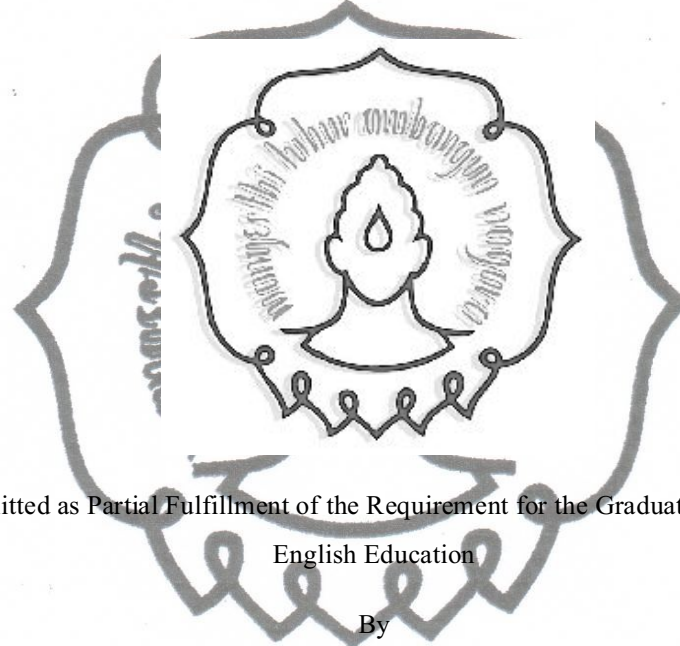THE EFFECTIVENESS OF INQUIRY-BASED LEARNING TO TEACH
READING VIEWED FROM THE STUDENT'S CREATIVITY

(An experimental Study at the Eighth Grade Students of MTs. Negeri Tuban

in the Academic Year of 2011/2012)

Thesis

Submitted as Partial Fulfillment of the Requirement for the Graduate Degree in

English Education

By

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SEBELAS MARET UNIVERSITY

SURAKARTA

2013

APPROVAL SHEET

THE EFFECTIVENESS OF INQUIRY-BASED LEARNING TO TEACH READING VIEWED FROM THE STUDENT'S CREATIVITY

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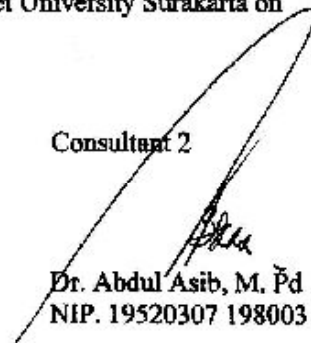
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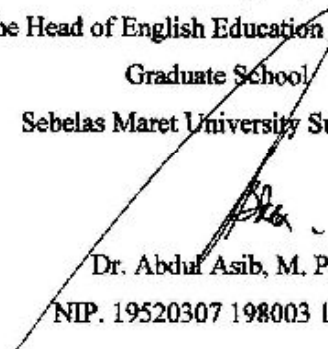
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LEGITIMATION FROM THE BOARD OF EXAMINERS

THE EFFECTIVENESS OF INQUIRY-BASED LEARNING TO TEACH READING VIEWED FROM THE STUDENT'S CREATIVITY

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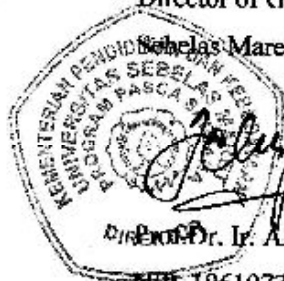on February 6th, 2013

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MOTTO

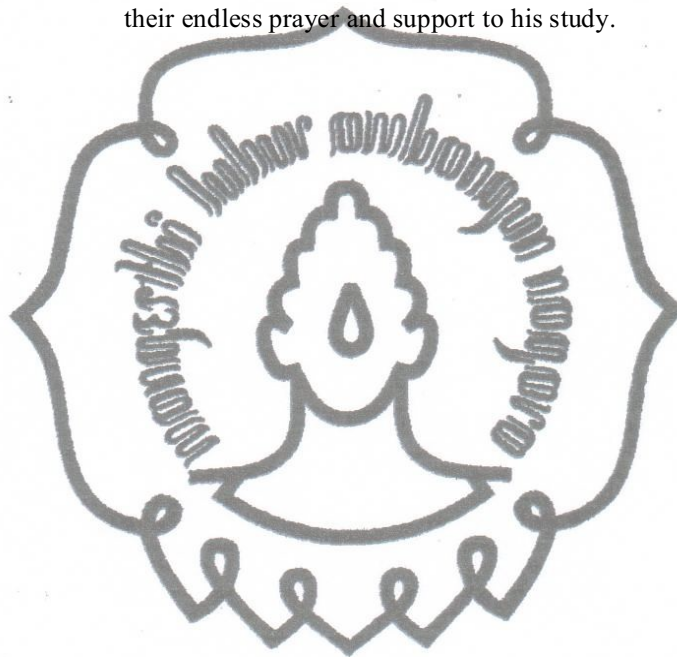What we get is what believe, what we believe is up to you

Life is a learning process

DEDICATION

This thesis is dedicated to:

His beloved mother and father, his beloved wife and his beloved daughters for their endless prayer and support to his study.

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ABSTRACT

Syofiyan Yunus, S891008091. *The Effectiveness of Inquiry-based Learning to Teach Reading Viewed from the Student's Creativity (An Experimental Study at the Eighth Grade Students of MTs. Negeri Tuban in the Academic year of 2011/2012)*. Thesis. Surakarta. English Education Department, Graduate School, Sebelas Maret University, 2012

Consultants: Dr. Ngadiso,M.Pd and Dr. Abdul Asib, M.Pd

This research is aimed at finding out whether: (1) Inquiry-based Learning is more effective than Lecture method to teach reading; (2) students who have high creativity have better reading skill than those who have low creativity; and (3) there is interaction between teaching methods and students' creativity in teaching reading

The research was conducted at MTs. Negeri Tuban in the academic year of 2011/2012 which consists of six classes. The research method used was experimental study. The sample was taken by using cluster random sampling. There are two classes used as samples, namely VIII-A as the experimental class taught using Inquiry-based Learning and VIII-B as control class taught using Lecture method. The data of the research were collected using two valid and reliable instruments, namely verbal creativity test and reading test. The verbal creativity test is used to classify students into two groups: the students who have high creativity and those who have low creativity. The reading test is used to know the students' reading skill. After the normality and homogeneity test were conducted, the hypothesis test was done. The data of reading test were analyzed by using multifactor analysis of variance 2 x 2 and Tukey test.

Based the data analysis, there are some research findings that can be drawn. First, Inquiry-based Learning is more effective than Lecture method to teach reading. Second, the students who have high creativity have better reading skill than those who have low creativity. Third, there is interaction between teaching methods and students' creativity in teaching reading. The effectiveness of the teaching method is influenced by the degree of students' creativity.

Based on the research findings, it can be concluded that Inquiry-based Learning is an effective method to teach reading to the eighth grade students of MTs. Negeri Tuban in the academic year of 2011/2012. Therefore, the use of Inquiry-based Learning is recommended in teaching reading in order to achieve a good result.

Key Words: Reading skill, Inquiry-based Learning, Lecture method, creativity.
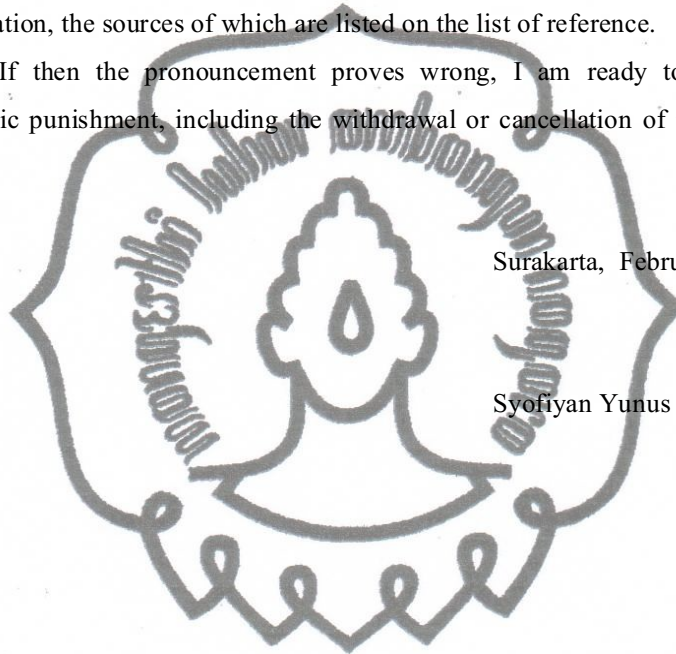
PRONOUNCEMENT

This is to certify that I myself write this thesis entitled "*The Effectiveness of Inquiry-based Learning to teach Reading Viewed from Students' Creativity*". It is not plagiarism or made by others. Anything related to others' works is written in quotation, the sources of which are listed on the list of reference.

If then the pronouncement proves wrong, I am ready to accept any academic punishment, including the withdrawal or cancellation of my academic degree.

Surakarta, February 2013

Syofiyan Yunus

ACKNOWLEDGMENT

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CHAPTER I

INTRODUCTION

A. Background of the Study

Being an international language, English is felt useful and becomes a very important tool for people in their life. English plays an important role in this era. Therefore, all people are eager to learn and master it both spoken and written. Indonesia is one of the countries which uses English in many aspects of life. Hence, English is one of the subjects which must be taught in nearly all levels of school.

The purpose of studying English based on the curriculum is to develop language skill in order that the students are able to communicate both spoken and written in certain literacy. In this case the students of Junior High School are hoped to communicate or parcitipate in creation of text in spoken or written in their daily life. In short, the students of Junior High School are expected to learn daily expression to accompany their action when they join class or interact whit their teachers and friends outside the class.

In learning English, there are four skills which are important to be learnt, namely: listening, speaking, reading and writing. Reading is one of the skills that should be mastered by students in all levels of school.

In *Ujian Akhir Nasional* at Junior High School, reading is one of the materials that are tested. The questions presented in this test are usually around understanding the meaning of texts and dialogues by deciding the topic of the text, finding information in detail, finding explicit and implicit

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information of the text, finding main idea, finding referents, synonim and antonym (*Panduan Materi Bahasa Inggris SMP/MTs Depdiknas*, 2006:178).

In Junior High School, the student's reading skills is very crucial thing. There are many materials that are presented in the form of many texts, namely: monolog and short functional texts. And the teacher can use the texts to teach many topics that should be discussed such as teaching grammar, vocabulary trought text, and teaching writing integrated with reading text.

Reading skill is also important to help the students to understand many tests that are usually used to measure their ability such as formative and summative test in which most of the questions are in the form of reading text. Besides, by reading the students can not only get information and knowledge but also widen their vocabularies.

The fact shows that many students do not like to read English text. It is because of their lack of vocabularies so they have difficulties to understand the text or to get meaning of the text. In this case there are probably three explanations that can be used to explain this condition. First, they may know the word but they do not know the menaing or they know the word orally but not in the written text. Second, they may know the passage but they do not understand the message of the passage. Third, the students external and internal reading factors influence their interest.

Reading factors are classified into two parts, namely: external and internal factors. External factors can be the place or location, the weather, and the time when the learning process happens. Internal factors can be classified in two groups. They are physiological factors and psychological factors. The

physiological factors include the function of certain organs that students have. The psychological factors can be the students motivation, interest, creativity, and intellegence.

Besides, there are some factors that influence someone's reading comprehension. First, it comes from inside the reader. It can be linguistics competence, interest, and motivation. Second, the factors can come outside the reader. It can be classified into two kinds, namely: the elements of the text and their reading environment (Johnson and Johnson, 2007: 16).

The student's of MTs Negeri Tuban have problem related to their reading skill. Many students do not like to read and find difficulties to get the message of the text when they join the teaching and learning process. They are passive in joining the reading class. They have low vocabularies that influence their interest in reading text. Therefore, their reading test result is poor. It can be seen from their result of the semester test that most of the students of VIII class got scores under the passing grade (72). The writer wonders what factors made the students reading skill poor.

The important factors that may affect the students ability in reading skill are teacher's techniques. There are some kinds of techniques that can be applied by the English teacher tom develop his/her students ability in reading skill. One of them is Inquiry Based Learning that is aimed to facilitate student-generated questions as the core part of the learning process. Learning has relevance because students drive the inquiry process. Inquiry-based Learning offers teachers another option for engaging students in the classroom while also preparing them to be learners throughout their lives. An

inquiry-based approach is not a strategy to employ as a "fluff" lesson. It is a student-driven method that promotes higher levels of thinking and problem-solving skills.

Inquiry based learning is supposed appropiate to develop students reading competence. Firstly, instructors or teachers act as coaches, guides, and facilitators who help learners at their questions or the thing they really care about. Secondly, students take control of their own learning and to apply knowledge, which they learn with understanding. Thirdly, inquiry is an active process, where progress is assessed by how well students develop experimental and analytical skills. Inquiry is a general process that has been done by human being in order to find the truth (Trianto, 2007: 135). According to Gulo as quoted by Trianto (2007: 135) the inquiry is series of teaching and learning process that involves all students ability maximally to search something logically, critically, and systematically. He explains that inquiry is derived from questions, hypothesis, collecting and analyzing data, and the last is making conclusion. The process of inquiry is started by delivering questions/problems. The teachers delivers some questions to the students to lead them to get the problem presented. The orientation of inquiry based learning is teacher seldom tells but often asks questions.

Questioning plays a crucial role in both the teaching and learning acts associated with the inquiry model of learning. This is so because by asking questions, the teacher assists the students in using his mind and attempting to understand the topic (Sund, 1993: 110). After delivering the questions,

teacher leads the students to find the answer. The next step is collecting the answer and the last is making conclusion based on the answers.

Meanwhile, the teacher tends to use lecturing in teaching and learning process in the class. Lecturing is a method of teaching by which the teacher gives an oral presentation of facts or principle (Dickens, et al. 1988: 8). In lecturing, the teacher talks more or less continuously to the class. The class listens, takes notes of the facts and ideas worth remembering, thinks over them later; but the class does not converse with the teacher. The teacher is more active and the students are passive so the information given tends to be forgotten quickly. Therefore, lecturing is often contrasted to active learning.

The study wants to demonstrate that creativity also has a substantial effect on the quality of the learners. According to Franken (1993: 396) creativity is the tendency to generate or recognize ideas, alternatives, or possibilities that may be useful in solving problems, communicating with others, and entertaining ourselves and others. Creativity is the ability to think up and design new inventions, produce works of art, solve problems in new ways, or develop an idea based on an original, novel, or unconventional approach. Creativity is the ability to see something in a new way, to see and solve problems no one else may know, and to engage in mental and physical experiences that are new, unique, or different. Creativity is a critical aspect of a person's life, starting from inside the womb onward through adulthood.

Creativity simply refers to the process of being imaginative and innovative. It is the ability to create something new that goes beyond ordinary modes of thought. Studies conducted by McCabe (1991: 116) proved that

academic achievement and creativity are related significantly. Nanda, Arti, and Pal (1994: 15) report that highly creative students possess better academic achievement. They state that the role of creativity and extensive reading on achievement in English is significant. Reading sharpens insight and sight, widens sympathies and experiences and provides occasions for the exercise of judgement about human beings and their conditions. A life-long relationship with the printed material will help a person in every circumstance throughout his or her life. So, love of reading should be inculcated among children right from the beginning of education. Good education, proper care and provision of opportunities for creative expression inspire the creative mind. Opportunities to express creativity may create love in the minds of student towards learning English language. Teachers can make their classes more interesting by assigning creative tasks, and thereby ensuring the co-operation of students. Open ended questions and group activities should be incorporated in the classroom activities. Teacher may try to adopt different teaching methods, instead of sticking on particular method.

