

HALAMAN PENGESAHAN THESIS

THE EFFECTIVENESS OF USING THE HERRINGBONE
TECHNIQUE ON STUDENTS' READING COMPREHENSION
SKILL IN RECOUNT TEXT IN THE EIGHTH GRADE OF
SMP GAJAH MADA MEDAN

DIAJUKAN OLEH

NAMA : PUTRI KUMALA BR TURNIP
NPM : 20120022
PROGRAM STUDI : PENDIDIKAN BAHASA INGGRIS
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Dinyatakan telah memenuhi syarat dengan hasil A dan dengan ini pula
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SARJANA PENDIDIKAN (S.Pd)
Medan 19 April 2024

Panitia Ujian Meja Hijau

Dosen Penguji 1



(Dr. Kammer Tuahman Sibayung, S.Pd., M.Pd)

Dosen Penguji 2



(Dr. Saldan Tampubolon, M.Hum)



Dosen Pembimbing
P UHN Medan

(Dr. Mula Sihira, M.Si., Ph.D)

Ketua Program Studi



(Dr. Nenni Triana Sinaga, S.S., M.Pd)

CHAPTER I

INTRODUCTION

1.1 The Background of Study

Reading carefully is one of the important skills in English and gives many advantages to us. Reading carefully is a window to the world. By using it, individuals can acquire information and data from books, magazines, papers, etc. According to Zaccoletti (2020:663-682), reading comprehension is one of the many learning tasks that children must concentrate on to succeed in school. Reading is the process of fully comprehending a text, and reading comprehension is valuable in the educational system as a means of achieving successful learning outcomes. Students are expected to use their reading comprehension skills to acquire the necessary information following the reading assignment. According to Deegan (2006), it enhances awareness of the core idea. Finding the major idea and supporting information in a reading comprehension lesson is accomplished through the application of the herringbone strategy.

The phenomenon that we encounter around us is that students still lack understanding in literacy or we can call it comprehension in reading, especially in English, and the researcher has made observations at the school. which we know, that English is a foreign language, Additionally, a lot of students believe that learning English is challenging. This shows that many students face difficulties in understanding, analyzing, and using information effectively, which can affect their ability to learn independently since understudies think learning English is truly

challenging, and they are consistently confused about dominating and understanding texts.

In schools, reading is a very important subject. During the time spent figuring out how to peruse, students must fully understand the book's substance during the reading process. The student must understand the content of the text to get the information from it. Reading is the method by which writers transmit knowledge from books to readers' brains; if a reader does not understand the text's content, they will not acquire this information. Vocabulary and pronunciation errors are another reading issue. They will conclude that learning English is challenging due to these numerous issues, particularly about reading comprehension and reading abilities.

The teacher's role must also be qualified to teach to improve students' comprehension in reading, not just giving texts to read without explaining, there is no approach to students to find out whether the students can understand or not, and the lack of understanding in reading approach to the student to find out whether the student can understand or not, and the lack of appropriate methods or techniques. This makes students lack understanding, lack interest in reading, and make students bored. So that they cannot explore more information from the text outside of the learning objectives.

The answer to this issue is for instructors to become more knowledgeable about approaches, techniques, and tactics for learning English. By using these techniques, teachers may enhance the effectiveness of the teaching and learning process, to assist students in resolving these issues, need another technique more interesting in teaching reading. There are numerous approaches to reading

instruction. The use of the Herringbone Technique toward students' reading comprehension of recount texts is the method that the author would like to suggest.

According to Deegan (2006), the Herringbone technique is a tactic that helps students comprehend the primary idea while reading by visualizing a fish skeleton and plotting the questions of who, what, when, where, why, and how. The writer intends to investigate The Effectiveness of Using the Herringbone Technique on Students' Reading Comprehension Skills in Recount Texts in Class VIII of SMP Gajah Mada. This study will be based on the explanation provided above.

1.2 The Problem of Study

Given the background information provided above, the following issues are revealed by this research:

"Is there any effectiveness of using the herringbone technique on students' reading comprehension skills in recount text in class VIII of SMP Gajah Mada?"

1.3 The Objective of Study

The following are the study's objectives in accordance with the problem study: The purpose of the study is to know the effectiveness of using the herringbone technique on students' reading comprehension skills on recount text in the eighth grade of SMP Gajah Mada.

1.4 The Scope of Study

The research limitations on the research's scope are as follows: The first the effectiveness of the herringbone technique on students' recount text reading comprehension is the main topic of discussion, the second this research is

experimental research, and third only SMP Gajah Mada 8th graders would part of the population.

1.5 The Significance of Study

Two expectations will be made regarding the study's significance they are theoretically and practically:

1.5.1 Theoretically

In addition to helping the author expand her expertise in teaching reading with the herringbone technique, it is hoped that the research's findings will be helpful to others wishing to undertake similar studies.

