CHAPTER III
RESEARCH METHODOLOGY

This chapter deals with all of the research method. In this chapter, the researcher will discuss about research design, subject of the research, data collection technique an instrumentation, and data analysis.

A. Research Design

Research design plays a crucial role in determining the effectiveness of a study, as it provides a structured approach to data collection, analysis, and interpretation. In educational research, various research designs can be used, such as experimental, qualitative, and action research, depending on the objectives and context of the study. One commonly used design in classroom-based research is CAR which allows educators to implement and evaluate teaching strategies in real classroom settings.

In this research, the researcher uses Classroom Action Research (CAR). CAR is a research method carried out by teachers or educational practitioners in the classroom to improve the learning process and improve student learning outcomes. In addition, Ritcharoon, as referenced in Semathong (2023:29), emphasized that classroom action research holds significant value in educational management, as it generates insights that support holistic personal development and aid in educational planning and administration. This research is reflective, cyclical, and based on real action in teaching practice.

Moreover, Kemmis, S., et all (2014:11) adds that classroom action research generally employs qualitative and interpretive methods of inquiry and data collection, often conducted by teachers sometimes in collaboration with academic partners with the goal of enabling them to evaluate and enhance their own teaching practices. Nugent, G., et all (2012:4) stated that action research is often referred to by different terms such as participatory research, collaborative inquiry, emancipatory research, action learning, and contextual action research. In simple terms, it means "learning by doing" a group of people works together to identify a problem, take action to solve it, evaluate the results, and try again if the outcome isn't satisfying. It involves examining one's own practices through teamwork, reflection, and open discussion. The purpose of action research is to improve the efficiency and effectiveness of routine work, namely by analyzing the problem conditions that cause the work to not work as it should. In addition, theoretical concepts and experiences from previous practices must be used to find information and methods that are expected to solve the problem, then reflect on the method to be tried on groups related to the problem.

Based on a statement from Efron, S. E., & Ravid, R. (2013:4), in action research, educators and school staff act as researchers by investigating and analyzing their own teaching practices within their classrooms and school settings. CAR is a reflective and cyclical approach that consists of four main stages: planning, action, observation, and reflection. The following is an explanation of each stage.

1. Planning

   The planning stage is the initial step in CAR which aims to identify problems in the learning process and design strategies to overcome them. At this stage, teachers or researchers collect information from various sources, such as student learning outcomes, classroom observations, and feedback from students and fellow teachers. Teachers were informed about the research, roles were clarified, and interviews were conducted to identify needs. The results were shared with stakeholders to form an action plan, and trainers were contacted for professional development.

2. Action

   After the planning stage is complete, the next step is action. This stage is the implementation of the strategy that has been designed in the planning. The research group carried out the action plan through several stages. They began with a workshop to build teachers' skills in classroom research, followed by a meeting to clarify the research process and supervision. Teachers then implemented their individual research projects based on selected issues. A supervision team supported and monitored each stage, including methods, innovation, and report writing. Co-researchers refined their work based on expert input, and the process concluded with a group meeting to share results and evaluate teacher development outcomes.

3. Observation

   Observation is the stage where teachers or researchers collect data on the effectiveness of strategies implemented in the action stage. The data collected can be in the form of field notes, video recordings, student work, interviews, or questionnaires. The main purpose of this stage is to understand the impact of actions on student learning processes and outcomes. The researcher and co-researchers collaboratively carried out observation and monitoring of the teacher development process in classroom research to gather valuable insights for future reflection.

4. Reflection

   Reflection is the final stage in the CAR cycle, where teachers analyze the data collected during observations to evaluate the success of the actions taken. At this stage, teachers consider whether the research objectives have been achieved, whether the strategies implemented are effective, and which aspects need to be improved or adjusted for the next cycle. As stated by Roberts, in Naseer, H., et al (2020:22), reflection aids in enhancing critical thinking about personal values, attitudes, beliefs, and behaviors. It plays a crucial role in both formal and informal learning by fostering new insights that improve future actions. Reflection helps us better understand our practices. The learning process through reflection involves experiences, which in turn create reflective observations vital for learning and growth.

B. The Subject of the Research

The subjects of this research is eight grade students at SMPN 8 Ketungau Hilir. The number of students in this eighth grade is 20 students, with 10 male students and 10 female students. The participants is eight grade students who were actively involved in intervention and assessment activities throughout the research process. This research aims to investigate the impact of group reading activities on students' reading proficiency, as well as their overall engagement and motivation during reading activities. The findings from this research will provide valuable insight into the effectiveness of group reading activities in improving secondary school students' reading comprehension and contribute to the development of language teaching strategies at SMPN 8 Ketungau Hilir.

C. Data Collection Technique and Instrumentation

1. Data Collection Technique

The data collection technique will use observation, interview, measurement and documentation to collect the data.

a) Observation

Observations will include student interactions in groups as they discuss, share understanding, and help each other understand the reading text. Based on the opinion from Reinke, et al (2015:160) interactions in the classroom directly and systematically.

b) Interview

Namsaeng, P., & Sukying, A. (2021:33) conclude that during the interviews, participants were able to share their thoughts and emotions freely, leading to the emergence of new insights that did not appear in the questionnaire or logbook data. Furthermore, using their native language helped reduce language-related difficulties.

c) Measurement

The measurements in this research refer to the process of assessing students' reading skills before and after implementing group reading activities. This can be done through reading tests specifically designed to measure certain aspects of reading skills, such as reading comprehension, reading speed, and text analysis abilities.

