CHAPTER III
METHODOLOGY

This chapter contains a description of the procedures that were used in this inquiry. It discusses the methodology of the research, the data collection processes, the procedures, the data analysis, and the results.

3.1 Research Design

In this study Classroom Action Research (CAR) was employed. According to Mertler (2014), action research is a kind of research that is carried out in a systematic manner throughout the process of teaching and learning by educators, administrators, counselors, or other individuals. The purpose of action research is to acquire information on how school function, how educators teach, and how students learn. Classroom action research is described as "an observation of learning activities in the form of an action that is deliberately raised and occurs in a class or outside the class together," as defined by Arikunto (2013).

This qualitative research aimed to illustrate how SFT may help HOTs in the classroom while teaching English to students of other languages (EFL learners). In light of the qualitative character of the data, the sequential exploratory design methodology was applied in the process of data collection for this research. The teaching and learning activity method, as well as how HOTs were promoted, and the result of the study was demonstrated through the use of qualitative data in this study. This article not only analyzes in which category EFL learners' HOTs were promoted, but it also illustrates the benefits and difficulties associated with promoting HOTs with SFT in the context of teaching English to EFL learners.

This research may have as many as two sessions throughout each cycle, but if those meetings are deemed unnecessary, the research may just have one meeting during the next cycle. Kristiyanto (2010) states that a cycle is a step that researcher (with collaborator) intentionally takes in order to make changes in a sensible and planned manner. This research held two sessions during each cycle, each of which consisted of the following stages:

1. Planning that includes a plan of action that is going to be carried out to enhance and raise physical education learning participation via the application of adjustments to rules and equipment.

2. Action that includes the activities that are carried out by researcher in order to increase learning participation in physical education via the application of adjustments to rules and equipment.

3. The observation of changes in the behaviours of students and teachers, including both improvements and deficiencies in such behaviours.

4. Reflection is a description of the technique for examining the results of research and reflection pertaining to the process and impact of corrective action that was done as well as the criteria and goals for the next cycle of action. Reflection is a step in the cycle that occurs after research and reflection have been completed.

3.2 Data Collection

The data of the research collected through the classroom observation, interviews with both teacher and students, and documents analysis of the teacher's learning plans and papers prepared by students.

3.2.1 Participants of the Research

The research was conducted at a junior high school in Cinunuk, which located in West Java. This inquiry is being carried out with the participation of a teacher as well as students in the seventh grade. There was a total of 25 students in the classroom, ten of whom were male and fifteen of whom were female. The location was decided upon after considering a number of different considerations. Before deciding on the school, the amenities were taken into consideration (McMillan & Schumacher, 2001). The institution's curriculum placed a significant emphasis on the study of English. The researcher had access to both the school and the people who participated in the study, and those people profited from the quality of the analysis, which included the amount of time, money, and resources that were spent. After that, the institution makes learning English a key topic for all of the students to pursue. In the context of this research project, a teacher and a researcher worked together to encourage the use of HOTs among EFL students by means of SFT. The goal of this project was to get a more in-depth understanding of the implementation process as well as analyze the benefits and challenges associated with it.

3.2.2 Instruments

According to Arikunto (2013), a research instrument is a tool or facility that is utilized by researcher in the process of data collection in order to make the task simpler, the results more accurate and systematic, and the findings simpler to process. As was mentioned before, information on the students was gathered through the observation of classrooms, interviews with both teachers and students, and the examination of lesson plans and student writing. During this research, a qualitative approach was utilized, notably for the purpose of data analysis. According to Curtis, Webb-Dempsey, and Shambaugh (2010), narrative descriptions of what students and instructors do and say in the classroom are the means through which qualitative data sources are documented. These narrative descriptions provide detailed, exhaustive, and contextual information on the activities, interactions, and behaviors of persons within the classroom.

In this discussion, the researcher delves into the pivotal components that form the bedrock of any research and it is the instruments. These instruments, ranging from classroom observations and interviews, play an indispensable role in shaping the result of this research. The researcher explored how the choice and design of these instruments impact the reliability, validity, and outcomes of this research.

