

**THE EFFECT OF LEARNING TO THINKING INDUCTIVELY
FORMING CONCEPT BY COLLECTING AND ORGANIZING
INFORMATION ON THE STUDENTS' READING
COMPREHENSION**

SKRIPSI

*Submitted in Partial Fulfilment as the Requirements
For the Degree of Sarjana Pendidikan (S.Pd.)
English Education Program*

by

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MEDAN
2018**



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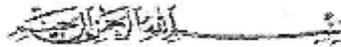
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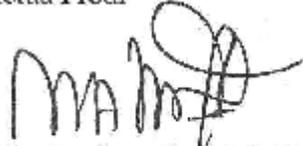
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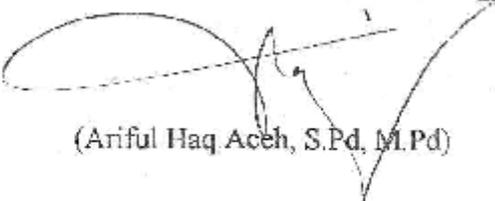
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04-09-2017	Chapter III	[Signature]
11-09-2017	Chapter IV	[Signature]
18-09-2017	Conclusion ACC	[Signature]

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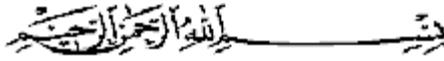
ABSTRACT

Desi Sivia Zahara. 1302050258. The Effect of Learning Thinking Inductively Forming Concepts by Collecting and Organizing Information on Students' Reading Comprehension. Skripsi. English Faculty of Teachers Training and Education. English Education Program. University of Muhammadiyah Sumatera Utara, Medan. 2018.

This study deals with the effect of learning thinking inductively forming concepts by collecting and organizing information on students' reading comprehension. The objectives of this study is to find out whether there are any effect of using Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information on the student's reading comprehension or not. The objective of this study is to find out the percentage the effect of using Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information on student's achivement in reading comprehension. The fact showed that the $t\text{-observed} < t\text{-table } 6.2921 > 2.024$. To test the hypothesis, the formula of t-test and the distribution table of observed were applied. The facts showed that t-critical (t_c) value was higher than the $t\text{-table}$ on the level 2.024. Therefore, the null hypothesis was rejected and alternative hypothesis was accepted. So, the researcher concluded the alternative was accepted that there was any significant effect of learning to thinking inductively forming concept by collecting and organizing information on the students' reading comprehension.

Keywords: Learning Thinking Inductively Forming Concepts, Reading Comprehension.

ACKNOWLEDGEMENTS



Assalamu'alaikum wr. wb.

Firstly, in the name of Allah SWT the Most Almighty and the Most Merciful, all of praise be to Allah for the health and ability given to her in finishing this thesis. Secondly, peace be upon to Prophet Muhammad SAW who had brought human beings from the darkness to the brightness in our life.

Thirdly, the researcher would like to dedicate her best gratitude and deep appreciation to her beloved parents Edy Efrizal Guci and Ivo Lusianti for their moral and material supports before, during and after the academic years at Muhammadiyah University of North Sumatra.

In writing this study that entitled **“The Effect of Learning Thinking Inductively Forming Concepts by Collecting and Organizing Informatino on Students’ Reading Comprehension”**, the researcher experienced so many difficulties and problems but she did not end her efforts to make it better, and it is impossible to finish without much help from the others.

Therefore, the researcher would like to deliver her thankfull to all people mention below:

1. Dr. Agussani, MAP., as the rector of University Muhammadiyah of North Sumatra Medan.
2. Dr. Elfrianto Nasution, SPd., MPd., as the dean of FKIP UMSU who had given her recommendation to carry out this study.

3. Mandra Saragih, SPd, MHum. and Pirman Ginting, S.Pd., M. Hum., as the head and secretary of English Education Department of FKIP UMSU who had helped in administration.
4. Ariful Haq Aceh, S.Pd., M.Pd., as her supervisor who had given her suggestion, idea criticism and guidance in writing this study.
5. All lectures of FKIP UMSU, especially those of English Education Program who had given the valuable thought and instruction well as the information in teaching English during her academic year in completing her study in UMSU.
6. All friends, especially classmate at VIII/B Afternoon, who gave care and supported her in finishing this study.
7. All the people that cannot be mentioned for supporting her a lot.

Finally, the researcher hoped that her study will be useful for the readers, especially the students of English Education Department who want to do a similar research and also for the researcher herself. May Allah the Almighty bless all of us.

Wassalamu'alaikum wr. wb.

Medan, March 2018

The researcher,

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CHAPTER 1

INTRODUCTION

A. Background of the study

Reading is a way of find knowledge has relation with education. To get further knowledge, college students are required to have critical and analytical competence in comprehending academic texts, in searching more academic information through various types of reading materials, such as textbooks, journals, reports, or electronic messages. So reading gives much contribution to improve students' knowledge and enrich their experience intellectual ability.

In reading we can find something from the writing such as facts, ideas, enjoyment, and even feelings of family community from latter. Language is an instrument for communication can't be avoided in human life. According to (Syukri Nst. 2008:11) "Language is an abstract set of psychological principles and sosiological consideration that constitutes a person's competence as a speaker in a given situation."

By language we can express our needs, wants, attitude and our language in reading comprehension and vocabulary knowledge, more topics of relevance to reading comprehension are identified. First, students need to be prepared for college entrance exams and college itself. College entrance exams contain section where students read material and demonstrate their knowledge of what they read. When students reach college, the reading requirement for most classes is more difficult than at the high school level.

Based on the researcher experience in teaching practice program (PPL 2016) in Junior High School of MTs Ali ImronMedan, the students faced difficulties to understand the meaning of their reading English text. Most of the students did reading as a passive activity. The students could read but they did not understand what the text talked about. So that, when the teacher asked them to answer the questions based on the text, they could not answer the questions. So, the purpose of reading cannot gain by the students.

This condition becomes the challenge for English teacher to find out the solution to improve the students' skill in comprehending the text. One way to improve their reading skill is Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information. This strategy provides students like adetective; they are piecing together collected information to get behind the wordson the page. It can help to clarify the information as well as improve students' engagement with the text and improve their reading comprehension.

B. The Identification of Problems

The problem can be defined as follow:

1. Most of the students did reading as a passive activity.
2. The students could read but they did not understand what the text talked about.
3. They could not answer when the teacher asked them to answer the questions based on the text.

C. The Scope and Limitation

This study is focused on the reading comprehension. The research is basically limited in teaching of reading narrative text.

D. Formulation of the Problems

The problems of this study are formulated as follows:

1. Is there any significant effect of using Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information on the student's reading comprehension?
2. How many percent is the effect of using Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information on the student's achievement in reading comprehension?

E. The Objectives of the Study

The objectives of the study are formulated as follows:

1. To find out whether there are any effect of using Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information on the student's reading comprehension or not.
2. To find out the percentage the effect of using Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information on student's achievement in reading comprehension.

F. The Significances of the Study

The result of the study was expected either the theories or practice to be useful for:

a. Theoretical

The expected of this research is to enrich the learning of reading especially in reading comprehension and as references for those who concerns with teaching English to help variety of technique in teaching process, especially technique in teaching reading.

b. Practically

1. The students, the result could make them easier to understanding and can be used to improve their ability in reading comprehension.
2. English teacher, it can be used as a reference to enrich their knowledge in teaching reading, especially in teaching Reading comprehension
3. Head master, it can be used to improve and increase awareness of teacher and the headmaster performance to improve professionalism.
4. Reader's at UMSU library, to enrich reader's knowledge about teaching technique and reading comprehension
5. The writer, can be used as basic information and knowledge for writers who are interested in doing research and in teaching reading.

