THE EFFECTIVENESS OF CLUSTERING TO TEACH READING
COMPREHENSION VIEWED FROM STUDENTS' INTEREST
(An Experimental Study at the Eleventh Grade Students of MAN I Ponorogo in the
Academic Year of 2011/2012)

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APPROVAL

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PRONOUNCEMENT

This is to certify that I myself write this thesis entitled ‘The Effectiveness of Clustering to Teach Reading Viewed from Students’ Interest’. It is not a plagiarism or made by others. Anything related to others’ works is written in quotation, the sources of which are listed on the list of bibliography.

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

Surakarta, Oktober 2012

Abdullah Fikri
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ABSTRACT


The aim of this research is to know whether: (1) Clustering technique is more effective than Direct Instruction in teaching of reading comprehension, (2) the students who have high interest have better reading comprehension than those who have low interest, (3) there is the interaction between teaching techniques and learning interest in teaching reading comprehension.

This research is an experimental research. The research was carried out at MAN 1 Ponorogo from December to July 2012. The population of this research is the eleventh grade students of MAN 1 Ponorogo for the academic year of 2011/2012. The sample was taken using cluster random sampling. The sample consists of 48 students which are divided into two classes or groups, XI IPS 2 which consists of 24 students as an experimental class and class XI IPA 1 which consists of 24 students as a control class. The instruments used are questionnaire to get scores of students’ interest and reading test to get scores of students reading comprehension. Before the instrument was used, a tryout was done to know the validity and reliability of the instrument. After treatment was given in eight meetings, the researcher conducted a post test to get the research data. Having got research data, the researcher analyzed the data in term of their frequency distribution, normality of the sample distribution and the data homogeneity. Then, researcher used ANOVA test (multifactor analysis of variance) and TUKEY test to test the research hypothesis.

Based on the result of data analysis, the research findings are: (1) Clustering technique is more effective than direct instruction to teach reading comprehension, (2) the reading achievement of the students with high interest is better than the achievement of those with low interest and (3) there is an interaction between teaching techniques and students’ interest in teaching reading.

The research result of this study implies that: (1) it is better for teachers to apply clustering technique to make the students more actively involved in teaching and learning process and more encouraged to study; (2) future researchers can conduct research on the same kind with different sample and different students’ condition.
MOTTO

“Dimana ada kemauan, disitu pasti ada jalan”

( Dr. HM. Tuah )
DEDICATION

This thesis is humbly dedicated to:

- My beloved parents and parents-in-law.
- My beloved wife, Rosyidah, for her great love, affection, patience, never ending supports in facing this life.
- My beloved sisters and brothers, for their support and pray.
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The researcher praises to Allah SWT, for all the blesses, strengths, and opportunities given so that this thesis can be well completed. So many people have also given great contribution to help the researcher in conducting this research while it is impossible to mention all. He is very grateful and he would express his deep gratitude to:

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5. All my beloved students, especially Class XI IPS 2 and XI IPA 1 who have taken part in my research.

Finally, the writer hopes that readers will find some values in this thesis. Therefore, any criticism and suggestions are very much welcome.

Ponorogo, Oktober 28th, 2012
Abdullah Fikri
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CHAPTER I

INTRODUCTION

A. Background of the study

In learning English, there are four language skills that should be mastered, namely listening, reading, speaking, and writing. Listening and reading belong to receptive skills in which the language users require the ability to receive spoken and written language, while speaking and writing belong to productive skills in which the language users require the ability to produce language both spoken and written (Pikulski & Templeton, 2004: 1-2). These four language skills are integrated and related to one another. Based on curriculum KTSP, all skills in teaching and learning English that are integrated each other must be learnt and taught by both students and teacher, including reading skill.

Reading is about understanding written texts. It is complex activity that involves both perception and thought. Reading consists of two related processes: word recognition and comprehension. Word recognition refers to the process of perceiving how written symbols correspond to one’s spoken language. Comprehension is the process of making sense of words, sentences and connected texts. Readers typically make use of their background of knowledge, vocabulary, grammatical knowledge, experience with the text and other strategies to help them understand the written texts.

According to Elaine (2008:116) reading is fundamental to the development of full second language competence. Many people across the world develop some listening and speaking ability in a second language through...
television or movies, but reading is necessary to use a language for academic or professional purposes.

Reading comprehension is a process of getting information from context and combining disparate elements into a new whole. It is a process of using reader’s existing knowledge (schemata) to interpret text in order to construct meaning. (Cahyono, 2011: 58).

Reading can’t be separated from comprehension. That is why there was appear a lot of problems dealing with reading comprehension. Many English learners find difficulties in understanding the English text. Very often, they get stuck because of some problems, such as unfamiliar words, their inability in understanding the context, being reluctant and so forth.

Reading is not an easy skill to be mastered. It is complex process that requires specialized skill of the reader. According to Nunan (1998: 33), reading need identification and also interpretation processes which require the reader’s knowledge about the language structure used in the text and his knowledge about a given topic. It is the complexity that makes some students less interested in this kind of activity. They find it difficult to understand what is on the reading passage since they do not know the technique which can help them to read more effectively and efficiently. This phenomenon happens in almost every language class.

A reader must activate meaning of a text, and schemata that fit with the information from text. To get meaning of text, a reader must activate the schemata he or she already possesses.

commit to user
To be able to achieve the purpose of reading comprehension, one should have some basic reading skills as follows: (1) literal skills (getting the central thought and main idea, recalling and recognizing of facts and information, finding answer to specific questions); (2) interpretative skills (drawing conclusions, generalizing, deriving meaning from context); (3) critical skills (determining the writer’s purpose); and (4) creative skills (applying information into daily life). (Grabe and Stoller, 2002: 26)

In Indonesia, English is the first foreign language taught at school. Because of that fact, Indonesian learners become foreign language readers. They use their background knowledge and all elements of reading processes, such as the topic, text structure, their knowledge of the world, patient, carefulness, consciousness, habitual action and their persistence to get the goal of reading comprehension.

In reality, most students face problems related to student’s reading comprehension. The students find some more problems in comprehending the text, finding general idea of the text, finding main idea of the text, finding some information explicitly and implicitly stated in the text, and finding the meaning of the words related to the text, fail in determining the key point and than many students have low interest in reading class. It makes the classroom situation even worse.

Moreover, some students find themselves difficult to understand the material of the English subject. Some of them consider that the materials are too difficult to master. It is understandable since English is different from
Indonesian. The various reading materials can make teaching and learning English reading more creative, interesting, challenging and beneficial.

The problem stated above may be caused by some conditions. First, the teachers use an inappropriate teaching technique when they are explaining reading materials. The teachers use one technique namely, conventional technique without any variation. Second, the teachers just present a subject in the textbook and ask students to read whether silently or loudly, and then students asked to answer the questions that follow. Consequently, the reading lesson becomes monotonous and boring, the students lack of motivation to read, even if they read, they show negative attitudes. As a result, the students are not able to get good scores in their reading achievement. Third, the teacher dominates the classroom activity. The students just listen and follow the instructions given by the teacher so that they cannot experience with their reading skills. They are not led to experience with their reading skill through reading process activity. Fourth, the teacher has insufficient mastery of strategies in helping students to read. The teachers do not yet master the strategies useful to guide students in reading.

At Senior High School or MAN I Ponorogo, English is taught 4 credit-hours a week with a time allocation 45 minutes each. Based on the students' English classroom observation, the students in majority cannot communicate in English smoothly although they have learned English since from Junior High School. Furthermore, in English teaching and learning process, teacher-centered activities are dominated in the classroom. So, in order to get further causes why
the students obtain poor achievement in learning English, it is needed a research
dealing with the teaching and learning English.

Based on the observation and the result of previous reading evaluation of
the eleventh grade students of MAN 1 Ponorogo shows that more than 60% the
result study of students were low. They are difficult to maintain their interest in
reading passage, the students get confused to recognize parts of speech in
reading, some of the students still get difficulty in finding the factual
information, and some students still do not know the meaning of each problem.

The condition during the lesson in the class is that the students are
passive. They even show no interest toward the subject. Then they have low
cooperation and negative response to reading class. It is indicated by their
keeping silent during the teaching learning process and they also have no
response when questions are addressed to them. In addition the students also
show no interest toward reading class.

In this case, in solving the problem above the teacher-centered should be
changed into students-centered. It means that students are given an opportunity
to improve and develop their ideas. Besides that, the teaching method should be
innovative, attractive and adjusted with students’ need and condition. This way
is to make students more interests and have motivation in attending the lesson.
In teaching and learning process, the teachers should know what the students
need and desire in learning, because without knowing their need and desire, the
learning process will not be maximized. The geographical condition,
environment, education background are the factors in deciding what method
should be used by the teachers. Before starting the material, the teachers should
review the past material/lesson. This way is used to guide the students connect with new material. In exploring the students’ prior knowledge, of course, we need a method; one method that can arouse the students’ prior knowledge is clustering strategy.

Why the writer uses clustering? Because of clustering can be used at least several different instructional purposes. This technique can assist teachers in planning the instruction by helping them identify the pattern of organization of ideas and the concepts. Clustering can be categorized by pre-reading activity. The writer leads students’ idea by giving some questions to them. The writer writes their ideas on the board and make diagram related to the reading passage. So in this technique the teacher give the opportunities to students improve their idea and the writer think that this technique can make student enjoy, happy and interest to learn English without any difficulties.

In addition the students’ interest is needed to support students in joining the teaching learning process. It makes them more interested in learning and makes they pay more attention in joining the class. The high level of interest will determine student’s success. Interest provides a strong motivation to learn.

B. Identification of the Problem

Dealing with the background of the study above, the writer identifies some problems, such as:

1. How can the learners of English improve their reading ability?
2. Why is it difficult for the students to learn English?
3. Why do they feel difficult to answer the question of a new reading text?
4. How can clustering technique help learners improve their reading skill?

5. How can the students with high interest get better achievement in reading than the students with low interest?

C. Limitation of the Problems

Limitation is used to narrow the scope of the study. Therefore, the writer will limit the study on the technique used by teacher of English in teaching reading comprehension. The research focus will be on the effectiveness of the reading technique offered by the researcher, clustering technique, in experimental class toward the reading strategy used by the teacher direct instruction in control class.

In addition, the researcher will be eager to know the correlation between the teaching reading technique with the students’ interest in teaching and learning process.

D. Statement of the Problems

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

1. Is clustering more effective than Direct Instruction to improve students’ reading comprehension achievement?

2. Do students who have high learning interest have better reading comprehension achievement than those who have low learning interest?

3. Is there any interaction between teaching technique and students’ learning interest in teaching reading by using clustering?
E. Objectives of the Study

This research is aimed at finding out the influences of the teaching technique and students’ interest on the students’ reading comprehension. In detail, this research has the objectives to find out whether:

1. Clustering technique is more effective than direct instruction to teach reading comprehension.
2. The students who have high interest have better reading comprehension than those who have low interest.
3. There is an interaction between teaching technique and interest to teach reading comprehension.

F. Benefits of the Study

The benefits of this study are as follows:

1. Theoretically, this study can support the theories on teaching English reading as a foreign language.
2. Practically, the result of this study will be useful to:
   a) Other teachers. This result will give information to other teacher about the students’ learning interest (low and high) in reading comprehension through clustering and traditional strategy.
   Secondly, this study enables other English teacher to create and explore some varieties of teaching reading technique to the students. It will make reading activities more interesting, faster, creative, innovative and always up to date.
   Finally, this study shows to other teachers that, as English teachers, they should improve their teaching quality to make their class have a greater
interest, motivation, joy, awareness and fruitful journey to explore their own teaching experience, especially reading.

b) Students. The using of clustering and learning process will surely attract the student’s attention because they feel that whatever they study in the classroom is actually useful for their daily life. They think that the classroom situation is interesting and the students can imagine themselves in a situation related to the text but beyond their own experience. Besides, the use of clustering in teaching reading will activate the students to learn.

c) The institution. This study can be used for MAN I Ponorogo because it provides valuable information for the improvement of teaching reading through clustering.

d) Other researches. This study can be a reference for further similar studies.

e) The writer. This study can improve and give her a new experience, build brand-new schemata and knowledge on teaching and learning process. It is functioned as the measurement whether or not she can practice and apply all of the theoretical knowledge to a real class or her own. Besides, it also gives her knowledge of personality, persistence and patience.
CHAPTER II

REVIEW OF RELATED LITERATURE

A scientific framework needs some theories that support the fundamental though. In accordance with the topic that will be discussed in the thesis, this chapter will discuss theoretical description underlying the research, rationale, and hypotheses.

A. Reading Comprehension

1. The Definition of Reading

In the field of language teaching, reading is becoming more important as it cannot be separated from the student’s activity in the effort to improve their knowledge.

The discussion of the nature of reading, in general, cannot be separated from different ways of defining the term of reading. Grabe and Stollen (2002: 9) defines that reading is the ability to draw meaning from the printed page and interpret this information appropriately.

Finocchiaro (1974: 77) states that reading is getting meaning from the printed or written material. To helping students comprehend the written material in a text that the teacher given to them, teachers should give them the knowledge and the ability to be able to read other material with easy and enjoyment. Williams (1984:2) defines reading as a process whereby one looks at and understand what has been read. The key word here is ‘understand’ – merely reading aloud without understanding does not count as reading.
Urguhart (1998:5) states that reading involves processing languages message. Furthermore, he also defines that reading is a process of receiving and interpreting information encoded in language via the medium of print (1998:22).

Leipzig (2001: 1) states reading is a multifaceted process involving word recognition, comprehension, fluency and motivation. He also says that reading is making meaning from print that requires: 1). identify the word in print – a process called word recognition, 2). construct an understanding from them – process called comprehension, 3) coordinate indentifying words and making meaning so that reading is automatic and accurate – an achievement called fluency.

Further, Kennedy (1995: 5) states that 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.

Cahyono (2011: 57) writes “reading is a means of communicating information between the writer and the reader. The reader tries to understand ideas that the writer has put in print. Muh Kusen in Cahyono (2011: 87) states “reading is complex process because it includes transferring the message between writers and readers who have different background knowledge”. Moreover, the meaning is not obtained in the words on the page but it is the end result of the interactive process between the text and the reader. In other words, the reader brings in his or her background knowledge (schema, linguistics competence and cultural awareness to extract meaning from a given text).
Patel and Jain (2008: 113) state that reading means to understand the meaning of printed words i.e. written symbols. Reading is an active process which consists of recognition and recognition comprehension skill. Reading is an important activity in life with which one can update his/her knowledge.

Referring to the definition above, reading can be concluded as follows:

1. Reading is an active process of finding the meaning through printed material. Moreover, reading is process of communication between the reader and the written in the way of getting the author's message from the text.

2. Reading is to get understanding of passage as reading for comprehension. Therefore, the reader who is doing comprehending should apply reading comprehension skills or abilities in enabling to understand literal, inferential, and evaluation.

3. Reading is active activity by relating the reader's own knowledge, experience and emotion to be able to reconstruct the author’s meaning in the passage.

From the explanation above it can be concluded that reading is an active process in which a reader, a text and the writer are involved to find the meaning, receive and interpret information, reconstruct the authors’ message from the text.

commit to user
2. **The Purpose of Reading**

When we read in our own language, we read differently from the way we read in a foreign language. In our own language, we know how to focus our reading so that we concentrate on getting the main meaning from a text. We usually have purpose for reading in our mind, which focusing our reading.

Hadfield & Hadfield (2008: 91) state “in our own language we use a variety of different ways of reading. We read in different ways depending on what we are reading and why”. If we read a magazine, we might read it rapidly, for general meaning. If we read entertainment page in a newspaper to see what time a particular film, we would search the text for this specific information.