1.5.2 Practically

The following are anticipated uses for the study's findings:

1. Benefits for students will provide more pleasurable and meaningful learning, as well as help inspire, mentor, and generate excitement for students in the learning process, particularly when teaching reading.
2. The method's benefits for teachers include an easier time teaching reading and an additional avenue for students' reading development.
3. Benefits for schools: It could help raise the standard of instruction.

CHAPTER II

REVIEW OF LITERATURE

2.1 Theoretical Framework

When searching, it is important to determine any phrases that are relevant to the search. In some situations, terms can be used to give specific meaning to vague concepts. To prevent misconceptions among writers who will define terminology that is crucial for this research, these terms must be explained conceptually.

2.1.1 The Nation of Reading Comprehension

According to Patel (2008), reading is a dynamic process that calls for recognition and comprehension abilities. This indicates that reading is a method by which readers decipher and assimilate textual material. Students who read can also comprehend the writers' meanings. Reading should ideally be developed in conjunction with writing, speaking, and listening, according to H. Douglas (2001). This implies that reading should perform better when paired with other English-language abilities. Writing, listening, and speaking exercises should all be connected to the reading process. According to Sinambela, R. K., & Kammer Tuahman Sipayung. (2023) that reading is an activity done to get message conveyed by the author through the medium of words or standard language.

The researcher draws the conclusion that reading is a reader's activity that enables them to take knowledge from written texts and use their eyes and brains to interpret the writer's ideas based on these theories. Reading comprehension is a critical ability for students. To understand the content being read, one must be able

to think critically. The reader's level of reading comprehension will depend on their prior understanding of the world.

Reading comprehension is, as stated by Snow (2002:19), the act of deriving and using meaning from text. Furthermore, to comprehend the author's message during this process, readers might draw on their prior knowledge or experience about the issue, text structure, and language structure (Lenz, 2005). It is the capacity to understand a book by drawing on the reader's previous knowledge and experience. Differences in comprehension stem from readers' varied experiences and backgrounds. The steps that proficient readers take when reading material are then described by the comprehension process itself. Reading can also connect the reader to others. However, reading is the act of opening the world. We can know everything in this world by reading. We can also interact with other people in this world. So, reading is essential for all of us to know about this world. (Sinaga, N. T., Parhusip, E. N., & Saragih, C. N. (2023). By reading, the students can increase their knowledge such as social, culture, politics, and so forth. In addition, it can also be called as a tool for the students to get a comprehension about what they have already read so far. Prianti S, A., Tampubolon, S., & Dwi Lestari, F. (2023).

Regarding the teaching and learning process, Brown (2004) states that a teacher needs to give pupils a reading comprehension strategy that satisfies the reading comprehension objective. Three things that need to be considered by the instructor are how they deliver a text, structure the lesson, and assess it taken into account by the instructor. At this point, the instructor has to explain the text in a way that is both meaningful and clear. This section gives the students a feeling of direction.

Students use a range of comprehension techniques when reading to keep track of and retain meaning. We have two obstacles when it comes to educating for understanding. To deal with kids, it is necessary to recognize how difficult it is to comprehend and implement this knowledge. Reading comprehension is a crucial stage in assisting readers in comprehending what they read and actively applying what they already know to uncover new information, as can be inferred from the aforementioned remark.

2.1.2 Technique for Reading Comprehension

A few strategies are related to both top-down and bottom-up operations, according to H. Douglas Brown (2000:491) The subsequent strategies are applicable in instructional settings:

1. Effective reading begins with figuring out why you are reading, and this is the first step in determining effective reading. Identifying helps us make sense of what we observe. As lessons are delivered in class, make sure the students know why they are studying the content.
2. To determine the key idea, skim the text. Knowing the objective, major idea, and possibly some supporting or developing ideas of a passage can be inferred by skimming it.
3. Look for specific information in the text. Scanning is to obtain specific information from a text without reading the complete thing. The name, time, and quantity of illustrative examples that students can locate in the scanning task.

4. Recognize inferred meaning as opposed to literal meaning. It is not possible to accurately understand every language by focusing only on its syntactic and literal surface structures, thus readers must meet specific prerequisites.

2.1.3 Level of Reading Comprehension

It is best to first ascertain the reading level of the students to comprehend how they read. Linda J. Dorn and Carla Soffos distinguish between two levels of comprehension (2005). Among them are:

- a. Surface level: Recalling specific information from a text is a legitimate indicator of surface-level comprehension.
- b. Deep level: To reconcile the author's objectives with their viewpoint, the reader must possess the ability to think beyond the text. We refer to this as the deep level of comprehension.

2.1.4 Herringbone Technique

Mcknight (2010) asserts that visual organizers are valuable teaching aids that help students comprehend freshly learned material by organizing thoughts. Students can find comprehensive information about what they have studied more easily by using a graphic organizer to help them recall it.