CHAPTER II

REVIEW OF LITERATURE

A. Theoretical Framework

A research is conducted based on the related theories in this study. In this case, the theoretical framework aims to give a clear concept and perception applied in this research in order to avoid the misinterpretation of some terms related to the research.

1. The Concept of Reading Comprehension

1.1 Reading

Definition of reading is not just saying the words. Reading is an active process. Reading is an active cognitive process of interacting with print and monitoring comprehension to establish meaning". Reading is an act of looking and understanding point. This is very true because reading entails the use of vision to understand several words in a sentence and make them meaningful. Same goes to each sentence in order to understand the entire text. (Ukessays.com)

Reading is a complex act that must be learned. It is also a means by which further learning takes place. In other word, a person learns to read and reads to learn. Learning to read depends upon motivation, practice, and reinforcement. Teachers must show children that being able to read is rewarding in many ways – that it increase success in school, helps in coping with everyday situation outside of school, bestows status and provides recreation.

1.2 Comprehension

Comprehension is an unobservable mental process. Comprehension is the ultimate goal of all reading; that is, the ability to understand a text underlies all reading tasks”. Reading comprehension is a metacognitive process in which many strategies, as Hans (2015) asserted, are “procedural, purposeful, effortful, willful, essential, and facilitative in nature”. Among the major goals of reading instructions today is the development of learners who understand. Students need these abilities: to understand concepts presented in print, to think about the material read, and d for to use that which is read for relevant purpose.

Comprehension strategy instruction cannot wait until children learn to read. They can learn listeing comprehension strategies that studes have shown transfer to reading comprehension. (Andrea, 2015:2)

Comprehension itself involves more than thirty such cognitive processes, including activating bakground knowledge, monitoring comprehension, drawing inferences, creating mental imagery and bringing to bear a knowledge of text structure (Carr, 2004: 10)

1.3 Reading Comprehension

Reading comprehension is a process of making sense of written ideas through meaningful interpretation and interaction with language. Reading comprehension is best viewed as multifaceted process affected by several thinking and language abilities. Reading comprehension involves taking meaning to a text in other to obtain meaning from that text.

Reading comprehension is designed to reinforce and extend the reading

skills of our students. (Saddleback, 2002: 5)

It is an active, thinking process that depends not only on comprehension skill but also on the student's experiences and prior knowledge. Comprehension involves understanding in vocabulary seeing the relationships among words and concepts, organizing ideas, recognizing the author's purpose, making judgments, and evaluation.

1.4 Level of Comprehension

There are four levels of comprehension, they are:

1. Literal Comprehension

Reading for literal comprehension which involves acquiring information that is directly stated in a selection. The basic of literal comprehension is recognizing stated main idea, detailed cause effect and sequence. It is also prerequisite for higher level understanding. In literal reading, the main ideas are directly stated. Everyone who hopes to obtain a higher-level of reading must master literal reading first. The ability to follow the directions and the ability to restate the author's material are skills involved in literal reading.

2. Interpretative Comprehension

Interpretative reading involves reading between the lines or making inference. It is the process of the deriving ideas that are implied. In other words, the ideas are not stated directly. Skills for interpretative reading included inferring main ideas of passages in which the main ideas are not directly stated, inferring cause and effect relationship when they are not directly stated, determining references of pronouns and adverbs, inferring committed words, and detecting the

authors' purpose in writing (to inform, to entertain, to persuade, to accomplish something else).

3. Critical Comprehension

Critical reading is evaluating written material-comparing the ideas covered material with known standards and drawing conclusion about their accuracy, appropriateness, and timeliness. It involves drawing conclusion about their accurately, appropriateness and timeliness. in critical reading, the readers evaluate written material, compare the ideas found in the material with his or her previous knowledge and draw conclusion appropriately the critical reader must be an active reader, a questioner who is always eager to know many things, a searcher for facts. The readers must be able to grasp implied ideas, and make good decisions on the materials that he or she has read.

4. Creative Comprehension

Creative reading involves going beyond the material presented by the author. It concerned with the production new idea, the development of new insights, fresh approaches, and original construct. It refers to evaluation of written material, comparing the ideas discovered in the material with known standard and drawing conclusions about their accuracy and appropriateness. Creative readers must understand cause-effect relationships in a story so well that they know why a character acts as he or she does at a particular time.

2. Narrative

Narratives are the oldest and most natural and powerful information for storing and describing experimental knowledge that is essential to learning science. (Nalan, 2011:17)

A narrative is some kind of retelling, often in words (though it is possible to mime a story), of something that happened (a story). The narrative is not the story itself but rather the telling of the story, which is why it is so often used in phrases such as “written narrative” “oral narrative” etc. while a story just is a sequence of events, a narrative recounts those events, perhaps leaving some occurrences out because they are from some perspective insignificant, and perhaps emphasizing others. In a series of events, a car crash takes a split second. A narrative account, however, might be almost entirely about the crash itself and the few seconds leading up to it. Narrative thus shapes history (the series of events, the story of what happened).

There are many types of narrative. They can be imaginary, factual or a combination of both. They may include fairy stories, mysteries, science fiction, romances, horror stories, adventure stories, fables, myths and legends, historical, narrative, ballads, slice of life, personal experience.

3. Strategy

Originally the word strategy is used in a military context. The word itself comes from the Greek word for a general. The following definition reflects the fact that strategy is no longer confined to the military environment. A strategy is a general method for achieving specific objectives. Strategies such as visualizing or

asking questions are general, metacognitive techniques that a reader uses to better understand and engage with the text. (Evan Moor, 2012:4)

It is difficult to explain how readers use strategies because good readers draw on them internally and automatically. (Bette, 2002: 8)

Reading strategy is the tactics or actions teachers implement in order to approach and make sense of a reading text. Students should experience all reading strategies. It is important to emphasize those skills students are less familiar or do not cope with as well as they would like to. Each of the pre-while-post stages of teaching a reading lesson should involve a variety of reading strategies.

Reading comprehension strategies are procedures which effective readers used to interact and understand the written text. Increasing student's reading comprehension strategies is an important aspect of the school's improvement plan.

4. Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information

Thinking inductively is a way of thinking in which a drawn general conclusions from the various individual cases. Inductive reasoning suggests starting with statements that have a distinctive scope and limited in formulating arguments that ended with the statement of a general nature.

Generalization is a form of inductive thinking method. For example:

“If there is air, people will live. If there is air, the animals will live. If there is air, the plants will live. Conclusions, if there are air-conditioned living beings will live”.