Grabe and Stoller (2002:12-15) believe that there are several purposes of reading that can be classified under several main headings. The purposes of reading are:

**a. Reading to search for simple information**

Reading to search for simple information is a common reading ability, though some researchers see it as relatively independent cognitive process. It is used so often reading tasks that it is probably best seen as a type of reading ability. The readers scan the text for a specific piece of information or a specific word. As an example, people usually search through a telephone directory to find key information, either an address or a phone number. In prose texts, the reader
sometimes slow down to process the meaning of a sentence or two in search of clues that might indicate the right page, section, or chapter.

b. **Reading to skim quickly**

Similarly, reading to skim (i.e. sampling segments of the text for a general understanding) is a common part of many reading tasks and a useful skill in its own right. It involves a combination of strategies for guessing where important information might be in the text and then using basic reading comprehension skills on those segments of the text until a general idea is formed.

c. **Reading to learn from texts**

It occurs in academic and professional contexts in which a person needs to learn a considerable amount of information from a text. It requires abilities to:

1) Remember main ideas as well as a number of details that elaborate the main and supporting ideas in the text.

2) Recognize and build rhetorical frames that organize the information in the text.

3) **Link the text to the reader’s knowledge base.**

Reading to learn is usually carried out at a reading rate somewhat slower than general reading comprehension (primarily) due to reading and reflection strategies to help remember information). In addition, it makes stronger inference demands than general comprehension to connect text information with background knowledge.
(e.g. connecting a character, event or concept to other known characters, events or concepts; or possible causes to known events).

d. Reading to integrate information

It requires additional decisions about the relative importance of complementary, mutually supporting or conflicting information and the likely restructuring of a rhetorical frame to accommodate information from multiple sources. These skills inevitably require critical evaluation of the information being read so that the reader can decide what information to integrate and how to integrate it for the reader's goal.

e. Reading to write

It may be task variants of reading to integrate information. It requires abilities to compose, select, and critique information from a text. Reading to write and reading to critique texts purposes represent common academic task that call upon the reading abilities needed to integrate information.

f. Reading for general comprehension

Two notions of general reading comprehension, that is first, it is the most basic purpose for reading, underlying and supporting most other purposes for reading. Second, reading for general comprehension is actually more complex than commonly assumed. It requires very rapid and automatic processing of words, strong skills in forming a general meaning representation of main ideas, and efficient coordination of many processes under very limited time constrains when accomplished by a skilled fluent reader.
Hedge (2000: 195) mentions that purpose of reading consist of:

2. Reflective reading. It is involve episodes of reading the text and then pausing to reflect and backtrack. Example: when reader wants to check whether a new line of argument in political text is consistent with opinions expressed earlier in the same article.
3. Skim reading. It is used to get global impression of the content of a text.
4. Scanning. It is involve searching rapidly through a text to find a specific point of information. Example: key point in academic text.
5. Intensive reading. It is involve looking carefully at a text.

Based on the theory above, we understand that different purposes for reading determine different strategies in approaching text and also different rates of reading. One text may be read in a variety of styles and the readers will have different purposes at each stage of the reading process and will apply the appropriate strategies.

3. The Definitions of Reading Comprehension

Klinger, Vaughn and Boardman (2007: 12) state that reading comprehension is multi component, highly complex process that involves many interactions between readers and what they bring to the text (previous knowledge, strategy use) as well as variables related to the text itself (interest in the text understanding of text types).

Snow (2002: 11) writes that reading comprehension as the process of simultaneously extracting and constructing meaning through interaction and
involvement with written language. The emphasis is merely on the word ‘extracting’ and ‘constructing’.

Grabe and Stoller (2002: 29) in their book *Teaching and Researching Reading* state as follows: Reading comprehension is an extraordinary feat of balancing and coordinating many abilities in very complex and rapid set of routines that make comprehension a seemingly effortless and enjoyable activity for fluent readers.

Rosenshine in Dupuis and Askov (1982: 186) 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 of the most important comprehension skills.

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 kinds of paragraph development, understanding the message of the theory, understanding topic sentence, understanding the tone (of emotion) of the text, understanding vocabulary, understanding logical inference, distinguishing between general idea and topic sentence, making accurate prediction, making restatement, and understanding grammar (Bermuister: 1974: 83).

Paris (2007: 1) states that reading comprehension involves the construction of meaning from text using a wide variety of skill and
knowledge. Reading as an active and complex process that involve understanding written text, developing and interpreting meaning, and using meaning as appropriate to type of text, purpose and situation.

Haris and Hodge (in Calyono, 2011: 88) state “reading comprehension is defined as the construction of meaning of written communication through a reciprocal, holistic interchange of ideas between the interpreter and the message in particular context”. The reader who has the balance knowledge and experience must be able to adjust the source of information into adaptable context.

In line with some definitions above, Aebersold and Field (2000: 15) also argue that reading comprehension is the processes of comprehending, then, involves decoding the writer’s words and the using background knowledge to construct an approximate understanding of writer’s message. Furthermore, they state that the process of comprehending a text is not so exact since reading is personal activity. It means that reading comprehension differs from one reader to another reader.

Grellet (1998:3) reading comprehension is an understanding a written text or extracting the required information from it as efficiently as possible.

White (1997: 22) reading comprehension involves recognizing the significance of the message, understanding the intentions of the writer and going beyond what is written to guess at hidden, unstated or implied meaning.

International Journal of Information and Education Technology (2011:142) states that reading comprehension is an interactive process in
which readers construct a meaningful representation of text using their schemata.

Basri in his article (2011) says that reading comprehension is the ability to process the written or passages from what has been read, and then develop and construct the ideas in main department on the experience or prior knowledge of the reader, reading comprehension also could be supposed to be the ability to understand and to find out the information, and the written purpose reading comprehension usually comes from the ability relate the writer’s to personal experience, along with the educate language attached to chose experiences and facilitated in utilizing word recognition clues. Comprehension complex activity the printed page itself has no meaning it is only the written paper in the meaning from the mind of the reader.

Arieta (2011: 1) states that reading comprehension as holistic process of constructing meaning from written text through the interaction of:

a. The knowledge the reader brings to the text, i.e., word recognition ability, world knowledge and knowledge of linguistic conventions.

b. The readers’ interpretation of the language that the writer used in constructing the text.

c. The situation in which the text is read.

Cahyono and Nur Mukminatin (2011: 88-89) state that reading comprehension entails three important elements, they are:

a. The reader. The reader, when he or she is in the purpose of comprehending a text, must have wide range of capacities and abilities. They include cognitive capacities (attention, memory, critical ability, inference, visualization ability), motivation (purpose of commitment to user...
reader, an interest, self efficacy), and various type of knowledge (vocabulary, linguistic and discourse knowledge).

b. Text. The features of the text have a large effect on comprehension. During reading, the reader constructs different representation of the texts that are important for comprehension.

c. Activity. Reading does not occur in vacuum. It is done for a purpose, to achieve some end. A reading activity involves one or more purposes, some operations to process the text at hand the consequences of performing the activity. Prior to reading, reader has purpose which can be either externally or internally generated. The purpose is influenced by cluster of motivational variables, including interest and prior knowledge.

From the theory described above, it can be concluded that reading comprehension is an interactive process in identifying word meaning (lexical meaning), identifying main idea, comprehending the meaning based on the context, getting implicit and explicit information, reference of the word from the text using variety of skill and knowledge (schemata) to get an approximate understanding of writer's message.

In this research the writer determines the indicators of reading comprehension, they are: lexical meaning, main idea, comprehending the explicit and implicit information, and referent of the word.

4. The Levels of Reading Comprehension

Crawford (2000: 38) in his articles Teaching Reading Comprehension for Industrial Students states that there are three different levels of thinking applied to reading comprehension, namely literal,
inferential, and critical comprehension. First, literal comprehension refers to noting and relating details, looking for context clues, identifying text patterns, and development. At this level, teachers can ask some questions such as distinguishing relevant from irrelevant points, using clues to understand meanings of words, finding the fact, finding the general information, and guessing the meaning of unfamiliar words.

Inferential comprehension refers to drawing conclusions and predicting outcome based on information in the text, e.g., guessing motivation of character in a text using the dialogue or description; generalizing ideas presented in the text, identifying the main idea, identifying the title, the type, the generic structure, the purpose of the text, and getting the implicit information.

Critical comprehension refers to distinguishing facts from opinions and evaluating tone, implications, and propaganda tools, e.g., questioning claims made by the author, analyzing, evaluating, expressing opinions about ideas in the text, interpreting the meaning based on the context, and making judgment.

The writer concerns on the all levels of reading comprehensions because the reading comprehensions itself is a complex process that should be undergone by the students from the beginning until the end.

5. Micro skills and Macro Skills of Reading Comprehension

Brown (2004: 187-188) states that aside from attending to genres of text, the skills and strategies for accomplishing reading emerge as a crucial
consideration in the assessment of reading ability. The micro- and macro skill below represent the spectrum of possibilities for objectives in the assessment of reading comprehension.

a. **Micro skills of reading comprehension**

There are seven micro skills in reading comprehension as follows:

1) Discriminate among the distinctive graphemes and orthographic patterns of English.
2) Retain chunks of language of different lengths in short-term memory.
3) Process writing at an efficient rate of speed to suit the purpose.
4) Recognize a core of word, and interpret word order pattern and their significance.
5) Recognize grammatical word classes (nouns, verbs, etc.), systems (e.g., tense, agreement, pluralization), pattern, rules and elliptical forms.
6) Recognize that a particular meaning may be expressed in different grammatical forms.
7) Recognize cohesive devices in written discourse and their role in signaling the relationship between and among clauses.

b. **Macro Skills of Reading Comprehension**

Macro skills also have seven ways in reading comprehension. They are:

1) Recognize the rhetorical forms of written discourse and their significance for interpretation.
2) Recognize the communicative functions of written texts, according to form and purpose.

3) Infer context that is not explicit by using background knowledge.

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

5) Distinguish between literal and implied meanings.

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

7) Develop 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 the interpretation of text.

6. The strategies of reading comprehension

Brown (2001: 306-311) also states as follows: the assessment of reading can imply the assessment of a storehouse of reading strategies, as indicated in macro skill item number 7. Aside from simply testing the ultimate achievement of comprehension of a written text, I may be important in some contexts to assess one or more of storehouse of classic reading strategies. The brief taxonomy of strategies below is a list of possible assessment criteria.

He mentions some principles strategies for reading comprehension as follow:

a. Identify your purpose in reading the text.

b. Apply spelling rules and convention for bottom-up decoding.
c. Use lexical analysis (prefixes, roots, suffixes, etc.) to determine meaning.
d. Guess at meaning (of words, idioms, etc.) when you are not certain.
e. Skim the text for the gist and for main ideas.
f. Scan the text for specific information (names, dates, key words).
g. Use silent reading techniques for rapid processing.
h. Use marginal notes, outlines, charts, or semantic maps/clustering for understanding and retaining information.
i. Distinguish between literal and implied meanings.
j. Capitalize on discourse markers to process relationships.

Many experts define theories on reading comprehension. Synthesizing from the explanations above, Reading comprehension involves instructional techniques and activities that are scientifically valid, moving from how to assess reading comprehension to teach students how to flexibly and effectively use multiple comprehension strategies. Furthermore, reading comprehension is important in reaching the goal of reading. To come into goal, reading comprehension passes through three different levels of thinking that is literal, inferential and critical comprehension that can be applied to reading comprehension. Literal comprehension includes: finding the fact, finding the general information, and guessing the meaning of unfamiliar words. Meanwhile, inferential comprehension involves: identifying the main idea, identifying the title, the type, the generic structure, the purpose of the text and getting the implicit information. In addition, critical comprehension includes: interpreting, analyzing, evaluating the meaning based on the context and also making judgment.
7. The Reading Process

Models of reading process often describe the act of reading as a communication event between a sender (the writer) and receiver of information (the reader). Reading models have been developed to describe the way readers use language information to construct meaning from a written text. Alderson (2001: 16) explains in his book that models process of reading may be placed in the three categories: button-up, top-down, and interactive models. The brief explanation of each type of reading models as follows:

a. Button-Up Model

The button-up models assume that the process of translating print to meaning begins with print. The process is initiated by decoding graphic symbols into sounds. The readers first identifies features of letters, link these features together to recognize letters, combine letters to recognize words and then proceeds to sentence, paragraph and text level.

Alderson (2001: 16) defines that “the button-up models are serial models where the reader begins reading with the printed words, recognizes graphic stimuli, decodes them to sound, recognizes words and decodes meaning”.

The button-up models are also used by the readers when they feel the text being read is difficult. The difficult of the text can be about the language and contents of the text. When the language text is felt difficult, readers start to identify the words meaning. Then, they combine the word
meaning to get the understanding of the phrases, sentences, and paragraph until reaching the entire meaning of the text.

Furthermore, Brown (2001: 298-299) defines that in button-up processing, readers must first recognize a multiplicity of linguistic signals (letters, morpheme, syllables, words, phrase, grammatical cues, discourse markers) and use their linguistics data-processing mechanism to impose some sort of order on these signals.

In summary the button-up models of the process of reading is a practice process as (text-driven) involving exact, detailed, sequential perception and identification of letters, words, spelling patterns, structure and larger language units in a text. In other words, this model is recognizing the written symbols to achieve meaning from the text.

b. Top-Down Model

The process of deriving meaning of the text in top-down models starts from the reader’s prior to knowledge and experience to the print. By the top-down models, readers start to process the text by applying the higher level stages. In this case, readers start with hypothesis and prediction and attempt to verify them by working down to the printed stimuli. By having the prior knowledge and experience, readers can make hypotheses and prediction about what they are going to find in the text. Brown (2001: 299) states that this where a complementary method of processing written text is imperative: top-down, or conceptually, driven, processing in which we draw on our intelligence and experience and experience to understand a text.
In conclusion, top-down reading model is a reading model with which readers make hypotheses and prediction about the text and confirm the efforts by working them down into the smallest linguistic units. In the top-down model the readers begin the process of reading comprehension from their understanding on the reading material as a whole then to the part of the text. The readers actively construct the meaning from the reading material by guessing or predicting. The linguistics aspects and language component are cues for the readers in the construction of meaning. In other words, meaning or comprehension is obtained by using only much information as necessary from the graphic, syntactic cue system.

c. **Interactive model**

The interactive models of reading assume that the process of translating print to meaning involve making use of both print and prior knowledge. The process in initiated by making prediction about meaning and/or by decoding graphic symbols. The reader formulates hypotheses based upon the interaction of information from semantic, syntactic, and graph phonemic source of information.

Interactive model in reading require both button-up and top-down model in combination. Readers may in understanding a text use these two models interactively and simultaneously. The interactive model suggests that the process of reading in initiated by decoding letters and words and by formulating hypotheses about meaning. Readers in understanding a text starts at first by processing the visual information that exist in the text.
This visual information is used to activate the higher level of schemata. After schemata have been active, readers use them as the basis of making prediction. These predictions are then confirmed to the new information found in the text.

In conclusion that the interactive model is a reading model that combines top-down and bottom-up during the reading process. The interactive model is the view that both linguistic knowledge and reader’s prior knowledge are integrated to find out the meaning of reading material. A teacher should be alert about these aspects in providing the suitable material and strategies that help students improve their comprehension.

In reading process, we are as teachers should understand the difficulties faced by the students in reading comprehension. Generally, the students have the problems in: finding main idea, finding general idea, finding the main idea, finding some information explicitly and implicitly and fail in determining the key point. The problem above are caused by: 1. text that given by the teachers is in the English text of which is a foreign language in Indonesia, so the understanding of the vocabulary used in the text in determining the content of the reading is unbelievably far from the expectation. 2. Students' mastery of vocabulary is severely limited. This makes the students cannot understand the information expressed in the passage explicitly or implicitly. 3. Students do not feel good at reading. This happens for several reasons: the students do not read the text as a whole, students do not want to try to find the meaning of words in the dictionary, the student does not answer the question whether the implicit or explicit
information well, but they only took the answer to match the same sentence without understanding the meaning. If these habits are left, the desire of students to improve their mastery of the vocabulary will be reduced and may be lost.