B. Identification of the problem

Based on the background of the study, there are many problems that arise.

The problems can be identified as follows:

1. Why do the students have low reading skill?

2. What factors cause low reading skill?

3. Are the students interested in learning English?

4. Are the students interested in learning reading?

5. Is Inquiry-based Learning more effective to teach reading?

6. Does the students creativity influence their reading skill?

7. Does Inquiry-based Learning make the students interested in learning reading?

C. Problem Limitation

It is impossible to answer all the problems. Therefore, the writer only limits the problems of the research which are supposed to influence the students reading skill namely: the method used by the teacher and the students creativity.

D. Problem Statements

From the background of the study, problem identification, and problem limitation above, the writer formulates the problems of the study as follows:

1. Is Inquiry-based Learning more effective than Lecturing to teach reading to the eighth grade students of MTs Negeri Tuban in the academic year of 2011/2012?

2. Do the students who have high creativity have better reading skill than those who have low creativity of the eighth grade students of MTs Negeri Tuban in the academic year of 2011/2012?

3. Is there any interaction between teaching methods and students creativity to teach reading to the eighth grade students of MTs Negeri Tuban in the academic year of 2011/2012?

E. The Objective of the study

This research is aimed to know the influence of teaching methods and the students creativity on the students reading skill. This research is particularly proposed to know whether or not (1) inquiry based learning is more effective than lecturing method to teach reading to the second grade students of MTs Negeri Tuban in the academic year of 2011/2012; (2) The students who have high creativity have better reading competence than those who have low creativity of the second grade students of MTs Negeri Tuban in the academic year of 2011/2012; (3) There is an interaction between teaching methods and students creativity to teach reading to the second grade students of MTs Negeri Tuban in the academic year of 2011/2012.

F. The benefit of the study

It is hoped that the study will be useful for:

1. Students

   After the research, the writer hopes that the students can apply Inquiry-based Learning in their study to improve their reading skill and help them become creative and better learner.

2. Teacher

   This study can give contribution to other teachers to innovate learning strategy especially Inquiry-based Learning, so that they can increase both teaching-learning quality and the students learning achievement.

3. Researcher

   It will be starting point in using Inquiry-based Learning to conduct further study about teaching and learning English, especially by applying Inquiry-based Learning in every classroom activity.
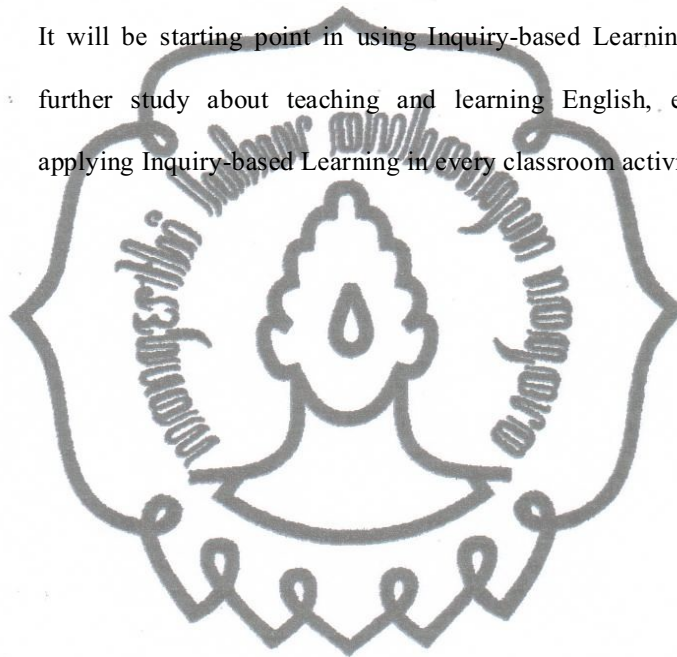
CHAPTER II

REVIEW OF RELATED LITERATURE

A. Reading

1. Definition of Reading

There are some definitions of reading. First, reading is the ability of an individual to recognize a visual form, associate the form with a sound or meaning acquired in the past, and on the basis of past experience, understand and interpret its meaning (Kennedy, 1995: 5).

Another definition is stated by Stanferr who states that reading is a mental process requiring accurate word recognizition, ability to call to mind particular meanings, and ability to shift or reassociate meanings (Stanffer in Petty and Jensen, 1987 : 208).

According to Anderson, et al., (1985), reading is the process of constructing meaning through the dynamic interaction among: (1) the reader's existing knowledge; (2) the information suggested by the text being read; and (3) the context of the reading situation.

In addition, Hudgson in Kamidjan (1996: 67) cites that reading is a process that is done and used by the reader to get message and information that is obtained by the writer through written form.

Meanwhile, according to Harris (1962: 9) reading is the meaningful interpretation of printed or written verbal symbols. It also involves sensing, perceiving, achieving meaning, learning and reacting in a variety of ways.

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Furthermore, he also explains that the sense of reading starts with focusing of two eyes so that they center on particular symbols.

A good reading competence requires many components. The students have to have some indicators that can indicate their reading competence such as : understanding reference in the reading text, understanding main idea, understanding kinds of paragraph development, understanding the tone (of emotion) of the text, understanding vocabulary, understanding logical inference, distinguishing between general idea and topic sentence, making accurate prediction, and making restatement (Bermuister, 1974: 83).

Rosenshine says that reading comprehension commonly entails 7 skills. They are: recognizing the words in the context, identifying main ideas, recognizing the sequence, decoding details, drawing inferences, recognizing cause and effect and comparing and converting. Being able to state the main idea of what has been read is one the most important comprehension skills (Rosehshine in Dupuis and Askov, 1982: 186).
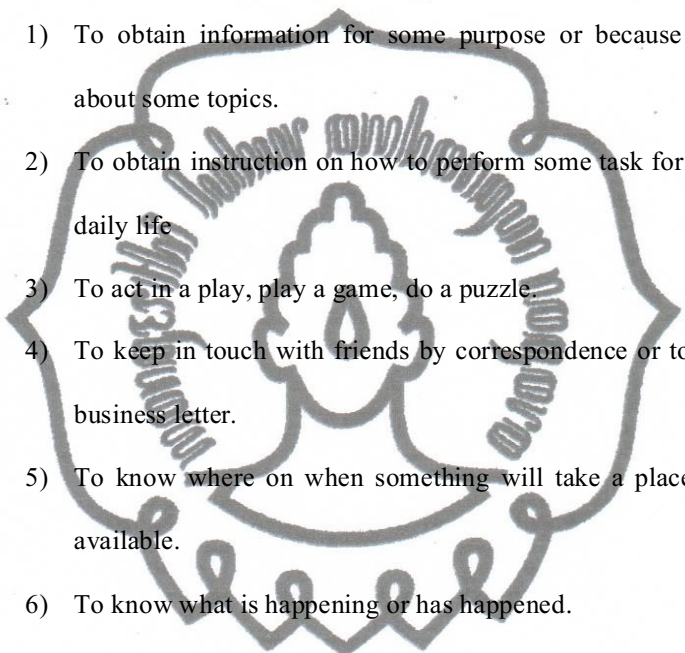
2. Reading Skill Purposes

Reading skill is a variant skill in which there is different types of reading that correspond to many different purposes we have for reading. Reading skill includes deducing meaning of unfamiliar lexical items, identifying main points, understanding explicitly stated information, and extracting salient points to summarize.

In Junior High School, reading skill is very important. Reading is one of the materials that are tested. The questions presented in this test are usually around understanding the meaning of texts and dialogues by deciding the topic

of the text, finding information in detail, finding explicit and implicit information of the text, finding main idea, finding referents, synonym, and antonym (*Panduan Materi Bahasa Inggris SMP/MTs Depdiknas,* 2006: 178).

River and Temperley in Nunan (1983: 33) suggest that the second language learner will want to read, as follows:

1) To obtain information for some purpose or because we curious about some topics.

2) To obtain instruction on how to perform some task for the work or daily life

3) To act in a play, play a game, do a puzzle.

4) To keep in touch with friends by correspondence or to understand business letter.

5) To know where on when something will take a place or what is available.

6) To know what is happening or has happened.

7) For enjoyment or excitement.

3. Micro and Macro Skills for Reading

Reading comprehension involves some skills that can indicate the students' competence in having good reading skill. Brown (2003: 187) states that there are seven micro-skills and seven macro-skills for reading comprehension.

a. Micro-skills :

1) Discriminating among the distinctive graphemes and orthographic patterns of English

2) Retaining chunks of language of different lengths in short-term memory

3) Processing writing at efficient rate of speed to suit the purpose

4) Recognizing a core of words, and interpret word order patterns and their significance

5) Recognizing grammatical word classes (noun, verb, dc), system (e.g: tense, agreement: pluralization): patterns, rules, and elliptical forms.

6) Recognizing that a particular meaning may be expressed in different grammatical forms.

7) Recognizing cohesive devices in written discourse and their role in signaling the relationship between and among clauses.

b. Macro-skills:

1) Recognizing the rhetorical forms of written discourse and their significance for interpretation

2) Recognizing the communicative functions of written texts, according to form and purpose

3) Inferring context that is not explicit by using background knowledge

4) Inferring links and connections between events, ideas, supporting ideas, etc, deduce causes and effects, and detect such relations as main idea, supporting idea, new information, given information, generalization and exemplification.

5) Distinguishing between literal and implied meanings

6) Detecting culturally specific references and interpret them in a context of the appropriate cultural schemata.

7) Developing and use a battery of, reading strategies such as scanning and skimming, detecting discourse markers, guessing the meaning of words from context, and activating schemata for interpretation of texts (Brown, 2003: 188)

In relation to what Brown states, here are sub skills that can also be used:

1) Recognizing the script of a language

2) Deducing the meaning of unfamiliar lexical items

3) Understanding explicitly stated information

4) Understanding conceptual meaning

5) Understanding the communicative values of sentences and utterances

6) Understanding relations within the sentence

7) Understanding relations between sentences through grammatical and lexical cohesive devices

8) Interpreting text by going outside it

9) Identifying main points in a discourse

10) Extracting salient point to summarize

11) Basic reference skills (contents, index, abbreviations, ordering)

12) Skimming

13) Scanning, and

14) Transcoding written information to tabular or diagram form and

vice versa

Based on the description above, it can be concluded that reading is the ability of an individual to recognize a visual form (written text) to find and interpret its meaning: to find main idea/topic sentence, to find the topic of the text, to find information in detail explicitly / implicitly, to find the words meaning, and to find referents.

4. Approaches to Reading

According to Nuttall (1996: 16-17) there are two approaches to reading: a top-down approach and a bottom-up approach.

a. The top-down approach

The top-down approach is the approach to reading in which one can make predictions based on the schemata he/she has acquired-to understand the text. This kind of processing is used when one interprets assumptions and draws inferences. He/she makes conscious use of it when he/she tries to see the overall purpose of the text, or get a rough idea of the pattern of the writer's argument, in order to make a reasoned guess at the next step. This approach might be compared to an eagle's eye view of the land cape. From a great height, the eagle can see a wide area spread out below; it understand the nature of the whole terrain, its general pattern and the relationships between various parts of it, far better than an observer on the ground. A reader adopts an eagle's eye view of the text when he considers it as a whole and relates it to his own knowledge and experience. This enables him to predict the writer's

purpose, the likely trend of the argument and so on, and then use this framework to interpret difficult parts of the text. The top-down approach gives a sense of perspective and makes use of all that the reader brings to the text: prior knowledge, common sense, etc, which have sometimes been undervalued in the reading class.

Shortly, when one interprets a certain kind of text using the top down approach, he/she considers the text as a whole and deals it with his/her schemata. So, he/she is able to predict what the writer intends and this leads him/her to understand difficult parts of the text.

b. The bottom-up approach

The bottom-up approach is the approach to reading in which the reader builds up a meaning from the black marks on the page : recognizing letters and words, working out sentence structure. One can make conscious use of it when the initial reading leaves him confused. Perhaps he cannot believe that the apparent message was really what the writer intended; this can happen if his world knowledge is inadequate, or if the writer's point of view is very different from his own. In that case, one must scrutinize the vocabulary and syntax to make sure he has grasped the plain sense correctly. Thus bottom-up processing can be used as a corrective to 'tunnel vision' (seeing things only from one's own limited point of view). One's image of bottom-up processing might be a scientist with a magnifying glass examining the ecology of a transect-a tiny part of the landscape the eagle surveys. The scientist develops a detailed understanding: of that one little area (which

might represent a sentence in the text); but full understanding only comes if this is combined with knowledge of adjacent areas and the wider terrain, so that their effects on one another can be recognized. In other words, bottom-up and top-down approaches are used to complement each other.

The bottom-up approach is used when one is not sure of understanding the message in the text because of lack of knowledge and the difference of perspective between his own and the writer's. in this ease one must examine the vocabulary and syntax thoroughly to ensure that he understands the text fully.

5. The Interaction of top-down and bottom-up processing

Although logically one might expect that he ought to understand the plain sense if he wants to understand anything else, in practice a reader continually shifts from one focus to another, now adopting a top-down approach to predict the probable meaning, then moving to the bottom-up approach to check whether that is really what the writer says. This has become known as interactive reading. Both approaches can be mobilized by conscious choice, and both are important strategies for readers.

In order to be able to understand or interpret the text comprehensively, both top down and bottom up approach can be used to complement each other.

6. Reading Strategies

Brown (2003: 188-189) proposes ten strategies for reading comprehension. They are as follows:

a) Identifying the purpose in reading

b) Using graphemic rules and pattern to aid in bottom-up decoding (especially for beginning level learners)

c) Using efficient silent reading techniques for relatively rapid comprehension (for intermediate to advanced levels)

d) Skimming the text for main ideas

e) Using semantic mapping or clustering

f) Scanning the text for specific information

g) Guessing when you aren't certain

h) Analyzing vocabulary

i) Distinguishing between literal and implied meanings; and

j) Capitalize on discourse markers to process relationship

In this relation, Grabe and Stoller (2002: 16) also propose sample reading strategies, they are as follows:

a) Specifying a purpose for reading

b) Planning what to do/what steps to take

c) Previewing the text

d) Predicting the contents of the text or section of text

e) Checking predictions

f) Posing questions about the text

g) Finding answers to posed questions

h) Connecting text to background knowledge

i) Summarizing information

j) Making inferences

k) Connecting one part of the text to another

l)   Paying attention to text structure

m) Rereading

n) Guessing the meaning of a new word form context

o) Using discourse markers to see relationships

p) Checking comprehension

q) Identifying difficulties

r) Taking steps to repair faulty comprehension

s) Critiquing the author

t) Critiquing the text

u) Judging how well objectives were met; and

v) Reflecting on what has been learned from the text

A key point of good reading means building framework for connecting words to thought. Another point of view of how to improve reading comprehension is that the purpose or reading is to link ideas on the page to what one has already known. Pouring words of text into one's mind is like pouring water into his hand if there is nothing known about a subject, he doesn't hold much. Similarly, if one likes sports, then reading the sports page is easy. He has a framework in his mind (or reading, understanding and storing information).