Students use the Herringbone Technique to answer 5W1H questions who, what, when, why, where, and how—about graphic elements like fish skeletons. The Herringbone technique, as described by Deegan (2006), involves organizing what, who, why, when, where, and how questions in a visual representation of a fish skeleton, enhances awareness of the core idea. Finding the major idea and supporting information in a reading comprehension lesson is accomplished through

the application of the herringbone strategy. After obtaining knowledge from the text by responding to 5W1H questions, students use the text to build a topic sentence.

The Herringbone Technique form utilized in this study is an adaptation of (Mcknight, 2010). The primary idea is stated in a single box using McKnight's version of the Herringbone Technique while supporting or particular material is placed between lines. The researcher in this study chooses to include boxes for general and specific information in each line. The material is written neatly and logically when there are boxes around it.



Source Deegan 2006

Diagram Fish Skeleton

This diagram uses supporting details to depict the text's core theme. A straight line represents the main idea, which ends in the head of a fish. Fish bones or line branches represent supporting information. Concurrently, 5W1H (what, why, who, when, where, and how) is used for fishbone filling. The content of the supporting information must be understood. By comprehending the supporting information, one might conclude a text's fundamental topic.

There are a few reasons by Mcknight, (2010) why graphic organizers are such useful tools for teaching and learning:

- a. They assist students in concentrating on key and significant information.

- b. We learn in pictures, and realistic coordinators are visual portrayals of recently educated material.
- c. Graphic organizers aid in the organization of content data.
- d. Graphic organizers are frequently used by businesses and professional associations to represent content. Students are gaining critical visual literacy abilities as they learn to produce, interpret, analyze, and synthesize information graphically.
- e. For assessment, we might make use of graphic organizers. Using a visual organizer, students can demonstrate their understanding and knowledge. The researcher will then suggest that educators give their students writing assignments that involve discussing the inclusion of certain material and the organization of that information in narratives, descriptions, or explanations of graphic organizers.
- f. Students use graphic organizers for note-taking and studying more readily when they are introduced to a diversity of formats.

2.1.5 The Procedures of Herringbone Technique

The 5W + 1H questions (what, who, where, when, why, and how) are plotted on a graphic of a fish skeleton using the Herringbone Technique, according to Deegan (2006), to help explain the main idea. With their answers to why questions, students write the primary idea down the spine of the fish diagram. The procedures are as follows:

- a. Textbooks suited for eighth-grade readers are chosen by the teacher
- b. Using chalkboard chalk, the instructor creates a herringbone diagram.

- c. Describe how the fish's backbone, or major idea, acts as the foundation and is joined by smaller bones, or details. The instructor elucidates how they all function in tandem to furnish the entire body with organization (comprehension).
- d. Students will be required to find information that addresses the following questions, the teacher informs them.
 - 1) What did they do?
 - 2) Who is the writer?
 - 3) Why did they do it?
 - 4) When did they do it?
 - 5) Where did they do it?
 - 6) How about the situation?
- e. Allow time for students to read the material.
 - 1) The teacher gives students copies of the text
 - 2) What did they do?
- f. Diagram and instruct students to write their responses to the questions on it. This can be the subject of a class-wide discussion exercise.
- g. After recording material, students can use their responses to the WH questions to formulate the text's core theme. Students see how the material is arranged by major ideas when the teacher models this process. Once the information from the herringbone diagram is included in the diagram, students write the primary idea.

2.1.6 The Advantages of Herringbone Technique

The benefits of the herringbone technique are as follows, based Katherine S. Mcknight (2010):

1. Students can recognize the core idea by using the herringbone method to comprehend the connections between supporting information. As a result, students will find it simpler to identify the text's core theme thanks to the herringbone technique exercise.
2. The learning process will involve more active participation from the students. Students can use this learning aid to locate crucial information in a text when reading it.
3. Because the Herringbone technique only concentrates on straightforward questions, it also inspires students to read a text with enthusiasm.
4. Students can exchange information about the books they have read during the discussion process, which keeps reading engaging and interesting for them.

2.1.7 The Disadvantages of Herringbone Technique

Bouchard (2005:54), by Riana D 2020, asserts that when students learn the content with the use of graphic representations, the shortcomings of the herringbone approach recording process would be lessened. Students' performance may suffer as a result of not having a thorough manual to refer to when they are editing their work. Due to students actively chatting with their peers, the class will be boisterous in the interim.