In solving the reading problem above, reading activity generally consist of these steps:

1. Pre-reading.
   a. Reading the title and imagining what the text might be about.
   b. Looking at the illustration/picture and trying to guess how they are related to the text.
   c. Skimming the text quickly to get gist.
   d. Reading the first line of every paragraph to understand what the text is about.
   e. Reading without looking up every unknown word in the dictionary.

2. Whilst-reading
   a. Using dictionary for the important words.
   b. Guessing the meaning of a word from the context.
   c. Guessing the meaning of a word from grammatical category.
   d. Remembering a new word by thinking of situation in which the word might be used.
   e. Skipping some of the unknown words.
   f. Rereading a sentence.
   g. Considering the other sentences in the paragraph to figure out the meaning of a sentence.
h. Having a picture of the events in the text in mind
i. Reading without translating word-for-word.
j. Thinking aloud during the reading
k. Paying attention to words or phrase that shows how the text is organized.
l. Taking notes on the important points of the text.
m. Making guess about what will come next based on the information that has already been given in the text.
n. Relating the text to background knowledge about the topic to remember important information.

3. Post-Reading
a. Classifying the words according to their meanings.
b. Classifying the words according to their grammatical categories.
c. Summarizing the main idea.
d. Rereading the text to remedy comprehension failures.
e. Rereading the text to remember the important points. (Cahyono: 2010: 61-62)

8. The Schema Theory

Schema theory is a theory about knowledge, about how knowledge is represented, and about how that representation facilitates the use of knowledge in various ways. According to schema theories, all knowledge is packaged into units called schemata, and embedded into these units of knowledge is information on how this knowledge is to be used.
According to Abbas and Masoumeh (2011:142) define schema as background knowledge—also prior knowledge. Schema theory deal with the reading process, where readers are expected to combine their previous experience with the text they are reading.

Richgels (1982:1) states that construct used by cognitive psychologists in their theories of memory and learning. A schema can be taught of as a knowledge structure, or framework, which interrelates all of one’s knowledge about a given topic.

Porter (2012:1) says that schema theory is about knowledge, about how is represented, and about how that representation facilities of the knowledge in various ways.

Qian Huang (2009:1) states that text only directions as to how a reader should retrieve or construct meaning from previously acquired knowledge. Comprehending words, sentences, and entire texts requires the ability to relate the material to one’s own knowledge. Effective reading is a combination of the non-visual information already stored and organized in the brain and the present visual information printed on the page.

In addition, Brown (2001:299) explain, reader brings information, knowledge, emotion, experience and culture – that is schema or schemata – to the printed word.

To get deeper understanding of schema in reading comprehension, the readers or students also need to recognize the categories of schema or schemata.
Schema theory consists of two categories: 1). Content schema, which refers to a readers’ background or world knowledge, provides readers with a foundation, a basis for comparison. 2). Formal schema known as textual schema, refers to organizational forms and rhetorical structures of written texts. It can conclude knowledge of different text types and genre, and also includes the understanding that different types of text use text organization, language structures, vocabulary, grammar, level of formality differently. (Qian Huan: 2009: 139).


Also the strategies to increase schema theory or prior knowledge are:

1) Build on what they already know.
2) Increase background information.
3) Real-life experience.
4) Vicarious experience through wide reading. (Porter: 2012: 2-4)

As a conclusion, schema theory is readers’ concept, information, expectation, virtually everything from past experience that are used in making sense of reading.

So, schema theory is a key role in reading comprehension, is based on the assumption that reader’s prior knowledge directly impact new learning situation.
B. Clustering

1. The Definitions

In this research study, the researcher chooses a clustering as a kind of reading comprehension to help the students to comprehend a text effectively.

Clustering also known as concept mapping, mind mapping, semantic mapping or word web that mean to a process used for exploring topics that explicitly or implicitly stated in the text. To make one, draw a circle and add spokes radiating from it. Put the central idea or subject in the middle and add subtopics or related ideas around it in any order.

Erlik Widiyanistyati (2010: 17) in her thesis writes that clustering like listing is another way to get ideas to write about something and write them in circle or bubbles, around the topic.

Robb (2000: 127) says that clustering like brainstorming. Clustering is free-association activity during which you branch out of from a central word or phrase that represent a topic or concept to be studied. This strategy developed for pre-writing, but it works well for pre-reading fiction and nonfiction. Students write a word or phrase in the center of a page and circle the word. Then they write and circle their ideas so that they radiate out word from the central word. Clustering connected ideas. After several minutes, the teacher collects student’s ideas and creates a collaborative cluster on a chart paper. In the process, the teachers discuss the clustering ideas and vocabulary and can clarify them for students. After reading, foster
the connections of prior knowledge to new learning by having students review their collaborative cluster, adjust ideas and new information.

Clustering is almost like drawing a map of thought using circle, lines, arrows, and word. It is a strategy aimed at pulling as many different related thought out of the mind as possible. For example, if the student given topic was “flora”, the teacher would write the word “flora” in the center of the page. Then, using other lines and circle and arrow, he/she would write down words representing thoughts, idea, feelings, objects or actions. (Cahyono, 2009: 81-82).

Based on the theory above, it can take conclusion that clustering is a strategy to stimulate the learner for developing their idea that’s difficult to say. Clustering is a type of pre-reading that allows the students/learners explore many ideas as soon as possible. Like brainstorming or free associating, clustering allows students/learners begin explore many ideas from their mind. It is a good way to develop idea before starting the reading activity. The students can do it on their own or with friends or classmates to try to find inspirations or idea.

Clustering or mapping is a process of reorganizing and rearranging (moving) the most important ideas and information from reading materials or textbook and converting them into a diagram with our own word to help us understand and remember what we read.

Reid (1993:6) mentions that the invention of clustering helps readers to generate, develop and arrange their idea. It can be said that clustering helps students in developing their idea. The goal of clustering is to commit to user
determine the intrinsic grouping a set of unlabeled data. It can be shown that there is no absolute “best” criterion which would be independent of the final aim of the clustering. Consequently, it is used to supply this criterion, in such way that the result of the clustering will suit their needs.

Figure 2.1. Clustering Technique Form

2. Classroom Application of Clustering

One of the techniques for stimulating ideas and finding a direction for a piece of reading is “clustering”. Clustering is powerful tool because it taps into the right brain. The right brain is where fresh ideas and original
insight are generated. The left brain, in contrast, is more logical and orderly. Both are essential to good reading, but the left brain is too dominant when starting reading, it inhibits the free flow of though. Newbacher (2012) in his article mentions that there are some procedures to do clustering technique:

1. The teachers write the topic of informational reading selection in heavy outlined circle on the whiteboard. For example: recycling

2. From the center “recycling” circle, draw “spokes” attached to new circles that include subtopic that students may be familiar with. Example: Kind of material, how to recycle, benefit of recycling

3. Next step is the teachers ask the student volunteer to name details that relate to each subtopic and for each one named draw a spoke from the subtopic and attach it to a new circle with the student’s details. Example. “Kinds of material” may be other circles that include, metal, plastic and glass.

4. When all students’ words have been added to the map, discuss the various topics and subtopics with students, and how they relate to each other and to the students’ own lives. Example: ask the students if they recycle and home, depending on their answer, why or why not. By accessing prior knowledge based on student’s own experience, students can gain a deeper understanding of what they are about to read.

5. The teachers explain the students that they now in about to read about recycling. Encourage them to keep in mind what they have discussed on the whiteboard as they read.

Cahyono (2009: 88) states that the teaching and learning process is conducted through the following procedure:

1. Pre-reading
   a. Writing the theme on the whiteboard.
b. The teachers draw a sample of cluster and ask the students to competitively complete to provide cluster.

c. Giving the example of description phrase on cluster.

d. The students are asked to make a cluster on their own.

This activity as a tool to preview the chapter or text and asking students to make prediction about the text based on the cluster. Therefore, in the pre-reading, the activities are focused on the student’s vocabulary and background or prior knowledge through questioning and some cluster.

2. During-reading

a. The students are asked to read the text.

The students find the important information as they read the text and confirming and or modify student’s prediction about the text. In this stage, the activities focused on extracting the topic, explicit and implicit information.

3. Post-reading

a. The students are asked if clustering is helping them in reading the text.

In conclusion, the procedure of clustering can help student’s reading comprehension in pre-, whiles, and post reading stages. Thus, the teacher should teach and provide a model of clustering procedures to students. As a result, the students are able to find the gist of the text and supporting details in a text.

3. Advantage and disadvantage of clustering

Clustering can be applied by the teacher in teaching and learning process, especially teaching reading comprehension. Variation of clustering is word web, mind map, semantic web. In line with teaching reading comprehension, clustering has some advantage and disadvantages. Purnomo
(2010: 40) writes in his thesis that clustering has advantages, there are: (1). Help the students to visualize the relationship among ideas. (2). Activate the student’s background knowledge. (3). Generate ideas or concept and/or words to given topic and then talk about how to those ideas/words are related of those idea. So this strategy is not only for students who begin constructing meaning of vocabulary, but also it can be used to visualize the relationship among the idea, to activate the student’s prior knowledge and generate the idea are related to get information from the text.

Besides the advantages stated above, this technique also have disadvantages when teaching reading comprehension. Those are: (1). It is not appropriate for passive learner. (2). It is hard for students to use this strategy when they have problem with a topic of a text. So they got difficulty in finding a topic of a text and then it is hard for them to activate their prior knowledge. (3). It is limit the amount of information that students can record simply because the circle can hold only so much verbiage.

In conclusion that clustering can have positive and negative benefits when used in teaching reading comprehension.

C. Direct Instruction

Donald Crawford (2012: 1) in his article states that Direct Instruction as a general approach to instruction; involve explicit explanation, small learning steps, frequent review, frequent teacher-student interaction, and choral responses. Zig Engelmann (2012: 1) states that Direct Instruction is the teacher directed and follows a definite structure with specific steps to guide pupils toward achieving clearly defined learning outcomes. The teacher maintains the locus of control over the instructional process and monitors pupils’ learning throughout the process.
Kardi and Nur (2000: 2) write that Direct Instruction is a teaching approach which can help the students learn basic skill and to get information that can be taught step by step. Also Borich (2011: 223) says that Direct Instruction a teacher or software centered strategy in which you and/or computer are the major information provider. In the Direct Instruction, facts, rules, and action sequence are presented to students in the most direct way possible. At first, this usually takes a presentation and recitation format with explanation, examples and opportunities for practice and feedback by the teacher. But direct instruction presentation and recitation format employing verbal explanation and teacher-student interaction may also include software-driven questions, correction of student error, and review and practice.

Further, Arends (1997:64) also said the same thing that a teaching technique that is aimed at helping students learn basic skills and knowledge that can be taught in a step by step fashion. For the purpose here, the technique is labeled “the direct instruction”.

The purpose of Direct Instruction is to help students learn basic academic content such as reading in the most efficient, straightforward way. (Cruickshank, Bainer and Metcalf: 1992:224).

One of the characteristics of key element in Direct Instruction is teacher centrality. It means that teacher exert direction and control. The teacher decides what is to be learnt and how, and is visibly in charge.

Instruction is general term for the explicit teaching of a skill-set using lectures or demonstrations of material, rather than exploratory models such as inquiry-based learning. This technique is often contrasted with tutorials,
participatory laboratory classes, discussion, recitation, seminars, workshops, observation, case study, active learning, practice or internships. Usually it involves some explication of the skill or subject matter to be taught and may or may not include an opportunity for student participation or individual practice. Some direct instruction is usually part of other methodologies, such as athletic coaching.

In direct instruction, the teacher becomes the decision maker. The teacher will be engaged in many planning decisions, such as deciding what he/she wants to teach, when he/she wishes to teach, and how he/she will go about the reading process (Parson, Hinson and Brown: 2001: 11). Direct Instruction highly structured and teacher directed. The students are under the teacher control. The teacher direction and control occur when the teacher select and directs the learning tasks, determine grouping patterns, maintains a central role during instruction, keeps students choice and freedom and minimize the amount of non academic pupil task.

Direct Instruction may be used ad hoc or even an incidental digression. Although there is usually some element of frontal instruction and a general concept of the skill or lesson, there may or may not be a formal lesson plan.

According to Arends (1997:65) Direct Instruction is a teacher-centered that has five steps: 1). establishing set, 2). explanation and/or demonstration, 3). guided practice, 4). Feedback, 5). extended practice. A direct instruction lesson requires careful orchestration by the teacher and a learning environment that businesslike and task-oriented, while Kardi and Nur (2000:27) state that a lesson using direct instruction pass through five phases: 1). Explanation of the goal and
preparing students, 2). Presentation or demonstration of certain skill, 3). Giving guided practice, 4). Giving feedback, 5) give individual task.


The teacher also provides feedback and correction for the students’ mistake. Direct Instruction is also academic focus. It means that academic focus is one of the highest priorities on the assignment and completion of academic tasks in the classroom. (Joyce and Weil: 1986: 326).

1. The Advantages of Direct Instruction

a. The teacher has control of the timing of the lesson
b. Students are physically easy to monitor
c. Direct instruction refers to a pattern of teaching which consists of teachers’ explaining a new concept to a large group of students where the way of the explanation is straightforward way where the teacher always gives feedback and correction for mistake that students made.
d. The curriculum can be covered, so the teacher can say that he/she taught the material.
e. Some material should be taught this way. Any information for which there is one right answer and for which that answer is relatively simple, can be taught efficiency and honestly by using direct instruction.
2. The disadvantages of Direct Instruction

a. The teacher centrality is strong occurred in Direct Instruction. It makes the students become passive in joining the learning process. Direct instruction demand not only teacher direction but strong teacher direction.

b. Students do not have a sense of the overall purpose of the simple steps. However, if the teachers tell students the purpose, by using advance organizers, this disadvantage is overcome.

c. Teacher cannot assess what the students’ prior knowledge is, so will be unaware of why particular students cannot learn.

d. Retention of how to solve the problem is low, because the students have not struggled with the problem themselves. This disadvantage can be overcome by having the students do many complex problems on their own.

e. Direct instruction as an instruction works for only a small percentage of students, not for a great variety. The students who have other than.

Based on the explanation above, it can be concluded that direct instructional is focused on the teacher, so the students have few time to increase their ideas and creativity. It makes the students become passive in attending the learning process.
D. Teaching Reading Using Clustering Compare to Direct Instruction

We know that all the methods/model/learning strategies are good. But what happened in the field all is not as we want. This is caused by several factors, 1. Students condition (whether it is geographical or cognitive abilities) 2. School conditions 3. Learning infrastructure, 4. Learning media 5. Teachers creativity.

In this thesis the authors wanted to compare the teaching of reading by using a clustering technique and direct instruction. Basically, the purpose of teaching by using clustering is to prepare students ready, having knowledge in their mind in attending the subject and do not get difficulties during the learning process. The steps of clustering in teaching reading comprehension are as follows:

1. Pre-reading
   a. Writing the theme on the whiteboard.
   b. The teachers draw a sample of cluster and ask the students to competitively complete to provide cluster.
   c. Giving the example of description phrase on cluster.
   d. The students are asked to make a cluster on their own.

   This activity as a tool to preview the chapter or text and asking students to make prediction about the text based on the cluster. Therefore, in the pre-reading, the activities are focused on the student’s vocabulary and background or prior knowledge through questioning and some cluster.

2. During-reading
   a. The students are asked to read the text.

   The students find the important information as they read the text and confirming and or modify student’s prediction about the text. In this stage,
the activities focused on extracting the topic, explicit and implicit information.