Reading comprehension requires motivation, mental frameworks for holding ideas, concentration and good study techniques. Here are some suggestions: (1) Develop a broad background (Read newspaper, magazines and books to broaden background knowledge. Be interested in world events); (2) Know the structure of paragraphs (Paragraphs that have a beginning, middle

and end are good construction. Often, the first sentence will give an overview that helps provide a framework for adding details. Also, look for transitional words, phrases or paragraphs that change the topic); (3) Identify the type of reasoning (Does the author use cause and effect reasoning, hypothesis, model building, induction or deduction, systems thinking?); (4) Anticipate and predict (Trying to anticipate the author and predict future ideas and questions are realty smart readers' ways. If it is right, this reinforces the understanding. If it is wrong, adjustment can be made quicker); (5) Look of the method of organization (Is the material organized chronologically, serially, logically, functionally, spatially or hierarchical?); (6) Create motivation and interest (Preview material, ask questions, and discuss ideas with classmates. The stronger interest, the greater comprehension); and (7) Pay attention to supporting cues (Study pictures, graphs and headings, read the first and last paragraph in a chapter, or the first sentence in each section).

7. The Reading Process

The first point to be made about the reading process is reading comprehension. Knowledge is the basic element for comprehension. It means that it is relating what one doesn't know, or new information, to what one already knows. For example : one already knows the word 'animal', so if there if a word denoting the kind of animal like dog, cat, chicken, bird, etc, one can imagine those features. To draw new information from a page of script or print, one must have learned to identify the categories and relationship represented in the visual forms on that page (Simanjuntak, 1988: 4).

Reading is simply one of the many ways in which human beings go about their basic business of 'making sense of the world' (Eskey in Simanjuntak, 1988: 10). The point of all this for the reading teacher is that no matter how well a student may know a language, she cannot read in that language with good comprehension if the subject of the text is one she doesn't know and therefore can have no real interest in. Comprehension is always directed and controlled by individual's need and purposes.

Reading processes that are activated when one reads are: (1) Lower-level processes which consist of lexical access, syntactic parsing, semantic proposition formation, and working memory activation; (2) Higher-level processes which include text model of comprehension, situation model of reader interpretation, background knowledge use and inferrencing, and executive control processes. Lexical access is calling up of the meaning of a word as it is recognized. A fluent reader is able to take in and store words together so that basic grammatical information can be extracted (a process known as syntactic parsing). Semantic proposition formation is the process of combining words meaning and structural information into basic clause-level meaning units. The three processes above will work together in working memory that is being used at a given moment (working memory activation). The most fundamental higher-level comprehension process is the coordination of ideas from a text that represent the main points and supporting ideas to form a meaning representation of the text (a text model of reading comprehension). The reader will begin to interpret the information from the text in tennis of his or her own goals, feeling, and background expectations. This reader's

interpretation is called the situation model of reader's interpretation. Background knowledge and inferrencing take on greater importance for a fluent reader. Executive control processing is the abilities to monitor comprehension and strategies needed (Grabe and Stoller, 2002: 20-28).

8. The Comprehension Gap

There are three specific problems identified in reading; one at the purely lexical level, one at the lexical-syntactical boundary, and one involving lexical-rhetorical markers. The three problems above are:

a) The purely lexical level deals with the one-word, one-meaning problem. Since the EFL student does not always acquire the full range of meanings that a given word may have, he may always assign a single meaning to that word and he may therefore misinterpret that word when it appears in a context where a different meaning is called for, for example: a content where the word 'tolerance' clearly refers to the strength of some material, not to the absence of 'prejudice'.

b) The lexical-syntactical boundary deals with the heavy noun phrases. It is a sequence of words functioning as a single complex nominal, which obscures the logical-syntactical relationships between them, for example, the phrase of 'Such treatments as holding cells in buffer after irradiation before placing them in nutrient agar plates' means that someone holds the cells in buffer someone has irradiated them but before someone places them on nutrient agar plates.

c) Lexical-rhetorical markers deal with the problem of assigning proper meanings to lexical cohesion markers which signal certain logical relationship between parts of the text as a coherent piece of discourse. For example: One subject, had no idea that the sentence connector 'thus' signals anything different from the conjunction 'and' (Simanjuntak, 1988: 10-11).

9. Recognizing relating sentence parts

This is the ability of retrieving some of the parts of the sentence from elsewhere in the text. A sentence that includes reference, substitution or ellipsis, does not itself express all the information required to convey its message. It means that the reader needs to fill the gap by referring to other parts of the text, identifying the missing information and using it to supplement the information actually expressed. When one read a paragraph, it is often to find the words like he, our, this, those, then, one, smaller, same, such, additional, other, etc'. When such words are used, they signal to the reader to find the meaning elsewhere in the text. In using such words, the writer avoids repeating what he has mentioned before, it is called interpreting or identifying references (Nuttal in Simanjuntak, 1988: 109).

In conclusion, reading is the cognitive process to get meaning (the message) from the text, which involves activating prior knowledge (schemata theory), guessing, predicting, etc. Reading skills include finding information in detail explicitly/implicitly, finding the topic of the text, finding main idea/topic sentence, finding word meaning based on the context, and finding referents.

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B. Inquiry-Based Learning

1. The Meaning of Inquiry-Based Teaching and Learning

Inquiry comes from the English word "inquiry" which can be interpreted as a process of asking questions and finding out the answers to scientific questions posed. Scientific questions are questions that can lead to the question of investigation of the object. In other words, inquiry is a method of student-centered teaching that encourages students to investigate problems and find new information. Inquiry method is a method of learning that seeks to instill the basic of scientific thinking on self-esteem, so that in the learning process more student self-study, develop creativity in solving problems. According Gulo as quoted by Trianto (2007: 18) states, that the inquiry not only develops intellectual abilities, but all the potential that exists, including emotional development.

Inquiry is a core pat of the contextual based learning activities. Knowledge and skills students are expected to be obtained are not the result given set of facts, but the result of finding themselves. Teachers must always be ready to provide assistance to students in carrying out the interaction, express arguments, gather evidence, and direct the discussion (Egatha 2010: 18).

Inquiry-based learning is a learning process through questions generated from the interests, curiosities, and perspective/experiences of the learner. When investigations grow from our own questions, curiosities, and experiences, learning is an organic and motivating process that is intrinsically enjoyable (Graesser, et al. 2007: 58). Inquiry based learning is a technique

whereby a teacher involves students in the learning process through focusing on questions, through problem-solving activities, and the use of critical thinking. Some students prefer this type of learning approach because when they become involved they understand concepts better (Graesser, et al. 2010: 58).

Peixotto (1997:1) defines inquiry-based teaching as "a perfect complement to a child's natural curiosity about the world and how it works". The worlds of inquiry, curiosity, and wonder should be alive in classrooms everywhere. It is a world where children's minds come alive with possibilities and where students learn through experience, investigation, and hands-on activities that engage their minds and foster their interest

In relation to what Piexotto states, inquiry-based learning describes "a range of philosophical, curricular and pedagogical approaches to teaching. Its core premises include the requirement that learning should be based around student questions. Pedagogy and curriculum requires students to work independently to solve problems rather than receiving direct instructions on what to do from the teacher. Teachers are viewed as facilitators of learning rather than vessels of knowledge. The teacher's job in an inquiry learning environment is therefore not to provide knowledge, but instead to help students along the process of discovering knowledge themselves (Duncan, & Chinn 2007: 99).

It is also stated that inquiry is "a seeking for truth, information, or knowledge … seeking information by questioning". The process of inquiry begins with gathering information and data through applying the human senses

… seeing, hearing, touching, tasting and smelling. Through the process of inquiry, individuals construct much of their understanding of the natural and human designed worlds. Inquiry implies a "need or want to know" premise. By questioning, individuals have a need or want to know information and knowledge that lead them to understanding both clearly. The process of inquiry is similar to infants observe faces that come near, grasp objects, put things in their mouths and turn toward voices. They begin to make sense of the world by inquiring (Costa 2004: 80).

The same idea is also proposed here, stating that inquiry-based learning is one of many terms used to describe educational approaches that are driven more by a learner's questions than by a teacher's lessons. Asking question is at the heart of inquiry-based learning. (Kirschner, et al. 2006: 75-86). Inquiry-based learning is students centered. However, it needs teachers' involvement in guiding students to ask questions to find answers and to construct new question along the way indicating that they really care about the material given. Teachers act as facilitators of learning, not those who always give instruction to their students and teach as if they are source of knowledge. They motivate students to ask questions and solve the problems independently; nevertheless, it is possible to do these in pairs or in a group.

Another definition of inquiry-based teaching and learning is "a dynamic approach to learning that involves exploring the world, asking questions, making discoveries, and rigorously testing those discoveries in the search for new understanding" (Carson, 2003: 7).

From the above ideas, it can be concluded that inquiry-based teaching and learning is the method or approach in which the process of constructing understanding is done by questioning. The worlds of inquiry, curiosity, and wonder should be alive in classrooms everywhere. The teachers' role is facilitating and guiding students to solve problems and answer the questions themselves. Teachers encourage students by questioning reflective questions requiring integration and information. The students and the teachers share responsibility for learning and they collaborate on constructing new knowledge.

2. The Steps of Inquiry Based Learning

According to Eggen and Kauchak in Trianto (2007: 141) there are six steps in inquiry, they are: presenting questions/problem, making hypothesis, designing an experiment, doing an experiment to seek information, collecting and analyzing data, and making conclusion. It means that teaching and learning process will be meaningful if the students are given a lot of chances and involved actively to construct the concept by teacher's guiding. To make teaching and learning process run well, teacher has to prepare everything he/she needs and does some steps through inquiry.

Another step of inquiry based learning (Graesser, et al. 2010: 58) are:

a) Questioning, the first step in any inquiry is the formulation of a question or set of questions related to the topic of inquiry. The question can be posed by the teacher or by the pupil (s). Sometimes the question is referred to as a hypothesis or a problem statement.

b) Investigation, once a question is posed, pupils are encouraged to investigate the topic by gathering information from sources that either the teacher provides or within learning resources or tools that are readily available to the pupils.

c) Organization, when enough information related to the topic of inquiry is gathered, it is organized in categories or outlined by highlighting the important information relative to the topic. This helps the pupil make connections with new learning and prior learning.

d) Analysis, the information is discussed and analyzed for further understanding. The teacher can direct the discussion and highlight the implications that arise from the investigation and show how it relates to the solution of the problem

e) Conclusions are made and related back to the original question. Student reflections are encouraged and serve as a way to relate back to the inquiry and retrace the steps that led to the conclusion. This also serves to reinforce the model so that pupils can repeat the process in any problem-solving situation.

Additional information on the Five Steps for Inquiry-based Learning Sund and Trowbridge (1993: 63) is as follows:

a) Questioning-This is the concept development phase. It connects students with what they already know and motivates them to bring their own questions to the phenomenon. For example, a teacher asks "Did you ever wonder why gum gets smaller when you chew it?"

The purpose of the prompt is to stimulate student interest in the topic for exploration. To allow the students to have concrete knowledge, the teacher in this example gives each student gum and they experience that phenomenon. In this classroom activity, the students conduct an initial, teacher-led experiment to test the hypothesis. The teacher models the questioning: "I have noticed that the size of a wad of gum decreases considerably in the first 10 or 15 minutes of chewing". The teacher tells them that this change in volume is due to the loss of sugar. After analyzing the results of the initial experiment, students are then in a position to generate their own questions about gum, many of which can be answered with similar experiments. It is when students ask their own questions that they become empowered learners.

b) Planning and Predicting – After students explore ideas through hands-on experiences, they formulate a question and create a plan for investigating their question. They also predict what they think their results will be. It takes time and practice before students learn how to formulate questions. It is important that teachers model this process, asking questions that can be investigated, and eliminating or rewording those that can't be investigated easily. In this example, the student questions that evolved include: "How will the weight losses compare in sugared gum versus sugarless gum?" and "Does the amount of mass lost depend on how long you chew the gum?"

Working in cooperative learning groups, the students make a plan of action to investigate their questions and predict the outcome.

c) Investigating – Students become involved in their inquiries. It is vital to give them ample time to complete their investigations. As students in this scenario begin their investigations, they weigh an un-chewed piece of gum. They then chew the gum for 15 minutes, let it dry for 48 hours, and weigh it again.

d) Recording and Reporting – Students record and communicate their findings in this stage of inquiry learning. They can report their findings in a variety of ways. Whatever means they use, they restate the question and predictions, describe the investigation, and interpret the result. The cooperative groups report their findings. One group document the results on spreadsheet graphs. Another group chooses presentation software to describe their investigation and to report their results. A third group scans the original gum wrapper (which lists the ingredients and nutritional information) and artistically display their calculations on their original designed wrapper. They compare the percentages of the sugar content before and after the gum was chewed.

e) Reflecting – In the reflecting phase, students revisit the phenomenon and plan further investigations. New questions may occur as a result of the inquiry and the process is repeated. As the students share and reflect on their findings of the chewing gum investigation, new questions occur: "Do different flavors of the same brand of gum

contain different amounts of sugar?" and "Would gum chewed in saliva lose more mass than gum chewed in water?" For these students, the inquiry process begins once again with these new questions as the basis of their next investigation.

3. **The Advantages of Inquiry-based teaching and learning**

Based on the explanation above, Inquiry-based Learning gives some advantages to the teaching and learning process. According to Sund and Trowbridge (1993: 65) the advantages are as follows:

a) Inquiry-based teaching and learning is essential, however, that one plans ahead so one can guide kids to suitable learning opportunities. It is flexible and works well for projects that range from the extensive to the bounded, from the research-oriented to the creative, from the laboratory to the internet.

b) Inquiry-based teaching and learning can, awake one's confidence, interest, and self-esteem. One will find that many kinds who have trouble in school because they do not respond well to lectures.

c) The inquiry-based approach is at its best when working on interdisciplinary projects that reinforce multiple skills or knowledge areas in different facets of the same project. In contrast, the traditional approach tends to be very vertical the class studies science for awhile, for example, the language arts, then math, then geography. One will also find that although the traditional approach is sharply weighted toward the cognitive domain of growth, inquiry-based projects

positively reinforce skills in all three domains-physical, emotional, and cognitive.

d) Inquiry-based works well when the teacher decides let each student develop an individual project; when doing so, however, be sure to incorporate some elements of collaboration or sharing. But it is particularly well suited to collaborative learning environments and team projects. Activities can be created in which the entire class works on a single question as a group (just be sure that we whole group truly cares about the question) or in teams working on the same or different questions.

e) An inquiry-based can work with any age group. Even though older students will be able to pursue much more sophisticated questioning and research projects, build a spirit of inquiry into activities wherever, even with the youngest, in an age-appropriate manner.

f) The inquiry-based acknowledges that children, especially children from minority and disadvantaged communities, have what researcher Luis Moll calls "funds of knowledge" that are often ignored by traditional curricula. An inquiry-based validates the experience and knowledge that all kids bring to the learning process.

4. **The disadvantages of inquiry-based learning teaching and learning**

a) Inquiry-based teaching and learning concerns with asking students to work at least as much as the teacher and achieving as much as he/she can in as little time as possible. The strategy will be hard applied to all students.

b) There is a chance of missing a lot of very important information that people need to know

c) Inquiry-based teaching and learning is not suitable for passive and unmotivated students, since it needs an active engagement and high motivated learners. (Sund and Trowbridge 1993: 67)

5. The Art of the Question

Because inquiry-based is premised on helping children ask questions, instructors themselves must learn the art of asking good questions. As the leaders and guides, remember they have to model the spirit of inquiry.