Inductive Thinking Model of Teaching, developed by Taba is a model under information processing family of teaching modes designed to enhance the process of using information and environmental stimuli through training of mental operation. (Prusty, 2015:9)

Inductive thinking model provides backbone to the social sciences curriculum and is based on the work of Taba, a curriculum theorist. (Billing, 2013:11)

Very soon they can distinguish the cat from a stuffed animal and things that float in the bath from things that sink. Not long after, these young people are recognizing words and trying to use them. By age three or so, they have learned an astonishing number of categories of words. In primitive speech, they will put the subject before the word and inflect the end of a question. We want to unfetter their cognitive birthright in a sense to get out of the way of the inborn capacity. Also, however, and this is important, we want to help our young to enhance their skills to become more and more self-consciously capable. And, that does not happen automatically. Curiously, the classification skill that serves so well during the first four or five years can be arrested in the school years as the child tries to imitate adult learning rather than continuing the process of inventing concepts and skills that dominates the delightful infant and early childhood years. And, through inquiry, we have refined ways of classifying and can help the students explore them and enhance their learning during the later childhood, pre-adolescent, adolescent, and young adulthood years. There are curriculums and ways of teaching that actually subvert and can even derail, this major part of humanness. Available, also, are versions of the inductive model of learning—ways of helping

our children enhance their tools for building and using categories. In these pages, we will concentrate on one of them –one that will be researched and polished to make it viable. Let's begin with a simple example.

SCENARIO 1: The Seamus Inquiry

Eight-year-old Seamus is apparently playing in his kitchen. In front of him are a number of plates. On one is a potato, cut in quarters. Another contains an apple, similarly cut. The others contain a variety of fruits and vegetables. Seamus pushes into the segments of potato a number of copper and zinc plates which are wired together and to a tiny light bulb. He nods with satisfaction when the bulb begins to glow. He disconnects the bulb, attaches a voltmeter, examines it briefly and then reattaches the bulb. He repeats the process with the apple, examining the bulb and voltmeter once again. Then come the raspberries, lemon, carrot and so on.

His father enters the room and Seamus looks up. 'I was right about the raspberries,' he says, 'we can use them as in a battery. But some of these other things . . .' Seamus is, of course, classifying fruits and vegetables in terms of whether they can interact with metals to produce electric current.

Reflection: The Seamus Inquiry

Before this inquiry was initiated, Seamus has had a good deal of experience with the classification process. He's classified the characteristics of animals and their habitats (see later). He has classified words and sentences and the titles of books. In fact, the last is what led to the inquiry with fruits, vegetables, and batteries after he found a little book on the basics of electricity.

With the help of his parents, he set up a study of metals that would and would not become electromagnets when surrounded with a coil. And, then they found a kit with tiny lights and voltmeters and the copper and zinc plates, and he began to classify the groceries according to whether and how much they generated electricity.

This little scenario illustrates how direct are the components of classification:

We need a set of data relative to some content domain. We need to examine the items in the set, noting their attributes. To do so thoroughly, we may need to operate on the data set (in this case collecting the further information about the production of electricity. And, we may need a measurement device (such as the little light and the voltmeter). And, we need to make notes of some kind or, possibly, here, make piles of the groceries depending on the results. Then, reflecting on what is learned leads to a clarification of the concepts and, importantly, the development of names for them.

As we continue to explore the learning process, note that, although this illustration focuses on a single child, a classroom or laboratory can be set up so that larger numbers of students can carry on the same type of inquiry that Seamus did. We will proceed to a first grade class on the first day of school where the schooling process begins with classification with no need for special equipment.

SCENARIO 2: The Diane Inquiry

Diane Schuetz provided each of her first grade children with sets of tulip – each had a dozen or so on their desks. She asked them to examine the bulbs carefully. Then she asked them to make categories (move the bulbs around into groups, putting similar ones together).

Gradually, the students formed groups according to characteristics like size (putting big and little ones together), whether they were joined together (Some have babies on them said some of the children), whether they had coats, or whether they had the beginnings of what look like roots. Diane led the children to share their ideas, moving around their set as the others shared (as putting those with babies or —coats in a temporary pile). Diane had set up a number of boxes, half of which were filled with potting soil and the other half with water. Above the boxes she arrayed ultra-violet lights.

She then organized the children to plant half of their bulbs and place the other half in stones in the water. As they planted them, she made cards with their hypotheses written on them, such as ‘Will the big ones [bulbs] grow bigger?’ ‘Will the babies grow on their own?’ ‘Will the ones in soil do better?’ and so on. She has designed the science curriculum area around the basic processes of building categories, making predictions and testing them.

Reflection –Diane Inquiry

Again we can see the essentials of learning to develop and use categories. Repeating ourselves somewhat: We need a set of data relative to some content domain. In this case, the bulbs make up the data set, and the domain is growth

from bulb to plant. We need to examine the items in the set, noting their attributes.

Here, the students can use their eyes and hands to take in the attributes.

And, we need to make notes of some kind or, as here, make piles of the bulbs as classification proceeds. Then, reflecting on what is learned leads to a clarification of the concepts and the development of questions –hypotheses by these young people.

Given that this is the first day of school for these children, you can imagine that thinking will be the theme of the curriculum. Diane will use other models of learning, as we will see later, but she is unafraid to lead her students to explore their content with their good heads. By the way, how many first grades have the depth and relevance hers is going to develop. And, as they make their observations and dictate them to her, can we expect that a healthy part of the literacy (reading and writing) curriculum will develop over inquiries into content.

SCENARIO 3: Biology in India with Bharati Baveja

At the Motilal Nehru School of Sports in the state of Haryana, India, two groups of 15-year-olds are engaged in the study of a botany unit that focuses on the structure of plant life. One group is studying the textbook with the tutorial help of their instructor, who illustrates the structures with plants found in the grounds of the school. We will call this group the presentation/illustration group. The other group, which we will call the inductive group, is taught by Dr. Bharati Baveja, an instructor at Delhi University. This group is presented with a large number of labeled plants. Working in pairs, Bharati's students build classifications of the plants based on the structural characteristics of their roots,

stems and leaves. Periodically, the pairs share their classifications and generate labels for them. Occasionally, she employs concept attainment to introduce a concept designed to expand the students' frame of reference and induce more complex classification. She also supplies the scientific names for the categories the students invent. Eventually, Bharati presents the students with some new specimens and asks them to see if they can predict the structure of one part of the plant from the observation of another part (as predicting the root structure from the observation of the leaves). Finally, she asks them to collect some more specimens and fit them to the categories they have developed so they can determine how comprehensive their categories have become. They discover that most of the new plants will fit into existing categories but that new categories have to be invented to hold some of them.

Reflections on the Baveja Experience

After two weeks of study, the two groups take a test over the content of the unit and are asked to analyze more specimens and name their structural characteristics. The inductive group has gained twice as much on the test of knowledge and can correctly identify the structure of eight times more specimens than the presentation/illustration group. Inductive teaching and learning has a strong base of research that fits with the Baveja results.

5. Inductive Thinking as a Model of Learning

The scenarios that introduce this section illustrate the inductive model in operation. The inductive model has a long history. Inductive thinking will be written about since the classical Greek period, and the model will be polished and studied formally during the last 30 years. Very important to current classroom use was the work of Hilda Taba (1966, 1967), who was largely responsible for popularizing the term teaching strategy and for shaping the inductive model so that it could be conveniently used to design curriculum and lessons.

The inductive model causes students to collect information and examine it closely, to organize it into concepts and to learn to manipulate those concepts. Used regularly, this strategy increases students' abilities to form concepts efficiently and increases the range of perspectives from which they can view information. If a group of students regularly engage in inductive activity, the group can be taught to use a wider range of sources of data. The students can learn to examine data from many sides and to scrutinize all aspects of objects and events. For example, imagine students studying communities. We can expect that at first their data will be superficial, but their increasingly sophisticated inquiry will turn up more and more attributes that they can use for classifying the information they are gathering. Also, if a classroom of students works in groups to form concepts and data, and then the groups share the categories they develop, they will stimulate each other to look at the information from different perspectives.