3. Post-reading
   a. The students are asked if clustering is helping them in reading the text.
   b. Evaluate students’ understanding of the text.

The procedure of teaching reading by using Direct Instruction as follows:

1. Introduction/review. In this step, the teachers review the previous day’s work to ensure that students are ready for the presentation of new information.

2. Explanation/presentation. The teacher provides clear explanation, description. Examples or models of what is to be learned while checking for students’ understanding through questioning.

3. Giving guided practice. Guided practice often takes the form of public recitation whereby the teachers asks a question, students or students answer, the teacher ask another questions. If the students have difficulty, the teacher helps then think aloud. Guided practice continuous until the class and the individuals are responding correctly over 85% of the time.

4. Giving feedback. This step the teacher use specific praise in moderation (that is a good answer because…….). Correction of miss-conception may require review, re-teaching, or more practice.

5. Giving Individual task. Assignments are given to reinforce the learning without teacher assistance to determine the degree of mastery that pupils have achieved.

From the procedure of teaching reading comprehension above whether using clustering or direct instruction, we can compare that:
### Clustering

<table>
<thead>
<tr>
<th>1. Students centered</th>
<th>1. Teacher centered</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Active thinking</td>
<td>2. Guided thinking</td>
</tr>
<tr>
<td>3. More independent</td>
<td>3. Dependent</td>
</tr>
<tr>
<td>4. Better understand students’ prior knowledge</td>
<td>4. Lack of understanding students’ prior knowledge</td>
</tr>
<tr>
<td>5. More communicative</td>
<td>5. Less communicative</td>
</tr>
</tbody>
</table>

### Direct Instruction

<table>
<thead>
<tr>
<th>1. Students centered</th>
<th>1. Teacher centered</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Active thinking</td>
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</tr>
<tr>
<td>5. More communicative</td>
<td>5. Less communicative</td>
</tr>
</tbody>
</table>

### E. Interest

#### 1. The Definition of Interest

An interest can be expressed through a statement that indicates the students prefer a case of the other things. Students who have an interest in certain subjects tend to give greater attention to the subject. Interest also has a major influence on learning because if the teaching materials are not in accordance with student interests, students will not learn well. Teaching materials that draw students will be better understood and stored and increase their interest in learning.

There are many definitions of interest. Many experts present the definition of interest that differ from one to another but their ideas complete each other. According to Crow and Crow (1973: 159), the word interest may be used to refer to a motivating force that causes individual to give attention to a person, a thing, or an activity. Marshefel (1969: 73) states that interest is something that impels or motivates the learners to strive for a particular goal. Also Hurlock (1956: 403) says that interest means a learned...
motive which drives the person to occupy him/herself with an activity when he/she is free to choose what he will do. Interest is freely choosing activity, which hold the attention and is a source of satisfaction and pleasure.

Longman Dictionary Contemporary English “Interest is an activity that you enjoy doing or a subject that you enjoy studying”. Hilgrad in Slameto (2010: 57) states that “interest is persisting tendency to pay attention to and enjoy some activity or content”. Further, Muhammad Surya (2003: 100) states “Minat adalah rasa senang atau tidak senang dalam menghadapi suatu objek”. It means that person will do something when he/she has interest on it without any coercion of others. For the students, interest has important role to increase their learning motivation effectively.

The Liang Gie (1987:20) says that interest besides allowing the concentration of the mind, will also cause excitement in learning. Cheerfulness will enlarge the person’s ability to learn and also help students not easy to forget what he learned it. Learning by unhappy feeling would make the lesson was very heavy.

Slameto (2010: 180) defines “Minat adalah suatu rasa lebih suka dan rasa ketertarikan pada suatu hal atau aktifitas, tanpa ada yang menyuruh. Minat pada dasarnya adalah penerimaan akan suatu hubungan antara diri sendiri dengan sesuatu diluar diri. Semakin kuat atau dekat hubungan tersebut, semakin besar minat.”

It means that person do everything depend on their interest. Students will learn something when they have interest to do it. So the teacher should make how the lesson is interest to the student.
Based on the definition above, it can conclude that interest is an activity that a person done happily to get the goal/willingness. Because he/she done by him/herself without any coercion of others.

Richard. I. Arends (2007: 157) writes that a teacher can do a number of things to relate learning materials and activities to student’s interest.

a. Relate lesson to students’ live. Find things that students in curious about, such as popular music, and relate these interest to topics under study.

b. Use student’s names. Using student’s name helps personalize learning and captures student’s attention.

c. Make materials vivid and novel. A teacher can say things that make the ordinary vivid and novel for students.

Using games, puzzle and other activities that are inviting and carry their own intrinsic motivation is another way teacher make lesson interesting for students. Similarly, using a variety of activities (field trips, simulations, music, and guest speaker), instructional methods (lecture, seatwork, and small group) keeps students’ interested in school and their schoolwork.

2. Kind of Interest

Suwardi (2010: 36) explains that there are two kind of interest in learning for the student to attend the lecture:

a. Internal interest: this interest is come from the student itself or since the student was born. Example: student who has ability in match subject, so he will join with the science program. Student’s interest will develop maximally when it supported by their talent.
b. External Interest: Interest that come from outside (environment) of the students, whether family environment, school environment or the society. Example: Student who wants enter at Vocational School, because of the economic situation, the father doesn’t allow him, and then the father sends him to Senior High School because the payment was cheaper.

The example above is an example of environment influence. In that such condition, he is interested to do something in order that he can accept as the member of the society, or the member of a group. The external interest can be in form of individual competition in a group, whether peer school society group, in achievement competition, or job competition. They only happen in the interaction with human being.

3. Role of Interest in Learning

A person possesses interest to play an important role in every activity and in achieving certain goals, because interest will strive someone in achieving his purpose by doing the activities.

Interest plays an important role to many activities. Being interested in an activity, enthusiasm will come up followed by pleasure. If one is interested in doing something means that he has no motive to act, and if he carries out an activity, the result will not satisfy him. So, the interest can make the goals of something can be achieved. The roles of interest will be mentioned as follows:

a. Interest is an important motive in directing individual to carry out his activities.
b. Interest can help individual in concentrating the attention to the problem he faces.

c. Interest in one of the major factors in determining whether an activity is well done.

d. Interest is an individual's aid in interacting with his environment, including learning activity.

e. Interest helps the individual in his growth and development to achieve his maturity and his dreams. (Achmad Phillip, 2010: 36).

Based on the explanation of interest above, it can be concluded that interest is a motivating force which causes individual to give attention to a person, a thing and an activity or learning something with full attention, satisfaction, motivation and pleasure to strive for particular goal and aware that it was important and valuable.

Learning interest is one of motivation for students to perform learning activities. Without any interest in the students on what to do, then they will not hesitate to learn, so that it cannot produce optimal learning outcomes as expected.

In this research the writer determines the indicators of students’ interest, they are:

1. Motivating force which causes individual to give attention to a person, a thing, or an activity.

2. Wanting/learning about something.

3. Doing something with full attention, satisfaction, motivation and pleasure.
F. Review of Related to Research

There are some researches giving evidence of the implementation of Clustering to teach reading written by Ahmad Budi Leksono, *Teaching Descriptive Text Using Picture and Cluster Diagramming*, State University of Malang, he conclude that using Clustering is a fusion from the cluster diagramming and the use of pictures in teaching descriptive text for our students. Both of them could not be separated to teach descriptive text. So, this technique is very essential to improve the students’ writing competence. Besides, it could primarily motivate the students to create their writing products from the interesting teaching and learning writing action.

Another research was written by Achmad Philips (2012), *The Effectiveness of KWL (Know, Want to Learn and Learned) in Teaching of Reading Viewed from Students’ English Learning Interest*, an Experimental Research in the Nine Grade Students of SMP Negeri 8 Probolinggo in 2009-2012 academic Year, English Education Department, Graduate School, Sebelas Maret University of Surakarta. The research gives the evidences of implementation of teaching model viewed from students’ interest. He concludes that there is interaction between teaching model and interest. It cannot be denied that teaching model which is used by the teacher in the classroom gives a big influence for the success of the teaching and learning process. Interest gives big influence to the students to improve their reading competence. In learning activity, interest determines one’s success. Interest provides a strong motivation to learn. Interest is also the major factors in any learning situation. From the statements, it can be stated that interest has an important role in influencing commit to user
learning activity which includes emotion feeling, attention, satisfaction, motivation and pleasure. If the students have high level of interest they will have high interest in reading many texts that the teacher gives to them.

G. Rationale

Based on the reviewed theories above, the writer proposes the basic assumption to develop hypotheses as follows:

1. **Clustering and Direct Instruction to teach reading comprehension achievement for students.**

   Clustering makes the learning and teaching more effective, attractive, meaningful, and successful. Clustering becomes especially important for some reasons.

   Firstly, Clustering for reading comprehension and in their capacity as a tool. Clustering in education is a well-recognized fact. Clustering allows teachers or lecturers and students to keep up with their minds. It lets them try their ideas as soon as they come up with them. Secondly, using clustering for reading comprehension makes the teaching and learning reading more communicative, convenient, and interesting for the student and lecturers. Furthermore, because of the attractive characteristics of clustering, they make a huge contribution to improve the students reading comprehension achievement and exploit their own critical thinking, imaginative, and intellectual capabilities.

   Thus, it can be supposed that clustering is more effective than Direct Instruction to teach reading comprehension.

*commit to user*
2. **Reading comprehension achievement between the students who have high learning interest and the students who have low learning interest.**

High-interest students will provide artificial reinforcement, generate full interest and participation, consistence regarding mastery of learning, and also have positive attitudes by time period learning activities (beginning, during, and ending). Students who have high learning interest are usually actively involved and have full attention. Besides, they have a positive motivation and attitudes to study reading comprehension. The result is that the students are more active and achieve considerable gratification.

On the contrary, low-interest students are passive in joining activities and have low attention to the subject. Low-interest students cannot elaborate their critical thinking, ideas, and arguments about certain materials. In this case, they cannot help themselves from an intention to learn more and more. They cannot be motivated to perform well because of their low interest, curiosity to solve the problem, or the desire to understand during the lesson. There is no energy and a mental power from the students to reach the goal.

Seeing the characteristic between the students who have high and low learning interest, it can be assumed that students who have high learning interest have a better achievement in reading comprehension than those having low learning interest.
3. **Interaction between teaching technique and students learning interest.**

Considering the explanation above, the clustering is suitable for high-interest students. The clustering triggers students to be actively involved during the instructional activities. The students will have high interest and full attention when they are faced with different interesting materials. This condition navigates a live classroom and conducive atmosphere to facilitate learning. In this situation, there will be interaction between the teachers and students and also among the students themselves.

Conversely, the Direct Instruction is suitable applied for low-interest students. The Direct Instruction tends to be out of date. The technique is less interesting. It triggers students to be passive. The teaching and learning process tends to be teacher-oriented. It is not actually condition that wants to be achieved. The students tend to have low interest. So, there is no interaction between students and the teacher and also among the students themselves. From the explanation above, it can be assumed that the choice of teaching materials and students learning interest will influence much the situation and condition during the instructional activities.

H. **Hypothesis**

Based on the rationale, the writer proposes the hypotheses of this study as the following:

1. Students taught using clustering have a better achievement in reading comprehension than the students taught using Direct Instruction of the first semester of the eleventh grade students of MAN I Ponorogo.
2. The students who have high learning interest have a better achievement in reading comprehension than the students who have low learning interest at the first semester of the eleventh grade students of MAN I Ponorogo

3. There is an interaction between clustering and students learning interest to teach reading comprehension at the first semester of the eleventh grade students of MAN I Ponorogo
CHAPTER III

RESEARCH METHODOLOGY

A. Time and Place of Study

1. School Biography

Madrasah Aliyah Negeri 1 Ponorogo established in 1982 which is relocation from MAN Ngawi. This School located at Jln. Areif Rahman Hakim No: 02 Ponorogo. The school statistical number is 311 350 217 031.

MAN I PONOROGO has a very strategic location. This is because the school was in main street between cities and districts. It is also supported by the easy of transportation because it is close to the bus station of Ponorogo. Thus, it makes easy to visit everyone.

This school has 15 classes for X, XI, and XII grade. Each class consists of 24 students. For the XI and XII grade has 3 programmes: Science, social and religion program. The students are taught by 45 teachers.

In achieving its objectives, the school must have a vision and a mission carried out as a measure the extent to which the school has done its job as educators of the nation. The vision and mission are explained before.

Vision: “Output and outcome that have good moral, life skill and quality in the field of science and technology (IMTAQ)”.

Mission:

1. Quality-oriented education, both khuluqiya, aqliya, jasadiya and ruhiya.
2. Develop basic skills learners become pious Muslims and have a high social concern.
3. Develop the ability to think scientifically and critically.
4. Developing life skills.
5. Developing students’ creativity in the intra and extra-curricular activities.
2. The Curriculum

English in this school is taught 4 credit-hours a week with a time allocation 45 minutes each. The teachers should look at the curriculum before teaching the subject in order the subject suitable with the national standard curriculum. In English subject, the standard competence and basic competence for Senior High School grade are explained as follows.

a. Graduate Competence Standard (SKL) for English subjects of MAN 1 Ponorogo
1) Listening
   To understand the meaning of interpersonal and transactional spoken text, formal or informal, in the form of **recount, narrative, procedure, descriptive, news item, report, analytical exposition, hortatory exposition, spoof, explanation, discussion, and review**, in the context of everyday life

2) Speaking
   To express the meaning of interpersonal and transactional spoken text, formal or informal, in the form of **recount, narrative, procedure, descriptive, news item, report, analytical exposition, hortatory exposition, spoof, explanation, discussion, and review**, in the context of everyday life

3) Reading
   To understand the meaning of interpersonal and transactional written text, formal or informal, in the form of **recount, narrative, procedure, descriptive, news item, report, analytical exposition, hortatory exposition, spoof, explanation, discussion, and review**, in the context of everyday life

4) Writing
   To reveal the meaning of interpersonal and transactional written text, formal or informal, in the form of **recount, narrative, procedure, descriptive, news item, report, analytical exposition, hortatory exposition, spoof, explanation, discussion, and review**, in the context of everyday life.
b. Standard Competence (SC) and Basic Competence (BC) of English Lesson for the Eleventh Grade.

In implementing the teaching-learning process, the school must prepare a curriculum refers to the government regulations (PERMENDIKNAS). So that, what is conveyed by the teacher to students in line with the government program. Here, the Standard Competence and Basic Competence as explained below in table 3.1.