Be aware of how a question can either shut down or open up a conversation by the words they choose and the prejudices they reveal. For example, consider the different responses they'd get to the question "Nobody here has ever created a Web page, have they?" versus "Has anyone made a Web page before?" versus "What do they know about creating Web pages?" the second question is at least a more positive version then the first, but it still will only get yes or no answers. The third invites constructive input and validates prior knowledge (Kirschner, et al. 2006: 75-86).

The following are questions that make for good inquiry-based projects. Of course, they must first be questions that the kinds truly care about because they come up with them themselves. In addition, good questions share the following characteristics: (1) The questions must be answerable ("What is the poem 'Dream Deferred' based on?" is answerable. "Why did Langston Hughes write it? Maybe answerable if such information exists, or if the students have some relevant is unanswerable because Hughes himself, now deceased is the only person likely to know such a specific answer); (2) The answer cannot be a simple

fact ("In what year was Kennedy killed?" doesn't make for a very compelling project because one can just took it up in any number of books or websites. "What factors caused the assassination attempt?" might be a good project because it will need research, interpretation, and analysis); (3) The answer can't already be known ("What is jazz music?" is a bit too straightforward and the kids are not likely to learn much more than they know already. "What musical styles does jazz draw from and how?" offers more opportunity for exploration); (4) The questions must have some objective basis for an answer ("Why is the rainbow colorful?" can be answered through research. "Why did God make the rainbow colorful" cannot because it is a faith-based question. Both are meaningful, valid, real questions, but the latter is in appropriate suitable for an inquiry-based project. "What have people said about why God made the sky blue?" might be appropriate. Likewise, "Why did the dinosaurs get lost or disappear become extinct?" is ultimately unanswerable in that form because no humans were around to know for certain, but "What do scientists trust was the reason for their extinction?" or "What does the evidence suggest about the cause?" will work. Questions based on value judgments don't work for similar reasons. One can't objectively answer "Is Hamlet a better play than Macbeth?"); (5) The questions cannot be too personal ("Why does one love the poetry of W.B. Yeats?" might inspire some level of internal exploration, but in most cases that's not the most important goal. Get the kids to focus on external research instead) (Kirschner, et al. 2006: 75-86).

C. Lecturing

1. Definition of Lecturing

Lecturing is the oldest teaching method (McKeachie, et al., 1994: 53). The word "lecturing" derives from the Latin word lego (legere, lectus) which means "to read". It was in use for instructional purposes long before the time of Crist and the second half of the fifth century it was as a carefully thought out discourse or brilliant improvisation on some theme or other. Lecturing can challenge the imagination of each student, arouse curiosity, develop his spirit of inquiry, and encourage his creativity (Dickens, et al. 1988: 7). They also state that lecturing is a method of teaching by which the teacher gives an oral presentation of facts or principles (Dickens, et al. 1998: 8).

Next, lecturing can be defined as an oral presentation intended to present information or teach students about a particular subject. (Heppner 2007: 36). Moreover, lecturing is defined as a teaching procedure involved in clarification or explanation of the students of some major idea (Bligh 2000: 20).

Meanwhile, lecturing means presentation by the course instructor with little student interaction (Zakrajsek 1998: 11). In lecturing, the teacher talks more or less continuously to the class. The class listens, takes note of the facts and ideas worth remembering, thinks over them later; but the class does not converse with the teacher is more active and students are passive but teacher also uses question answer to keep them attentive in the class. It is used to motivate, clarify, and review the information (Bligh 2000: 20).

On the other hand, Bradwell states that lecturing is an efficient means of communicating large amounts of information to many people in a short

period of time (1980: 1). Lecturing is used to transit cognitive/factual data from a teacher to a group of students and to effect desired changes either through cognitive reasoning or appealing to the affective domain to make changes through emotion (Bradwell, 1980: 3). In the other hands, McKeachie (1994: 540) states that lecturing is good for helping students get up-to-date information on current research and theories relevant to topics they are studying. It may sometimes usefully summarize material scattered over a variety of printed source.

2. The Procedure of Lecturing

According to McKeachie, et al., lecturing consists of three main parts (1994: 65), namely:

a) Introduction

It is to capture the interest and attention of the students. The introduction can be a prequestion. It may help students to discriminate between more and less important features of lecturing. We may motivate students by beginning with example, case, or application that indicates the practical relevance of the topic. A good introduction is critical to the success of a lecturing.

b) Body of the Lecturing

The instructor can make s smooth transition into the body of lecturing once the attention of the students has been captured with an interesting introduction. It contains the core of information to be transferred to the students.

c) Summary

It is to draw together the critical information presented and ensure that students leave the lecturing with clear understanding of this information. It should be brief and address only main points.

Meanwhile, Richard in Delivering Effective Lectures (1996: 5-9) states that the main parts of lectures method are: Introduction, body and summary.

a) Introduction

The aim of the introduction is to capture the interest and attention of the students. It can also serve to make students aware of the instructor expectations and encourage positive learning climate. A good introduction is a critical to success of a lecture. The activities are:

- Presenting lecture objective

- Relating the topic to a real-life experience

- Asking series of questions related to the topic

b) Body

The body of lecture contains the core of information to be transferred to the students. It recommends that instructor:

- Use problem-solving activity

- Ask number of questions and encourage the students to ask questions

- Use student's name when asking and answering questions

- Provide positive feedback when students ask questions, answer, and make comment

c) Summary

The purpose of lecture summary is to draw together the critical information presented and ensure that the students leave the lecture with clear understanding of information. There are several techniques which can be used to summarize lecture:

- Asking the students questions. The gives students an opportunity to clarify their understanding of content
- Summarizing the content of the lecture
- Extending Learning by providing handouts (task)

3. The Advantages and Disadvantages of Lecturing Method

According to Bradwell (1980: 18) there are some benefits and weaknesses of lecturing in teaching and learning process. The advantages coming from lecturing method are as follows:

a) Lecturing can present large amounts of information

b) It can be presented to large audiences

c) It present like risk for students

d) It appeals to students learn listening.

Next, Gillstrap and Martin (1988: 19) mention some of the advantages of lecturing, namely:

a) It is economical with classroom time

b) It allows the teacher to use his experience, knowledge, and wisdom

c) It permits the teacher to cope with large numbers of students

d) It helps students develop ability to listen accurately, critically, and with appreciation.

e) It can provide exposure to knowledge not readily found in assigned readings or the common experience of the students.

f) It can be unusually stimulating and can enhance students desire to learn in academic area.

g) It is helpful for introducing a new topic of study

h) It earns further status for the teacher by allowing him to reveal his knowledge of the subject to students

i) It permits variations with team work, mini lecturing, and small group follow-up.

j) It can reinforce students reading and learning from other sources.

Meanwhile, McKeachie, et al., (1994: 54) state that lecturing may sometimes usefully summarize material scattered over a variety of printed sources, and it can adapt material to the background and interest of a particular audience-material which in printed form is at a level or in a style not well suited to particular class.

Some disadvantages of lecturing method are stated below:

According to Bradwell (1980: 18) there are some disadvantages of lecturing in teaching and learning process. The disadvantages coming from lecturing method are as follows:

a) Lecturing fails to provide instructors with feedback about the extent of student learning.

b) Information tends to be forgotten quickly when students are passive.

c) Lecturing presumes that all students learn at the same pace and are at the same level of understanding.

d) Lecturing emphasizes learning by listening, which is a disadvantage for students who have other learning style.

Gillstrap and Martin (1988: 19) mention some of the disadvantages of lecturing, namely:

a) It places at a disadvantage those students who have neither learned to listen nor to take notes.

b) It tends to be a one-way process, with students in a passive role.

c) It may cause the teacher to cover the same ground that pupil could cover easily by a quick reading.

d) It is difficult to measure students learning and/or interest (at least during the lecturing).

e) The strategy progresses at the pace of the speaker rather than of the pupil.

f) It can be as encouraging retention of facts as an end in itself.

g) The strategy tends to encourage acceptance of the teacher as final authority.

h) It tends to emphasize the interests of lecturing rather than students.

i) It is often inadequate for teaching skills and attitudes.

Furthermore, Moore (1994: 182) states that the lecturing method has several serious flaws, namely:

a) Lecturing method fosters passive learning, with very low student involvement. Students are expected, and even encouraged, to sit quietly, listen, and perhaps take notes.

b) It is not good for helping students develop skills in thinking, problem solving, and creativity.

c) Lecturing frequently is boring and does not motivate.

d) Because lecturing tends to focus on the lowest level of cognition, understanding and transfer are often limited.

e) It may lead to the development of discipline problem. Most lecturing generates little interest, and students' attention soon wanes and turns more stimulating and often undesirable activities.

However, critics point out that lecturing as mainly a one-way method of communication does not involve significant audience participation (Gillstrap and Martin 1988: 11) Therefore, lecturing is often contrasted to active learning. Educational research is clear that the lecturing format alone is not highly effective as mean to help students accomplish students learning outcomes (Moore 1994: 184).

4. **The Comparison of Teaching Steps between Inquiry-Based Learning and Lecturing**

Inquiry-Based Learning	Lecturing
- Questioning, the teacher presenting question/problem related to the topic of inquiry.	- Introduction, the teacher introduces the learning objectives or the material to deliver.
- Investigation, pupils are encouraged to investigate the topic by gathering information from sources provided.	- Body or Content, the teacher presents the material, the teacher explains the ideas of every sentence and paragraph in the reading text from the begining to the end.
- Organization, pupils organized the information by highlighting the	

important one.	- Closing, the teacher ends with an integrative review of the main points.
- Analysis, pupils discuss and analyzed for further information.	
- Conclusion, it leads to the students' reflection and conclusion.	

D. Creativity

  1. Definitions of Creativity

One of the definitions of creativity is a means by which a person obtains a new perspective and, as a result, brings something new to consciousness (Rockler 1988: 36). Based on the scientific point of view, the products of creative thought sometimes referred to as divergent thought are usually considered to have both originally and appropriateness. Although intuitively a simple phenomenon, it is in fact quite psychology, cognitive science, artificial intelligence, philosophy, aesthetics, history, economics, design research, business, and management among others.

Creativity has been attributed variously to define intervention, cognitive processes, the social environment, personality traits, and chance. It has been associated with genius, mental illness, and humor. Some say it is a trait we are born with; others say it can be taught with the application of simple techniques. Although popularly associated with art and literature, it is also an essential part of innovation and invention design, graphic design, advertising, mathematics, music, science and engineering, and teaching. Creativity has been associated with right or forehead brain activity or even specifically with lateral thinking.

Some students of creativity have emphasized an element of change in the creative process.

There are some definitions of creativity with different point of views. Firstly, creativity is defined as the ability to produce something new though imaginative skill, whether a new solution to a problem, a new method or device, or a new artistic objects or form. Then creativity is a mental process involving the generation of new ideas or concepts. An alternative conception of creativity is that it is simply the act of making something new. Another adequate definition of creativity is that it is an "assumptions-breaking process." Creative ideas are often generated when one discards preconceived assumptions and attempts a new approach or method that might seem to others unthinkable. Furthermore, creativity is typically used to refer to the act of producing new ideas, while innovation is the process of both generating and applying such creative ideas in some specific context (Torrance, 1974: 6).

Moreover, creativity is stated as a mental process involving the discovery of new ideas or concepts, or new associations of the existing ideas or concepts, fuelled by the process of either conscious or unconscious insight (Guilford 1967: 9).

Then, creativity is defined as the tendency to generate or recognize ideas, alternative, or possibilities that may be useful in solving problem, communicating with others, and entertaining ourselves and others (Franken: 1993: 396)

On other hand, creativity is defined as a mental process which involves the creation of the new ideas or concepts or the new relation between the ideas and the available concepts (Sternberg 2006: 1)

Furthermore, creativity is supposed as a complex field, which cover various different views. The different definitions of creativity which are expressed by some experts are the definitions that complete each other. The different definition is caused by the different views of each expert. In this case, there are some different definitions of creativity as follows:

Creativity refers to the abilities that are characteristics of creative people (Guilford, 1950: 3). Creative action is imposing of one's own whole personality on the environment in a unique and characteristic way (Munandar, 1999: 16)

Creativity is a process that manifests in self, in fluency, in flexibility as well in originality of thinking which are proved through the ability to create some words given based on the beginning of word, find out some words based on the letters in one word, form the sentences based on the available words, find out the objects of double characteristics, and find out the unusual usage of the daily things (Munandar 1999: 16). Creativity is the initiative that someone manifests by his power to break away from the usual sequence of thought (Munandar 2002: 9).

2. **Kinds of Creativity**

   a) Behaviorist View of Creativity

      The behaviorist believes a person is not an initiating force in creative act, but rather a focal point where environmental and genetic forces come

together, to have a common effect. Skinner (1972: 267-272) states that the environment acts upon the individual. He supports his statements with an example from biology; the mother supplies protection, warmth, and nourishment, but she doesn't design the baby who profits from these. The baby is a product of its genetic heritage. The poet, also, is a product of his past history and the poem occurs to him in bits pieces. The analogy breaks down because the poet can accept or reject the bits and pieces where the mother cannot, but the poet doesn't willfully generate them. They bubble forth as a product of the poet's past environment. This does not mean to say that there is no creation-there is in the sense that the product is new but autonomy, the volition of the perceived creative agent is suspect. Skinner concludes by saying the task is to analyze the genetic and environmental histories responsible for an individual's behavior and then to create an environment for creative behavior to occur.

b) Personality – Based Creativity

Maslow (1963: 86 – 92) writes of creativity as an aspect of personality and cognitive process. This humanistic perspective states that creativity is a special perceptiveness on the part of certain individuals. That is why the people can see the raw, the fresh, the concrete as well as the generic, the abstract, the categorized, and the classified. Creativity becomes an attitude shown throughout the daily life of the individual. Other qualities used to describe the creative personality include self-confidence, independence, and openness to experience. They have a sense

of humor and playful child-like attitude, a preference for complexity, an acceptance of disorder, and a tolerance of ambiguity.

c) Cognitive Process Creativity

Creativity as a function of a cognitive process is illustrated by Osborn, et al. (1963: 26) that the term cognitive process means a volitional mental operation that can be learned in much the same way as solving a mathematical equation or speaking another language

There are two types of creativity (Koestler 1988: 36):

1) Associative Routine of Habit

The type is characterized by repetitiveness, conservation, rigid to flexible variations on a theme, and associations developed only within the confines of one given matrix. This type of creation can lead to discovery, by an individual, of perceptions here fore unknown to that person, but not new in the context greater humanity. New discoveries and inventions in actual fact are the result of the second type of creativity.

2) Originality

The second type is named Originality and contains the following elements.

- The result is novel and entirely new.

- It is a destructive/constructive process that destroys old perceptions through new ones.

- The process is guided by subconscious which normally is restrained.

- There is duper-flexibility in variations and theme.

- It is the bisociation of independent matrices.

The quality of the originality is the measure of the unluckiness of the probable association of the matrices.

Guilford feels that creativity is part of divergent, convergent, and evaluative thinking operations. It is measured by the flexibility, fluency, and originality of responses to a given problem situation. It also measured by the sensitivity of an individual to a problem and the ability to redefine information.

Flexibility is the ability to break apart and reform different configurations of classes, relations, and systems. Fluency is measured by the sheer number of units produced. Originality is the ability to generate a variety of transformations. These three are parts of the divergent thinking mode.

Sensitivity to problem is in the evaluative mode. The individual must be able to evaluate situations for unmet needs in order to bring about improvement. The convergent thinking mode is used to redefine information. The product is a transformation. A lot of creative effort is in the form of transforming something known into something not previously known.