2.1.8 The Procedures of Teaching Reading Comprehension by Using Herringbone Technique

Pre-teaching, teaching activities, and post-teaching activities comprise the steps of the Deegan J. herringbone technique for teaching reading comprehension (2006).

a. Pre-Teaching Activity

The teacher needs to complete several tasks at this point. In class, the instructor asks students to join in prayer. He greeted students as he began the session. Next, mentally and physically prepare the class to participate in the lessons. Encouraging students to learn is the next task. This is among the crucial exercises that educators need to incorporate into the curriculum. Calling on students' names from the attendance list is the next task. Next, the instructor goes over the prior lesson and asks questions to help students remember it. The next step in the learning process is to explain the lesson's purpose. This can help both the teacher and the students reach the learning objective.

b. While Teaching Activity

1) Engagement

The teacher inspires students to read texts that contain challenging content. A few topic-related questions are posed by the instructor. It will assist students in creating their past knowledge.

2) Exploration

Following the distribution of an example recount text, the teacher will assist students in understanding the material that will be covered through learning media

such as pictures or photos, etc. The teacher will also pose questions to test students' knowledge of the subject and foster critical thinking. Under the teacher's guidance, students may begin to ask yes/no questions, inquire about their comprehension of the picture, and then read the text above.

3) Explanation

When the students have already understood the lesson, the herringbone technique can be implemented in this phase. The teacher gives the students an introduction to the herringbone technique. The teacher draws a herringbone pattern on the board and explains the use of the pattern. The horizontal lines are used to put important information from a text read by the students based on the answers to the six basic reading comprehension questions. They put a topic sentence of the text on the mid-line of the pattern. If the students find some unknown words, they may write them on the left or right side of the pattern.

4) Elaboration

Following the students' description of the herringbone technique and comprehension of its application, there are a few steps involved in elaboration. They are as follows:

- (a) The teacher requests that they replicate the herringbone design on a sheet of paper.
- (b) Upon reading a text, the students are instructed to identify key concepts by responding to the six comprehension questions—who, when, what, why, where, and how—as they read. The available herringbone design has those answers written on it.

- (c) Following their completion of the questions, the students create a topic sentence that spans the fishbone pattern in the text.

5) Evaluation

Students are asked to share and display their assignments with their peers as the final step in the herringbone technique process. The teacher will next instruct the class to gather their assignments and assign a score.

c. Post-Teaching Activity

At this point, the teacher inquires about the students' challenges in understanding the material. The instructor then wraps up the material that has been taught to the class. The teacher assigns homework to the students as well. Subsequently, the instructor informs the pupils about the study subject that will be covered the following week.

2.1.9 Recount Text

Recounts are texts that describe historical events, typically in the chronological order in which they occurred (Anderson, M., & Anderson, K., 1997:48) by Haris A 2014. Recount texts enlighten readers about prior experiences and provide background information about these occurrences, and thus illustrate how the purpose of the text is to explain what happened to the audience. where orientation, events, and re-orientation make up the recount text's structure. This indicates that a recall text informs readers about past occurrences by narrating experiences from the past.

Students examine the first paragraph's subject, taking note of the title, scanning the paragraph for any relevant images, and summarizing the text in general. By using the (who, what, when, why, where, and how) Students can

improve their reading comprehension skills by using question words to better understand the content in narrative texts and to better understand arguments.

After giving these explanations some thought, the researcher found that reading comprehension of recount texts is the capacity to comprehend written material that informs the reader by narrating experiences or historical events and to support one's position when responding to questions about supporting ideas, the main ideas, idioms, grammatical details, inferences, omission of unwritten facts, and vocabulary in context.

Example of Recount Text

My Holiday in Medan

- Orientation

2 years ago, I went to Medan. I spent my holidays there. I went to Medan by bus. Bus schedule from Kisaran at 08.00 and arriving in Medan at 11.00 AM

- Events

On the first day, I went to the Medan Museum because I like history. The ticket price is only Rp 25,000. The history there is complete.

The second day I went to the Medan tourism icon and chatted with the guide about the tour and its history too. It made me understand history. I saw a collection of traditional clothes there. After that, I went to Medan Station because I had to go home to Binjai.

- Reorientation

My holiday in Medan was only three days but it was a very interesting holiday.

2.2 Previous Research

Previous relevant studies have been conducted, some of which are presented below and provide support for the current research:

1. The research entitled “Effect of Herringbone Technique on the Students’ Achievement in Reading Narrative Text at SMA Swasta Budisatrya in Academic Years of 2021/2022”. Written by Dinda Suryani (2023) V01.3. No.1. The researcher used methodology in this research Quasi-experimental design with experimental and control class. The population of this research is the eighth grade of SMAS Budisatrya Medan. In determining the sampling technique. The researcher analyzed the data of the research. From the result, it was obtained that t-count is higher than t-critical ($46 > 39,33$). Therefore, there is a significant influence of using a series pictures on students’ reading comprehension in narrative text at the second semester of the eleven grade of SMAS Budisatrya Medan in academic year 2021/2-2022.

The difference in this research is the purpose where the researcher is to know the effect whereas this research is the effectiveness, and different of text where the researcher used Narrative Text. technique in data collection, and the difference with this research is type of the text used narrative text, comics and the last sample.