Table: 3.1. SC and BC for Eleventh Grade of Science and Social Program

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Standard Competence</th>
<th>Basic Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Listening</strong></td>
<td>1. To understand the meaning of transactional and interpersonal conversations in the context of everyday life</td>
<td>1.1. To respond the meaning of transactional (to get things done) and interpersonal (social) dialogue by using a variety of spoken language accurately, fluently, and thankful in the context of everyday life and involves: expressing an opinion, asking for an opinions, expressing satisfied and unsatisfied</td>
</tr>
<tr>
<td></td>
<td>1. To understand the meaning of short functional text and monologue in the form of reports, narrative, and analytical exposition text in the context of everyday life</td>
<td>1.2. To respond the meaning of transactional (to get things done) and interpersonal (social) dialogue by using a variety of spoken language, accurately, fluently, and thankful in the context of everyday life and involves: giving advice, warning, accepting request, and expressing of relief, pain, and pleasure</td>
</tr>
<tr>
<td><strong>Speaking</strong></td>
<td>2. To express the meaning of conversations text in formal transactional and interpersonal situation in the context of everyday life</td>
<td>2.1. To respond the meaning of spoken short functional text, accurately, fluently and acceptable in the context of everyday life</td>
</tr>
<tr>
<td></td>
<td>3. To express the meaning of short functional text and monologue in the form of report, narrative and analytical exposition text in the context of everyday life</td>
<td>2.2. To respond the meaning a variety of spoken monologues, accurately, fluently and acceptable in the context of everyday life in the form of: report, narrative and analytical exposition text</td>
</tr>
<tr>
<td></td>
<td>4. To express the meaning of short functional text and monologue in the form of report, narrative and analytical exposition text in the context of everyday life</td>
<td>3.1. To express the meaning of transactional (to get things done) and interpersonal (social) conversation by using a variety of spoken language accurately, fluently and acceptable in the context of everyday life and involves: expressing an opinion, asking for an opinions, expressing satisfied and unsatisfied</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.2. To express the meaning of transactional (to get things done) and interpersonal (social) conversation by using a variety of spoken language accurately, fluently and acceptable in the context of everyday life and involves: giving advice, warning, accepting the request, and expressing of relief, pain, and pleasure</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.1. To express the meaning of spoken short functional text accurately, fluently and acceptable in the contexts of everyday life</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.2. To express the meaning of spoken monologue text accurately, fluently and acceptable in the context of everyday life in text form: report, narrative and analytical exposition text</td>
</tr>
</tbody>
</table>
### Reading

5. To understand the meaning of short functional text and essay in the form of *report, narrative and analytical exposition text* in the context of everyday life and accessing the knowledge

5.1. To respond the meaning of short functional text (e.g. *banners, posters, pamphlets*, etc.) by using variety of written language, accurately, fluently and acceptable in the context of everyday life

5.2. To respond the meaning of an essay by using written language accurately, fluently and acceptable in the context of everyday life and accessing the knowledge in the form of: *report, narrative and analytical exposition text.*

### Writing

6. To express the meaning of essay text in the form of *report, narrative and analytical exposition text*, in the context of everyday life

6.1. To express the meaning of short functional text (e.g. *banners, posters, pamphlets*, etc.) by using a variety of written language accurately, fluently and acceptable in the context of everyday life

6.2. To express the meaning of essay text by using a variety of written language accurately, fluently and acceptable in the context of everyday life in the form: *report, narrative and analytical exposition text.*

### Semester 2

### Listening

7. To understand the meaning of transactional and interpersonal conversations in the context of everyday life

7.1. To respond the meaning of transactional (to get things done) and interpersonal (social) conversation by using a variety of spoken language accurately, fluently and acceptable in the context of everyday life and involves: *expressing attitudes, expressing toward something, expressing of love, and sadness.*

7.2. To respond the meaning of transactional (to get things done) and interpersonal (social) conversation by using a variety of spoken language accurately, fluently and acceptable in the context of everyday life and involves: *expressing of shame, expressing angry, and expressing annoyance.*

8. To understand the meaning of short functional text and monologue in the form of *narrative, spoof and hortatory exposition text* in the context of everyday life

8.1. To respond the meaning of short functional text both formal and informal situation by using a variety of spoken language accurately, fluently and acceptable in the context of everyday life

8.2. To respond the meaning of monolog text by using a variety spoken language accurately, fluently and acceptable in the context of everyday life in the form of text: *narrative, spoof, and hortatory exposition.*

### Speaking

9. To express the meaning of transactional and interpersonal conversation text, formal and continues (sustained) in the context of everyday life

9.1. To express the meaning of transactional (to get things done) and interpersonal (social) conversation text, formal and continues (sustained) by using a variety of spoken language accurately, fluently and acceptable in the context of everyday life and involves: *expressing of attitudes, expressing toward something, expressing love and sadness.*

9.2. To express the meaning of transactional (to get things done) and interpersonal (social) conversation text, formal and continues (sustained) by using a variety of spoken language accurately, fluently and acceptable in the context of everyday life and involves: *expressing a shame, expressing angry, and expressing annoyance.*
<table>
<thead>
<tr>
<th>Standard Competence</th>
<th>Basic Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. To express the meaning of short functional text and essay in the form of a narrative, spoof and hortatory exposition in the context of everyday life</td>
<td>10.1. To express the meaning of short functional text by using a variety of spoken language accurately, fluently and acceptable in the context of everyday life</td>
</tr>
<tr>
<td>10.2. To express the meaning of essay text by using a variety of spoken language accurately, fluently and acceptable in the context of everyday life in the form of text: narrative, spoof, and hortatory exposition</td>
<td></td>
</tr>
</tbody>
</table>

**Reading**

11. To understand the meaning of short functional text and essay in the form of a narrative, spoof and hortatory exposition in the context of everyday life and accessing the knowledge

11.1. To respond the meaning of short functional text (eg banners, posters, pamphlets, etc.) by using a variety of written language accurately, fluently and acceptable in the context of everyday life and accessing the knowledge

11.2. To respond the meaning of essay text by using a variety of written language accurately, fluently and acceptable in the context of everyday life and accessing the knowledge in the form of a narrative, spoof, and hortatory exposition

**Writing**

12. To express the meaning of short functional text and essay in the form of a narrative, spoof and hortatory exposition in the context of everyday life

12.1. To express the meaning of short functional text (eg banners, posters, pamphlets, etc.) by using a variety of written language accurately, fluently and acceptable in the context of everyday life

12.2. To express the meaning of essay text by using a variety of written language accurately, fluently and acceptable in the context of everyday life in the form of text: narrative, spoof, and hortatory exposition

3. Time Schedule of The Research

This study is carried out for the eleventh grade students of MAN I Ponorogo in the academic years of 2011/2012. This study conducts on March to June 2012

Table 3.2 Time Schedule of the Research

<table>
<thead>
<tr>
<th>Activities</th>
<th>Des</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arranging proposal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preparing instrument</td>
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<td></td>
<td></td>
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<tr>
<td>Conducting treatment</td>
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<td></td>
<td></td>
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<tr>
<td>Collecting and analyzing data</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Making report</td>
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</tbody>
</table>

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B. Methods of the Study

Methodology is a very important factor that ought to be considered before conducting a research. In Research Methods in Language Learning, Nunan (1992: 3) states that research is systematic process of inquiry consisting of three elements:

1. A question, problem, or hypothesis.
2. Data
3. Analysis and interpretation of data.

Experimental research, as postulated by Frankel and Wallen (1993: 240), is one of the most powerful research methods researcher can use. It is claimed as the best way to establish cause-and-effect relationship between variables and directly attempts to influence a particular variable. Moreover, Christensen (2000:23) states that through experimentations, cause and effect relationship can be identified. The purpose of experimental study is to investigate the cause and effect of a certain condition.

Considering the explanation above, related to this research design, the writer uses an experimental study because the aim of this study is revealing the effect of teaching technique and learning interest towards student’s reading comprehension achievement. It involves three kinds of variables.

The first variable is independent variable. In this research variables, the independent variable is teaching technique. It is also recognized as an experimental or treatment variable. They are two teaching techniques that are used in this study, namely clustering and direct instruction. The technique used in the experimental class is clustering while the technique used in
control group is direct instruction. Each group is classified into two different levels of interest, high and low interest.

The second variable is a dependent variable. The dependent variable in this study is reading comprehension achievement of the students as the advanced level students. This variable is the factor which is observed and measured to determine the effect of the independent variables, teaching technique (clustering and direct instruction). In short, considering the explanation above, this experimental study uses two groups, namely experimental group and control group.

The third variable is a secondary independent variable. It is selected to determine if it affects the relationship between the primary independent variable (teaching techniques: clustering and direct instruction) and dependent variable (reading comprehension achievement). In short, in this study, learning interest as the last variable is a kind of variable that will be labeled with two different names, i.e. high learning interest and low learning interest.

Moreover, in this study, the writer uses a factorial design to extend number of relationships that may be examined. Frankel and Wallen (1933: 255) propose that they are essentially modifications of either the post-test only control group designs, which permit the investigation of additional independent variables. In other word, factorial design is an efficient way to study several relationships with one set of data.

As an experimental study, there are at least two groups in this experiment, namely control group and experimental groups. The control group is the class that is taught by using direct instruction and the experimental group is the class that is taught using clustering. They are given different treatment. After
the treatment, the groups are given post-test. In addition, before the treatment, the writer also gives a questionnaire about students’ learning interest. The students’ English learning interest is classified into high and low. By so doing the writer can find out what teaching materials can be used to teach high-interest students and those low-interest students.

The proposed an experimental design of the independent and dependent variables can be seen at a 2X2 Factorial Design, the table can be seen as follows:

<table>
<thead>
<tr>
<th>Instruction</th>
<th>Techniques</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest</td>
<td></td>
</tr>
<tr>
<td>High (B₁)</td>
<td>Group A₁ B₁</td>
</tr>
<tr>
<td></td>
<td>(students having high interest taught using clustering)</td>
</tr>
<tr>
<td></td>
<td>Group A₂ B₁</td>
</tr>
<tr>
<td></td>
<td>(students having high interest taught using direct instruction)</td>
</tr>
<tr>
<td>Low (B₂)</td>
<td>Group A₁ B₂</td>
</tr>
<tr>
<td></td>
<td>(students having low interest taught using clustering)</td>
</tr>
<tr>
<td></td>
<td>Group A₂ B₂</td>
</tr>
<tr>
<td></td>
<td>(students having low interest taught using direct instruction)</td>
</tr>
</tbody>
</table>

The picture shows that (1) by comparing the observation under treatment variable, C(A₁) to observation under DI (A₂), it is possible to contrast the effectiveness of those teaching technique to teach reading comprehension; (2) by comparing A₁B₁ to group A₂B₁, it can be pointed which teaching techniques is better applied to teach reading comprehension to student having high learning interest; (3) by comparing group A₁B₂ to group A₂B₂, it can be pointed which teaching techniques is better applied to teach reading comprehension to students having low learning interest; and (4) by comparing the individual cell effect,
group A₁ B₁ versus A₂ B₁, group A₁ B₂ versus A₂ B₂, it is possible to identify the interaction of types of material and students’ learning interest that might exist.

C. Subjects of the Study

1. Population

Ary (1985:138) states that the larger group about which the generalization is made is called a population. A population is defined as “all members of any well-defined class of people, events or objects”. Population is the group to which the researcher would like to attribute the result of the study to be generalization (Frankel and Wallen, 1993: 554). Based on the theory above, it can be concluded that population is all subjects or individuals with certain characteristics that will be analyzed. Related to the definition, the population of this research is the eleventh grade students of MAN 1 Ponorogo for the academic year 2011-2012. The total number of it is 120 students who are divided into 5 classes.

2. Sample

In Educational Research, Quantitative and Qualitative Approaches, Johnson and Christensen (2000:158) explain that sample is a set of elements that taken from a large population according to the certain rules. Frankel and Wallen (1993:556) state that sample is the group in which information is obtained, preferably selected in such way that the sample represents the larger group.

Considering the definition above, it can be inferred that the same sample should represent the same population because a sample is a part of
population. In this study, the writer only takes two classes of the first semester of the eleventh grade students of MAN I Ponorogo as the sample. One class (Class XI IPS 2) used as the experimental group and the other one (Class XI IPA 1) as the control group. Each class consists of 24 students.

3. Sampling

A technique used for getting sample is sampling. Sampling is the process of drawing a sample from population (Christensen, 2000:156). Frankel and Wallen define that sampling is the process of selecting a number of individuals (a sample) from a population, preferably in such way that the individual represent the larger group from which they were selected. In addition, in *Introduction to Research in Education*, Ary (1985:143) defines as follows:

The researcher would choose a number of schools randomly from a list of schools and then include all the students in those schools in the sample. This kind is probability sampling is referred to as cluster sampling since the unit chosen is not an individual but a group of individuals who are naturally together. These individuals constitute a cluster insofar as they are alike with represent to characteristic relevant to the variables of the study.

Seeing the definition above, the writer intends to take cluster random sampling in getting two classes. The major concern is determining the cluster random sampling is that every class or unit has an equal chance of being selected from the frame of list. The cluster random sampling, in this study, is chosen randomly from the population of clusters and then one cluster is selected. It means that all the members of the cluster must be included in the sample.

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D. Techniques of Collecting the Data

Frankel and Wallen (1993:101) state that the data are the kinds of information researcher obtain on the subjects of their research. An important decision for researchers to make during the planning phase of an investigation, therefore, is what kind (s) of data they intend to collect. The study’s device to collect the data is called an instrument. Based on the aims of this study, a questionnaire, and test are developed as the instruments in collecting data.

1. Questionnaire

The questionnaire means the researcher giving set of items to be answered by respondents in order to get the information from the students as respondents about their learning interest in studying English, especially in reading comprehension. So, by using the questionnaire, it can guarantee confidently and may elicit more truthful responses from respondents.

In addition, Tuckman (1999: 196-197) states as follows:

Questionable and interviews are used by researches to convert into data information directly given by a person (subject). By providing access to what is “inside a person’s head,” these approaches make it possible to measure what a person knows (knowledge or information), and what a person thinks (attitude and beliefs). Questionable and interviews can also used to discover and experiences have taken place (biography) and what is occurring at the present. This information can be transformed into numbers or quantitative data by using the attitude scaling or rating scale techniques, ........., thus generating frequency data.

The questionnaire takes longer time to prepare because it has to be carefully written, however, it is efficient to the students to answer it. The writer uses Likert’s scale that provides a simple way to measure students’ learning interest. There are two kinds of statements in a questionnaire that is positive and negative statement. In this case, writer uses four points rating scales namely strongly agree (4 points), agree (3 points), disagree (2 points),
and strongly disagree (1 point). Conversely, if the statement is negative the score is vice versa.

In addition, the questionnaire needs to be tried out to the students of other class who do not belong to the experimental group and control group in order to check the validity and the reliability of the questionnaire.

The validity of the questionnaire is analyzed using the following formula:

\[
 r_v = \frac{\sum x_i^2}{\sum x_i^2} = \text{coefficient of validity}
\]

\[
 r_i = \frac{\sum x_i}{\sqrt{\sum x_i^2}} = \text{total of item variance}
\]

\[
 r_t = \sqrt{\frac{\sum x_i}{\sum x_i^2}} = \text{total variance of item}
\]

\[
 r_v = \sqrt{\frac{\sum x_i^2}{\sum x_i}} = \text{total variance}
\]

The test items are valid if \( r_v \) or \( r_i \) is higher than \( r_t \) or \( r_v \) or \( r_i \) > \( r_t \) and invalid if \( r_v \) or \( r_i \) is lower than \( r_t \) or \( r_v \) < \( r_t \).

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

\[
 r_{kk} = \frac{k}{k-1} \left( 1 - \frac{\sum s_i^2}{s_t^2} \right)
\]

\[
 k = \text{total of valid item}
\]

\[
 s_i^2 = \text{total variance of all items}
\]

\[
 s_t^2 = \text{total variance}
\]

The instrument is reliable if \( r_{obtained} \) or \( r_{kk} \) is higher than \( r_{table} \) or \( r_{obtained} > r_{table} \).

2. Test

The writer uses a test in order to get the reading test data. A test is a set of questions, experiences, or other means used to measure skills, knowledge, intelligence, achievement, or aptitude of an individual or group.
(Arikunto, 1993:123). Linn and Grondlund (2000:31) explain that a test is a particular type of assessment that typically consists of a set of question administered during a fixed period of time under reasonably comparable conditions for all students.

In addition, there are many achievement tests available for use in the experimental study. One of them is objective type test. Linn and Grondlund (2000:150-151) state about the objective type test as follows:

Objective test items are highly structured and require the students to supply a word or two or to select the correct answer from number of alternatives. They are called objective because they have a single right or best answer that can be determined in advance. ...... The great variety of different types of objectives test items can be classified into those that require the student to supply the answer and those that require the student to select the answer given number of alternatives.