3. **Factors Influencing Creativity**

Some theories suggest that creativity may be particularly susceptible to affective influence.

a) Positive Influence

According to Isen (1983: 18-31) positive affect has three primary effects on cognitive activity:

1) Positive affect makes additional cognitive material available for processing, increasing the number of cognitive elements available for association;

2) Positive affect leads to defocused attention and more complex cognitive context, increasing the breadth of those elements that are treated as relevant to the problem;

3) Positive affect increases cognitive flexibility, increasing the probability that diverse cognitive elements will in fact become associated. Together, these processes lead positive affect to have a positive influence on creativity.

Fredrickson (2001: 56) says that positive emotions such as joy and love broaden a person's available repertoire of cognitions and actions, thus enhancing creativity.

According to the above theories, positive emotion increase the number of cognitive elements available for association (attention scope) and the number of elements that are relevant to the problem (cognitive scope).

b) Negative Influence

On the other hand, some theorists state that negative affect leads to greater creativity. A cornerstone of this perspective is empirical evidence of a relationship between affective illness and creativity. In addition, several systematic studies of highly creative individuals and their relative have uncovered a higher incidence of affective disorders

(primarily illness and depression) than that found in the general population.

c) At Work Influence

Three patterns may exist between affect and creativity at work: positive (or negative) mood, or change in mood, predictably precedes creativity; creativity predictably precedes mood; and whether affect and creativity occur simultaneously.

It was found that not only might affect precede creativity, but creative outcomes might provoke affect as well. At its simplest level, the experience of creativity is itself a work event, and like other events in the organizational context, it could evoke emotion. Then, creative insight is often followed by feelings of elation.

In contrast to the to the possible incubation effects of affective state on subsequent creativity, the affective consequences of creativity are likely to be more direct and immediate. In general, affective events provoke immediate and relatively-fleeting emotional reactions. Thus, if creative performance at work is an affective event for the individual doing the creative work, such an effect would likely be evident only in same-day data. Therefore, the more positive a person's affect on a given day, the more creative thinking they evidenced that day and the next day-even controlling for that next day's mood.

Based on the above theories, it can be started that, there are some factors that may influence someone's creativity, such as: positive influence, negative influence, and at work influence.

4. The Importance of Creativity

When we think the importance of creativity we are apt to think of it only in the context of art. Actually, art is only a small part of creativity. We use creativity in every aspect of our daily lives. Our ability to express our deepest feelings is at the core of the importance of creativity. As humans have a very strong need to express ourselves and we're happiest when other people understand what we are trying to get across to them. We find all kinds of ways to do this. Speech is probably the first and foremost means we use to communicate what we want others to know. Most often it is simple and very straight forward. "Pass the salt," no way to interpret that incorrectly (Sternberg 1999: 313-335).

Yet when we want to get something specific across, we know we have to put a little more into it. Even the most smooth-spoken person takes the time to consider his words and actions when there is something specific he wants people to know. He knows words can be golden and the exact right ones will change the prospective of the people he is trying to reach. That's when he taps into his creativity to find a way to say what he wants, in a way that will get everyone's attention. It's the same for all of us when we want to reveal something from deep inside ourselves. This is when the importance of creativity becomes most evident. We think of endless ways to say something when we want say it 'more'.

The importance of creativity can easily be seen in the different ways people choose to express themselves. People have used their creativity to come up with endless ways to get their messages across, and we're still

thinking of new ones. We certainly don't let words limit us. It is important to be able to express our feelings when words aren't close to enough. We express ourselves in the form of paintings, music, or sculptures.

There are so many aspects of our lives that are touched by the importance of creativity. Creativity isn't just art. It is our very essence. Throughout history creative genius has been connected with mental illness.

Edgar Allen Poe died in the streets, drugged out and dried up. Emily Dickinson created poems secluded in her room, seeing only family and few friends. It became fashionable to suffer for your art. A creative people tend to be more intelligent and curious than average person. In this case, by having the creativity the person can do everything he wishes. He can develop and improve himself in various fields such as education, science, art, business, etc.

Based on the above theories, it can be stated that creativity is related to the ability of someone to produce or create something new, find out new solution in solving problems, use new idea or concept in creating something, or the process which is seen from someone's fluency, flexibility, and originality in thinking. These creativities can be proved through the ability to create some words given based on the beginning of word (clues), create some words based on the letters in one word, form sentences based on four words provided, find out object of the same characteristics, and find out the unusual usage of the daily objects (things).

E. Review of Related Research

To know more about the strength of using Inquiry-based Learning in language teaching, here is the analysis on some related journals.

Arthur Carvin (1996) writes "*A General Platform for Inquiry Learning*". The research indicates that in Inquiry approach motivates and engages every type of student, helping them understand the material. Teaching using inquiry demonstrates a manageable way for new and experienced teachers to bring discovery successfully. The methods portion scaffolds concepts and illustrates instructional models to help readers understand the inquiry approach to teaching. The research provides activities portion follows the 5-E model (Engage, Explore, Explain, Elaborate, and Evaluate) The study tells that during every phase in Inquiry-based Learning, the students are also expected to be creative, critical, and innovative. In Inquiry-based Learning, the students are actively involved teaching and learning process.

Joan P. Gipe (1992) writes "*Creativity as A Mediating Variable in Inferential Reading Comprehension*". The research reported here examined the effect of readers' abilities to be creative on their ability to make inferences in reading prose passages. He also states that creative ability enhances schema development, the formation of mental framework. Students who have high creativity are willing to take risks, they are often described as a "high risk taker" or adventurous or speculative students. They can manipulate ideas by easily changing, elaborating, adapting, improving, or modifying the original idea or the ideas of others, whereas those who have low creativity believe that they have little or no risk-taking characteristic and they also have little ideas.

The results indicate that the students who have high creativity have greater risk-taking characteristic of creative individuals and the ability to manipulate and reorganize symbols and words is related to the ability to infer when reading text above average evaluation marks whereas those who have low creativity have no greater risk-taking characteristic of creative individuals and the ability to manipulate and reorganize symbols and words is related to the ability to infer when reading text and below average evaluation marks.

"Enggaging First Year Students Using a Web-Supported Inquiry-Based Teaching Setting" by Oliver Roy (2004). He describes a study that explored the utility and efficacy of the application of a Web-based tool to promote learner engagement among first year students in a large class in teaching learning process. The Web-based tool was developed to support an Inquiry-based Teaching approach that was characterized by strong learning scaffolds, meaningful contexts, feedback and support and administrative efficiencies. The study explored the forms of engagement that the Web-supported Inquiry-based Teaching approach was able to engender among first year undergraduate students and the factors that were found to influence students' level of engagement and achievement in the approach.

Frank (1999) writes *"Using Inquiry Discovery to Enhance Student Learning"*. He states that discovery learning is a process to build students' skills by discussing, investigating, and answering question thinking. In this study the teacher's job is encouraging students to take initiative in posing and enable students to independently answer to their questions. The teacher delivers some questions to students to lead them to get the problem presented.

Inquiry requires that learning should be based around students' questions. At the result, inquiry practices can be introduced in stages, starting with simple activities and gradually increasing the levels of challenge.

Parker (2001) writes *"Planning of Inquiry: Inspiring Inquiry-Based Learning"*. He states that Inquiry-based Learning is a pedagogical approach that invites students to explore academic content by posing, investigating, and answering questions. Also known as problem-based teaching or simply as 'inquiry', this approach puts students' questions at the center of the curriculum, and place just as much value on the component skills of research as it does on knowledge and understanding of content. The role of the teacher in an Inquiry-based classroom is quite different from that of a teacher in a conventional classroom. Instead of providing direct instruction to students, teachers help students generate their own content-related questions and guide the investigation that follows. In this study Inquiry-based Approach provides rich experiences that provoke students' thinking and curiosity; to plan carefully-constructed questioning sequences; to manage multiple student investigations at the same time; and to continuous assess the progress of each student as they work toward their solution or final product.

F. Rationale

1. The Difference between Inquiry-Based Learning and Lecturing

Inquiry-based learning is a method or approach in which the process of constructing understanding is done by questioning. The worlds of inquiry, curiosity, and wonder should be alive in classrooms everywhere. The teacher'

role is facilitating and guiding students to solve problems and answer the questions themselves. Teachers encourage students by asking questions requiring integration and information reflectively. The students and the teachers share responsibility for learning and they collaborate on constructing new knowledge. Finally, in this technique the students are asked to understand the text being read through focusing on questions, through problem-solving activities, and the use of critical thinking. By asking questions, the teacher assists the students in using his mind and attempting to understand the topic. After delivering the questions, teacher leads the students to find the answers. The text step is collecting the answers and the last is making conclusion based on the answers.

Meanwhile, lecturing is a method of teaching by which the teacher gives an oral presentation of facts or principles. The activities conducted in this technique are quite different from inquiry-based learning. This technique tries to lead the students to get the meaning of source language into target language by listening the teacher's explanation. In lecturing, the teacher talks more or less continuously to the class. The class listens, takes notes of the facts and ideas worth remembering, thinks over them later; but the class does not converse with the teacher is more active and students are passive.

Based on the above elaboration, the difference between inquiry-based learning and lecturing can be seen on the learning activity done and the process of getting understanding from the text being read. Inquiry-based learning focuses on constructing understanding done by questioning, while lecturing focuses on listening and taking notes of teacher's explanation.

Thus, it can be assumed that inquiry-based learning is more effective than lecturing to teach the reading.

2. The Difference between Students Having High Creativity and Students Having Low Creativity

Creativity is the ability to produce or create something new, whether new solution to solve a problem, a new method to do something, new ideas or concepts to create something, or a new action to conduct something. Based on these ideas the students are called having high creativity when they are able to produce something new in their daily activity. They are able to solve their problem (learning problem), create something with their new ideas and they can apply it better. Meanwhile, the students are called having low creativity when they have no progress in doing something. They have a monotonous concept, idea, creation in solving the problem which may be affected by their low intelligence.

Based on the above elaboration, it can be stated that the students who have high creativity will be easier to understand the text given because they are more creative in finding out the solution when they are faced by the difficulties in reading comprehension. Otherwise, the students who have low creativity will have difficulty in understanding the text given because they are less creative in solving their problems. This is sometimes caused by their desire to do something, especially in comprehending the text itself.

Thus, it is supposed that the students having high creativity have better reading ability than those having low creativity.

3. The Interaction between Teaching techniques and Students' Creativity

Teaching reading comprehension is not an easy task for the junior high school students, so the teachers have to pay more on how the students have to be taught. Choosing and applying the proper techniques are believed able to treat the students to have high creativity and choosing improper techniques will bring them to have low desire in learning, especially in understanding the reading texts. Therefore, the teacher ought to be selective in selecting the techniques used in the teaching and learning process.

In inquiry-based learning, the students are asked to find out the answers to questions posed. It encourages students to investigate problems and find new information from the text being read by questioning. The students who have high creativity can be seen from their high ability to produce or create something new and find out new solution in solving the problems, especially in comprehending the text. Because the activities done in inquiry-based learning are rather complex, so it can be stated that these activities can only be done by the students who have high creativity. Based on the above elaboration, it is assumed that inquiry-based learning is supposed more suitable for the students who have high creativity.

Meanwhile, in lecturing the students do not apply many activities in understanding the texts. They are only asked to listen and take notes the meaning of words directly from the teacher. On the other hand, the students who have low creativity are indicated by their less ability to produce or create something new and find out new solution in solving the probes, especially in comprehending the text. The activities applied in lecturing is not as a complex

as in the inquiry-based learning. So, it is assumed that lecturing is more appropriate to be taught for students who have low creativity.

Thus, it can be assumed that there is an interaction between the teaching technique and the students' creativity for teaching reading.

F. Hypothesis

Based on the above rationale, the writer presents some hypotheses. The hypotheses are follows:

1. Inquiry-based Learning is more effective than Lecturing to teach reading for the eighth graders of *MTs. Negeri Tuban*

2. The students having high creativity have better reading skill than those having low creativity of the eighth graders of *MTs. Negeri Tuban*

3. There is an interaction between the teaching methods and students' creativity in teaching reading.

CHAPTER III

METHODOLOGY RESEARCH

A. Setting of the Research

The research was conducted at MTs Negeri Tuban. It is on Jl. Diponegoro No. 6 Tuban. It is on the west of Tuban town square for about two kilometers. The research was carried out during semester two starting from April 16th until June 21th, 2012 in the academic year of 2011/2012.

The following is the time schedule for the research.

Activities	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Proposal	X	X													
Reviewing Literatures	X	X													
Developing Documents			X	X	X	X									
Doing Treatment							X	X	X						
Collecting and Analyzing the Data										X	X				
Writing the Report												X	X	X	
Submitting the Document															X

B. Method of the Research

The method used by the researcher was the way to collect and analyze the data of the research. Research is defined as the effort to find, develop, and classify the truth of science, done by using scientific method (Hadi, 1986:4) while method refers to a way, which is used to achieve the objective of their study (Surachmad, 1985: 131). The research method used in this study is experimental study. Experimental study is defined as the technique,

which attepts to ferret out cause and the effect relationship. Through experimentations, cause and effect relationship can be isolated. Because of its ability to identify caution, the experimental approach has come to represent the prototype of the scientific method for solving problems (Christensen, 1977: 35). The class VIII A was used for the experimental class. The technique of teaching reading in the experimental class was an Inquiry-based Learning. The class VIII B was used for the control class. The technique of teaching reading in the control class was lecturing.

The research design used in the research is a simple factorial design 2x2. Two classes were chosen to serve as the experimental group and the control group. The method of teaching reading in the experimental class is Inquiry-based Learning. The method of teaching reading in the control class is Lecture method. The design can be seen in the following figure:

Teaching Method / Creativity	Inquiry-Based Learning A_1	Lecturing A_2	
High B_1	$A_1 B_1$	$A_2 B_1$	B_1
Low B_2	$A_1 B_2$	$A_2 B_2$	B_2
	A_1	A_2	

C. Population, Sample, and Sampling.

1) Population

The population of the research was the eighth grade students of MTs Negeri Tuban in 2011/2012 academic year. It consisted of seven classes (276 students). In order to

make the teaching and learning process run as usual the writer uses two classes which he teaches.

2) Sample

The sample refers to any groups on which information is obtained (Crishtensen, 2007: 78). The sample used in the research is the students of class VIII A and VIII B of the eighth grade students of MTs Negeri Tuban in 2011/2012 academic year. One class is the experimental class and the other is the control class.

3) Sampling

The writer used cluster random sampling to get the sample. Using this sampling enables him to pick up a sub group from a larger group then use this subgroup as a basis for making judgments about the larger group (Vockell, 1983: 102). In other words, cluster random sampling is the selection of groups or clusters, of subjects rather than individuals (Fraenkel and Wallen, 1993: 84) the writer used cluster random sampling because it has some advantages, such as: it can be used when it is difficult or impossible to select a random sample of individuals, it is often far easier to implement in schools, and it is frequently less time consuming (Fraenkel and Wallen, 1993: 139).

After getting two sample classes using cluster random sampling, the control and experimental class were decided randomly by lottery. Then each class was devided into two groups, students who have high creativity and those who have low creativity. One of the two classes was taught by Inquiry-based Learning and the other class was taught by lecturing, so there are four groups: (1) students with high creativity who are taught by Inquiry-based Learning; (2) students with low creativity who are taught by Inquiry-based

Learning; (3) students with high creativity who are taught by lecturing; (4) students with low creativity who are taught by lecturing.

