

CHAPTER III

RESEARCH METHODOLOGY

In this chapter, the researcher dealt with all the research methods. In the methodology, the researcher explained some of the subsets of methods used in this research. It was divided into several sections, namely research design, the subject of the study, data collection techniques and instruments, and data analysis.

A. Research Design

Research design was a meticulous process that either developed theory or discovered new facts through a specific methodology. The research process was a crucial aspect of conducting research. This research exemplified Classroom Action Research (CAR) carried out by a teacher in the classroom. Aimed at enhancing teacher professionalism and student learning outcomes, this research could have introduced new procedures and strategies.

According to Hopkins (2008, p. 48), Classroom Action Research was any systematic investigation conducted by a teacher researcher to collect information about their school's operations, teaching methods, and student learning outcomes. This information was gathered to gain insights, develop reflective practices, implement positive changes in the school environment and educational practices, and improve student outcomes. Norton (2009, p. 52) described classroom action research as a form of self-reflective inquiry conducted by participants in social settings. The goal was to enhance the rationality and fairness of their practices, deepen their understanding of these

practices, and improve the context in which they were implemented. Sagor (2004, p. 4) stated that Classroom Action Research was an investigation conducted by individuals who had the authority to implement their own actions, aiming to enhance their future actions. This distinction was important to clearly differentiate action research from other forms of scientific or educational research.

Burns (2010, pp. 7–8) contended that a classroom action research cycle typically comprised four main stages. This cycle could have been a continuous, iterative spiral that repeated until the researcher decided to stop after gathering sufficient findings. Each cycle, including Cycle 1 and Cycle 2, was divided into four stages: planning, implementation, observation and perception, and analysis and reflection. The steps in conducting action research were planning, action, observation, and reflection. In this research, the researcher employed the Classroom Action Research model by Kemmis and McTaggart (1998) as referenced by Burns (2010, p. 9).

The CAR cycle model based on Kemmis and McTaggart (1998) in Burns (2010, p. 9) includes the following stages:

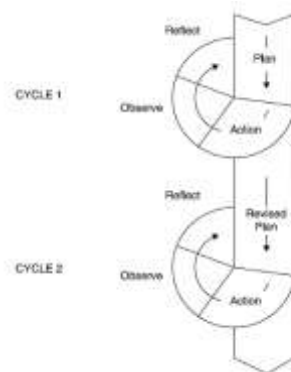


Figure 3. 1 Cyclical CAR model based on Kemmis and McTaggart

1. Cycle I

a. Planning

At this stage, the researcher conducted planning related to all aspects of the research to be carried out. The researcher designed the teaching module by referring to the materials contained in the curriculum, as well as prepared relevant narrative text materials and various examples that were distributed to students to support the learning process. In addition, the researcher determined the teaching technique to be used, namely guided reading strategy, which was considered the most effective to achieve the research objectives. Furthermore, the researcher also prepared various research instruments needed to collect data comprehensively, such as observation checklists that were used to record various activities during the observation, interview guidelines that served to explore more in-depth information from the research subjects, field notes to record various important findings during the research, and test sheets that were used to measure students' learning outcomes after the treatment.

b. Action

At this stage, the researcher focused on implementing the plan that had been developed in the previous stage. The researcher implemented the teaching module that had been created in the learning process, ensuring all materials and methods designed were used effectively. Guided reading strategy was applied as the main method in learning

narrative text, helping students understand and analyze the text better. Meanwhile, the collaborator acted as an observer, supervising and recording all activities that occurred during the teaching and learning process to ensure everything went according to plan and collected data needed for research evaluation.

c. Observation

At this stage, the researcher was assisted by the collaborator who acted as an observer to observe all activities that occurred in the classroom. The data obtained included the results of various aspects of observation, data collected through research instruments, and predetermined data collection techniques. During the observation, the researcher collected all relevant data related to the implementation of the actions that had been carried out previously. The researcher used observation sheets, field notes, and video recordings of learning as a guide in making observations, ensuring the data collected was accurate and comprehensive for further analysis.

d. Reflection

At this stage, the researcher reflected to analyze the data that had been collected to determine whether the application of the guided reading strategy in the teaching and learning process had been effective for students of class VIII SMP Negeri 05 Kayan Hulu. This reflection process involved an evaluation of the observations and data collected. The researcher identified and summarized various problems that arose

during the implementation of actions. If the results found had not met the predetermined success criteria, then the researcher planned to continue to the next cycle to improve and optimize the learning methods used.