To create an environment where learners can use inductive thinking uses three basic ideas. One is focus, the learners need to be able to master a single topic. Second is conceptual control, the learners have to find meaning in the single subject, they need to understand the similarities and differences and see the connections. Three is converting that conceptual understanding to skill. As the learners use the concepts, they learn how to use the concepts in different situations. The inductive model causes students to collect information and examine it closely, to organize the information into concepts, and to learn to manipulate those concepts. The also showed how much the research proved the success of this style, ending with the truth that teachers who 'reach' the students with poor histories of learning and help them out of their rut also propel the best students into higher states of growth than they have been accustomed to.

Inductive model steps:

1. identify the data that are relevant
2. group data into categories
3. interpret data and develop categories
4. convert the categories into skills or hypotheses

The authors also give tips for teaching inductively:

1. practice, practice practice. Build a learning community around the model
2. study how kids think. The thinking process gives us a window into their minds.
3. Keep up front that we are trying to help kids learn to learn. They need models to follow for how we comprehend and make predictions

4. Inductive process creates exploration. They need to inquire.
5. Words are not meaningful unless they are in a sentence.
6. Use the model to teach substance. This is not a rainy day activity.
7. Make sure the data set has the attributes present, both concept formation and concept attainment.
8. Be careful how you teach complete and incomplete sentences. Teach subject and predicate first.
9. Distinctions between fact and opinion probably not good for inductive thinking.
10. In science, concentrate on the learners collecting the raw data
11. Kids can create multiple-attribute categories
12. Consider data sets where the learners can discover the various subcategories, but not more than six.
13. 'squeeze' the meaning out of complex sets.
14. Studying attributes like characters in stories need to concentrate on physical description and temperament.
15. If doing characters, have at least 20 to talk about
16. What is the goal? Look at the higher-order objective at the beginning.

6. Conventional Method

When the teacher use this method continuously in teaching learning process, especially in reading class, it will gives negative effect for the students. The teacher can be bored during the teaching activities because everything they do just follow the teacher's instruction. Sometimes, student find difficulties in reading process such as lack of vocabularies, doubt on the point of the passage he get, lack of self confidence in asking or answering question that make the student be passive. All of these, influence students' comprehension on the reading passage.

It is a very common phenomena while the teacher would teach their students, they just ask their students to read the text and see their dictionary to find difficult word and ask them to memorize words As much as possible, and ask them to answer the question. They also ask the student to remember five to ten words everyday without teach a specific technique how to make it easier and faster, or without teach how to read effectively and more understand.

Although collaboration has spread widely, but conventional method does not recognize it. Conventional method just read the text, memorize the new words, ask the student to answer the question and the student just put on the spot to find the teachers right answer. From the phenomena, the researcher can conclude that if someone want to improve his reading comprehension, he must practice and practice in a long time, because the method is not fast. It will influence his capability in reading comprehension.

The procedure of conventional model is used in the research based on the teacher done as usual in the class.

B. Conceptual Framework

Reading is a process of activating prior knowledge to help a reader in understanding certain text.

Reading comprehension is the mental process by which readers take the words encoded by a researcher use to construct an interpretation of what they think the researcher intended to convey. As reading is one of the language ability that should be acquired by the student. But some the students have problems to comprehend the reading text. Therefore, it is necessary to find an effective strategy in teaching reading comprehension in order to let the students achieve better understanding in reading text.

The success in teaching reading is influenced by the strategy that used in teaching process. Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information is suitable to be applied in teaching process. It can improve students' achievement in reading comprehension because this strategy helps students construct the meaning from the text. Through this strategy, the students can select appropriate information from a reading to be analyzed and helps them consider possible implications of this material. So, by using the Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information students can organize their ideas and they can form a well-developed, concise summary about whatever they have just read.

There are some benefits of using Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information, it can attract the students' attention, stimulate the students' critical thinking, motivate the students to be more active in the class and help to get better score in reading comprehension.

C. Hypothesis

The hypothesis of this research is as follows:

Ha : There is a significant effect of using Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information on student's achievement in reading comprehension.

Ho : There is no significant effect of using Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information on student's achievement in reading comprehension.

CHAPTER III

METHOD OF THE RESEARCH

A. Location

This research is conducted at the 8th grade students in MTs Ali ImronMedan. It is located at Jl. Bersama No. 19-21 Bandar Selamat Kec. Medan Tembung. This reason for choosing this school is because the researcher observed found the lack of the students ability in reading comprehension.

B. The Population and Sample

1. Population

The population of the research is the 7th grade students in MTs Ali Imron Medan in academic year 2016/2017. There are two classes consist of 62 students.

Table 3.1
Population

No	Class	Total
1	VIII A	30
2	VIII B	32
Total		62

2. Sample

Sample is a part of representative population observed. Arikunto (2010:102) stated that: “if the population are less than 100 it is better to include all of them as the sample. However, if there are more than 100, 15%, 20%, 25% or 50% can be taken as the sample”.

Based the statement above, take 100% or 62 students of the population will be taken as the sample. The researcher is used random sampling.

Table 3-2
Sample

No	Class	Total
1	VIII A	30
2	VIII B	32
Total		62

Random sampling is the single way to obtain representative sample. The technique in taking the sample by write the students' name on the piece of paper and then insert to the box, after being mix, it is taken out. Then 62 students who are listed in the paper is regarded as the sample, the sample is divided into two groups, 30 students for experimental group and 32 students for control group.

C. Research Design

In this research, the researcher will use an experimental design. The experimental research is purposed to find out the effect of treatment in both experimental and control group. The experimental group is taught by using Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information, and the control group is taught by using Conventional method.

Table 3.3
Research Design

Group	Pre – Test	Treatment	Post- Test
Experimental Group	√	Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information	√
Control Group	√	Conventional Method	√

Research Procedures

This part is decided into three steps namely pre-test, treatment, and post test.

a. Pre-test

The test is administered to measure the similarity or difference of the sample's ability in reading comprehension. This test is treated to both the control and experimental groups.

b. Treatment

After the pre-test is administered a treatment is given to students. Control group is taught by using Traditional Method, while experimental groups is taught by using Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information:

1. The teacher asked the students whether they had already known about Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information.

2. The teacher explained about Learning to Thinking Inductively Forming Concept by Collecting and Organizing Information.
3. The teacher write the title of the passage on the whiteboard, asks the students what they think after reading titles
4. The teacher divide the students into a group
5. The students read the text loudly
6. The teacher ask the students to make the summer statement.
7. The teacher asked the students to do test.

c. Post-test

The post-test is administered to measure the students' competence after the treatment had been completed. The achievement of the groups then is compare and analyzed.

D. Instrument of the Research

The data of this research will be collected by using the written test. In collecting data, pretest and post- test will be conduct in both experimental and control group. The test is made by teacher and consist 10 items, it is essay test. The score of the test is range between 0 to 100 .

Scoring of Writing Test

To know the students achievement in writing there are some criteria considered. There are five scoring components scales namely content, organization, vocabulary, language use, and mechanism. The specific criteria are described in detail in the following stages.

1. Content

The score of content depends on the students' ability to write ideas, information in the form of logical sentences.