2. The research written "The Effect of Herringbone Technique on Students' Reading Comprehension Through Narrative Text at MTS PAB 1 Helvetia, Medan" was written by Rizky Vita Losi on May 1, 2020. Finding out if using the Herringbone approach to improve students' reading

comprehension of narrative texts was the goal of this study. Students' reading comprehension scores on the pre-and post-tests served as the research's data. Utilizing the Paired Sample T Test method, which was computed by SPSS 2.2, the data was examined. The result of this research discovered that the T-Test value ($10,085 > 2,042$) was greater than the T-Table value. It demonstrated that the null hypothesis (H_0) was rejected and the alternative hypothesis (H_a) was accepted. It also demonstrated that the Herringbone approach had a noteworthy impact.

The difference in this thesis is in terms of the type of text used, where this research uses recount text, as well as in data collection where they research used a SPSS, and the population and sample in used is different.

3. The research written by Rengganis Siwi Amumpuni (2021) was titled “The Effect of the Herringbone Technique on Reading Comprehension” where the purpose of this researcher is to know the effect of the herringbone technique, the researcher used a quasi-experiment method, and the sample was 20 students of Guidance and counseling department. The researcher used this research to collect the data and the data was analyzed by paired sample T-test by using SPSS. The result of this research, there was a significant effect of the herringbone to the students 'reading comprehension methods for gathering data through testing.

The difference between this thesis is in terms of the total sample, the sample was chosen randomly so all classes had the same chance to be selected, which was computed by SPSS as well as in terms of a conceptual framework or research method.

4. The research written by Desi Riana (2020) was titled "The Implementation of Herringbone Technique to Improve Students' Reading Comprehension". Where the purpose of study was to know the improvement of the students' reading comprehension after the implementation of Herringbone technique, and to know the students' perception on Herringbone technique in improving their reading comprehension. The population of this study was students in the first grade of SMAN 1 Kuta Cot Glie. The samples were the students of class X IPS-1 as the experimental class and X IPS-2 as the control class. In collecting the data, the researchers used tests and the questionnaire. The tests were used to know the improvement of the students' reading comprehension after the implementation of Herringbone technique. Meanwhile, the questionnaire was used to know the students' perception on Herringbone technique in improving their reading comprehension. The difference between this thesis is the title, and the difference of this thesis in terms of the total sample, and how to the instruments to collecting data, this research use quasi experimental.
5. The research entitled "The Effectiveness of Herringbone Technique to Improve Listening Comprehension for The Eighth Grade Students' At SMPN 1 Baron In The Academic Year of 2018/2019. Where the purpose of this study was to find out the learning outcomes of students in English learning especially in listening skills, knowing student learning outcomes before and after using herringbone techniques and the influence or differences in student learning outcomes before and after using herringbone techniques to improve listening skills in class VIII . This research is an

experimental research with quantitative design. The place used in this study was Baron 1 Junior High School 2018/2019 Academic Year. The study population was class VIII as many as 212 students, while the sample used by researchers was class VIII-G of 28 students. The sample greatly influences the success of the study. So the researcher used the sampling technique was based on interviews with English teachers, classes with low listening scores. Data collection techniques with tests (pre-test and post-test). The data analysis technique used to analyze the data in this study is the analysis of statistical data t-test. From these data it is know that there is an increase in students' learning outcomes before used herringbone technique and after used herringbone technique. So there is an effect of a significant increase in students' listening skills using the technical herringbone in class VIII students at Baron 1 Junior High School 2018/2019. The difference between this thesis is the title, and the difference of this thesis in terms of the total sample, and the skill used, where the researchers was used skill listening, and the writer using skill reading.

6. The research entitled “ The Effectiveness of Herringbone and SQ4R as Technique in Teaching Reading Comprehension to Students With Visual and Auditory Learning Styles (2021) This study analyzes the effectiveness of Herringbone and SQ4R to teach reading comprehension to visual and auditory students at SMPN 2 Sedong. This study belongs to quantitative research with quasi-experimental design applying 2 x 2 factorial design with ANOVA. There are two classes chosen as samples; 8A as the experimental class I and 8G as the experimental class II. This study reveals that there is

no interaction among techniques, reading comprehension, and learning styles in teaching reading comprehension to the visual and auditory students. Herringbone and SQ4R are effective to teach reading comprehension to students with visual and auditory learning styles. Both visual and auditory students have an equal improvement treated with herringbone and SQ4R since there is no significant difference in the improvement between visual and auditory students in reading comprehension treated by herringbone and SQ4R. Conversely, both herringbone and SQ4R have an equal effectiveness to teach reading comprehension to the visual and auditory students since there is no significant difference of effectiveness between herringbone and SQ4R to the visual and auditory students. Where the difference of this study is from the population and sample, and the collecting data, where their researchers was used ANOVA. Where the writer using the quasi-experimental pre-test and post-test and the technique used.