Moreover, Mason and Bramble (1997:297) explains that the objective test will not let the personal biases, perceptions and interpretation of scorer come in play during the process of scoring. They also describe that the objective test items are simple to respond and simple to score. Simple to respond means the students do not need to construct their own words in answering the questions. Besides, simple to score means the writer does not have include the subjectivity in scoring her students’ answers.

Synthesizing from explanation above, this study uses the objective type test in the form of multiple choices with five options. The multiple-choice items is generally recognized as the most widely applicable and useful type of objective test item (Linn and Gronlund, 2000:193). This test is useful to use during this study in order to know the students’ reading
comprehension achievement. The items are designed in such way so that the scores are not able to involve their judgment or personal feeling.

In addition, the instruments have four requirements, namely valid, reliable, measurable, and practical. In this study, the writer uses two instruments, namely a questionnaire and a test. The questionnaire is used to get the data of students’ learning motivation and the objective type test in the form of multiple choices is used to get the data of students’ reading comprehension. Both the instruments in this experimental study, the questionnaires and objective tests should be valid and reliable in order to answer the research problems and to obtain a correct conclusion. Validity refers to the extent to which an instrument measures what is intended to measure. Reliability, on the other hand, is the extent to which a measuring whatever it measures (Ary, 1985:213).

a. The Validity of test

The validity of test is that it measures what is supposed to measure. Fraenkel and Wallen (1993: 102) put forward that validity revolves around the defensibility of the inferences researchers make from the data collected through the use of instrument.

The validity of the test is measured by using formula as follows:

$$r_o = \frac{X - \bar{r}_i}{s_i} \sqrt{p_i q_i}$$

The test items are valid if $r$ obtained or $r_o$ is higher than $r$ table or $r_i$ or $r_o > r_i$ and invalid if $r$ obtained is lower than $r$ table or $r_o < r_i$. 

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b. The Reliability of the Test

The reliability of a test refers to consistency of the test score. Tuckman (1999:160) states test reliability means that a test is consistent. Furthermore, he also explains some factors which contribute to the unreliability of a test as follows: (1) familiarity with the particular test form (such as a multiple choice question); (2) fatigue; (3) emotional strain; (4) physical conditions of the room in which the test given; (5) health of the test taker; (6) fluctuations of human memory; (7) amount of practice or experience by the test taker of the specific skill being measured; and (8) specific knowledge that has been gained outside of the experience being evaluated by the test.

A test which is overly sensitive to these unpredictable (and often uncontrollable) sources of error is not a reliable test. Test unreliability creates instrumentation bias, a source of internal validity in an experiment (Tuckman, 1999:162). Ary (1985:226) propounds that reliability is concerned with how consistently we are measuring whatever we are measuring.

To find out the reliability of the reading test data, the researcher uses the formula as follows:

\[ r_{kk} = \frac{k}{k-1} \left( 1 - \frac{\sum pq}{s^2} \right) \]

The instrument is reliable if \( r \) obtained or \( r_{kk} \) is higher than \( r \) table or \( r_o > r_L \).
E. Techniques of Analyzing the Data

The objective of this study is to investigate the combined effect of clustering strategy and learning interest in improving the students’ reading comprehension achievement. The experiment investigating the combined effects of two or more independent variables is called a factorial design and the results are analyzed by means of multifactor analysis of variance (Ary, 1985:196).

The writer will use a descriptive analysis and inferential analysis in this study. The descriptive analysis is used to know the mean, median, mode, and standard deviation of the reading test. Normality and homogeneity will be used before testing the hypothesis.

The formulas of mean, median, mode, and standard deviation are described as follows:

1. Data Description
   a. Mean
      
      Tuckman (1999: 250) states that “the mean or average is computed by adding a list of scores and then dividing by the numbers of scores”.
      
      The algebraic formula used to determine the mean is:
      
      \[
      \bar{X} = \frac{\Sigma X}{N}
      \]
      
      Where:
      
      \(\bar{X}\) = the mean
      
      \(\Sigma\) = the sum of raw score
      
      \(X\) = raw score
      
      \(N\) = the number of cases

   b. Median
      
      Ary (1985: 153) states the median is defined as that point in a distribution of measure below which 50 percent of the cases lie (which means that the other 50 percent will be above this point).
The median formula is employed:

\[ Md = L + \left( \frac{N}{2} - Cfb \right) \frac{i}{fw} \]

Note

Md  =  the median  
N  =  the number of cases in the distribution  
L  =  the lower limit of the interval within which the median lies  
Cfb = the cumulative frequency in all intervals below the interval containing the median  
fw  =  the frequency of cases within the interval containing the median  
i   =  the interval size  

c. Mode

According to Ary (1985 : 103), “the mode is that value in a distribution that occurs most frequently”. He adds that mode can be more than one in a distribution.

d. Standard Deviation

\[ Sx = \sqrt{\frac{\sum (X - \overline{X})^2}{N}} \]

2. Normality and Homogeneity Test

Normality and homogeneity of the data should also be known, it is done before testing the hypothesis.

The algebraic formula used to determine the normality is:

\[ z_i = \frac{X - \overline{X}}{s} \]  
where  
\[ s = \sqrt{\frac{\sum X^2 - \overline{X}^2}{n-1}} \text{ or } \sqrt{\frac{\sum X^2}{n-1}} \text{ or } \sqrt{\frac{\sum X^2}{n-1}} \]

If \( L_o \) is lower than \( L_t \), the sample is in normal distribution.
Meanwhile, the following is algebraic formula used to determine the Homogeneity:

\[ X_0^2 = (n \times 10^3 \times - \log \sum \frac{f_i - 1}{s_i^2} \]

Note:
- \( X_0 \) = \( X \) observation
- \( X_t \) = \( X \) table

The level of significance \( \alpha \) = 0.005 (7.815)

if \( X_0^2 \) is lower than \( X_t^2 \), the data are homogeneous.

Moreover, one statistical device that is appropriate for factorial design is analysis of variance (ANOVA). In ANOVA, it is possible to put more than one independent variable into a single study. The writer uses two independent variables, dealing with this study, the teaching technique and learning interest which is divided into two kinds, namely, high learning interest and low learning interest. This interest classification is based on the median. The high interest intended here is the score upper the median while the low interest refers to the score below the median.

Considering the explanation above, it can be clued that there are two independent variables; ANOVA is called 2 x 2 ANOVA. \( H_0 \) is rejected if \( F_0 > F_t \). If \( H_0 \) is rejected the analysis is continued to know the difference of the group by using Tuckey test. In counting Multifactor Analysis of Variance or 2 x 2 ANOVA, there are some steps. These steps have done orderly:
Table 3.4. The Design of Multifactor Analysis of Variance or 2X2 ANOVA

<table>
<thead>
<tr>
<th>Interest</th>
<th>Instruction</th>
<th>Clustering (A₁)</th>
<th>Direct Instruction (A₂)</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Interest (B₁)</td>
<td>A₁ B₁</td>
<td>A₂ B₁</td>
<td></td>
</tr>
<tr>
<td>Low Interest (B₂)</td>
<td>A₁ B₂</td>
<td>A₂ B₂</td>
<td></td>
</tr>
</tbody>
</table>

Note:

A₁ : the mean score of reading comprehension test of experimental class which is taught using clustering.

A₂ : the mean score of reading comprehension test of control class which is taught using direct instruction.

A₁ B₁ : the mean score of reading comprehension test of students having high learning interest who are taught using clustering.

A₁ B₂ : the mean score of reading comprehension test of students having low learning interest who have taught using clustering.

A₂ B₁ : the mean score of reading comprehension test of students having high learning interest who are taught using direct instruction.

A₂ B₂ : the mean score of reading comprehension test of students having low learning interest who are taught using direct instruction.

B₁ : the mean score of reading comprehension test of students having high learning interest.

B₂ : the mean score of reading comprehension test of students having low learning interest.
The steps for the computation of 2 x 2 ANOVA:

a. The total sum of squares:

\[ x_t^2 = \frac{x_t^2}{N} \]

b. The sum of squares between groups:

\[ x_b^2 = \frac{x_1^2}{n_1} + \frac{x_2^2}{n_2} + \frac{x_3^2}{n_3} + \frac{x_4^2}{n_4} - \frac{x_t^2}{N} \]

c. The sum of squares within groups:

\[ x_w^2 = x_t^2 - x_b^2 \]

d. The between-columns sum of squares:

\[ x_{bc}^2 = \frac{x_{c1}^2}{n_{c1}} + \frac{x_{c2}^2}{n_{c2}} - \frac{x_t^2}{N} \]

e. The between-rows sum of squares:

\[ x_{br}^2 = \frac{x_{r1}^2}{n_{r1}} + \frac{x_{r2}^2}{n_{r2}} - \frac{x_t^2}{N} \]

f. The sum-of-squares interaction:

\[ x_{int} = x_b^2 - x_{bc}^2 + x_{br}^2 \]

g. The number of degrees of freedom associated with each source of variation:

- df for between-columns sum of 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-groups sum of squares:
- df for total sum of square: N-1
where:

df is the degree of freedom

C is the number of columns

R is the number of rows

G is the number of groups

n is the number of subjects in one group

N is the number of subjects in all groups

Here the table for summarizing 2 x 2 ANOVA:

**Table 3.5. The Summary of 2x2 Factorial Design ANOVA**

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>SS</th>
<th>Df</th>
<th>Ms</th>
<th>F₀</th>
<th>F(0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between columns (technique of Teaching)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between rows (Levels of learning interest)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Columns by rows (Interaction)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To find which means are significantly different from one another, Tukey’s test can be used. Tukey’s test is a statistical test generally used in conjunction with an ANOVA to find which means are significantly different from one another.

Damon Verial (2011) states that the purpose of Tukey’s HSD test is to determine which groups in the sample differ. Tukey’s HSD can clarify to researcher which groups among the sample in specific have significant differences.

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The steps for computation of Tukey test:

a. Clustering is compared with direct instruction
\[ q = \frac{\overline{X}_{c_1} - \overline{X}_{c_2}}{\sqrt{\text{error variance}/n}} \]

b. High interest is compared with low interest
\[ q = \frac{\overline{X}_{r_1} - \overline{X}_{r_2}}{\sqrt{\text{error variance}/n}} \]

c. Clustering is compared with direct instruction for students having high interest
\[ q = \frac{\overline{X}_{c_1} - \overline{X}_{c_2}}{\sqrt{\text{error variance}/n}} \]

d. Clustering is compared with direct instruction for students having low interest
\[ q = \frac{\overline{X}_{c_1} - \overline{X}_{c_2}}{\sqrt{\text{error variance}/n}} \text{ or } q = \frac{\overline{X}_{c_1} - \overline{X}_{c_2}}{\sqrt{\text{error variance}/n}} \]

\( q_o \) is compared with \( q_t \), if \( q_o > q_t \), the difference is significant. To know which technique is more effective or better to teach reading, the means are compared.

3. Statistical Hypotheses

The researcher formulates the statistical hypothesis that consists of null hypothesis (\( H_0 \)) and alternative hypothesis (\( H_1 \)). The statistical hypotheses are as follows:

a. The difference between clustering and direct instruction to teach reading to the eleventh grade students of MAN I Ponorogo.
\[ H_0 : \mu A_1 = \mu A_2 \]
\[ H_1 : \mu A_1 > \mu A_2 \]

Note:
\[ H_0 : \text{There is no significant difference in reading ability between the students who are taught by using clustering and students who are taught by using direct instruction.} \]
H₁ : The students who are taught by using clustering have better reading ability than students who are taught by using direct instruction.

b. The difference in reading ability between students who have low level of interest with the students who have high level of interest in reading.
H₀: \( \mu_{B_1} = \mu_{B_2} \)
H₁: \( \mu_{B_1} > \mu_{B_2} \)
Note:
H₀ : There is no significant difference in reading ability between the students who have low level of interest and students who have high level of interest.
H₁ : The students who have high level of interest have better reading than the students who have low level of interest.

c. The interaction between teaching technique and students’ interest in teaching reading.
H₀: \( \mu_A \times \mu_B = O \)
H₁: \( \mu_A \times \mu_B > O \)
Note:
H₀ : There is no interaction between teaching technique and students’ interest in reading. It means that the effect of interest level on reading ability does not depend on teaching technique.
H₁ : There is an interaction effect between teaching technique and students’ interest in teaching reading. It means that the effect of interest level on reading depends on teaching technique.
CHAPTER IV

THE RESULT OF THE STUDY

This chapter discusses the result of the study. The result is divided into four discussions as follows: the data description, normality and homogeneity test, hypothesis test and the discussion of the result of the study.

A. The Data Description

The data presented are the result of the reading test. It includes the frequency of distribution followed by histogram and polygon, the mean, mode, median and standard deviation. The descriptions of the data are based on the groups analyzed which are divided into eight groups:

1. The data of reading test of the students or the group who are taught by using Clustering (A1).
2. The data of reading test of the students or the group who are taught by using direct instruction (A2).
3. The data of reading test of the students who have high interest (B1)
4. The data of reading test of the students who have low interest (B2)
5. The data of reading test of the students or the group having high interest who are taught by using Clustering (A1B1).
6. The data of reading test of the students or the group having high interest who are taught by using direct instruction (A2B1).
7. The data of reading test of the students or the group having low interest who are taught by using Clustering (A1B2).
8. The data of reading test of the students or the group having low interest who are taught by using direct instruction (A2B2).

The data of each group are described as follows:
1. The data of reading test of the students or, the group who are taught by using Clustering ($A_1$).

Descriptive analysis of the data $A_1$ shows that the score is 21 up to 34. The means is 28.25, the mode is 28.75, the median is 24 and the standard deviation is 28.6, histogram and polygon are presented in table 4.1.

*Table 4.1. Frequency Distribution of $A_1$*

<table>
<thead>
<tr>
<th>Class Limit</th>
<th>Class Boundaries</th>
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<th>$X_i^2$</th>
<th>$f_i$</th>
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<th>$fX$</th>
<th>$fX^2$</th>
<th>cf $b$</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 - 23</td>
<td>20.5 - 23.5</td>
<td>22</td>
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<td>16.67</td>
<td>88</td>
<td>1936</td>
<td>4</td>
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<tr>
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<td>23.5 - 26.5</td>
<td>25</td>
<td>625</td>
<td>1</td>
<td>4.17</td>
<td>25</td>
<td>625</td>
<td>5</td>
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<tr>
<td>27 - 29</td>
<td>26.5 - 29.5</td>
<td>28</td>
<td>784</td>
<td>10</td>
<td>41.67</td>
<td>280</td>
<td>7840</td>
<td>15</td>
</tr>
<tr>
<td>30 - 32</td>
<td>29.5 - 32.5</td>
<td>31</td>
<td>961</td>
<td>7</td>
<td>29.17</td>
<td>217</td>
<td>6727</td>
<td>22</td>
</tr>
<tr>
<td>33 - 35</td>
<td>32.5 - 35.5</td>
<td>34</td>
<td>1156</td>
<td>2</td>
<td>8.33</td>
<td>68</td>
<td>2312</td>
<td>24</td>
</tr>
</tbody>
</table>

| 36 - 38     | 35.5 - 38.5      | 39    | 1444    | 4     | 16.67| 58   | 6864   | 4      |
| 39 - 41     | 38.5 - 41.5      | 41    | 1641    | 7     | 29.17| 287  | 7983   | 15     |
| 42 - 44     | 41.5 - 44.5      | 44    | 1844    | 10    | 41.67| 417  | 16884  | 22     |
| 45 - 47     | 44.5 - 47.5      | 47    | 2049    | 15    | 62.5 | 697.5| 44625  | 30     |
| 48 - 50     | 47.5 - 50.5      | 50    | 2256    | 20    | 83.3 | 906  | 81216  | 40     |

Figure 4.1: Histogram and Polygon Data $A_1$
2. The data of reading test of the students or the group who are taught by using Direct Instruction ($A_2$).