B. The Subject of the Study

The research could be said to be successful if it met the criteria of having a clear subject. Research subjects were people or groups who were the focus of the research. According to Cresswell (2012, p. 141), research subjects were selected based on the problem to be studied. In this research, the subjects chosen were the VIII grade students of SMPN 5 Kayan Hulu. There was a total of 27 students consisting of 10 male students and 17 female students. The researcher observed how the guided reading strategy was used in the classroom as well as how students responded and participated in the learning process with the method. The goal was to improve students' reading skills through the application of guided reading strategies.

C. The Data Collection Technique and Instrumentation

The instruments and data collection techniques used in this research were very important because they provided the means and methods to determine the validity and reliability of the research conducted and produced meaningful findings. The instruments used, such as observation sheets, field notes, and video recordings of learning, enabled the researcher to collect data systematically and comprehensively. Effective data collection techniques ensured that the data collected were relevant and accurate, so that the

conclusions drawn from the research were reliable and useful for the purpose of the research.

1. Data Collection

In this research, the researcher used observation, interviews, documentation, and measurement to collect data.

a. Observation

According to Efron & Ravid (2013, p. 68), "Observation was deliberately observing people, events, and interactions as they occurred."

In the context of this research, the researcher observed the learning process, which included all activities carried out by students in the classroom. By directly observing students' activities, the researcher aimed to identify how students participated in the learning process. The results of this observation were used to evaluate and improve the teaching strategy in the next meeting, ensuring that the guided reading strategy was applied effectively and provided maximum benefits for students.

b. Interview

An interview was a structured conversation to exchange information and ideas through questions and answers to understand a particular topic (Efron & Ravid, 2013, p. 68). According to Creswell W. & Creswell D. (2018, p. 263), there were three types of interviews: face-to-face interviews, telephone interviews, and focus group interviews. Face-to-face interviews were conducted directly with participants to

collect data. In this research, the researcher interviewed some students to find out their opinions about the guided reading strategy in reading comprehension.

The researcher used purposive sampling to select participants who had important knowledge related to the research objectives (Lodico et al., 2010, p. 34). Students were selected based on their level of engagement in class to obtain relevant data. Open-ended interviews were used to give students the freedom to express their opinions. Semi-structured interviews with pre-prepared open-ended questions (Tomal, 2003, p. 37) were applied. This method allowed students to answer freely and in-depth, so that the researcher got rich and varied data to understand how guided reading strategies could improve students' reading comprehension.

c. Documentation

The researcher used documentation techniques to obtain data on student learning outcomes. This documentation included various forms such as audiovisual, writing, pictures, and other documents. The documentation technique also served to record all student and teacher activities during the research. Hopkins (2008, p. 123) stated that documentation was one of the techniques used to collect data on curriculum or other educational issues. By utilizing these documents, one could prove the existence of background information and understanding of issues that were not available through other methods.

To ensure concrete data from this research, the researcher used documentation as one of the data collection techniques. The documentation used included student worksheets during teaching and learning activities, as well as recordings and photos of student activities in reading comprehension using guided reading strategies. Thus, this documentation technique provided a clear and detailed picture of the process and results of the research.

d. Measurement

Measurement or evaluation was another method for collecting data in action research. Assessment involved examining the work of individuals using a variety of tools such as exams, portfolios, notes, or direct observation of individual and group abilities and behaviors (Tomal, 2003, pp. 70-71). Thus, measurement was a way to assess student learning and performance (Efron & Ravid, 2013, p. 135). In this research, the researcher used guided reading strategies to assess students' work for evaluation and to improve their learning process. This strategy was expected to help students understand the text better, thus improving their reading skills and overall comprehension.

2. Instrumentation

Instrumentation was a tool for collecting data. Research instrumentation was an important document used to collect data. In this case, the researcher used observation checklists, field notes, interview guidelines, documentation, and tests as instruments. In this research, these

instruments were related to data collection regarding the application of guided reading strategies in improving students' reading comprehension of narrative texts in eighth grade students of SMP Negeri 05 Kayan Hulu.

a. Observation Sheet

In this research, the researcher used observation sheets as a tool to collect data on student activities in the classroom. This observation sheet aimed to record the activities performed by students and their frequency during the teaching and learning process. The English teacher acted as an observer in this research. The researcher used a checklist to record behaviors or actions relevant to the study (Efron & Ravid, 2013, p. 96).