What set this research apart from the earlier studies was its methodology. In addition, the analysis, post-test, and questionnaire sheet were employed as data collection instruments. The purpose of this study was to determine how well students' reading comprehension abilities in text recount were affected by the application of the herringbone technique and the experimental research methodology. This study tool, a quantitative approach employing experimental and quasi-experimental research designs, will compare the herringbone technique and the experimental group and control-group.

2.3 Conceptual Framework

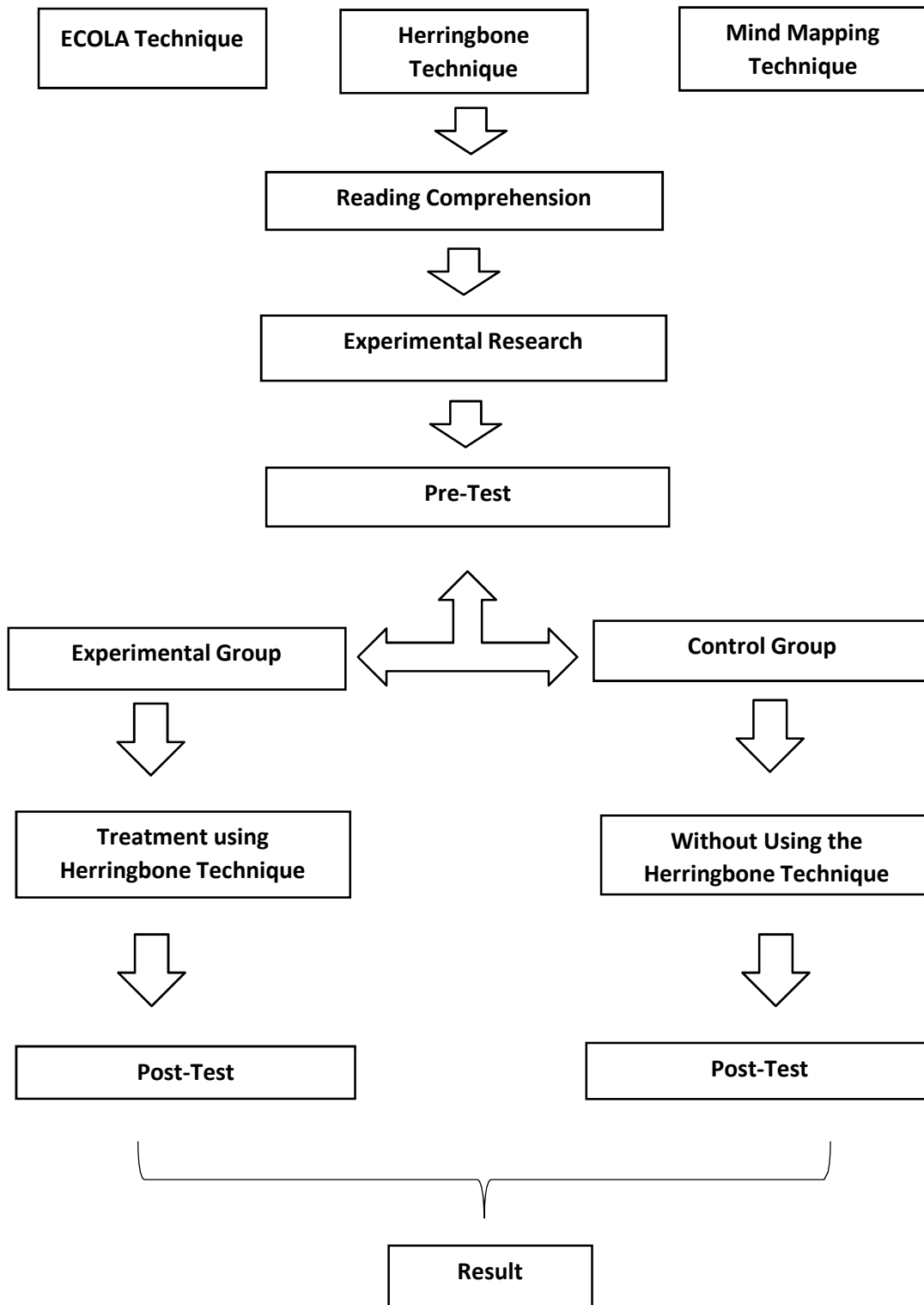


Figure 2.3 Conceptual Framework

Based on the conceptual framework above, the students had difficulty

picking up English. Their inability to comprehend what they read or to recognize

precise details, the primary idea, synonyms, references, and inferences is one of their most significant issues. Many techniques are used to improve reading comprehension, and the research chose the herringbone technique to improve reading comprehension, is to know the effectiveness of herringbone technique. To solve the issues, the researcher will be using the Question Answer Herringbone Technique based on the previous issue. This learning process is through experimental research between the treatment using the herringbone technique and conventional control classes. Where the experimental class uses the herringbone technique and the control class uses conventional techniques.

