</th>
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| Total score | ∑ 2271 | ∑ 2993 | ∑ 722 | ∑ 20150 |


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**TOTAL SCORE**  
\[ \sum 2091 \quad \sum 2256 \quad \sum 165 \quad \sum 2925 \]
4.3 Hypotheses Testing and Discussion Of The Research

4.3.1 The Mean of Experimental Class

\[ M_y = \frac{\sum Y}{N} \]

- \( M_y \): Mean of experimental class
- \( \sum Y \): The sum of the gain result of experimental class
- \( N \): The number of score

\[ = \frac{722}{33} \]
\[ = 21.87 \]

After calculated the data with the formula above, the mean of the experimental class is 21.87.

4.3.2 The Mean of Control Class

\[ M_X = \frac{\sum X}{N} \]

Where;

- \( \bar{X} \): Mean of control class
- \( \sum X \): The sum of the gain result of control class
- \( N \): The number of score

\[ = \frac{163}{33} \]
\[ = 4.93 \]
After calculated the data with the formula above, the mean of the control class is 4.93

4.3.3 The Standard Deviation of Two Classes.

a. Standard Deviation of Experimental Class

$$SD_y = \sum Y^2 - \frac{(\sum Y)^2}{N}$$

SD = Standard deviation

$$\sum Y^2$$ = the sum of gain result quadrant of experimental class

N = Number of sample

$$= 20150 - \frac{(722)^2}{33}$$

$$= 20150 - \frac{521284}{33}$$

$$= 20150 - 15796.48$$

$$= 45353.52$$  Arikunto (2006:313)

b. standard deviation of control class

$$SD_x = \sum X^2 - \frac{(\sum X)^2}{N}$$

SD = Standard deviation

$$\sum X^2$$ = The sum of gain result quadrant of control class

N = Number of sample
\[ t = \frac{M_x - M_y}{\sqrt{\frac{\sum X^2 + \sum Y^2}{N_x + N_y - 2} \left( \frac{1}{N_x} + \frac{1}{N_y} \right)}} \]

- \( M_y \) = mean of experimental class
- \( M_x \) = mean of control class
- \( N \) = number of sample
- \( X \) = deviation of \( x \)
- \( Y \) = deviation of \( y \)

Arikunto(2006:311)

\[ t = \frac{4.93 - 21.87}{\sqrt{\frac{2100 + 4353.52}{33 + 33 - 2} \left( \frac{1}{33} + \frac{1}{33} \right)}} \]

\[ t = \frac{-16.94}{\sqrt{\frac{6453.52}{64} \left( \frac{2}{33} \right)}} \]

\[ t = \frac{16.94}{\sqrt{100.84 \times 0.06}} \]
\[ t = \frac{16.94}{\sqrt{6.05}} \]

\[ t = \frac{16.94}{2.46} \]

\[ t = 6.88 \]

After knowing the T-Test formula value, the writer looks for the interpretation towards T-calculation or combined with the degree of freedom (df) of the sample as follows:

\[ df = (Ne + Nc - 2) \]

\[ = 33 + 33 - 2 \]

\[ = 64 \]

Df = degree of freedom

Ne = the number of experimental group

Nc = the number of control class

According to the data above, T-value is 6.88 and degree of freedom in this study is 64. In this case, the writer determines the t-critical value based on two tailed test. It is 1.67 on 5% level of significant. 1.67 < 6.88 means that t-value is higher than t-table on 5% of level significant. So that, Ha is accepted and Ho is rejected. In conclusion, the writer concludes that teaching reading using jigsaw technique is relative effective. Finally jigsaw technique is able to help student in improving their reading skills.
CHAPTER V
CONCLUSION, SUGGESTION, AND RECOMMENDATION

5.1 Conclusion

Reading has an important role in studying English. It is important for students to find some information and knowledge in printed text. Some of students have difficulty in reading a text. Therefore, it is needed a good technique or a right technique in teaching reading.

Jigsaw technique is one of a good technique in teaching reading. It helps student to comprehend the text more effective in short time, beside that, by using jigsaw technique students is given the chance become an expert for teaching each other in their group. Its expectation is students have a good achievement in reading skills. So that, the goal of teaching and learning process will be gotten well.

His research shows that students’ achievement in reading skills which the writer has conducted jigsaw technique in experimental class is higher than in control class. It is showed after he calculated the mean of experimental and control class and compare them, the writer determines the t-critical value based on two tailed test. It is 1.67 on 5% level of significant. $1.67 < 6.88$ it means that t-value is higher than t-table on 5% of level significant.

From the result of the research, we know that jigsaw technique is effective to used in teaching reading towards students’ reading skills.

5.2 Suggestion
After the writer conducted the research, he proposes the following suggestion, as follows:

1. English teacher should be able to create an interesting atmosphere in classroom by managing the class and using appropriate depends on student needs.

2. English teacher should be able to give motivation to his/her students in learning English, because the motivation is the most important factor in learning.

3. The English teacher should be more creative on assisting the students in learning English, especially in teaching reading.

4. Based on the research and its result which is satisfied, the writer suggest the English teacher to apply the jigsaw technique in teaching reading

5.3 Recommendation

In order to motivate students in reading, it is better for English teacher to divide jigsaw group randomly and each jigsaw groups should consist of various students (different social background, intelligent background, and gender)
BIBLIOGRAPHY

Arikunto, Suharsimi, 2006. *Prosedur Penelitian Suatu Pendekatan Praktik*, Jakarta; Rineka Cipta


Barbara Tewksbury, Detailed steps for using the jigsaw technique, http/serccarleton.edu/sp/ Pedagogy in Action. Library Jigsaws/ Jigsaw Steps/ (accessed on March 24, 2009)

Brisk, Maria and Margaret M. Harrington, 2000. *Literacy and Bilingualism A Hand Book for All Teacher*, Elburn; Lawrence


Majid, Abdul. 2007. *Perencanaan Pembelajaran*, Bandung; Rosada