The first one is a check list for the researcher to use when making observations. The goal of this observation checklist is to determine how far the circumstances and excitement of the student's actions during the process of teaching and learning have progressed. The Indonesian Ministry of Education was responsible for the creation of the scorecard, which was based on the criteria for an acceptable grade *(KKM)* see table 3.1. The point explained as: A: Student's attention to teacher's explanation; B: Student's activeness during teaching and learning process; C: Student's reaction during learning process; D: Student's feel eager in performing the test; E: Student's developed an excellent example of SFT. The checklist comprises five points: A: Student's attention to teacher's explanation; B: Student's activeness during teaching and learning process; C: Student's response during learning process.

Table 3. 1 Observation checklist on Student's participation in classroom

Name of Students	Point A	Point B	Point C	Point D	Point E
1.					

2.	
3.	
4.	
5.	

In addition, as was discussed before in relation to the solution of problems, another observation checklist involved analyzing the students' HOTs via the lens of the SFT learning technique. The categories of action verbs in observation checklist was created by Bloom (1956) as shown in table 3.2.

Table 3. 2 Observation Checklist on Action Verbs in HOTs

Knowledge	
Useful Verbs	**Sample Question Stems**
Tell	What happened after...?
List	How many...?
Describe	Who was it that...?
Relate	Can you name the...?
Locate	Describe what happened at...? Who spoke to...?
Write	Can you tell why...?
Find	Find the meaning of...?
State	What is...?
Name	Which is true or false...?

Comprehension	
Useful Verbs	**Sample Question Stems**
Explain	Can you write in your own words...?
Interpret	Can you write a brief outline...?
Outline	What do you think could of happened next...?
Discuss	What do you think...?
Distinguish	Can you distinguish between...?
Predict	What differences exist between...?
Restate	Can you provide an example of what you mean...?
Translate	Can you provide a definition for...?
Compare	
Describe	

Application	

Useful Verbs	Sample Question Stems
Solve Show Use Illustrate Construct Complete Examine Classify	Do you know another instance where...? Could this have happened in...? Can you group by characteristics such as...? What factors would you change if...? Can you apply the method used to some experience of your own...? What questions would you ask of...? From the information given, can you develop a set of instructions about...? Would this information be useful if you had a ...?

Synthesis	
Useful Verbs	**Sample Question Stems**
Create Invent Compose Predict Plan Construct Design Propose Devise Formulate	Can you design a ... to ...? Can you see a possible solution to...? If you had access to all resources how would you deal with...? What would happen if...? How many ways can you...? Can you create new and unusual uses for...? Can you develop a proposal which would...?

Evaluation	
Useful Verbs	**Sample Question Stems**
Judge Select Choose Decide Justify Debate Verify Argue Recommend Assess Discuss Rate Prioritize Determine	Is there a better solution to... ? Judge the value of... ? Can you defend your position about...? Do you think ... is a good or a bad thing? How would you have handled...? What changes to ... would you recommend? Do you believe….? How effective are...? What do you think about...?

Analysis	
Useful Verbs	**Sample Question Stems**

Analyze	Which events could have happened...?
Distinguish	How was this similar to...?
Examine	What was the underlying problem with...?
Compare	What do you see as other possible outcomes?
Contrast	Why did ... changes occur?
Investigate	Can you compare your ... with that presented in...?
Categorize	Can you explain what must have happened when...?
Identify	What are some of the problems of...?
Explain	Can you distinguish between...?
Separate	What was the problem with...?

The next group of instruments is comprised of interviews with teacher and students to get their thoughts on the use of SFT to advertise HOTs. In the activities including interviews, there were four participants: three students and one teacher. The semi-structured interview method that was used for this research and the teacher need to keep their attention while also retaining their flexibility. The use of a semi-structured interview made it possible to come up with fresh concepts in response to the answers provided by the participant. The challenges that arose when carrying out SFT were the inspiration for the interview questions.

The interview was conducted for one hour with the teacher and two hours with three students. The interview was also conducted in casual form but still focused on the teaching and learning process in the classroom.