2.4 Hypothesis

The terms hypo and thesis combine to form the hypothesis. Hypothesis lacking, inadequate, or weak. A theory or assertion that is supported by evidence is called a thesis. Therefore, hypotheses must be validated to create weak truth assertions to analyze an issue. It is clear from the literature review and other studies that the researcher would want to propose the following hypothesis:

A. Alternative hypothesis (H_i)

There is a positive and significant influence of using the Herringbone technique on the students' reading comprehension in the eighth grade of SMP Gajah Mada.

B. Null hypothesis (H_o)

There is no positive and significant influence of using the Herringbone technique on the students' reading comprehension at the eighth-grade SMP Gajah Mada.

CHAPTER III

RESEARCH METHODOLOGY

3.1 Research Design

The researcher used a quantitative method, according to Creswell (2014), which is a technique for assessing objective theories through the analysis of variable relationships. The researcher presents a statistical analysis (mathematical analysis) of the data, which is usually presented in numerical form. The researcher used of experimental design. According to Creswell (2014), the most effective quantitative design for determining cause and effect is the experimental design. It is a quasi-experimental research methodology. A study design that involves assigning people to groups—but not at random—is known as a quasi-experimental design. This is because the researcher is unable to fabricate groups specifically for the experiment. Creswell, John W. (2012). This means that we are not able to randomly allocate students to specific groups under various conditions; this would interfere with the learning process in the classroom.

Two groups were used to participate in the experiment in this study. where the control class uses conventional techniques and the experimental class uses the herringbone technique. This research uses pre-and post-test data to determine the potential impact of the herringbone technique on students' reading comprehension abilities in recount texts at SMP Gajah Mada.

3.2 Population and Sample

Samples and populations are usually employed in classroom action research. Each is explained in detail by the study's researcher of each as follows:

3.2.1 Population

Sugiono (2010:117) claims that population is a spatial generalization and that there are specific qualities and characteristics of the topic or subject that the researcher sets out to discover before drawing a judgment. The entirety of the research (Arikunto, 2010). The study participants of the study are students in the 8th grade of SMP Gajah Mada and only have one class for 8th students, totaling 34 students.

3.2.2 Sample

Arikunto (2017:173) asserts that the sample is representative of the size and composition of the population. Sampling is the practice of selecting a subset of research participants so that they are considered voluntary. The total sampling will be some individuals to get information about the population. The researcher must first choose the sample to learn more about a portion of the student body. Therefore the sample of the research is the students in class 8th grade of SMP Gajah Mada. There were a total of 34 students.

This ensures the class is homogeneous and allows be valid comparison between groups where the researcher was a comparison between the experimental class which will be the herringbone technique and the control class by conventional technique. Where one class consists of 34 students. where 17 students were in the experimental group and 17 students were in the control group

3.3 The Instrument of The Collecting Data

A reading assessment serves as the data instrument. Both groups be given receive tests, which include a pre-and post-test. The experimental group be given the herringbone technique for teaching reading, and the control group, on the other hand, be given to discuss the recount text as the subject matter and would not use the herringbone technique. Each text would have several questions in a multiple-choice form where the questions will test students' understanding at the Literal or reading comprehension level. Where the question format is multiple choices, such as finding specific information, finding the main idea, making inferences, identifying references, and using synonyms to understand the meaning of words, the total of questions is 20 items.

3.4 Procedure for the Collecting Data

Two groups—the experimental group and the control group—will be used in the research. The experimental class provides several treatments. According to Creswell, J. W. (2014), the study process then consists of three steps: the pre-test, the treatment, and the post-test.

3.4.1 Pre-Test

The experimental class and the control class in this study both undergo a pre-test by the researcher before the start of treatment. Assessing the student's proficiency in recount text comprehension is the aim. Used a multiple-choice exam that students from both classes did, the researcher used it for this task. Finding out the mean score for both the experimental and control classes is the purpose of the pre-test. This form is a reading assessment.

3.4.2 Treatment

Following the Pre-Test, the researcher used to give the treatment for both classes using a different approach the following time. The experimental class would be taught using the Herringbone technique by the researcher, while the control class would be taught using the conventional technique. Despite this, all of the classes used teach the same subject.

3.4.3 Post-Test

The researcher used to conduct a Post-Test in the experimental and control classes as a means of evaluation following treatment. Questions on this test are the same as they are on the pre-test. The purpose of this post-test is to evaluate the impact of the Herringbone instructional technique in the experimental class. This would demonstrate a notable disparity in the academic achievement of the students between their pre-test and post-test results. The purpose of the post-test is to determine whether or not the herringbone technique has an impact on the group that has been taught how to use its technique on the group who teach using the herringbone technique or not.