The criteria of scoring are as follows:

24 – 30	Excellent to very good: knowledge able to substantive through development of topic sentence-relevant to assigned topic.
22 – 26	Good to average: some knowledge able of subject-adequate range-limited development of topic sentence-mostly relevant to topic, but lack detail.
17 – 21	Fair to poor: Limited knowledge of subject-little substance inadequate development of topic.
13 – 16	Very poor: Does not show of subject –not substantive not

	pertinent-or not enough to evaluate.
--	--------------------------------------

2. Organization

The organization refers to students' ability write the ideas, information in logical order. The topic and supporting sentences are clearly stated.

The criteria of giving the score use as follows

18-20	Very Good: exact word, effective word choice and usage, word from mastery appropriate register
14-17	Good to average: adequate range, occasional errors of word. Choice but meaning not obscured
10-13	Fair poor: limited range, frequent errors of words, choice usage, meaning confused or obscured
7-9	Very poor: Essentially a translation, knowledge of English vocabulary, word from or not enough to evaluate.

3. Vocabulary

Vocabulary refers to the students' ability in using word or idiom to express idea logically. It also refers to the ability to use synonym, prefix, suffix exactly.

The criteria of scoring vocabulary used are

18-20	Very good: exact word, effective word choice and usage, word from mastery appropriate register
14-17	Good to average: adequate range, occasional errors of words. Choice but meaning not obscured
10-13	Fair to poor: limited range, frequent errors of words, choice usage, meaning confused or obscured
7-9	Very poor: Essentially a translation, knowledge of English vocabulary, word from or not enough to evaluate.

4. Language Use

The criteria of scoring language use as follows

22-25	Excellent to very good: effective complex construction- few errors argument, test, word order/function,articles, pronouns, preposition
18-21	Good to average: effective but simple constructions-minor problems in complex construction-several errors of agreement, tense, number-word order/function, articles, pronouns, preposition but meaning seldom obscured.
11-17	Fair to poor: major problems in simple/complex construction frequents of errors of negotiations, agreement, tense, pronoun, preposition and or fragment, deletions-meaning confused or obscured
5-11	Very poor: virtually no mastery of sentence constructions rules dominated by errors-does not communicate or not enough to evaluate.

5. Mechanism

The criteria of scoring mechanism are given below

05	Excellent to very good: demonstrate mastery of conversations-few errors spelling, punctuation and capitalization writing sentence
04	Good to average: occasional errors of spelling, punctuation, capitalization writing sentences.
03	Fair to poor: frequent errors of spelling, punctuation, and capitalization, writing sentence-poor hand writing meaning confused or obscured.
02	Very poor: no mastery of conventions-dominated by errors of spelling, punctuation and capitalization, paragraph-hand writing illegible-or not enough to evaluate.

Based on these indicators, then the students ability in writing descriptive paragraph using chronological order is classified in quantitative and qualitative system. The scales are as follows:

SKILL	
Qualitative From	Quantitative From
Excellent to very good	90-100
Good to average	70-89

Fair to poor	30-69
Very poor	0-29

E. Technique of Collecting the Data

To get accurate data, in this study the researcher will the test in the collecting the data, they are:

a. Giving Pre-test

The test will be given before applying the strategy in both experimental and control clases. It needs to know the ability of students in reading comprehension in both group. For this pre-test, the researcher asked the students to read a text. Pre-test will be conducted before the treatment begin, pre-test will be administrated to the sample, the experimental group and control group. The pre-test consists of Essay Test.

b. Giving Treatment

Both experimental and control groups will be given in different treatment. The experimental group will be taught with applying Learning To Thinking Inductively Forming Concept By Collecting And Organizing Information while control group was taught without applying Learning To Thinking Inductively Forming Concept By Collecting And Organizing Information.

c. Giving Post –Test

After the teaching presentation both the experimental and control groups, the teacher will give a post test to each students in both experimental and control groups in order to know their mean score of experimental group and control group and control group after receiving treatment. The researcher will use post test to

know the effect of Learning To Thinking Inductively Forming Concept By Collecting And Organizing Information on students' achievement in reading comprehension.

d. Collecting the Students' Worksheet

After conducting the post-test, the researcher will collect the students' worksheet.

F. Technique of Data Analysis

In analyzing the data, some techniques is taken as follow Sugiyono (2012: 156). Test the hypothesis,

The following steps are taken:

1. Scoring the sample's answer
2. Listing their score tables: first for experimental group scores as X variable, second for control group scores as Y variable.
3. Measuring the standard deviation of variable X and Y by using following formula:

$$SDx_{or}SD_1 = \sqrt{\frac{\sum X^2}{N}} \text{ for variable X and}$$

$$SDy_{or}SD_2 = \sqrt{\frac{\sum Y^2}{N}} \text{ for variable Y}$$

4. To measure the correlation between both variables by using the following formula:

$$SE M_1 = \frac{SD_1}{\sqrt{N_1 - 1}}$$

$$SE M_2 = \frac{SD_2}{\sqrt{N_2 - 1}}$$

5. Finding out the error of standard deviation between M_1 and M_2 by using the following formula:

$$SE_{M_1-M_2} = \sqrt{SE_{M_1}^2 + SE_{M_2}^2}$$

6. Testing the hypothesis by applying T- test:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}} \text{ (Sugiyono, 2012: 264)}$$

Note :

M_x or M_1	: Mean of the Experimental group
M_y or M_2	: Mean of the Control group
SD_x or SD_1	: Standard deviation of the Experimental Group
SD_y or SD_2	: Standard deviation of the Control Group
$SE M_1$: Correlation in experimental group
$SE M_2$: Correlation in control group
$SE_{M_1-M_2}$: The error of standard deviation.
t_o	: Test observation
N_1	: total sample of experimental group
N_2	: total sample of control group.

CHAPTER IV

DATA AND DATA ANALYSIS

A. Data Collection

The data of this research were students' answer which was collected by giving the students a test consisting of ten items. There were 70 students as sample involved in this research. Samples were divided into two groups, namely the experimental group and control group. Each group was given a pre-test and post-test. The description could be seen in the following table:

Table 4.1

The Result of Pre-Test and Post-Test in Experimental Group

No.	Students' Initial	Score	
		Pre-Test (T ₀)	Post-Test (T ₂)
1	AS	20	96
2	AWS	30	96
3	AFP	40	96
4	ASR	10	96
5	DAL	30	96
6	E	50	96
7	F	30	96
8	FPS	60	96
9	1H	30	96
10	MRS	20	88
11	MR	30	88
12	MAP	10	88
13	MFH	10	88
14	NIF	10	88
15	MN	30	88
16	NS	30	88
17	NE	20	88

18	NN	30	88
19	VF	20	91
20	FNH	10	91
21	VZ	10	91
22	RH	20	91
23	RT	20	93
24	RS	20	91
25	RS	20	91
26	FRH	10	91
27	DSY	30	91
28	MM	30	93
29	DDL	30	91
30	DY	40	93
31	RN	30	93
32	SIN	60	93
33	SNM	20	93
34	S	10	93
35	TBW	30	91
Total		T1=900	T1=3217

Table 4.2

The Result of Pre-Test and Post-Test in Control Group

No.	Students' Initial	Score	
		Pre-Test (T1)	Post-Test (T2)
1	DNF	20	53
2	AA	30	40
3	AII	40	52
4	AQ	10	46
5	BB	30	55
6	BIS	50	33
7	DA	30	40
8	DSO	60	45
9	ELK	30	46
10	ERL	20	46
11	FS	30	61

12	DY	10	35
13	MK	10	46
14	GUU	10	46
15	JS	30	50
16	MU	30	38
17	MFS	20	38
18	MFF	30	46
19	MR	20	58
20	ML	10	45
21	MA	10	25
22	MVS	20	58
23	MKL	20	40
24	MQ	20	50
25	NA	20	46
26	NRN	10	55
27	PKI	30	50
28	PMW	30	40
29	RFA	30	50
30	RAA	40	48
31	RRI	30	63
32	RSA	60	56
33	VHI	20	58
34	WAA	10	48
35	ZIL	30	40
Total		T1=900	T1=1646

Based on the data in the table above, the students' initial (sample) and the students' score in the pre-test and post-test of two groups could be seen in the table 4.1 and 4.2. In the pre-test, the highest score of pre-test in the experimental group was 60 and the lowest was 10 with the total score of pre-test was 900. While the highest score of post-test was 96 and the lowest was 88 with the total score of post-test was 3217.