The observation sheet for students used a rating scale format. This rating scale was designed to assess the frequency of occurrence of certain behaviors or circumstances with four answer options: strongly agree (point 4), agree (point 3), disagree (point 2), and strongly disagree (point 1) (Efron & Ravid, 2013, pp. 96-97). The following was a table of the rating scale used in this research:

Table 3. 1 Rating scale of observation

Point	Rating Scale	Description
1	Strongly disagree	1 to 7 students do the activity
2	Disagree	8 to 14 students do the activity
3	Agree	15 to 21 students do the activity
4	Strongly Agree	22-28 students do the activity

In this research, the researcher used the following formula to calculate observation scores from observation sheets for students:

$$\text{Score} = \frac{\text{obtained score}}{\text{total score}} \times 100$$

Description:

Total score : The observation score.

Obtained score : Total point of observation.

b. Field Note

Field notes were used to record detailed information about the implementation of learning in the classroom and identify things that needed attention for the next meeting. They recorded classroom activities and interactions, showing how the relationship between learners and educators developed during the teaching and learning process. Data from observation sheets were used to support and enrich field notes, providing a more comprehensive picture of classroom dynamics and the effectiveness of the learning strategies implemented. According to Leavy (2017, p. 136), field notes were written records or recordings of observations in the field that served as data. It was important to record dates and times to maintain an accurate chronological order.

Field notes documented the occurrence of specific events or activities. The collaborator recorded the impact of the action, including comments, suggestions, obstacles, strengths, and weaknesses in the teaching and learning process. In classroom action research, field notes were used to record things that were relevant to teacher or student

activities, strengthen research results, and provide a comprehensive picture of classroom dynamics and the effectiveness of the learning strategies applied.

c. Interview Guideline

The interview guide was conducted after the end of the class cycle to find out the students' difficulties in reading comprehension, their interest during the implementation of the guided reading strategy, and the improvement of their reading ability on narrative text. The researcher used an interview guide developed to facilitate information gathering (Boyce & Neale, 2006, p. 5). The guide contained a list of topics and questions as well as a consent form, which helped the interviewer to explore issues relevant to the research topic. The interview guide helped to ensure all important aspects were covered and made it easier for the interviewer to follow up on answers. With this, the researcher was able to collect systematic and in-depth data on students' experiences and the effectiveness of the guided reading strategy.

d. Test

According to Mahmoodi-Shahrehabaki as cited in Adom et al. (2020, pp. 110-111), tests were used as the main instrument to measure students' understanding of the material taught. In this research, the researcher gave tests in the form of essay questions to evaluate the extent to which students' abilities had increased. These essay questions were based on learning materials that focused on students' understanding in

capturing the meaning of the text. Essay tests were chosen because they allowed students to express their understanding in depth and demonstrate the ability to analyze, interpret, and construct arguments. To measure the improvement of students' reading comprehension skills, the researcher used narrative texts that were in line with the school's ATP. By using curriculum-relevant texts, the test aimed to provide a clear picture of the effectiveness of the applied learning strategies as well as help teachers design better strategies to improve students' reading comprehension.

a. The Course of Scoring and Assessment Indicators

The assessment rubric was designed according to the aspects of reading comprehension that had been discussed in this research. The researcher adapted some important aspects in making tests and assessing reading comprehension based on Brown's (2003, p. 206) opinion. The aspects included in making the test included: topic (main idea), detailed information, conclusion, supporting ideas, and vocabulary. The scores obtained by the students had been calculated by the researcher based on the scoring rubric in the form of the answer key below. This rubric provided clear guidance on how each aspect of reading comprehension was assessed, making the assessment objective and consistent. Here was the answer key and scoring rubric used:

Table 3.2 The Course Grid of Reading Comprehension

No	Teaching Material	Types of questions	Number of questions
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1	Narrative Text	The students identify topic and idea of the text	1, 6
2	Narrative Text	The students find out the supporting idea of the text	2, 7
3	Narrative Text	The students determine the vocabulary contained in the text. (unfamiliar word)	3, 8
4	Narrative Text	The students find out the detail and specific information of the text	4, 9
5	Narrative Text	The students make interpretation and conclusion of the text	5, 10

In accordance with the needs of this research, the researcher developed a grid of questions listed in the table above to facilitate the assessment of reading comprehension. Based on the grid, the researcher prepared an answer key tailored to the type of questions used to assess students' performance using narrative text. This answer key had been formulated as follows:

Table 3.3 The answer key of scoring reading comprehension

No	Questions	Answers	Scores
1	What is the main idea of the story about Roro Jonggrang	The main idea is that Roro Jonggrang cleverly avoided marrying Bandung Bondowoso by tricking him into thinking it was dawn, resulting in her becoming a stone statue and creating the Roro Jonggrang temple.	4
		Roro Jonggrang tricked Bandung Bondowoso to avoid marrying him.	3
		Roro Jonggrang did not want to marry Bandung Bondowoso because he was mean	2
		Out of text/not answered	1
2	What problem did Roro Jonggrang have in the story?	Roro Jonggrang had to find a way to avoid marrying Bandung Bondowoso without causing harm to her people	4
		Roro Jonggrang needed to stop Bandung Bondowoso from building the temples.	3
		Roro Jonggrang was afraid of Bandung Bondowoso because he was mean.	2

		Out of text/not answered	1
3	What does the word "genies" mean in the story?	In the story, "genies" are magical beings that can help build the temples quickly because of their supernatural powers.	4
		"Genies" are supernatural beings with magical abilities.	3
		"Genies" are soldiers commanded by Bandung Bondowoso.	2
		Out of text/not answered	1
4	How did Roro Jonggrang trick the genies into stopping their work?	Roro Jonggrang made her servants burn straw and pound mortar to create the illusion of dawn, causing the genies to think the sun was rising and flee.	4
		Roro Jonggrang used a clever trick to make the genies believe it was morning.	3
		Roro Jonggrang burned straw and made noise to fool the genies	2
		Out of text/not answered	1
5	What lesson can we learn from Roro Jonggrang's story?	We can learn that cleverness and quick thinking can help solve difficult problems, but sometimes there may be unexpected consequences.	4
		The story teaches us that intelligence can be used to overcome challenges.	3
		The lesson is to be resourceful in difficult situations.	2
		Out of text/not answered	1
6	What is the main topic of the story about Malin Kundang?	The main topic is about Malin Kundang, a diligent boy who became a successful trader but was cursed into a stone by his mother due to his disobedience.	4
		Malin Kundang became a successful trader but was cursed by his mother.	3
		Malin Kundang was cursed into a stone by his mother.	2
		Out of text/not answered	1
7	Why did Malin Kundang join the big ship?	Malin Kundang joined the big ship because he wanted to improve his family's life.	4
		Malin Kundang joined the big ship to find a better life.	3
		Malin Kundang joined the ship for a better future.	2
		Out of text/not answered	1
8	What does the word "vacillated" mean in the context of the	"Vacillated" means to be unsteady or to waver. In the context of the story, it describes the big ship being rocked by a	4

	story?	big storm.	
		"Vacillated" means to be unsteady or to waver.	3
		"Vacillated" means to move back and forth.	2
		Out of text/not answered	1
9	What did Malin Kundang do when his mother approached him with a plate of village cake?	Malin Kundang did not admit that she was his mother and kicked the village cake until it scattered.	4
		Malin Kundang denied his mother and kicked the cake	3
		Malin Kundang didn't recognize his mother and rejected her.	2
		Out of text/not answered	1
10	What conclusion can be drawn from Malin Kundang's actions towards his mother?	Malin Kundang's disobedience and disrespect towards his mother led to his downfall and transformation into a stone.	4
		Malin Kundang's disrespect to his mother caused his transformation into a stone.	3
		Malin Kundang was punished by his mother because he disrespected her.	2
		Out of text/not answered	1

Based on the reading comprehension course grids that had been explained, and to facilitate the researcher in the process of assessing the tests given, answer keys had also been provided. This answer key had been customized by the researcher for this research. There were 10 essay questions with two narrative texts on the theme of “fairy tales and legend.” In the answer key table above, there was a scale for each reading comprehension test number, where scales 4 and 3 indicated that students had answered according to the text, while scales 2 and 1 indicated that students were less thorough in providing answers.

In addition, the answer key table above made it easier for the researcher to see student improvement, especially in residual performance on reading comprehension.