Descriptive analysis of the data $A_2$ shows that the score is 18 up to 30. The means is 22.75, the mode is 19.75, the median is 22 and the standard deviation is 3.78. Histogram and polygon are presented in table 4.2.

**Table 4.2. Frequency Distribution of $A_2$**

<table>
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<tr>
<th>Class Limit</th>
<th>Class Boundaries</th>
<th>$X_i$</th>
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<th>$fX$</th>
<th>$fX^2$</th>
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<td>9</td>
<td>37.5</td>
<td>171</td>
<td>3249</td>
<td>9</td>
</tr>
<tr>
<td>21 - 23</td>
<td>20.5 - 23.5</td>
<td>22</td>
<td>484</td>
<td>6</td>
<td>25</td>
<td>132</td>
<td>2904</td>
<td>15</td>
</tr>
<tr>
<td>24 - 26</td>
<td>23.5 - 26.5</td>
<td>25</td>
<td>625</td>
<td>4</td>
<td>16.7</td>
<td>100</td>
<td>2500</td>
<td>19</td>
</tr>
<tr>
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<td>26.5 - 29.5</td>
<td>28</td>
<td>784</td>
<td>4</td>
<td>16.7</td>
<td>112</td>
<td>3136</td>
<td>23</td>
</tr>
<tr>
<td>30 - 32</td>
<td>29.5 - 32.5</td>
<td>31</td>
<td>961</td>
<td>1</td>
<td>4.17</td>
<td>31</td>
<td>961</td>
<td>24</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>546</td>
<td>12750</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 4.2. Histogram and Polygon Data $A_2$**

 commit to user
3. The data of reading test of the students or the group having high interest ($B_1$).

Descriptive analysis of the data ($B_1$) shows that the score is 18 up to 34. The means is 26.67, the mode is 30.38, the median is 27.5, and the standard deviation is 4.39. Histogram and polygon are presented in table 4.3.

Table 4.3. Frequency Distribution of $B_1$

<table>
<thead>
<tr>
<th>Class Limit</th>
<th>Class Boundaries</th>
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<th>$X_{12}$</th>
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<th>$fX$</th>
<th>$fX^2$</th>
<th>cfb</th>
</tr>
</thead>
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<tr>
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<td>19.5</td>
<td>380.25</td>
<td>6</td>
<td>25</td>
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<td>2281.5</td>
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<tr>
<td>22 - 25</td>
<td>21.5 - 25.5</td>
<td>23.5</td>
<td>552.25</td>
<td>3</td>
<td>12.5</td>
<td>70.5</td>
<td>1656.75</td>
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</tr>
<tr>
<td>26 - 29</td>
<td>25.5 - 29.5</td>
<td>27.5</td>
<td>729</td>
<td>6</td>
<td>25</td>
<td>165</td>
<td>4374</td>
<td>15</td>
</tr>
<tr>
<td>30 - 33</td>
<td>29.5 - 33.5</td>
<td>31.5</td>
<td>992.25</td>
<td>8</td>
<td>33.33</td>
<td>252</td>
<td>7938</td>
<td>23</td>
</tr>
<tr>
<td>34 - 37</td>
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<td>35.5</td>
<td>1260.25</td>
<td>24</td>
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$\sum f = 3914$ $\sum f100\% = 100$ $\sum fX = 640$ $\sum fX^2 = 17510.25$

Figure 4.3. Histogram and Polygon Data $B_1$
4. The data of reading test of the students or the group having low interest ($B_2$).

Descriptive analysis of the data ($B_2$) shows that the score is 18 up to 30. The means is 24.37, the mode is 27.58, the median is 24.25 and the standard deviation is 3.64. Histogram and polygon are presented in table 4.4.

Table 4.4. Frequency Distribution of $B_2$

<table>
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<th>Class Boundaries</th>
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<th>$f_i$</th>
<th>$100%$</th>
<th>$fX$</th>
<th>$fX^2$</th>
<th>cfb</th>
</tr>
</thead>
<tbody>
<tr>
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<td>17.5 - 20.5</td>
<td>19</td>
<td>4</td>
<td>16.67</td>
<td>76</td>
<td>1444</td>
<td>4</td>
</tr>
<tr>
<td>21 - 23</td>
<td>20.5 - 23.5</td>
<td>22</td>
<td>7</td>
<td>29.17</td>
<td>154</td>
<td>3388</td>
<td>11</td>
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<tr>
<td>24 - 26</td>
<td>23.5 - 26.5</td>
<td>25</td>
<td>4</td>
<td>16.67</td>
<td>100</td>
<td>2500</td>
<td>15</td>
</tr>
<tr>
<td>27 - 29</td>
<td>26.5 - 29.5</td>
<td>28</td>
<td>8</td>
<td>33.33</td>
<td>224</td>
<td>6272</td>
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<td>30 - 32</td>
<td>29.5 - 32.5</td>
<td>31</td>
<td>1</td>
<td>4.16</td>
<td>31</td>
<td>961</td>
<td>24</td>
</tr>
</tbody>
</table>

|          |                  |       |       |         |      |        |     |
| 3215      | 24               | 100   | 585   | 14565   |     |        |     |

Figure 4.4. Histogram and Polygon Data $B_2$
5. The data of reading test of the students or the group having high interest who are thought by using Clustering ($A_1B_1$).

Descriptive analysis of the data $A_1B_1$ shows that the score is 24 up to 31. The means is 30.41, the mode is 30, the median is 30.3 and the standard deviation is 2.31. Histogram and polygon are presented in table 4.5.

### Table 4.5. Frequency Distribution of $A_1B_1$

<table>
<thead>
<tr>
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<th>$f_i$</th>
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<th>$fX^2$</th>
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<td>65</td>
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<td>1200</td>
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<td>11203</td>
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Figure 4.5. Histogram and Polygon Data $A_1B_1$
6. The data of reading test of the students or the group having high interest who are taught by using direct instruction ($A_2B_1$).

Descriptive analysis of the data $A_2B_1$ shows that the score is 18 up to 30. The means is 22.75, the mode is 19.63, the median is 20.5 and the standard deviation is 21.49. Histogram and polygon are presented in table 4.6.

<table>
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<th>cfB</th>
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<td>95</td>
<td>1805</td>
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<td>21 - 23</td>
<td>20.5 - 23.5</td>
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<td>484</td>
<td>3</td>
<td>66</td>
<td>1452</td>
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<td>24 - 26</td>
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</tr>
<tr>
<td>27 - 29</td>
<td>26.5 - 29.5</td>
<td>28</td>
<td>784</td>
<td>2</td>
<td>56</td>
<td>1568</td>
<td>11</td>
</tr>
<tr>
<td>30 - 32</td>
<td>29.5 - 32.5</td>
<td>31</td>
<td>961</td>
<td>1</td>
<td>961</td>
<td>961</td>
<td>12</td>
</tr>
</tbody>
</table>

|                  |                  | 3215 | 12   | 100  | 273 | 6411  |

Figure 4.6. Histogram and Polygon Data $A_2B_1$
7. The data of reading test of the students or the group having low interest who are thought by using Clustering ($A_1B_2$).

Descriptive analysis of the data $A_1B_2$ shows that the score is 21 up to 30. The means is 25.6, the mode is 28, the median is 27 and the standard deviation is 3.75. Histogram and polygon are presented in table 4.7.

<table>
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<th>100 %</th>
<th>$fX$</th>
<th>$fX^2$</th>
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<td>23.5</td>
<td>552.25</td>
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<tr>
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<td>8.3</td>
<td>24.5</td>
<td>650.25</td>
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<tr>
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<td>2809</td>
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<td>88.5</td>
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</table>

| Total       | 3237.25          | 12    | 100    | 307  | 8008.9|

Figure 4.7. Histogram and Polygon Data $A_1B_2$
8. The data of reading test of the students or the group having low interest who are taught by using direct instruction ($A_2B_2$).

Descriptive analysis of the data $A_2B_2$ shows that the score is 18 up to 28. The means is 22.75, the mode is 19.9, the median is 22.48 and the standard deviation is 3.41. Histogram and polygon are presented in table 4.8.

<table>
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<td>7</td>
</tr>
<tr>
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<td>1875</td>
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</tr>
<tr>
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<td>26.5 - 29.5</td>
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<td>16.67</td>
<td>56</td>
<td>1568</td>
<td>12</td>
</tr>
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</table>

|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

Figure 4.8. Histogram and Polygon Data $A_2B_2$
B. Normality and Homogeneity test

Before analyzing the data for testing hypothesis, analyzing the normality and homogeneity test must be done. The normality test is to know the sample is in normal distribution and the homogeneity test is to know the data are homogenous. Each test is presented as follows.

1. Normality Test

The sample is on normal distribution if $L_0$ (L obtained) is lower than $L_t$ (L table) at the level of significance $\alpha = 0.05$, L standard for Lilliefors.

a. Normality test of scores of the students who are taught using clustering (A1).

Based on the calculation, the highest values of $F(Z_i) - S(F_i)$ is 0.0960, or $L_0$ is 0.0960 and $L_t = 0.173$. From the table of critical value of Lilliefors test with $N=24$ at the significant level $\alpha = 0.05$, the score of $L_t$ is 0.173. Because $L_0$ is lower than $L_t$ or $L_0 (0.0960) < L_t (0.173)$, it can be concluded that the data is in normal distribution.

b. Normality test of scores of the students who are taught using direct instruction (A2).

Based on the calculation, the highest values of $F(Z_i) - S(F_i)$ is 0.1423, or $L_0$ is 0.1423 and $L_t = 0.173$. From the table of critical value of Lilliefors test with $N=24$ at the significant level $\alpha = 0.05$, the score of $L_t$ is 0.173. Because $L_0$ is lower than $L_t$ or $L_0 (0.1423) < L_t (0.173)$, it can be concluded that the data is in normal distribution.
c. Normality test of scores of the students who have high interest who are taught using clustering and direct instruction (B1).

Based on the calculation, the highest values of F(Z_i) - S(F_i) is 0.117, or \( L_o \) is 0.117 and \( L_I = 0.173 \). From the table of critical value of Lilliefors test with N=24 at the significant level \( \alpha = 0.05 \), the score of \( L_I \) is 0.173. Because \( L_o \) is lower than \( L_I \) or \( L_o (0.117) < L_I (0.173) \), it can be concluded that the data is in normal distribution.

d. Normality test of scores of the students who have low interest who are taught using clustering and direct instruction (B2):

Based on the calculation, the highest values of F(Z_i) - S(F_i) is 0.104, or \( L_o \) is 0.104 and \( L_I = 0.173 \). From the table of critical value of Lilliefors test with N=24 at the significant level \( \alpha = 0.05 \), the score of \( L_I \) is 0.173. Because \( L_o \) is lower than \( L_I \) or \( L_o (0.104) < L_I (0.173) \), it can be concluded that the data is in normal distribution.

e. Normality test of scores of the students who have high interest who are taught using clustering (A1B1).

Based on the calculation, the highest values of F(Z_i) - S(F_i) is 0.1976, or \( L_o \) is 0.1976 and \( L_I = 0.243 \). From the table of critical value of Lilliefors test with N=12 at the significant level \( \alpha = 0.05 \), the score of \( L_I \) is 0.243. Because \( L_o \) is lower than \( L_I \) or \( L_o (0.1976) < L_I (0.243) \), it can be concluded that the data is in normal distribution.
f. Normality test of scores of the students who have low interest who are taught using clustering (A1B2).

Based on the calculation, the highest values of F(Zi)-S(Fi) is 0.1466, or Lo is 0.1466 and Lt = 0.243. From the table of critical value of Lilliefors test with N=12 at the significant level α = 0.05, the score of Lt is 0.243. Because Lo is lower than Lt or Lo (0.1466) < Lt (0.243), it can be concluded that the data is in normal distribution.

g. Normality test of scores of the students who high interest who are taught using direct instruction (A2B1).

Based on the calculation, the highest values of F(Zi)-S(Fi) is 0.1700, or Lo is 0.1700 and Lt = 0.243. From the table of critical value of Lilliefors test with N=12 at the significant level α = 0.05, the score of Lt is 0.243. Because Lo is lower than Lt or Lo (0.1700) < Lt (0.243), it can be concluded that the data is in normal distribution.

h. Normality test of scores of the students who have low interest who are taught direct instruction (A2B2).

Based on the calculation, the highest values of F(Zi)-S(Fi) is 0.1127, or Lo is 0.1127 and Lt = 0.243. From the table of critical value of Lilliefors test with N=12 at the significant level α = 0.05, the score of Lt is 0.243. Because Lo is lower than Lt or Lo (0.1147) < Lt (0.243), it can be concluded that the data is in normal distribution.
Table 4.9. Normality Test

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<th>Data</th>
<th>The Number of Sample</th>
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<th>$L_1$</th>
<th>$\alpha$</th>
<th>Distribution of Sample</th>
</tr>
</thead>
<tbody>
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<td>0.173</td>
<td>0.05</td>
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<tr>
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<td>$A_2$</td>
<td>24</td>
<td>0.1423</td>
<td>0.173</td>
<td>0.05</td>
<td>Normal</td>
</tr>
<tr>
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<td>0.117</td>
<td>0.173</td>
<td>0.05</td>
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<tr>
<td>4</td>
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<td>Normal</td>
</tr>
<tr>
<td>5</td>
<td>$A_1B_1$</td>
<td>12</td>
<td>0.1976</td>
<td>0.243</td>
<td>0.05</td>
<td>Normal</td>
</tr>
<tr>
<td>6</td>
<td>$A_2B_2$</td>
<td>12</td>
<td>0.1466</td>
<td>0.243</td>
<td>0.05</td>
<td>Normal</td>
</tr>
<tr>
<td>7</td>
<td>$A_2B_1$</td>
<td>12</td>
<td>0.1700</td>
<td>0.243</td>
<td>0.05</td>
<td>Normal</td>
</tr>
<tr>
<td>8</td>
<td>$A_2B_2$</td>
<td>12</td>
<td>0.1127</td>
<td>0.243</td>
<td>0.05</td>
<td>Normal</td>
</tr>
</tbody>
</table>

The summary of normality test shows that all the values of $L_0$ is lower than $L_1$, so it can be concluded that all data are in normal distribution.

2. Homogeneity Test

Homogeneity test is done to know that the data are homogeneous. If $x_0^2 < x_t^2(0.05)$, it can be concluded that the data are homogeneous.

Table 4.10. The Summary of Homogeneity Test

<table>
<thead>
<tr>
<th>Sampel</th>
<th>$n-1$ (df)</th>
<th>$1/$(df)</th>
<th>$s_i^2$</th>
<th>$\log s_i^2$</th>
<th>$(df) \log s_i^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>11</td>
<td>0.090901</td>
<td>4.20</td>
<td>0.6232</td>
<td>6.8552</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
<td>0.090901</td>
<td>10.81</td>
<td>1.0338</td>
<td>11.3718</td>
</tr>
<tr>
<td>3</td>
<td>11</td>
<td>0.090901</td>
<td>17.60</td>
<td>1.2455</td>
<td>13.7005</td>
</tr>
<tr>
<td>4</td>
<td>11</td>
<td>0.090901</td>
<td>11.36</td>
<td>1.0553</td>
<td>11.6083</td>
</tr>
<tr>
<td>$\sum$</td>
<td>44</td>
<td>0.363604</td>
<td></td>
<td></td>
<td>43.5358</td>
</tr>
</tbody>
</table>

$x_0^2 = (ln10)\{B-\sum(n_i-1)\log s_i^2\} = (2.3026)(45.799 - 43.5358) = 5.211$

Because $x_0^2(5.211)$ is lower than $x_t^2(0.05)(7.81)$, it can be concluded that the data are homogeneous.
C. Hypothesis Testing

ANOVA test (Multifactor Analysis of Variance)

Before the data are analyzed using ANOVA test, the data are divided into four groups, they are: (1) The data of reading test of the students or the group having high interest who are taught by using Clustering (A1B1). (2) The data of reading test of the students or the group having low interest who are taught by using Clustering (A1B2). (3) The data of reading test of the students or the group having high interest who are taught by using Direct Instruction (A2B1). (4) The data of reading test of the students or the group having low interest who are taught by using Direct Instruction (A2B2).