For the control group, the highest score of pre-test in the experimental group was 60 and the lowest was 10 with the total score of pre-test was 900.

While the highest score of post-test was 63 and the lowest was 25 with the total score of post-test was 1646.

B. Data Analysis

From all the data of the pre-test and post-test of the experimental group and the control group obtained, then the researcher analyzed the data to find out the differences of the sample's score between pre-test and post-test in the experimental group.

1. The Effect of Learning To Thinking Inductively Forming Concept By Collecting And Organizing Information On The Students' Reading Comphension

Based on the table above, the following tables 4.3 and 4.4 shown the difference scores between pre-test and post-test of both the experimental group and the control group.

Table 4.3
The Differences Score of the Pre-Test and Post-Test in Experimental Group

No.	Students Initial	Score				
		Pre-Test (T ₁)	T ₁ ²	Post-Test (T ₂)	T ₂ ²	T ₂ -T ₁ (X ₁)
1	AS	30	900	100	10000	70
2	AWS	30	900	70	4900	40
3	AFP	20	400	90	8100	70
4	ASR	30	900	90	8100	60
5	DAL	30	900	90	8100	60
6	E	30	900	100	10000	70
7	F	30	900	70	4900	40
8	FPS	30	900	70	6400	50
9	IH	40	1600	100	10000	60

10	MRS	20	400	70	6400	60
11	MR	10	100	70	6400	70
12	MAP	30	900	70	4900	40
13	MFH	30	900	90	8100	60
14	MF	30	900	100	10000	70
15	MN	40	1600	100	10000	60
16	NS	20	400	100	10000	70
17	NE	20	400	70	6400	60
18	NN	30	900	100	10000	70
19	VF	10	100	70	6400	70
20	FNH	20	400	90	8100	70
21	VZ	30	900	100	10000	70
22	RH	30	900	100	10000	70
23	RT	20	400	100	10000	70
24	RS	10	100	100	10000	90
25	RS	30	900	90	8100	60
26	FRH	30	900	100	10000	70
27	DSY	20	400	100	10000	70
28	MM	10	100	90	8100	70
29	DDL	40	1600	100	10000	60
30	DY	30	900	100	10000	70
31	RN	20	400	100	10000	70
32	SIN	30	900	100	10000	70
33	SNM	30	900	100	10000	70
34	S	30	900	100	10000	70
35	TBW	30	900	90	8100	60
Total		Σ T1=1060	ΣT_1^2 =30400	Σ T2=3670	ΣT_2^2 =370900	$\Sigma(X_1)=2610$

The data in the table 4.3 showed the differences scores between pre-test and post-test in the experimental group. From the result of the test previously the data was calculated to find out whether applying Extensive Reading Strategy had significant effect on the students' vocabulary mastery in reading. The collected data were analysis t-test formula. In experimental group, pre-test was 1060 and post-test 3670. The differences of the pre-test and post-test were $12 = 825$.

The Calculation in Experimental Group

1. The calculation for total in pre-test and post-test in experimental group

a. Mean

$$\begin{aligned}M_1(X_1) &= \frac{\sum(T_2 - T_1)}{N_1} \\ &= \frac{2610}{35} \\ &= 62,25\end{aligned}$$

b. Standard Deviation (SD)

$$\begin{aligned}SD_1 &= \sqrt{\frac{\sum(T_2 - T_1)^2}{N}} \\ &= \sqrt{\frac{2610^2}{35}} \\ &= \sqrt{\frac{6812100}{35}} \\ &= \sqrt{170303} \\ &= 412.68\end{aligned}$$

2. The calculation for pre-test in experimental group

a. Mean

$$\begin{aligned}MT_1 &= \frac{\sum T_1}{N} \\ &= \frac{1060}{35} \\ &= 26.50\end{aligned}$$

b. Variances

$$\begin{aligned} S^2 &= \sum T_1^2 - \frac{(\sum T_1)^2}{N} \\ &= 30400 - \frac{(1060)^2}{35} \\ &= 30400 - \frac{1123600}{35} \\ &= 30400 - 27090 \\ &= 2310 \end{aligned}$$

c. Standard Deviation (SD)

$$\begin{aligned} SD &= \sqrt{\frac{\sum T_1^2}{N}} \\ &= \sqrt{\frac{30400}{35}} \\ &= \sqrt{760} \\ &= 27,57 \end{aligned}$$

3. The calculation for post-test in experimental group

a. Mean

$$\begin{aligned} MT_2 &= \frac{\sum T_2}{N} \\ &= \frac{3670}{40} \\ &= 91,75 \end{aligned}$$

b. Variances

$$\begin{aligned}
 S^2 &= \sum T_2^2 - \frac{(\sum T_2)^2}{N} \\
 &= 340900 - \frac{(3670)^2}{35} \\
 &= 340900 - \frac{13468900}{35} \\
 &= 340900 - 336722.5 \\
 &= 4177.5
 \end{aligned}$$

c. Standard Deviation (SD)

$$\begin{aligned}
 SD &= \sqrt{\frac{\sum T_2^2}{N}} \\
 &= \sqrt{\frac{34090}{35}} \\
 &= \sqrt{8522.5} \\
 &= 92.32
 \end{aligned}$$

Table 4.4
The Differences Score of the Pre-Test and Post-Test in Control Group

No.	Students Initial	Score				
		Pre-Test (T ₁)	T ₁ ²	Post-Test (T ₂)	T ₂ ²	T ₂ -T ₁ (X ₁)
1	DNF	20	400	90	8100	70
2	AA	30	900	100	10000	70
3	AII	40	1600	100	10000	60
4	AQ	10	100	70	4900	60
5	BB	30	900	100	10000	70
6	BIS	50	2500	100	10000	50
7	DA	30	900	70	4900	40