3.5 The Validity and Reliability of The Test

When conducting research, a test's validity and reliability are crucial. Their goals are to determine the test's consistency and measurement accuracy. Before testing a sample, better to find out if the test is valid and reliable.

3.5.1 Validity of The Test

A test's validity is determined by how well it allows its results to be translated into relevant and practical conclusions. Validity, according to Best and

Kahn (2016), is the ability of a technique or instrument to measure what it is supposed to measure. So, the researcher used construct validity. It concerns with the extent to which a test measures a specific trait or construct. The construct validity can be seen when scoring which weights the factors related to the subject (,2004:6) to achieve the construct validity to measure students' reading comprehension in a particular objective, it makes the test specification. The tested text would taken from the reading texts of a test, which had more on interpretative and critical comprehension and this also aims to show the treading test which is commonly held for many SMP students.

$$r = \frac{n(\sum XY) - (\sum X)(\sum Y)}{\sqrt{[n \sum x^2 - (\sum X)^2][n \sum y^2 - (\sum Y)^2]}}$$

Information:

r = correlation coefficient

$\sum X$ = total item scores

$\sum Y$ = the total score of the items

n = number of respondents

3.5.2 Reliability of The Test

The consistency metric is called reliability. Reliability tests are characterized by "the extent of consistency demonstrated by the instrument or procedure: whatever it is measuring, it measures it consistently." (Best and Kahn, 2016). Although necessary, reliability is not sufficient in and of itself to establish validity. In other words, a test needs to be valid to be considered legitimate, but it might also be valid even though it is dependable, A stable result indicates that the test is reliable: The tested text will take from the reading test

To achieve the reliability of the test, by Kuder Richardson formula (KR21) will be applied:

$$K_{r_{21}} = \left(\frac{k}{k-1} \right) \left(1 - \frac{M(k-M)}{k \cdot S^2} \right)$$

In which:

K = Number of questions

M = average test score

St = square of the standard deviation of test scores

Arikunto (2009:75) states that the following criterion for product-moment correlation can be used to interpret the size of the coefficient obtained using the preceding formula:

0,80 - 1,00: The reliability is very high

0,60 - 0,79: The reliability is high

0,40 - 0,59: The reliability significant

0,20 - 0,39: The reliability is low

0,00 - 0,19: The reliability is very low

3.5.3 Test Specification

The purpose of the test specification is to assess the reading comprehension achievement of the students. Students should accomplish certain goals based on topic validity, as stated by Best and Kahn (2006:289). The elements can be calculated as follows:

Table 3.5.3.1 Test Specifications

No	Content	Item of Test	Kinds of Test	Score
1	Main Idea	4	Multiple choice	20

2	Information	4	Multiple choice	20
3	Synonym	4	Multiple choice	20
4	Reference	4	Multiple choice	20
5	Inference	4	Multiple choice	20
	Total	20		100

Every correct answer has five points. Main idea (Mi) which consists of 4 items, the correct answer would be times five. $[Mi\ 4 \times 5 = 20]$. For information $[I\ 4 \times 5 = 20]$. For synonym (S) which consists of 4 items would times to five. $[S\ 4 \times 5 = 20]$. For reference (R) which consists of 4 items, the correct answer would times to five. $[R\ 4 \times 5 = 20]$. For inference (In) which consists of 1 item, the correct answer would to five. $[In\ 1 \times 5 = 5]$ So the total score if the students can answer all questions is $20 \times 5 = 100$.

Table 3.5.3.2 The assessment of students' Competence

NO	Score	Classification
1	96-100	Excellent
2	86-95	Very Good
3	76-85	Good
4	66-75	Fairly Good
5	56-65	Fair
6	36-55	Poor
7	0-35	Very Poor

3.6 The Procedure for Analyzing Data

After teaching reading comprehension by using the herringbone technique, the researcher will use statistical analysis to analyze data. To find out the result of the test and whether it is statistically significant, the writer applies a t-test.

According to Arikunto (2010:345), the T-test formula will be applied to test the hypothesis. To calculate the impact of this research, the author will administer a test. This exam will also be utilized to determine whether or not the hypothesis regarding the herringbone technique's effectiveness in teaching reading is true.

Several steps will be taken in the analysis of the data, including:

1. Tabulating the scores of the students in pre-test and post-test experimental and control group
2. Finding the mean of two groups
3. Comparing the mean of two groups
4. the scores of the two groups
5. Analyzing the data by using the T-test formula

As formula follows:

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

Where: t: the effect

M_x: mean of the experimental group

M_y: mean of control class

Dx²: the deviation square of the experimental group

Dy2: the deviation square of the control group

Nx: the sample of the experimental group

NY: the sample of the control group