Table 4.11. Summary of mean scores

<table>
<thead>
<tr>
<th>Students’ Interest</th>
<th>Teaching technique</th>
<th>Total Rows</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Clustering (A1)</td>
<td>Direct Instruction (A2)</td>
</tr>
<tr>
<td>High Interest (B1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A1B1</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>18</td>
</tr>
<tr>
<td>Low Interest (B2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A1B2</td>
<td>28</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>26</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Total Columns</td>
<td>N = 24</td>
<td>N = 24</td>
</tr>
<tr>
<td></td>
<td>(\sum X = 674)</td>
<td>(\sum X = 545)</td>
</tr>
<tr>
<td></td>
<td>(X_{c1} = 25.923)</td>
<td>(X_{c2} = 20.962)</td>
</tr>
</tbody>
</table>

\[\sum X^2 = 31901\]
Table 4.12. The summary of a 2x2 multifactor analysis of variance

<table>
<thead>
<tr>
<th>Summary</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>( F_o )</th>
<th>( F_t ) (0.05)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between columns (Clustering)</td>
<td>346.82</td>
<td>1</td>
<td>346.82</td>
<td>31.529</td>
<td>4.00</td>
</tr>
<tr>
<td>Between rows (Learning Interest)</td>
<td>63.12</td>
<td>1</td>
<td>63.12</td>
<td>5.738</td>
<td></td>
</tr>
<tr>
<td>Columns by rows (interaction)</td>
<td>50</td>
<td>1</td>
<td>50</td>
<td>4.545</td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>459.84</td>
<td>3</td>
<td>153.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within groups</td>
<td>484.16</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1403.94</td>
<td>47</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the computation result of ANOVA test, it can be concluded that:

1) Because \( F_o \) between columns (31.529) is bigger than \( F_t \) at the level of significance \( \alpha = 0.05 \) (4.00), the difference between columns is significant. Therefore, the null hypothesis (H<sub>0</sub>) stating that there is no significant difference in reading comprehension between the students who are taught by using clustering technique and students who are taught by using direct instruction is rejected. It can be concluded that teaching reading using Clustering to the students is significantly different from the one using Direct Instruction. The mean score of students taught using Clustering (25.923) is higher than the one of those taught using Direct Instruction (20.962). So, teaching reading using clustering is more effective than the one using direct instruction.

2) Because \( F_o \) between rows (5.738) is bigger than \( F_t \) at the level of significance \( \alpha = 0.05 \) (4.00), the difference between rows is significant. Therefore, the null hypothesis (H<sub>0</sub>) stating that there is no significant difference in reading comprehension between the students who have low level of interest and students who have high level of interest is rejected. It can be concluded that students having high learning interest taught using Clustering is significantly different from those having low learning interest. The mean score of students having high learning interest (26.542) is higher than the one of those having low learning interest.
interest (24.250). So, reading achievement of the students having high interest is better than the one of those having low interest.

3) Because $F_o$ interaction (4.545) is bigger than $F_t$ at the level of significance $\alpha = 0.05$ (4.00). Therefore, the null hypothesis ($H_0$) stating that there is no interaction between teaching techniques and students’ interest in reading comprehension is rejected. It means that the effect of teaching techniques on the student’s reading comprehension depends on the student’s interest.

From the hypothesis testing above, can be seen that there is interaction effect between the two variables, teaching technique and interest, so calculation must be continued to Tukey test. It shows as follows:

1. Clustering compared with Direct Instruction ($A_1$&$A_2$)

$$ q = \frac{X_{C1} - X_{C2}}{\text{Error Variance}/n} = \frac{25.923 - 20.962}{11/24} = \frac{4.961}{0.4583} = \frac{4.961}{0.6769} = 7.32 $$

From the computation above, it can be concluded that $q_o$ (7.32) is higher than $q_t$ (2.92).

Because $q_o$ between columns (7.32) is higher than $q_t$ (2.92), so the difference between columns is significant. It can be concluded that teaching reading using clustering significantly differs from the one using Direct Instruction. The mean score of students taught using Clustering (25.923) is higher than the one of those taught using Direct Instruction (20.962). It means that teaching reading using Clustering is more effective than the one using Direct Instruction.
2. High interest is compared with low interest (B₁ & B₂)

\[ q = \frac{X_{r1} - X_{r2}}{Error \ Variance/n} = \frac{26.542 - 24.250}{11/24} = \frac{2.292}{0.4583} = 2.292 / 0.6769 = 3.390 \]

From the computation above, it can be concluded that \( q \) (3.390) is higher than \( q_t \) (2.92).

Because \( q \) between rows (3.390) is higher than \( q_t \) (2.92), so the difference between rows is significant. It means that the students who have high interest are significantly different in reading competence from the students who have low interest. The mean score of the students having high interest (26.542) is higher than those who have low interest (24.250). Thus, it can be concluded that the students who have high interest have better reading comprehension than those having low interest.

3. Clustering compared with Direct Instruction for students having high English learning interest (A₁B₁ & A₂B₁)

\[ q = \frac{X_{c1r1} - X_{c2r1}}{Error \ Variance/n} = \frac{30.250 - 22.833}{11/12} = \frac{7.417}{0.917} = 7.417 / 0.957 = 7.750 \]

From the computation above, it can be concluded that \( q \) (7.750) is higher than \( q_t \) (3.08).

Because \( q \) (7.750) between columns for students having high learning interest (7.750) is higher than \( q_t \) (3.08), so the difference between columns for students having high learning interest is significantly different from the one using Direct Instruction. The mean score of the students having high learning interest taught using Clustering (30.250) is higher than the one of those taught using Direct Instruction (22.833). It means that teaching reading using Clustering to the students having high learning interest is more effective than the one using Direct Instruction.

commit to user
4. Clustering compared with Direct Instruction for student having low English learning interest (A1B2 & A2B2)

\[ q = \frac{X_{C2B2} - X_{C1B2}}{\text{Error Variance} / n} = \frac{25.917 - 22.583}{11/12} = \frac{3.334}{0.917} = \frac{3.34}{0.967} = 3.483 \]

From the computation above, it can be concluded that \( q_0 \) (3.48) is higher than \( q_t \) (3.08).

Because \( q_0 \) (3.48) is higher than \( q_t \) (3.08), so the difference between columns for students with low interest is significant. It can be concluded that teaching reading using Clustering to the students having low learning interest is significantly different from the one of those using Direct Instruction. The mean score of the students having low learning interest taught using Clustering (25.917) is higher than the one of those taught using Direct Instruction (22.583). It means that teaching reading using Clustering to the students having low learning interest is better than the one using Direct Instruction.

D. Discussion of the Result of the Study and Implication

1. Discussion of the Result of the Study

This research is one of the efforts to generate some improvement in teaching reading to the eleventh grade students of the senior high school. It has been discussed in the previous chapter that Clustering is one of the alternatives to obtain the intention. The following is the elaboration discussions of the research findings.
a. **Clustering is more effective than Direct Instruction.**

Clustering is to **stimulate the learner** for developing their idea that’s difficult to say. Clustering is a type of pre-reading that allows the students/learners explore many ideas as soon as possible. Robb (2000:127) said, “**clustering** is like brainstorming or free associating, clustering allows students/learners begin explore many ideas from their mind”. It is a good way to develop idea before starting the reading activity. The students can do it on their own or with friends or classmates to try to find inspirations or idea. As Beth Taylor said (2009:1) in his article, “**Clustering is great study strategy and is especially helpful for visual learners who like to look at and create charts. Clustering can help all students organize their thought and make useful connection**”.

On the contrary, Direct Instruction makes the students depends on the teacher’s **explanation and translation** almost all the times in reading class. The teacher will be engaged in many planning decisions, such as deciding what he/she wishes to teach, and how he/she will go about the reading process (Parson, Hinson, and Brown. 2001:11). They wait until all the words are translated by the teacher to get the message of the text given to them. This technique does not promote achievement in creativity, thinking and problem solving. Therefore, Clustering is more effective than Direct Instruction.
b. The students who have high interest have better reading comprehension than the students who have low interest.

An interest can be expressed through a statement that indicates the students prefer a case of the other things. Students who have an interest in certain subjects tend to give greater attention to the subject. Interest also has a major influence on learning, because if the teaching materials are not in accordance with student interests, students will not learn well. Teaching materials that draw students will be better understood and stored and increase their interest in learning. The Liang Gie (1987:20) says that interest besides allowing the concentration of the mind, will also cause excitement in learning. Cheerfulness will enlarge the person’s ability to learn and also help students not easy to forget what he learned it. Learning by unhappy feeling would make the lesson was very heavy.

The students’ learning interest influences their achievement in learning. The students with high learning interest are always active, creative, curious, having good participation in the teaching and learning process. They have their own spirit to study for gaining their best competency and skill. When teacher applies clustering in teaching reading, the students can easily understand the material given by the teacher and they are much more interest in learning.

On the contrary, students with low interest face problem with most of the academic process. The students are difficult to maintain their interest in reading passage, they get confused to recognize part of speech through reading passage, misplaced the correct part of speech in reading passage,
some of them still get difficulty in finding the factual information, and still do not know the meaning of each sentence. Slameto (2003: 180) stated that the lack of interest in learning can lead to a lack of interest in a particular field, it can lead to refusal to teacher. Kaniyem (2012: 2) in her article said that Interests has big effect on learning result, because, if the lessons materials not in accordance with their interests, students will not learn well because it did not interest them. Students will be lazy and will not get the satisfaction of the lesson. Teaching materials that attract students, would be easy to learn, so it can improve in learning achievement. Therefore, clustering is effective for student having high interest.

c. There is an interaction between teaching techniques and learning interest.

Teaching techniques used in a class really influence students and teachers behavior in the class process. That is the reason why teachers must use suitable techniques which will be able to motivate the students to get actively involved in the teaching and learning process. Direct instruction cannot motivate the students well because it focuses on the teachers, students tend to just accept anything the teacher explained to them. Meanwhile, clustering technique gives opportunity to students to be more active in teaching and learning process. Reid (1993: 6) mentions that the invention of clustering helps readers to generate, develop and arrange their idea. It can be said that clustering helps students in developing their idea.
Clustering is a technique to stimulate the learner for developing their idea that is difficult to say. Clustering is a type of pre-reading that allows the students/learners explore many ideas as soon as possible. Like brainstorming or free associating, clustering allows students begin explore many ideas from their mind.

Clustering will also make the students more interested in joining the teaching and learning process especially in reading. It can be stated that interest has an important role in influencing learning activity which includes emotion, attention, satisfaction, motivation and pleasure. If the students have high level of interest they will have high interest in reading many texts that the teacher gives to them. Hurlock (1956: 403) says that interest means a learned motive which drives the person to occupy him/herself with an activity when he/she is free to choose what he will do. Interest is freely choosing activity, which hold the attention and is a source of satisfaction and pleasure. In other words, clustering is more effective used for student having high interest in teaching reading.

In the other side, Direct Instruction is teacher centered. It means that teacher exert direction and control. Donald Crawford (2012:1) in his article states that Direct Instruction as a general approach to instruction; involve explicit explanation, small learning steps, frequent review, frequent teacher-student interaction, and choral responses. The teacher decides what is to be learnt and how, and is visibly in charge. The teacher usually translates word by word, sentence by sentence to help the students understand the text. The teacher gives explanation in the straight
forward way and gives feedback and direct correction for the students’ mistakes. It is accordance with the characteristics for the students having low interest. The students are passive in the class and they just become the followers in the teaching and learning process. Briefly, it can be concluded that there is an interaction between teaching technique and degree of interest.

E. Weaknesses of the Research

This research is presented to fulfill one of requirements to achieve Graduate Degree of English Education at Sebelas Maret University. It has been done for more than eight years from December 2011 till July 2012 starting from observation, writing the research proposal, up to the last activity that is writing the research report. The researcher expects that the result of the research will be the best research about education and useful for teacher and next researcher as reference.

The researcher has made series efforts to do this, but because of the limitation of time and cost of the researcher. This work may not fulfill ideal expectation for the reader yet. Therefore, in this occasion researcher presented the thesis as source of knowledge especially in English education and hope that this research will be perfected by next researcher.
BAB V

CONCLUSION AND SUGGESTION

As the closing of this report, this chapter discusses the conclusion, implication, and suggestions for teachers, students and other researchers based on the finding of the research discussed on the previous chapter.

A. Conclusion

Referring to the result of the data analysis discussed in chapter IV, it can be concluded that:

1. Clustering is more effective that Direct Instruction to teach reading for eleventh grade students of MAN 1 Ponorogo in the academic year of 2011-2012.

2. The reading achievement of students of the eleventh grade students of MAN 1 Ponorogo in the academic year of 2011-2012 having high learning interest is better than the one of those having low learning interest.

3. There is an interaction between teaching techniques and learning interest in teaching reading comprehension for eleventh grade students of MAN 1 Ponorogo in the academic year of 2011-2012.

Based on those three findings, the conclusion is that Clustering is an effective technique for teaching reading comprehension to the eleventh grade students of MAN 1 Ponorogo. Since Clustering is simple and arousing students’ interest in promoting independence in learning, students are getting more active and more encouraged to study reading comprehension and improve their reading comprehension.
comprehension. As a result, the students’ reading achievement is improved optimally.

B. Implication

The result of this research indicates that using Clustering of teaching reading to the eleventh grade students of MAN 1 Ponorogo in the academic year 2011-2012 is an effective teaching technique. Since the technique is applied in teaching, the students are getting more active in the teaching learning process. It means that using Clustering in the teaching and learning process can improve the students’ interest toward learning. When the students’ learning interest is high, their achievement will certainly improve significantly. That’s why it can be said that there is a very close interaction between clustering and students learning interest.

From the summary of multifactor analysis of variance, it has been proved that (1) Clustering is more effective than Direct Instruction for teaching reading to the eleventh grade students of MAN 1 Ponorogo in the academic year 2011-2012; (2) The reading achievement of the students with high learning interest is better than the one of those with low learning interest; (3) There is interaction between teaching technique and learning interest. In other words, it implies that Clustering is one of the other teaching techniques that can be applied to increase students learning interest in the teaching and learning process. Therefore, Clustering can be applied as teaching technique to increase student’s interest toward learning English in other classes to the different student with similar condition.
C. Suggestion

In term of research finding, the writer would like to offer three kinds of suggestion; there is suggestion for teachers, students and the following researchers as follows:

1. Suggestion for the teachers

   The teacher must have preparation before teaching reading comprehension. To raise the students’ interest in studying English, the teacher can apply Clustering in teaching reading so that the students will be more interested and enjoy in learning English. The more students enjoy learning English, the more easily understand the reading text given. In such kind of class milieu, the teachers can easily conduct teaching and learning activities.

2. Suggestion for the students

   The students will surely be interested in teaching and learning process because they feel that they can understand the reading text better. They can easily understand and discuss the reading text given in the class. Besides, they can improve their own comprehension during teaching and learning process by applying the technique wherever and whenever they read English text.

3. Suggestion for the following researchers

   The benefits of this study for other researchers are as follows:
   a. A similar research with different population and characteristics can be held in the future.
   b. An imitation of this research design can be used by the following research as reference.
   c. The result of the research could be useful for other researchers to conduct research with different student’s condition like students’ motivation or habit.