8	DSO	60	3600	90	8100	30
9	ELK	30	900	70	4900	40
10	ER L	20	400	90	8100	70
11	FS	30	900	90	8100	60
12	DY	10	100	70	4900	60
13	MK	10	100	70	4900	60
14	GUU	10	100	90	8100	70
15	JS	30	900	100	10000	70
16	MU	30	900	100	10000	70
17	MFS	20	400	70	4900	50
18	MFF	30	900	70	6400	50
19	MR	20	400	70	6400	60
20	ML	10	100	70	4900	60
21	MA	10	100	90	8100	70
22	MVS	20	400	70	4900	50
23	MKL	20	400	70	4900	50
24	MQ	20	400	70	4900	50
25	NA	20	400	70	6400	60
26	NRN	10	100	70	6400	70
27	PKI	30	900	70	4900	40
28	PMW	30	900	70	4900	40
29	RFA	30	900	90	8100	60
30	RAA	40	1600	70	6400	40
31	RR1	30	900	70	4900	40
32	RSA	60	3600	100	10000	40
33	VHI	20	400	90	8100	70
34	WAA	10	100	70	4900	60
35	ZIL	30	900	70	6400	50
Total		\sum T1=1030	$\sum T_1^2$ =32700	\sum T2=3270	$\sum T_2^2$ =274200	$\sum(X_1)$ =2250

The Calculation in Control Group

1. The calculation for total test in pre-test and post-test in control group

a. Mean

$$\begin{aligned}M_1(Y_1) &= \frac{\sum(T_2 - T_1)}{N_1} \\ &= \frac{2250}{40} \\ &= 56.25\end{aligned}$$

b. Standard Deviation (SD)

$$\begin{aligned}SD_1 &= \sqrt{\frac{\sum(T_2 - T_1)^2}{N}} \\ &= \sqrt{\frac{2250^2}{40}} \\ &= \sqrt{\frac{5062500}{400}} \\ &= \sqrt{12656.25} \\ &= 355.76\end{aligned}$$

2. The calculation for pre-test in experimental group

a. Mean

$$\begin{aligned}MT_1 &= \frac{\sum T_1}{N} \\ &= \frac{1030}{40} \\ &= 25.75\end{aligned}$$

b. Variances

$$\begin{aligned} S^2 &= \sum T_1^2 - \frac{(\sum T_1)^2}{N} \\ &= 32700 - \frac{(1030)^2}{40} \\ &= 32700 - \frac{1060900}{40} \\ &= 32700 - 26522.5 \\ &= 6177.5 \end{aligned}$$

c. Standard Deviation (SD)

$$\begin{aligned} SD &= \sqrt{\frac{\sum T_1^2}{N}} \\ &= \sqrt{\frac{148725}{36}} \\ &= \sqrt{4131.25} \\ &= 64.27 \end{aligned}$$

3. The calculation for post-test in experimental group

a. Mean

$$\begin{aligned} MT_2 &= \frac{\sum T_2}{N} \\ &= \frac{3280}{40} \\ &= 82.00 \end{aligned}$$

b. Variances

$$\begin{aligned} S^2 &= \sum T_2^2 - \frac{(\sum T_2)^2}{N} \\ &= 272400 - \frac{(3280)^2}{40} \\ &= 272400 - \frac{10758400}{40} \\ &= 272400 - 268960 \\ &= 5240 \end{aligned}$$

c. Standard Deviation (SD)

$$\begin{aligned} SD &= \sqrt{\frac{\sum T_2^2}{N}} \\ &= \sqrt{\frac{274200}{40}} \\ &= \sqrt{6855} \\ &= 82.79 \end{aligned}$$

Table 4.5
The Calculation Table

No.	X	AT	X ²	Y ²	XY
1	90	100	8.100	10.000	9.000
2	60	70	3.600	4.900	4.200
3	70	90	4.900	8.100	6.300
4	60	90	3.600	8.100	5.400
5	70	90	4.900	8.100	6.300
6	100	100	10.000	10.000	10.000
7	60	70	3.600	4.900	4.200
8	60	70	3.600	6.400	4.700
9	70	100	6.400	10.000	8.000
10	60	70	3.600	6.400	4.700

11	60	70	3.600	6.400	4.700
12	60	70	3.600	4.900	4.200
13	70	90	4.900	8.100	6.300
14	90	100	8.100	10.000	9.000
15	100	100	10.000	10.000	10.000
16	100	100	10.000	10.000	10.000
17	60	70	3.600	6.400	4.700
18	90	100	8.100	10.000	9.000
19	70	70	6.400	6.400	6.400
20	60	90	3.600	8.100	5.400
21	90	100	8.100	10.000	9.000
22	70	100	4.900	10.000	7.000
23	70	100	4.900	10.000	7.000
24	70	100	6.400	10.000	8.000
25	70	90	6.400	8.100	7.200
26	90	100	8.100	10.000	9.000
27	70	100	4.900	10.000	7.000
28	70	90	4.900	8.100	6.300
29	90	100	8.100	10.000	9.000
30	70	100	6.400	10.000	8.000
31	70	100	4.900	10.000	7.000
32	100	100	10.000	10.000	10.000
33	90	100	8.100	10.000	9.000
34	70	100	6.400	10.000	8.000
35	70	90	6.400	8.100	7.200
Total	3.020	3.670	235.200	340.900	281.000

The table 4.5 above, calculating table that explained formula of post-test in experimental and control group was implemented to find the t-critical value both group as the basis to the hypothesis the research.

C. Testing the Hypothesis

Testing the hypothesis should be done in order to know whether the hypothesis is accepted or rejected.

a. The Equation of Linier Regression

$Y = a + b$ was getting by:

$$a = \frac{(\sum Y_1)(\sum X_1^2) - (\sum X_1)(\sum XY)}{n\sum X_1^2 - (\sum X_1)^2}$$

$$a = \frac{(3670)(235200) - (3020)(281000)}{40(235200) - (9120400)}$$

$$a = \frac{863184000 - 848620000}{9408000 - 9120400}$$

$$a = \frac{14564000}{287600}$$

$$= 50.64$$

$$b = \frac{n(\sum X_1 Y_1) - (\sum X_1)(\sum Y_1)}{n\sum X_1^2 - (\sum X_1)^2}$$

$$b = \frac{(40)(281000)(3020) - (3670)}{(40)(235200) - (3020)^2}$$

$$b = \frac{11240000 - 11083400}{9408000 - 9120400}$$

$$b = \frac{156600}{287600}$$

$$= 0.54$$

$$Y = a + bx$$

$$= 50.64 + 0.54x$$

b. Coefficient r^2

$$\begin{aligned}r_{xy} &= \frac{n \sum XY - (\sum X)(\sum Y)}{\sqrt{\{n \sum X^2 - (\sum X)^2\} \{n \sum Y^2 - (\sum Y)^2\}}} \\&= \frac{40(281000) - (3020)(3670)}{\sqrt{\{40(235200) - (3020)^2\} \{40(340900) - (3670)^2\}}} \\&= \frac{11240000 - 11083400}{\sqrt{\{9408000 - 9120400\} \{13636000 - 13468900\}}} \\&= \frac{156600}{219221} \\&= 0.7143\end{aligned}$$

c. Examining the statistical hypothesis

Ha : $P \neq 0$ there was any significant effect of learning to thinking inductively forming concept by collecting and organizing information on the students' reading comprehension.

Ho : $P = 0$ there was not any significant effect of learning to thinking inductively forming concept by collecting and organizing information on the students' reading comprehension.