D. Technique of Collecting the Data

In this research, the writer used two kinds of tests to get the data. The first test was objective reading test related to the material and the topic provided which is used to collect the data of the students reading skill. The test was applied to know the students skill in reading. The second was verbal creativity test which was used to collect the data of the students creativity. It was applied to know the students creativity in learning. According to Gay (1992: 175) tests of creativity are really tests designed to measure those personality characteristics that are related to creative behaviors. The creativity test is provided in form of essay tests. The kind of this test is in the form of verbal creativity test which is focused in creating some words through the beginning of words (letter clue), arranging the words based on one word, forming sentences through three words, finding the characteristics of a certain object, and finding unusual usage of certain objects.

1) Test

Test is a set of questions which are used to measure skill, knowledge, intellegence, and attitude of an individual or group (Arikunto, 2006: 127). The reading test is used to know the students reading competence. The reading test is in the form of multiple choice or objective reading test. Both instruments, reading test and verbal creativity test are tried out to know the validity and reliability at the first step. It is done before treatment. The try out is done to the other class which doesn't belong to the experimental and the control

one. At the end the valid and the reliable items are used to get the data. The reading test is conducted after treatment (post test).

2) Validity and Reliability of the Instruments.

The instruments of collecting the data, namely: verbal creativity test and reading test must be valid and reliable. Therefore, they must be tried out to know the validity and reliability at the first step before doing treatment. It was done to another class which doesn't belong to experiment and the control one.

The validity of the verbal creativity test was analyzed using the following formula:

$$r_{xy} = \frac{\Sigma x_i x_t}{\sqrt{\left(\Sigma x_i^2\right)\left(\Sigma x_t^2\right)}}$$

If r_o is higher than r_t the item is valid.

After the validity was analyzed, it was continued to know the reliability of the test. The formula used is:

$$r_{kk} = \frac{k}{k-1}\left(1 - \frac{\Sigma S_i^2}{S_t^2}\right) \text{ where } S_i^2 = \Sigma X_i^2 - \frac{\left(\Sigma X_i\right)^2}{n} \text{ , } S_t^2 = \Sigma X_t^2 - \frac{\left(\Sigma X_t\right)^2}{n}$$

If r_o is higher that r_t the item is reliable.

Meanwhile, the validity of the reading test was analyzed by using the following formula:

$$S_t = \sqrt{\frac{\Sigma x_t^2}{n}}$$

$$r_o = \frac{\overline{X}_i - \overline{X}_t}{S_t}\sqrt{\frac{p}{q}}$$

If r_o is higher then r_t the item is valid.

Then, the reliability of the reading test was analyzed using the following formula:

$$(r_{kk}) = \left(\frac{k}{k-1}\right)\left(1 - \frac{\Sigma pq}{S_t^{\ 2}}\right)$$

If r_0 is higher that r_t, the instrument is reliable.

After all the instruments were valid and reliable, they could be used to get the data.

The reading test would be conducted after treatment as the post test.

E. Technique of Analyzing the Data

The writer used a descriptive analysis and inferential analysis in this research. The descriptive analysis is used to know the mean, median, mode and the standard deviation of the score of reading text. The normality and the homogeneity test are used to know the normality and homogeneity of the data. It is done before testing the hypothesis and the last is the use of ANOVA or multifactor analysis of variance 2X2. The design of multifactor analysis of variance is as follows.

Teaching Method ⟋ Creativity	Inquiry Based Learning A_1	Lecturing A_2	
High B_1	$A_1\ B_1$	$A_2\ B_1$	B_1
Low B_2	$A_1\ B_2$	$A_2\ B_2$	B_2
	A_1	A_2	

Table 2. Design of Multifactor Analysis of Variance

Note:

$A_1 B_1$: the mean score of reading test of students having high creativity who are taught by using Inquiry-based Learning.

$A_2 B_1$: the mean score of reading test of students having high creativity who are taught by using lecturing.

$A_1 B_2$: the mean score of reading test of students having low creativity who are taught by using Inquiry-based Learning.

$A_2 B_2$: the mean score of reading test of students having low creativity who are taught by using lecturing.

A_1 : the mean score of reading test of experimental class which is taught by using Inquiry-based Learning.

A_2 : the mean score of reading test of experimental class which is taught by using lecturing.

B_1 : the mean score of reading test of students having high creativity.

B_2 : the mean score of reading test of students having low creativity.

The data are analyzed using the following ways:

1. The total sum of square:

$$\sum x_t^2 = \sum x^2 - \frac{(\sum x^2)}{n}$$

2. The sum of squares between groups:

$$\sum x_b^2 = \frac{(\sum X_1^2)}{n_1} + \frac{(\sum X_2^2)}{n_2} + \frac{(\sum X_3^2)}{n_3} - \frac{(\sum X_t^2)}{N}$$

3. The sum of squares within groups:

$$\sum x_{w}^{2} = \sum x_{t}^{2} - (\sum x_{b}^{2})$$

4. The between-columns sum squares:

$$\sum x_{bc}^{2} = \frac{(\sum X_{c1}^{2})}{n_{c1}} + \frac{(\sum X_{c2}^{2})}{n_{c2}} - \frac{(\sum X_{t}^{2})}{N}$$

5. The between-rows sum of squares:

$$\sum x_{br}^{2} = \frac{(\sum X_{r1}^{2})}{n_{r1}} + \frac{(\sum X_{r2}^{2})}{n_{r2}} - \frac{(\sum X_{t}^{2})}{N}$$

6. The sum-of-squares interaction:

$$\sum x_{int} = \sum X_{b}^{2} - (\sum X_{bc}^{2} + \sum X_{br}^{2})$$

7. df for between – columns sum squares = C – 1

   df for between – rows sum of squares = R – 1

   df for interaction (C – 1) (R – 1)

   df for between – groups sum of squares = G – 1

   df for within – columns sum of squares = $\sum$ (n-1)

   df for total sum of squares = N – 1

   C = the number of column

   R = the number of rows

   G = the number of groups

   N = the number of subjects in one group

   N = the number of subjects in all group

The result of data analysis, i.e. Fcomputation (Fo), is consulted to Ftable (Ft) at the

significance level a = 0.05 to know whether the different is significant or not. If Fo is

higher than Ft, the different is significant. This mean that the null hypothesis (Ho) is rejected.

When the result of analysis of variance shows that there is interaction between the two variable, teaching methods and students creativity, the researcher continues analyzing the data using Tukey test, as follows:

1. Inquiry-based Learning compared with Lecture method in teaching reading.

$$q = \frac{\overline{X_{G1}} - \overline{X_{G2}}}{\sqrt{\text{error variance}/n}}$$

2. Students having high creativity compared with those having low creativity.

$$q = \frac{\overline{X_{r1}} - \overline{X_{r2}}}{\sqrt{\text{error variance}/n}}$$

3. Inquiry-based Learning compared with Lecture method in teaching reading for students having high creativity.

$$q = \frac{\overline{X_{G1r1}} - \overline{X_{G2r1}}}{\sqrt{\text{error variance}/n}}$$

4. Inquiry-based Learning compared with Lecture method in teaching reading for students having low creativity.

$$q = \frac{\overline{X_{G1r2}} - \overline{X_{G2r2}}}{\sqrt{\text{error variance}/n}} \quad \text{or} \quad q = \frac{\overline{X_{G2r2}} - \overline{X_{G1r2}}}{\sqrt{\text{error variance}/n}}$$

Then, the result of the computation or q_o is compared with q_t if $q_o > q_t$, the different is significant. To know which one is better, the means are compared. The higher mean indicates the better variable.

F. Statistical Hypothetis

In this study, the writer proposes three hypotheses. These hypotheses are based on the formulation of the problems presented in the previous chapter and are illustrated through null hypothesis.

1. The difference between, the researcher proposed three hypotheses. These hypotheses were based on the formulation of the problems. They were:

1) The difference between Inquiry-based Learning (A_1) and Lecture Method (A_2) to teach reading for students.

    a. $H_{o:}\ \mu_{A1} = \mu_{A2}$

       Note: H_o means that there is no difference between Inquiry-based Learning (A_1) and Lecture Method (A_2) to teach reading for the students.

    b. $H_{a:}\ \mu_{A1} > \mu_{A2}$

       Note: H_a means that Inquiry-based Learning is more effective than Lecture to teach reading for the students

2) The difference between students who have high Creativity (B_1) and those who have low Creativity (B_2).

    a. $H_{o:}\ \mu_{B1} = \mu_{B2}$

       Note: H_o means that there is no difference in reading skill between students who have high creativity (B_1) and students who have low creativity

    b. $H_{a:}\ \mu_{B1} > \mu_{B2}$

       Note: H_a means that the students who have high creativity (B_1) have better reading skill than the students who have low creativity (B_2).

3) Interaction between the teaching methods used (Inquiry-based Learning and Lecturing method) (A) and Creativity (B) in teaching reading for the students.

   a. H_o: A X B = 0

      Note: H_o means that there is no interaction between the teaching methods used (Inquiry-based Learning and Lecture Method) (A) and creativity (B) in teaching reading.

   b. H_a: A X B > 0

      Note: H_a means that there is an interaction between the teaching methods used (Inquiry-based Learning and Lecture Method) (A) and creativity (B) in teaching reading.
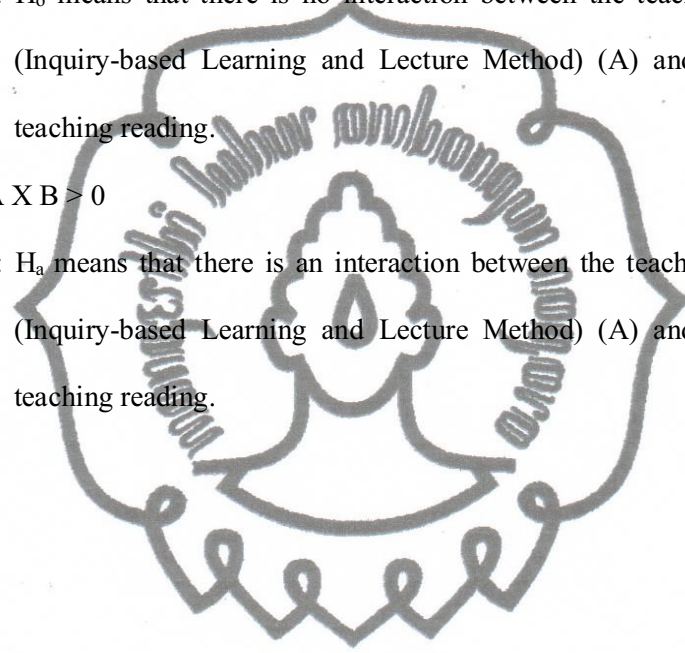
CHAPTER IV

THE RESULT OF THE STUDY

This chapter presents the result of the study. It is divided into four parts, namely: the description of the data, normality and homogeneity test, hypothesis test, and the discussion of the result of the study.

A. Description of the Data

The data presented are the result of the reading test. It includes the mean, median, standard deviation, and frequency distribution then followed by histogram and polygon. Based on the groups analyzed, the description of the data is divided into eight groups, namely:

1. The data of the reading test of the students or the groups who are taught using Inquiry-Based Learning method (A_1).

2. The data of the reading test of the students or the groups who are taught using Lecture method (A_2).

3. The data of the reading test of students or the groups who have high creativity (B_1)

4. The data of the reading test of the students or the groups who have low creativity (B_2)

5. The data of reading test of the students or the group having high creativity who are taught using Inquiry-Based Learning method (A_1B_1)

6. The data of the reading test of the students or the group having low creativity who are taught using Inquiry-Based Learning method (A_1B_2)

7. The data of the reading test of the students or the group having high creativity who are taught using Lecture method (A_2B_1)

8. The data of the reading test of the students or the group having low creativity who are taught using Lecture method (A_2B_2)

The data of each group are presented as follows:

1. The data of the reading test of the students or the groups who are taught by using Inquiry-Based Learning (A_1)

Descriptive analysis of the data A_1 shows that the score is 55 up to 83. The mean is 70, the mode is 77, the median is 72.6, and the standard deviation is 9.09. The frequency distribution of the data A_1 is presented in table 4, histogram and polygon are presented in figure 1.

Table 4. Frequency Distribution of the Data A_1

Class Limit	f_i	Class Boundaries	X_i	f_iX_i
55 - 59	9	54.5 - 59.5	57	513
60 - 64	1	59.5 – 64.5	62	62
65 - 69	5	64.5 – 69.5	67	335
70 - 74	8	69.5 – 74.5	72	576
75 - 79	9	74.5 – 79.5	77	693
80 - 84	8	79.5 – 84.5	82	656
85 - 89	0	84.5 – 89.5	87	0
Sum	40		504	2835
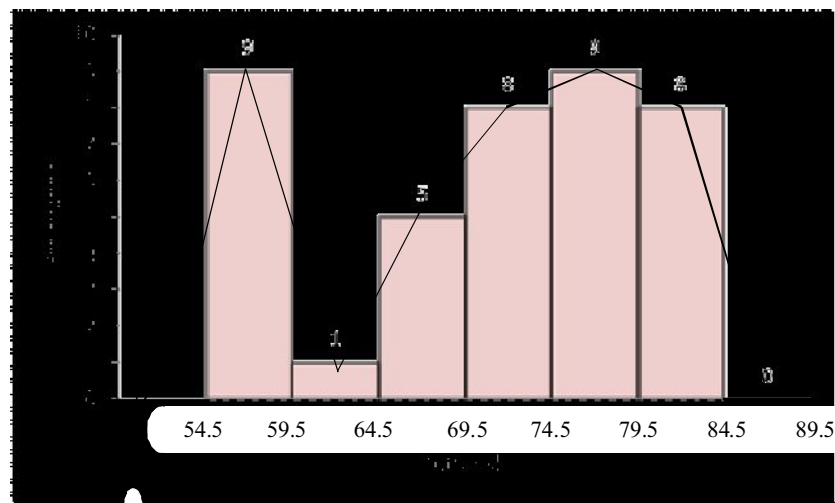
Figure 1 Histogram and Polygon of the Data A_1

2. The data of the reading test of the students or the groups who are taught by using Lecture method (A_2)

Descriptive analysis of the data A_2 shows that the score is 53 up to 83. The mean is 66.225, the mode is 68.3, the median is 67, and the standard deviation is 8.46. The frequency distribution of the data A_2 is presented in table 5, histogram and polygon are presented in Figure 2.

Table 5. Frequency Distribution of the Data A_2

Class Limit	f_i	Class Boundaries	X_i	f_iX_i
50 - 54	3	49.5 – 54.5	52	156
55 - 59	8	54.5 – 59.5	57	456
60 - 64	5	59.5 – 64.5	62	310
65 - 69	8	64.5 – 69.5	67	536
70 - 74	7	69.5 – 74.5	72	504
75 - 79	8	74.5 – 79.5	77	616
80 - 84	1	79.5 – 84.5	82	82
Sum	40		490	2660
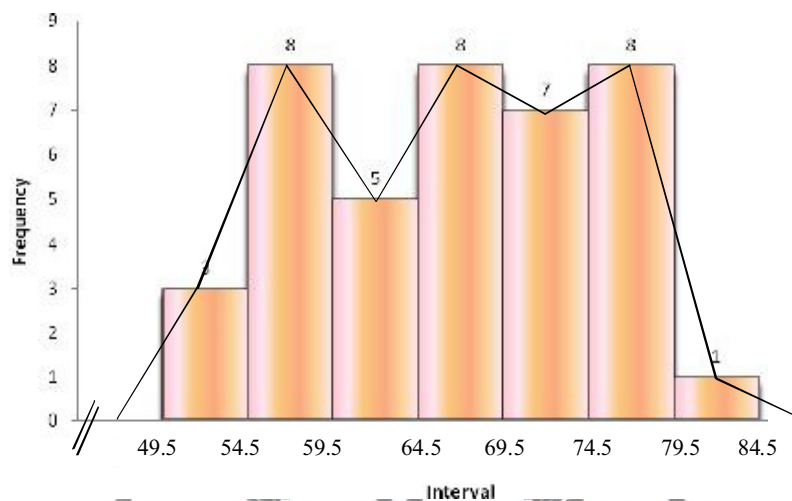
Figure 2. Histogram and Polygon of the Data A_2

3. The data of the reading test of the students or the groups who have high creativity (B_1)

Descriptive analysis of the data B_1 shows that the score is 53 up to 83. The mean is 71.025, the mode is 79.04, the median is 74.4, and the standard deviation is 8.92. The frequency distribution of the data B_1 is presented in table 6, histogram and polygon are presented in Figure 3.