Table 3.1 The Answer Key of Scoring Reading Comprehension
(Cycle I)

Orientation			
No	Questions	Answer	Score
1	Who was Toba?	Toba was a poor farmer who lived in a village.	4
		A poor farmer	3
		A man/a farmer	2
		Out of the text / No answer.	1
2	What did Toba catch in the river?	A big golden fish that could talk.	4
		A golden fish	3
		A fish	2
		Out of the text / No answer.	1
3	What was Toba's life like before he caught the magical fish?	He lived simply, worked in the fields, and caught fish for food.	4
		He worked in the fields and caught fish.	3
		He was a farmer.	2

		Out of the text / No answer.	1
5	What was Toba's promise?	He must not tell anyone that his wife was once a fish.	4
		Don't tell anyone about the fish	3
		Keep a secret	2
		Out of the text / No answer.	1
6	What are the character of Samosir?	He was cheerful, active, curious, and a little mischievous	4
		He was curious and a little mischievous.	3
		Curious/Mischievous/Active	2
		Out of the text / No answer.	1
Complication			
4	What did the fish say to Toba?	She said she was a princess and wanted to be his wife.	4
		She wanted to marry him	3
		She talked to him	2
		Out of the text / No answer.	1
7	Why did Toba get angry at Samosir?	Because Samosir ate the food before giving it to his father.	4
		He ate the food	3
		Because of food	2
		Out of the text / No answer.	1
8	What did Toba say that broke the promise?	"You are just like your mother, a fish!"	4
		"Your mother is a fish"	3
		He talked about fish"	2
		Out of the text / No answer.	1
Resolution			
9	What happened after Toba broke the promise?	The sky turned dark, heavy rain came, and the village was flooded.	4
		It rained and the village was flooded.	3
		There was a storm.	2
		Out of the text / No answer.	1
10	Give your opinion about what lessons we can learn from the story!	Keep our promises and control our anger.	4
		Keep promises/control our anger.	3
		Don't be angry	2
		Out of the text / No answer.	1

Formula :

$$N = \frac{\text{obtained score x 100}}{\text{total score}}$$

N = students' score

Information:

Score 4: Very Complete and Accurate Answer
Score 3: Quite Accurate, But Incomplete Answer
Score 2: Inaccurate or Too General Answer
Score 1: Irrelevant Answer / Does Not Answer

Table 3.2 The Scoring Reading Comprehension

(Cycle II)

Orientation			
No	Questions	Answer	Score
1	Who were the main characters in the story?	A poor widow and her daughter.	4
		A mother and her daughter.	3
		A mother/ a girl	2
		Out of the text / No answer.	1
2	How was the daughter's personality?	She was beautiful but lazy, spoiled, and disrespectful.	4
		Beautiful but lazy.	3
		Lazy and spoiled.	2
		Out of the text / No answer.	1
3	Where did the story happen?	A small village in Kalimantan	4
		In Kalimantan	3
		In a village	2
		Out of the text / No answer.	1

Complication			
4	Why did the daughter feel ashamed of her mother?	Because her mother wore old clothes and looked poor.	4
		Her mother looked poor.	3
		Her mother looked dirty.	2
		Out of the text / No answer.	1
5	What did the daughter say to people on the way to the market?	She said her mother was her servant.	4
		She called her a servant.	3
		She didn't say her mother.	2
		Out of the text / No answer.	1
6	How did the mother feel when her daughter lied about her?	She was heartbroken and cried.	4
		She was very sad.	3
		She was hurt.	2
		Out of the text / No answer.	1
9	What does the sentence "Her heart was broken into pieces" tell us?	It shows how deeply hurt the mother was	4
		She was very sad	3
		She was hurt	2
		Out of the text / No answer.	1
Resolution			
7	What did the mother do after hearing her daughter's words?	She prayed to God to punish her ungrateful daughter.	4
		She prayed to God.	3
		She asked God for justice.	2
		Out of the text / No answer.	1
8	What happened to the daughter after the mother's prayer?	Her body turned into stone and she cried.	4
		She turned into stone.	3
		She became a stone.	2
		Out of the text / No answer.	1

Moral Value			
10	What is the moral of the story?	Love and respect your parents, and never be ashamed of them.	4
		Respect your parents.	3
		Don't be ashamed of your parents.	2
		Out of the text / No answer.	1

Formula :

$$N = \frac{\text{obtained score x 100}}{\text{total score}}$$

N = students' score

Information:

Score 4: Very Complete and Accurate Answer
Score 3: Quite Accurate, But Incomplete Answer
Score 2: Inaccurate or Too General Answer
Score 1: Irrelevant Answer / Does Not Answer

d) Documentation

Mettetal, G (2015:4) stated that instructional resources and teaching assessments serve as a solid foundation for documentation, while peer observations and student work samples offer additional valuable insights. In this context, documentation can include records of group reading activities, learning implementation plans, teaching materials, and other documents related to the reading learning process at SMPN 8 Ketungau Hilir.