The questions for the interview were as below:

1. How was your teaching and learning impacted by SFT? Was there an issue?

2. Have you previously utilized SFT in your teaching?

3. Please tell me about some of the ways you've encouraged HOTs in your classroom. Were there any obstacles in the way of marketing HOTs through SFT?

4. Have you observed any changes in the delivery of your lessons, either before or after the implementation of SFT?

5. In your opinion, what kind of an influence do you think SFT may have on the promotion of HOTs among EFL students?

The final instrument is an examination of the student writings and the lesson plan in the form of a paper which can be seen in appendix 2. The teacher wanted to reflect on the teaching process through the process of analyzing the lesson plan. This type of reflection is essential for successfully navigating the complex reality that exists within the classroom at the present time. In addition, the examination of the students' written work is being done with the intention of gathering their HOTS data.

3.3 Procedure

This study followed the CAR technique that Lewin (1946) suggested for doing research. In the context of this study, the action process is an essential stage in the application of the approach, and researcher explored the efficacy of SFT in fostering HOTs in the context of the instruction of English to students of English as a foreign language (EFL learners). The following step is to make a list of all of the activities that are carried out throughout each cycle. This action research is conducted, and the subject of research is maintained. The steps of this research are carried out procedurally in participatory and collaborative research, beginning with the planning, acting (Execution), observing, and reflecting phases of the activities carried out in the first cycle, then, if placement in the second cycle is insufficient, proceeding to the third cycle (Wijaya, 2012).

As a result of the researcher involvement in the fieldwork, the investigation takes the form of critical participatory classroom action research. According to Kemmis (2013), critical participatory action research implies a commitment to combine social examination, the self-aware community self-study of practice, and transformative action.

The researcher explained SFT, taught students using SFT in the classroom, and evaluated students' work with the teacher. The teacher played an active role in coordinating the class and reviewing the lesson plan with the researcher. As depicted in Figure 3.1, the researcher adopted the CAR model of Kemmis and McTaggart (1998) in this research.
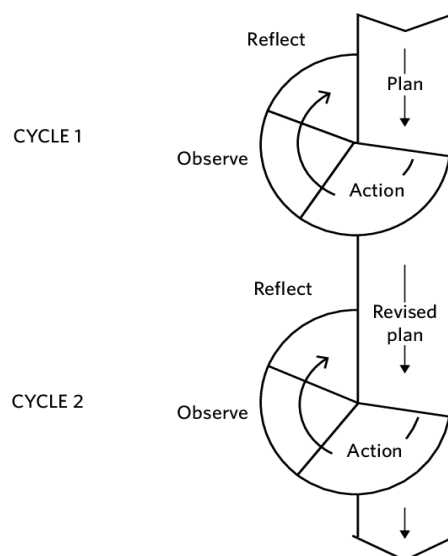
Figure 3.1 *Kemmis and McTaggart model (1998)*

3.3.1 Cycle 1

3.3.1.1 Planning

At the planning stage for the first cycle, the researcher conducted a preliminary study by reflecting on the practice of learning short functional text in junior high school that has been going on. Teacher and researcher are making lesson plan to teach short functional text. Planning to teach SFT in English has involved careful consideration of the text types, teaching objectives, and strategies to engage students effectively. The characteristic of SFT is typically brief and serve specific purposes, in line with that teacher and researcher made a guide to plan their lesson in the classroom. The guides are:

1. Identify the Learning Objectives. In this stage, teacher and researcher defined what they want students to achieve by the end of the lesson. The learning objectives include understanding the structure of short functional texts, recognizing key features, and being able to write and respond to teacher and researcher effectively.

2. Select Appropriate Texts. Teacher and researcher choose a variety of short functional text which are relevant to students needs and their prior knowledge. They choose warning, short notice, invitation, and advertisement for the texts.

3. Teaching strategies. Teacher and researcher are planned to engage students in teaching and learning activities to convey the concept. The strategies that used by the teacher are brainstorming session, group discussion, and role-playing.