Table 6. Frequency Distribution of the Data B_1

Class Limit			f_i	Class Boundaries	X_i	f_iX_i
53	-	57	3	52.5 – 57.5	55	165
58	-	62	5	57.5 – 62.5	60	300
63	-	67	3	62.5 – 67.5	65	195
68	-	72	6	67.5 – 72.5	70	420
73	-	77	8	72.5 – 77.5	75	600
78	-	82	12	77.5 – 82.5	80	960
83	-	87	3	82.5 – 87.5	85	255
Sum			40		490	2895
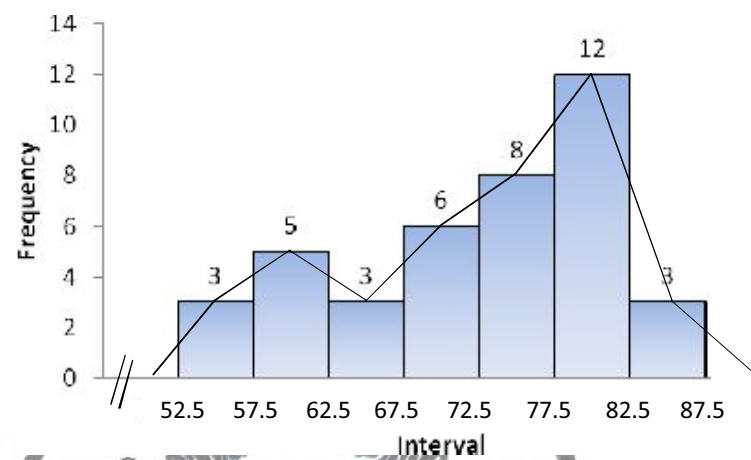
Figure 3. Histogram and Polygon of the Data B_1

4. The data of the reading test of the students or the groups who have low creativity (B_2)

Descriptive analysis of the data B_2 shows that the score is 53 up to 80. The mean is 65.2 the mode is 71.8, the median is 67, and the standard deviation is 7.53. The frequency distribution of the data B_2 is presented in table 7, histogram and polygon are presented in Figure 4.

Table 7. Frequency Distribution of the Data B_2

| Class Limit	f_i	Class Boundaries	X_i	$f_i X_i$
50 - 54	1	49.5 - 54.5	52	52
55 - 59	11	54.5 – 59.5	57	627
60 - 64	5	59.5 – 64.5	62	310
65 - 69	6	64.5 – 69.5	67	402
70 - 74	12	69.5 – 74.5	72	864
75 - 79	5	74.5 – 79.5	77	385
80 - 84	0	79.5 – 84.5	82	0
Sum	40		469	2640
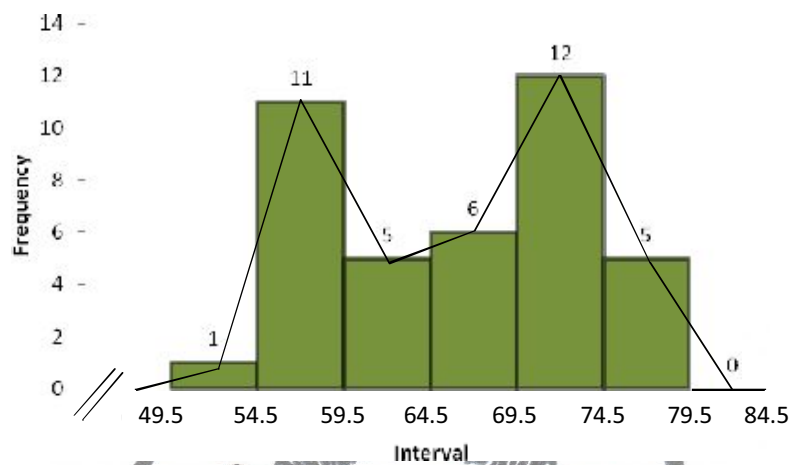
Figure 4. Histogram and Polygon of the Data B_2

5. The data of the reading test of the students or the group having high
creativity who are taught using Inquiry-Based Learning method (A_1B_1)

Descriptive analysis of the data A_1B_1 shows that the score is 70 up
to 83. The mean is 77.1, the mode is 78.35, the median is 77.7 and the
standard deviation is 4.58. The frequency distribution of the data A_1B_1 is
presented in table 8, histogram and polygon are presented in Figure 5.

Table 8. Frequency Distribution of the Data A_1B_1

| Class Limit	f_i	Class Boundaries	X_i	f_iX_i
65 - 68	2	64.5 – 68.5	66.5	133
69 - 72	1	68.5 – 72.5	70.5	70.5
73 - 76	4	72.5 – 76.5	74.5	298
77 - 80	10	76.5 – 80.5	78.5	785
81 - 84	3	80.5 – 84.5	82.5	247.5
85 - 88	0	83.5 – 88.5	86.5	0
Sum	20		459	1534
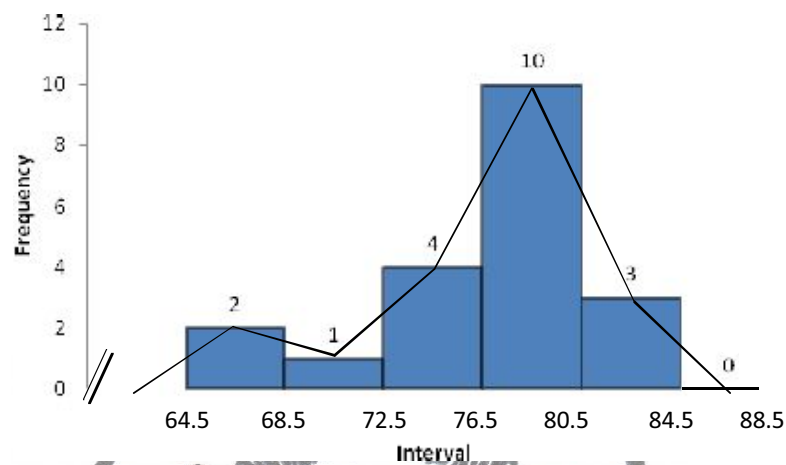
Figure 5. Histogram and Polygon of the Data A_1B_1

6. The data of the reading test of the students or the group having low creativity who are taught by using Inquiry-Based Learning method (A_1B_2)

Descriptive analysis of the data A_1B_2 shows that the score is 55 up to 73. The mean is 62.9, the mode is 56.6, the median is 62.5, and the standard deviation is 5.87. The frequency distribution of the data A_1B_2 is presented in table 9, histogram and polygon are presented in Figure 6.

Table 9. Frequency Distribution of the Data A_1B_2

| Class Limit	f_i	Class Boundaries	X_i	f_iX_i
55 - 58	9	54.5 – 58.5	56.5	508.5
59 - 62	1	58.5 – 62.5	60.5	60.5
63 - 66	3	62.5 – 66.5	64.5	193.5
67 - 70	6	65.5 – 70.5	68.5	411
71 - 74	1	70.5 – 74.5	72.5	72.5
75 - 78	0	74.5 – 78.5	76.5	0
Sum	20		399	1246
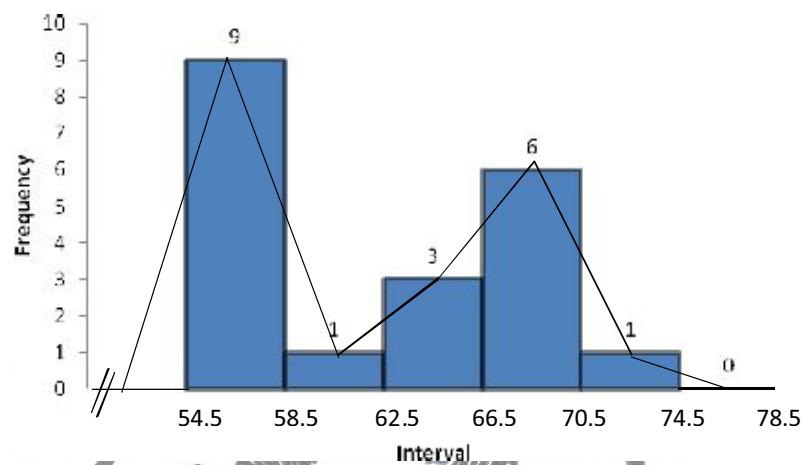
Figure 6. Histogram and Polygon of the Data A_1B_2

7. The data of the reading test of the students or the group having high

   creativity who are taught using Lecture method (A_2B_1)

   Descriptive analysis of the data A_2B_1 shows that the score is 53 up

to 83. The mean is 64.95, the mode is 59.5, the median is 67.5, and the

standard deviation is 8.32. The frequency distribution of the data A_2B_1 is

presented in table 10, histogram and polygon are presented in Figure 7.

Table 10. Frequency Distribution of the Data A_2B_1

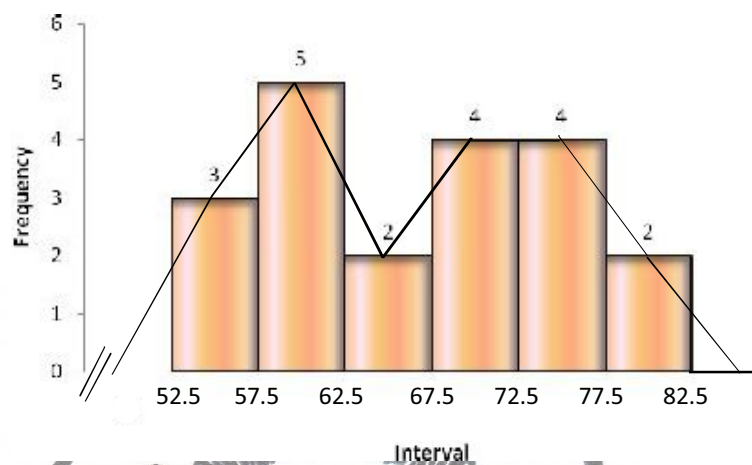| Class Limit	f_i	Class Boundaries	X_i	f_iX_i
53 - 57	3	52.5 – 57.5	55	165
58 - 62	5	57.5 – 62.5	60	300
63 - 67	2	62.5 – 67.5	65	130
68 - 72	4	67.5 – 72.5	70	280
73 - 77	4	72.5 – 77.5	75	300
78 - 82	2	77.5 – 82.5	80	160
Sum	20		405	1335

Figure 7. Histogram and Polygon of the Data A_2B_1

8. The data of the reading test of the students or the group having low creativity who are taught using Lecture method (A_2B_2)

Descriptive analysis of the data A_2B_2 shows that the score is 53 up to 70. The mean is 67.5, the mode is 74.5, the median is 69.5, and the standard deviation is 7.71. The frequency distribution of the data A_2B_2 is presented in table 11, histogram and polygon are presented in Figure 8.

Table 11. Frequency Distribution of the Data A_2B_2

Class Limit	f_i	Class Boundaries	X_i	f_iX_i
50 - 54	1	49.5 – 54.5	52	52
55 - 59	2	54.5 – 59.5	57	114
60 - 64	4	59.5 – 64.5	62	248
65 - 69	3	64.5 – 69.5	67	201
70 - 74	5	69.5 – 74.5	72	360
75 - 79	5	74.5 – 79.5	77	385
Sum	20		387	1360
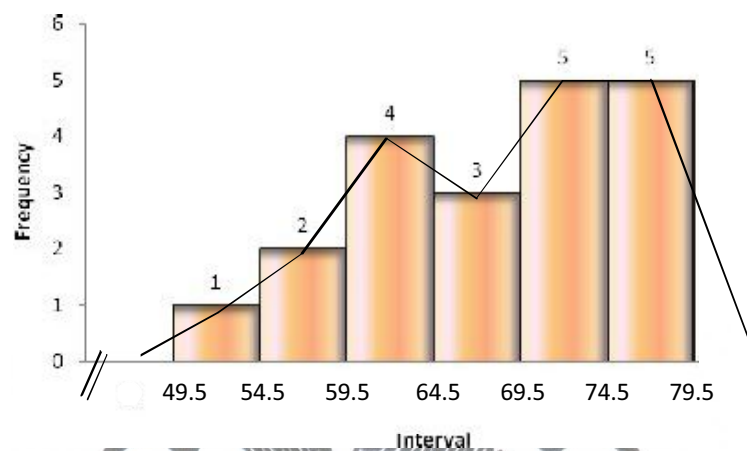
Figure 8. Histogram and Polygon of the Data A_2B_2

B. Normality and Homogeneity Test

Before analyzing the data using inferential analysis, normality and homogeneity test must be done. The normality test is to know that the sample is in normal distribution and the homogeneity test is to know that the data are homogeneous. Each test is presented in the following section.

1. Normality Test

The sample is in normal distribution if L_o (L obtained) is lower than L_t (L table), at the level of significance $(\alpha) = 0.05$. L stands for Lilliefors.

Table 12. The Summary of Normality Test Using Lilliefors

No	Data	The Number of Sample	L Obtained (L_o)	L Table (L_t)	Alpha (α)	Distribution of Population
1	A_1	40	0.112	0.140	0.05	Normal
2	A_2	40	0.115	0.140	0.05	Normal
3	B_1	40	0.114	0.140	0.05	Normal
4	B_2	40	0.086	0.140	0.05	Normal
5	A_1B_1	20	0.134	0.190	0.05	Normal
6	A_1B_2	20	0.124	0.190	0.05	Normal
7	A_2B_1	20	0.068	0.190	0.05	Normal
8	A_2B_2	20	0.111	0.190	0.05	Normal

It can be concluded that the data are in normal distribution because L obtained (L_o) is lower than L table (L_t) at the level of significance (α) = 0.05

2. Homogeneity Test

Homogeneity test is done to know that the data are homogeneous. If χ_o^2 is lower than χ_o^2 (0.05), it can be concluded that data are homogeneous.

Table 13. The Homogeneity Test

Sample	df	1/df	S_i^2	log S_i^2	df (log S_i^2)
1	19	0.053	23.568	1.372	26.074
2	19	0.053	37.674	1.576	29.944
3	19	0.053	73.524	1.866	35.462
4	19	0.053	57.105	1.757	33.377
	76	0.212			124.858

$$\chi^2 = (\ln 10)\{B - \Sigma \log(s_i^2) \times (n-1)\} =$$

$$= 2.3026(127.756 - 124.858)$$

$$= 2.3026 \times 2.898$$

$$= 6.683$$

Based on the calculation above, it can be seen that χ^2 (6.683) is lower than χ_i at the level of significance (α) 5% = 7.815. Therefore, it can be concluded that the data are homogeneous.