2. Instrumentation

   Instrumentation is a tool used in research to collect the data needed to answer research questions. In this research, several instruments used include observation sheets, field notes, tests, and video recordings.

a) Observation Sheet

   Chauhan, L., et al (2024:58) said that participation observation refers to a method where the observer actively takes part in the activity or group being studied while simultaneously conducting the inquiry. The observation sheet is a tool used to record observations during the group reading activities process. Participation observation refers to a method where the observer actively takes part in the activity or group being studied while simultaneously conducting the inquiry. In this research, observation sheets will use to observe how students participate in group reading activities, how they interacted in understanding the text, and how they using reading strategies.

b) Interview Guideline

   Braun & Clarke, as cited in Maurer, K. (2024:39), states that since interviews are highly valuable for uncovering and examining specific elements of research that demand depth and detailed insights, they are also categorized into different types based on their structure. An interview guide is a tool used in research to help focus and organize the flow of thoughts and questions during an

interview. The guide aims to keep the interview focused on the research topic, ensure consistency in the questions ask to various respondents, and help researcher collect relevant data.

c) Field Note

Field notes are notes made by researchers during the learning process. Field notes play multiple roles, primarily by helping researchers develop detailed and in-depth descriptions of the research setting, interactions, interviews, focus groups, and documents, capturing important contextual information, Phillippi, J., and Lauderdale, J. (2018:381). Field notes are notes made by researchers during or after observations that describe events that occur in natural situations.

d) Test

The test is an instrument used to measure the development of students' reading skills before and after implementing Group Reading Activities. This test is used to determine the extent to which group reading activities can improve students' reading comprehension.

e) Video Recording

According to Robson, as cited in Pham, V. P. H., et all (2019:178) English has become a global language utilized in areas such as communication, science, information exchange, business, technology, and diplomacy. The benefit of using video recordings

in this research is that it can review student interactions in more detail, can be used as authentic evidence regarding the effectiveness of the group reading activities method, helps in analyze students' expressions and attitudes when reading in groups.

D. Data Analysis

This chapter presents the data analysis process carried out in CAR. The collection techniques used are quantitative and qualitative data. The following section outlines the data analysis procedures:

1. Quantitative Data Analysis

Students' reading skill is measure before and after the implementation of the group reading activity using a reading test based on a scoring rubric for reading. This test is use to quantitatively assess the improvement of students' reading skills. This test is carried out after the implementation of group reading activities.

a) Criteria of Success

The criteria of in this research is when students' reading skills improve. In this research, researcher invite cycle guidelines, and the next cycle must be implemented. There are three aspects criteria of success. First, observation, if 75% of students follow the learning process calmly, participate actively, show enthusiasm, and enjoy the learning process, then it can be said that the cycle is consider successful. Second, interview, if 75% of students express positive feedback about the learning process in class, report

increase confidence in reading, and feel that the activity help them understand the text better, then the cycle is consider successful. Finally, test, if 75% of students show significant improvement in reading comprehension skills and their scores increase compared to the previous test, then the cycle is considered successful.

Table 3.3 Criteria of Success

Observation	If 75% of the total number of students follow the learning process calmly, participate actively, show enthusiasm, and enjoy the learning process, then it can be said that the cycle is successful.
Test	If 75% of the average scores obtained by all students show a significant improvement in reading comprehension and their scores improve compared to the previous test, then the cycle is considered successful.

2. Qualitative Data Analysis

In qualitative research, there are four main stages in data analysis, namely data collection, data reduction, data presentation, and conclusion. The steps in this research are as follows.

a) Data Collection

As stated by McBurney and White, as cited in Akinyode, BF, & Khan, TH (2018:165) stated that data collection using qualitative methods helps build relationships between the interviewer and the interviewee. The methods use can be observation, interviews, and

documentation. This data collection aims to get a clear picture of the phenomenon being studied.

b) Data Reduction

   Huberman and Miles, as cited in Mezmir, E. A. (2020:18) explain that data reduction involves narrowing down the vast amount of potential data in advance by selecting a conceptual framework, formulating research questions, and determining cases and instruments. When the actual data such as field notes, interviews, or recordings have been collected, the process continues through summarizing, coding, identifying patterns, grouping data, and composing narratives, all of which represent ongoing refinement and condensation of the data.

c) Data Presentation

   The reduce data is then presented in a more structured form, such as tables, diagrams, or narratives. Data presentation helps researchers see patterns or relationships in research findings. In this way, the information obtained becomes clearer and easier to understand.

d) Conclusion

   The final step in research is drawing conclusions. Based on the statement from Erwin, as cited in Alem, D. D (2020:23), the conclusion provides more in-depth information than the summary but should not simply restate the content of the main body. It needs

to revisit the key ideas of the research and present the findings. This part of the writing is where all elements of the study are brought together, unresolved issues are addressed, and the final outcomes along with a suggested course of action are clearly stated.