Table 3.4 the scales of Scoring Reading Comprehension

No	Criteria	Score
1	Students can answer the questions completely and clearly according to the answer key and details related to the reading text displayed. Answers cover all important aspects of the story and show deep understanding.	4
2	Students can answer the question quite fully and clearly, but there is a slight lack of detail or understanding. Answers cover most of the important aspects, but there are some details missing.	3
3	Students can only answer part of the question with incomplete details, showing limited understanding. Answers cover some important aspects but miss many key details.	2
4	Students cannot answer the questions correctly or answers are irrelevant, showing a lack of understanding of the topic and main idea of the text. Answers do not reflect the essence of the story	1

The formula:

$$\text{Score} = \frac{\text{Obtain score}}{\text{total score}}$$

In this research, to know the average of the students' score the researcher used formula below:

$$Mx = \frac{\sum x}{n}$$

Mx = Mean

$\sum x$ = total score all students

N = Number of students

e. Video Recording

Video recording was an important supporting tool in collecting data from the results of learning process activities or situations in the classroom. Observation tools such as photographs, video recordings, and audio recordings could improve the ability to capture student behavior, attitudes, and social interactions through images and sounds (Efron & Ravid, 2013, p. 93). In this research, the researcher used video recordings to document student situations during the learning process. This video recording served as supporting data that provided a more detailed and concrete picture of student activities and interactions that occurred in the classroom.

D. Data analysis

After the data collection stage, the next step in the research process was data analysis. Data analysis could be defined as a series of methodical procedures that produced reliable findings. These findings were then interpreted into new claims, justifications, and conclusions in the research (Efron & Ravid, 2013, p. 165). In this research, the Classroom Action Research method was used, and the data collected included both quantitative and qualitative data. Quantitative data was obtained through tests, while qualitative data was collected using observation sheets, field notes, interview guides, and video recordings. The researcher analyzed the success criteria, quantitative data, and qualitative data. The following was an explanation of each part:

1. Qualitative Data

The main data in this research was qualitative data, which was used by the researcher to conduct analysis. The process of analyzing qualitative data involved three activities that took place simultaneously, namely data reduction, data display, and conclusion drawing or verification (Miles & Huberman, 1994, pp. 10-11). The following was an explanation of each of these activities:

a. Data reduction

Data reduction was an analytical process that aimed to sharpen, sort, focus, discard, and organize data so that the researcher could draw conclusions. In this research, sorting and focusing on important information was very important to get the data needed. The data reduction process involved simplifying, grouping, and eliminating irrelevant data to produce meaningful information and facilitate drawing conclusions.

b. Data display

Data display was the process of organizing data systematically so as to facilitate drawing conclusions and taking action. It also helped the researcher in presenting qualitative data. Data presentation involved organizing data in a neat and easy-to-understand manner so that conclusions could be drawn. In this research, data presentation was very important because it supported the researcher in collecting data for analysis. The researcher displayed interview transcripts, field notes, and observation sheet results in data display.

c. Conclusion drawing and verification

The final stage was conclusion drawing and verification. Verification involved the process where the researcher summarized the findings from the research data. Conclusions could not be made before the data reduction and data display processes were completed, because conclusions were based on the results of these steps.

2. Quantitative Data

Quantitative data was the secondary data in this research. According to Burns (2010, p. 118), quantitative data presented information in the form of numbers and often involved observations and figures to provide a concise numerical overview. This data was used to describe a set of numbers, and to present information in the form of averages, frequencies, or percentages.

Descriptive statistics were methods used to analyze quantitative data, assisting in reducing numbers. One of the techniques in descriptive statistics was central tendency, which involved the use of mean, median, and mode to reduce numbers (Burns, 2010, p. 121). Thus, the researcher used the average of students' scores from each cycle to obtain the results.

3. The Criteria Of Success

In this research, the researcher set success criteria to assess the effectiveness of the application of guided reading strategies in improving students' reading comprehension. These criteria were based on the results of research instruments such as observation sheets, field notes, interview guides, and tests. The indicator of the success of this research was the

positive response from students to the guided reading strategy in their reading comprehension.

The determination of success criteria was very important to measure the level of achievement in each cycle. This made it easier for the researcher to determine whether it was necessary to continue to the next cycle or not. The success criteria to be used in this research were presented in the following table:

No	Indicators	Instrument
1	If 80% of students follow the learning process calmly, actively, enthusiastically, and enjoy the class during the lesson, then the cycle is considered successful.	a. Observation sheet b. Field note c. Interview guideline d. Video recording
2	If 75% of the students' ability significantly improves in reading comprehension and their grades also improve, then the cycle is considered successful.	a. Test

Based on the table above, the researcher concluded that in this research a cycle would be declared successful if 80% of students follow the learning process calmly, actively, enthusiastically, and enjoy the class during the lesson, then the cycle is considered successful, and if 75% of students' ability significantly improves in reading comprehension and their grades also improve, then the cycle is considered successful.