C. Hypothesis Test

Hypothesis test is done by using multifactor analysis of variance 2 x 2 because there are more than two groups of data. H_o is rejected if $F_o > F_t$. It means that there is a significant difference and there is an interaction. When

the result of analysis of variance shows that there is an interaction between the two variables, teaching methods and students' creativity, the analysis is continued to know the significant difference between the pair means of groups using Tukey test. The multifactor analysis of variance 2 x 2 and Tukey test are described as the following:

1. Summary of a 2 x 2 Multifactor Analysis Variance

Table 14. Multifactor Analysis Variance

Source of variance	SS	df	MS	F_o	$F_{t\,0,05}$	$F_{t\,0,01}$
Between columns (Method)	285.013	1	285.013	9.481	4.00	7.08
Between rows (creativity)	678.612	1	678.612	22.575	4.00	7.08
Columns by rows (interaction)	1402.813	1	1402.813	46.667	4.00	7.08
Between groups	2366.438	3	788.813	-	-	-
Within group	3645.562	76	30.060	-	-	-
Total	6012.000	79	-	-	-	-

The table above shows that:

a. The value of F_o between columns, the comparative analysis between the effect of teaching reading using Inquiry-Based Learning method and Lecture method, is 9.481. Because F_o between columns (9.481) is higher than F_t at the level of significance $\alpha = 0.05$ (4.00) and F_t at the level of significance $\alpha = 0.01$ (7.08), the difference between columns is significant. This shows that the null hypothesis stating that there is no difference in the effectiveness between Inquiry-Based Learning and Lecture method in teaching reading is rejected. It can be concluded that teaching methods differ significantly from one another in their effect on the performance of the subjects in the experiment. The mean score of the students who are taught using Inquiry-Based Learning (70) is higher than that of those who are taught using

Lecture method (66.225). So, it can be concluded that Inquiry-Based Learning is more effective than Lecture method for teaching reading.

b. The value of F_o between rows, the comparative analysis of the learning achievement between the students having high creativity and those having low creativity, is 22.575. Because F_o between rows (22.575) is higher than F_t at the level of significance $\alpha = 0.05$ (4.00) and F_t at the level of significance $\alpha = 0.01$ (7.08), the difference between rows is significant. This shows that null hypothesis stating that there is no difference in reading skill between the students having high creativity and those having low creativity is rejected. It can be concluded that the students having high creativity and those having low creativity are significantly different in their reading skill. The mean score of the students having high creativity (71.025) is higher than that of those having low creativity (65.2). So, it can be concluded that students having high creativity have better reading skill than those having low creativity.

c. The value of F_o interaction, the interaction between teaching methods and students' creativity, is 46.667. Because F_o interaction (46.667) is higher than F_t at the level of significance $\alpha = 0.05$ (4.00) and F_t at the level of significance $\alpha = 0.01$ (7.08), the null hypothesis stating that there is no interaction between teaching methods and students' creativity in teaching reading is rejected. This shows that there is an interaction effect between the two variables, teaching methods and the degree of students' creativity, toward students' reading skill. It means

that the effect of teaching methods on reading skill depends on the degree of students' creativity.

2. Summary of Tukey Test

    The finding of q is found by dividing the difference between the means by the square root of the within group variation and the simple size.

Table 15. Summary of Tukey Test

Between Groups	q_o	$q_{t(0.05)}$	Significance	Meaning
$A_1 - A_2$	4.340	2.86	Significant	$A_1 > A_2$
$B_1 - B_2$	6.733	2.86	Significant	$B_1 > B_2$
$A_1B_1 - A_2B_1$	9.910	2.95	Significant	$A_1B_1 > A_2B_1$
$A_1B_2 - A_2B_2$	3.772	2.95	Significant	$A_1B_2 < A_2B_2$

a. Because q_o between A_1 and A_2 (4.340) is higher than q_t at the level of significance $\alpha_t = 0.05$ (2.86), Inquiry-Based Learning differs significantly from Lecture method for teaching reading. The mean score of the students who are taught using Inquiry-Based Learning (70) is higher than that of those who are taught using Lecture method (66.225). So, it can be concluded that Inquiry-Based Learning is more effective than Lecture method for teaching reading.

b. Because q_o between B_1 and B_2 (6.733) is higher than q_t at the level of significance $\alpha = 0.05$ (2.86), the students having high creativity differs significantly from those having low creativity. The mean score of the students having high creativity (71.025) is higher than that of those having low creativity (65.2). So, it can be concluded that students

having high creativity have better reading skill than those having low creativity.

c. Because q_o between A_1B_1 (9.910) is higher than q_t at the level of significance $\alpha = 0.05$ (2.95), Inquiry-Based Learning differs significantly from Lecture method to teach reading for students having high creativity. The mean score of the students having high creativity who are taught using Inquiry-Based Learning (77.1) is higher than that of those who are taught using Lecture method (64.950). So, it can be concluded that Inquiry-Based Learning is more effective than Lecture method to teach reading for students having high creativity.

d. Because q_o between A_1B_2 and A_2B_2 (3.772) is higher than q_t at the level of significance $\alpha = 0.05$ (2.95), Inquiry-Based Learning differs significantly from Lecture method to teach reading for students having low creativity. The mean score of the students having low creativity who are taught using Lecture method (67.5) is higher than that of those who are taught using Inquiry-Based Learning (62.9). So, it can be concluded that Lecture method is more effective than Inquiry-Based Learning to teach reading for students having low creativity.

Based on the result in c and d above, it can be concluded that there is interaction between teaching methods and the students' of creativity in teaching reading

3.   Discussion of the Result of the Study

1. Inquiry-Based Learning is more effective than Lecture method to teach reading

In Inquiry-Based Learning, students not only learn and receive whatever the teacher teaches in the teaching-learning process or passively listening to a teacher talk but also learn from other students. Students are demanded to be more active and to work cooperatively in joining the learning process In reading class, they have to learn together, help each other to reach joint success, and do not compete against each other. They work cooperatively, not competitively to be more successful than others in doing the reading tasks. Through this principle, students can develop their positive interdependence. Their individual accountability also develops because they are motivated to work seriously in order to be able to do share and give contributions to others. The development of the interpersonal skills also occurs because they can learn how to lead, decide, ask questions, share opinion or present a point of view in discussing the reading texts. Dow (2000: 5- 8) confirms that when engaging in inquiry, students describe objects and events, ask questions, construct explanations, and communicate their ideas to others. They identify their assumptions, use critical and logical thinking, and consider alternative explanations. In this way, students actively develop their understanding by combining knowledge with reasoning and thinking skills. So, students can develop their positive interdependence, individual accountability, and interpersonal skills. Through the development of those

aspects, students are able to learn more comfortably and successfully in reading class.

On the other hand, Lecture method is a method of teaching in which a teacher presents an informative talk to a group of students. In this method, the teacher talks much about a reading text to the class. The class listens, takes notes of the facts and ideas worth remembering, and thinks over them later. Johnson and Johnson (1994: 123) say that it is typically a long period of uninterrupted teacher-centered that relegates students to the role of passive "spectator" in the classroom. Moore (1994: 182) also states that Lecture method fosters passive learning with very low student involvement. This lack of class participation dampens the students' motivation to learn and impedes learning progress. It minimizes the students' spirit and curiosity and discourages critical thinking and initiative in reading class. This turns the students into passive, apathetic individuals, and being satisfied to do minimal work necessary for passing the course. As a result, this method is neither able to make students understand the reading texts nor improve their reading skill effectively. Therefore, Inquiry-Based Learning is more effective than Lecture method to teach reading.

2. The students who have high creativity have better reading skill than those who have low creativity

In reading class, the students having high creativity are more actively involved in the class discussion and make a great effort to deal with the given tasks in order to reach a good achievement. The students

are called having high creativity when they are able to produce something new in their daily activity. They are able to solve their problem (learning problem), create something with their new ideas and they can apply it better. In this case, their creativity is related to the reading ability which covers the creativity to find out the meaning of words, find out the main idea of a certain paragraph, find out the implicit and/or the explicit information of the text, and find out the reference of words or phrases.

High creativity students often have special attitudes that give rise to creative intelligence, a superior ability for innovative thinking and application. They tend to clarify and elaborate or refine ideas and solutions (Torrance 1986: 1957). They can work cooperatively and feel that they are worthy and able to give contribution to others. Moreover, Franken (2000 : 396) states that high creativity students tend to generate or recognize ideas, alternative, or possibilities that may be useful in solving problem, communicating with others, and entertaining ourselves and others. Those have important influence on success in second language learning. Nanda, Arti, and Pal (1994: 15) report that highly creative students possess better academic achievement. They state that the role of creativity and extensive reading on achievement in English is significant.

On the contrary, the students are called having low creativity when they have no progress in doing something. They have a monotonous concept, idea, creation in solving the problem which may be affected by their low intelligence. The students who have low creativity have the opposite characteristics. In reading class, they don't have strong

confidence to cope with the given tasks. They are reluctant to take a great effort, pessimistic to be successful in learning. They often face the tasks in learning with fear, complaint, and tend to be passive, not creative, and less motivated. Guest (1984: 4) confirms that students with low creativity underestimate their worth, think less of themselves than they should, and focus on their weaknesses. Therefore, it is very hard for them to improve their reading skill successfully.

Based on the above elaboration, it can be stated that the students who have high creativity will be easier to understand the text given because the are more creative in finding out the solution when they are faced by the difficulties in reading comprehension. Otherwise, the students who have low creativity will have difficulty in understanding the text given because they are less creative in solving their problems.

Therefore, it is understandable that students who have high creativity have better reading skill than those who have low creativity.

3. There is an interaction between teaching methods and students' creativity

Teaching method used by the teacher in the class gives a big influence on the success of the teaching and learning process. Choosing and applying the proper techniques are believed able to treat the students to have high creativity and choosing improper techniques will bring them to have low desire in learning. In teaching reading, the teacher also needs to find a suitable method that can motivate the students to join the class actively. Unlike Lecture method, which tends to be teacher-centered and places the students in a passive learning role, Inquiry-Based Learning encourages

student-centered activities and requires the students to be more active in acquiring the academic content without neglecting their social and human relation with others unconsciously (Orlich, et al., 1998: 274).

In teaching and learning process by using inquiry based learning, the students have optimism to finish the task. They have high motivation and self-confidence to ask their friend and express their ideas. They learn how to socialize each other, express ideas, and respect other's opinion. Cooperative activities in Inquiry-Based Learning require the students to be actively involved in the discussion, to show their competence and responsibility to find out and share the ideas or answers, to learn to help each other and to be accepted by others in order to achieve a success together. Sund and Trowbridge (1993: 65) state that inquiry based learning provides students more opportunities to develop their talents such as creativity, social interaction, and organizing. To accomplish such activities successfully requires the students who have high creativity.

In reading class, the students having high creativity are more actively involved in the class discussion and make a great effort to deal with the given tasks in order to reach a good achievement. They have so high self-confidence that they face the tasks in learning reading with rationality, creativity, independence, flexibility, and optimism to be successful. Atwater (1990: 155) states that students having high level of creativity expect to do well in their accomplishments and try to be successful. In reading class, they are more self-confident, motivated, active, cooperative, and able to cope with challenging tasks. They have

high aspiration to achieve good scores, make greater efforts, and believe that they can be successfully. Therefore, Inquiry-Based Learning is effective to teach reading to the students having high creativity.

On the contrary, Lecture method presumes that all students learn at the same pace and at the same level of understanding. It emphasizes learning by listening, which is a disadvantage for students who have other learning style. It seems to be suitable for students having low creativity because it possesses the characteristics which possibly make the students passive during the class (Johnson and Johnson, 1994: 123). In reading class with Lecture method, the students directly receive knowledge through a one-way of oral presentation by the teacher. They are not actively involved in the cooperative activity since they are not demanded to explore and elaborate their ideas or answers in the teaching and learning process. Lecture method fosters passive learning, with very low students' involvement. Students are expected, and even encouraged, to sit quietly, listen, and perhaps take notes. Such a method of teaching is preferred by students who have low creativity. They tend to expect the worst, exert less effort on their tasks, especially challenging and demanding ones, and achieve less success (Atwater, 1990: 155). In other words, they prefer being passive in the teaching-learning process. Since Lecture method and students having low creativity have a suitable characteristic, Lecture method is suitable to teach reading for students who have low creativity.

Therefore, there is an interaction between teaching methods and creativity toward students' reading skill. Inquiry-Based Learning is more

effective than Lecture method to teach reading for students having high creativity. In other words, Inquiry-Based Learning is suitable for students having high creativity. Meanwhile, Lecture method is more effective than Inquiry-Based Learning to teach reading for students having low creativity. In other words, Lecture method is suitable for students having low creativity.

CHAPTER V

CONCLUSION, IMPLICATION, AND SUGGESTION

A. Conclusion

Based on the description of the data analysis, the research findings are as follows:

1. Inquiry-based Learning is more effective than lecture method to teach reading to the eighth grade students of MTs. Negeri Tuban in the academic year of 2011/2012

2. The students who have high creativity have better reading skill than those who have low creativity at the eighth grade students of MTs. Negeri Tuban in the academic year of 2011/2012

3. There is an interaction between teaching methods and students' creativity to teach reading to the eighth grade students of MTs. Negeri Tuban in the academic year of 2011/2012

Based on the research findings, it can be concluded that Inquiry-based Learning is an effective method to teach reading to the eighth grade students of MTs. Negeri Tuban in the academic year of 2011/2012. The effectiveness of the method is influenced by the students' level of creativity.

B. Implication

Since Inquiry-based Learning is proved to be effective, the use of Inquiry-based Learning is recommended in teaching reading. In order to achieve a good result, it must be applied properly in the teaching-learning process. The

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procedures of Inquiry-based Learning are: (1) the class is divided into several groups; (2) all groups give set of questions related to the topic of inquiry; (3) once a question is posed, students are encouraged to investigate the topic by gathering information from sources that the teacher provides; (4) when enough information related to the topic of inquiry is gathered, they organized in categories or outlined by highlighting the important information relative to the topic; (5) they discuss in their group and analyze their answer to check them; (6) each group presents the answers in the class discussion. Here, the teacher facilitates the discussion and gives confirmation on the answers presented by the groups so that the conclusion can be made.

It is clear that in the process of teaching reading using inquiry-based learning, the students have to be actively involved in cooperative work to do the shared tasks. They have to learn together, help each other to reach joint success. The expected result is not only in the improvement in students' achievement but also in the quality of their interpersonal relationship. When the procedure of inquiry-based learning are applied properly in teaching reading, not only students' academic achievement but also students' creativity can be expected to increase. This happens because through cooperative learning in inquiry-based learning the students feel more capable of doing the tasks, successful in achieving the goals, and worthy for others. They also encouraged to be actively involved in cooperative work. Therefore, it is undeniable that by applying inquiry-based learning, the students are able to obtain an optimum achievement in reading.

C. Suggestion

It is necessary to have other investigations as the follow up of the researches which have been carried out. Replication of similar study will reinforce the findings. This research is expected useful for teachers, students, and future researchers, therefore, some suggestion are listed as follows:

1. For Teachers

   a. Teachers can use inquiry-based learning to teach reading to improve students' reading skill.

   b. Teachers have to consider that creativity is one of important factors which can influence the students in the teaching and learning.

2. For Students

   a. Students should be actively involved in the teaching and learning process in order to improve their reading skill.

   b. Students having low creativity should encourage themselves and be aware that they have to more active in their involvement in the teaching and learning process.

3. For Other Researchers

   a. Other researchers can use the findings of the study as the starting point to continue the next study.

   b. It may be worthwhile for them to conduct another research with different attributive variables such as students' habit, creativity or risk taking.

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