With the criteria examination, H_0 was accepted if $t \{1 - \alpha\} < t < t \frac{\{1 - \alpha\}}{2}$

Where $t \frac{\{1 - \alpha\}}{2}$ was getting by t distribution with $dk = n - 2$. $dk = 40 - 2 =$

38. $\alpha = 5\% = 0.05$. In the other way, H_0 was rejected.

$$\begin{aligned}
t_{hitung} &= \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \\
&= \frac{0.7143\sqrt{40-2}}{\sqrt{1-0.7143^2}} \\
&= \frac{4,4032}{0,6998} \\
&= 6.2921
\end{aligned}$$

$$\begin{aligned}
t_{tabel} &= \left(1 - \frac{1}{2} \alpha\right) (dk) \\
&= \left(1 - \frac{1}{2} 0,05\right) (38) \\
&= t_{0,9975} (38) \\
&= 2.024
\end{aligned}$$

The conclusion, because $t_{tabel} > t_{hitung}$ or $6.2921 > 2.024$. So, H_0 was rejected. It meant that H_a was acceptable or "there was a significant effect of applying Extensive Reading Strategy on the students' vocabulary mastery in reading.

d. Determining the percentage of the effect of X variable toward Y variable

$$\begin{aligned}
D &= r^2 \times 100\% \\
&= 0,7143^2 \times 100\% \\
&= 0,5102 \times 100\% \\
&= 51.02\%
\end{aligned}$$

It meant the effect of X variable toward Y variable or the effect of applying Extensive Reading Strategy on the students' vocabulary mastery in reading was 51.02 and 48.98% was influenced by another factors.

CHAPTER V

CONCLUSION AND SUGGESTION

A. Conclusion

Based on the result of the research t-test, the research gave some conclusion as follows

1. The fact of showed that the $t_{\text{observed}} > t_{\text{table}}$ $6.2921 > 2.024$. ; test the hypothesis, the formula of h_0 and the distribution table of observed were applied. The facts showed that $t_{\text{critical}} (t_c)$ value was higher than the h_{ank} on the level 2.024. Therefore, the null hypothesis was rejected and alternative hypothesis was accepted. So, the researcher concluded the alternative was accepted that there was any significant effect of learning to thinking inductively forming concept by collecting and organizing information on the students' reading comprehension.
2. Inductive thinking methods can improve students' reading ability. It can be viewed based on graduation score on the students, at least 70 graduation students then many have succeeded in achieving the passing grade. Therefore the method of inductive thinking has succeeded

B. Suggestion

In relation to the conclusion above, the researcher gives some suggestion, as follows:

1. The English teacher can use thinking inductively reading method to increase the students' information in reading because based on the research finding, it has effect to the students' ability
2. As an input for the students' to increase their ability when the teacher used thinking inductively reading method effectively in teaching learning process in the class.
3. The readers of UMSU library should make this thesis as a reference to make a similar research.
4. Headmaster of the school should support teachers in learning to thinking inductively method because the method can increase the students' information in reading comprehension.
5. As an input for the researcher in order to increase knowledge about teaching students in class.

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Medan, April 2018

The researcher,
Desi Silvia Zahara

Appendix 1

Answer the questions from story below:

MALIN KUNDANG

Once upon a time, lived a diligent boy named Malin Kundang. He lived in the seashore with his mother. They were very poor, but they lived quiet and harmonious.

One day, a big ship closed to the beach near their village. They asked people to join work in their ship and went to cross the island. Malin Kundang wanted to join with them because he wanted to earn much money and improve his family's life. But his mother didn't permit him. She worried to Malin. Malin still kept his argument and finally he got his mother's permission and sailed with the bigship.

Several years later, Malin Kundang succed and he became a rich trader. Then, he came to his native village with his beatiful wife, but his wife didn't know Malin's real descent. Malin's mother was very happy to see her son back and quickly approached Malin and brought a plate of traditional cake, Malin's favorite. But Malin didn't admit that woman as his poor mother, and then he kicked the cake which brought by his mother until scattered.

His mother felt very hurt because Malin rebellious to her, who had growth him. Then, his mother cursed Malin became stone.

Suddenly, the bigship which Malin's had was vacillated by a big storm and all of his crewman tossed aside out. Malin realized that was his fault being rebellious with his mother. He bowed down and became a stone.

Questions:

1. What is the title of the story?
2. Where di Malin Kundang live?
3. With whom di Malin Kundang live?
4. What are their condition, are they rich or poor?
5. Did Malin Kundang want to be rich?
6. If so, what did he do?
7. Did his mother permit him to go out of his village?
8. Did Malin Kundang succeed?
9. Did Malin Kundang get married?
10. Why did his mother feel very hurt?

Answer:

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

I. Choose one of the best answer (a, b, c, d, or e) from the questions below!

The following text is for questions 1 – 4

MALIN KUNDANG

Once upon a time, lived a diligent boy named Malin Kundang. He lived in the seashore with his mother. They were very poor, but they lived quiet and harmonious.

One day, a big ship closed to the beach near their village. They asked people to join work in their ship and went to cross the island. Malin Kundang wanted to join with them because he wanted to earn much money and improve his family's life. But his mother didn't permit him. She worried to Malin. Malin still kept his argument and finally he got his mother's permission and sailed with the bigship.

Several years later, Malin Kundang succed and he became a rich trader. Then, he came to his native village with his beatiful wife, but his wife didn't know Malin's real descent. Malin's mother was very happy to see her son back and quickly approached Malin and brought a plate of traditional cake, Malin's favorite. But Malin didn't admit that woman as his poor mother, and then he kicked the cake which brought by his mother until scattered.

His mother felt very hurt because Malin rebellious to her, who had growth him. Then, his mother cursed Malin became stone.

Suddenly, the bigship which Malin's had was vacillated by a big storm and all of his crewman tossed aside out. Malin realized that was his fault being rebellious with his mother. He bowed down and became a stone.

1. What is the genre of the text?
 - a) Narrative
 - b) Procedure
 - c) Recount
 - d) Report
 - e) Explanation

2. What is the generic structure of the text?
 - a) Identification – description

 - b) Orientation – complication – resolution – reorientation
 - c) Thesis – argument – recommendation
 - d) Newsworthy event – background event – sources
 - e) Orientation – complication – resolution

3. Why does Malin decided to join work on ship?
 - a) Because Malin want to go overseas
 - b) Because Malin want to leave his mother
 - c) Because Malin is a diligent boy
 - d) Because Malin want to make a living for his family
 - e) Because Malin want to go to cross the island

4. Which of the following statement is NOT TRUE according to the text?
- a) Malin and his mother were very poor family
 - b) Malin was very happy to see his mother
 - c) Malin's mother didn't permit Malin to join the big ship
 - d) Malin's mother brought his favorite cake
 - e) Malin's mother cursed him into a stone

Adjective Clause questions

5. The girl was outside your house. She is so beautiful.
We can say ...
- a) The girl was outside your house and she is so beautiful.
 - b) The girl was outside your house whom is so beautiful
 - c) The girl whose was outside your house is so beautiful
 - d) The girl who was outside your house is so beautiful
 - e) The girl which was outside your house is so beautiful
6. A: Who is that girl?
B: That is the girl ... I met at the party.
- a) Who
 - b) Whose
 - c) Which
 - d) Whom
 - e) Where
7. It is a story about a boy ... parents got divorced.
- a) Who
 - b) Whose
 - c) Which
 - d) Whom
 - e) Where
8. The time ... the plane takes off and lands will be changed soon.
- a. Why b. Where c. When d. Which e. Who
9. Do you know the reason ... she is so upset?
- a. Why b. Where c. When d. Which e. Who
10. Thank you very much for your e-mail ... was very interesting.
- a) Who
 - b) Whose
 - c) Which
 - d) Whom
 - e) Where