3.3.1.2 Acting (Execution)

The activities carried out at this stage of implementation is the teacher conveys the objectives, ways of implementation and the results to be achieved in the study at the time of learning, the researcher acts as a teacher of practice, and assisted by teachers of short functional text learning from other classes who act as observers by using observation sheets that have been made by researcher. observers are tasked with observing student learning participation.

3.3.1.3 Observing

This stage the researcher observes actions aimed at obtaining input in the form of deficiencies, progress, advantages that have been achieved, and problems that may be encountered in learning by the way: observation, interviews, and value taking.

1. Observation

     During the implementation, researcher observed the activities of students during the learning process by using observation sheets that have been provided. Observations were conducted to determine the increase in student learning participation during the learning process. Therefore, during the learning process, student participation was observed by researcher using participation observation sheets that had been provided. The classroom observation was conducted four times in four meetings in this cycle one and ninety minutes for each meeting. While observing classroom situations the researcher recorded the teaching and learning process to gather the data of students HOTs and how they respond to teacher questions in each meeting of the lesson.

2. Interview

     During the implementation of the action, interviews were also conducted to students about the new and ongoing learning process, how they responses, reactions and actions of the students about increasing physical education learning participation with the application

of modifications to regulations and equipment. Meanwhile for the teacher, the interview is focused on teaching process especially in teaching short functional text material.

3. Test

After the implementation of the action, the teacher held a test to determine the improvement of the ability of learning outcomes on the material that has been taught (see appendix 1). In the first cycle the tests are presented to the students, the test which performed in cycle one was form as a quiz. The results from students' work are used as a basis for language mapping in cycle two.

3.3.1.4 Reflecting

The activities carried out at this stage are collecting and analyzing data from observations and data from field activity records, reflecting on whether the actions taken can increase participation in short functional text learning.

3.3.2 Cycle 2

1.3.2.1 Planning

At the planning stage for the second cycle, the researcher conducted a revised lesson plan and teaching strategies by reflecting on the practice of learning short functional text in junior high school that has been going on in first cycle. These planning activities include:

1. Identify the problem in cycle one. The teacher tailor lesson plan to specific needs and proficiency levels of the students. Flexibility and adaptability are key when teaching SFT as the types of texts and communication needs can vary widely.

2. Analysis of the causes of the problem that was found by the teacher and researcher in cycle one. There are some problems that occurs in cycle one, the problem such as technical issue and some students having hard time learning from teacher however teacher did not have enough time teaching same problems several times to make the students understand.

1.3.2.2 Acting

For the activities carried out at this stage in cycle two the teacher conveys the objectives, ways of implementation and the results to be achieved in the study at the time of learning, the researcher

and the teacher making some role-playing with the students based on SFT material. Furthermore, the teaching and learning process is also conducted not only inside the classroom, but they study outside the classroom. The teacher acted as a supervisor while assisting students to observed the things around the school which refer to their learning material.

1.3.2.3 Observing

In these observation activities in cycle two the researcher conducted classroom observations, interviews with the teacher and students and also observing students' work from their test.

1. Observation

   During the cycle two there are five meetings in classroom, researcher observed the activities of students during the learning process by using observation sheets that have been provided same as in cycle one. Observations were conducted to determine the increase in student learning participation during the learning process. Therefore, during the learning process, student participation was observed by researcher using participation observation sheets that had been provided. This time the classroom observation was conducted five times in five meetings. While observing classroom situations the researcher recorded the teaching and learning process to gather the data of students HOTs and how they respond to teacher questions in each meeting of the lesson.

2. Interview

   In this cycle interviews were also conducted in two hours with three students, and one hour with the teacher. Furthermore, in this cycle two interviews with students and teachers serve as a valuable tool for self-assessment, communication, improvement, and relationship building in teaching and learning settings. They contribute to the holistic development of students, help teachers refine their teaching methods, and support institutions in their quest for excellence in education. The interview questions can be seen in an appendix.

3. Test

   The test for cycle two is also in form of quiz, it is used to investigated students understanding of SFT and measure their higher order thinking skills. The quiz which was performed to the students can be seen in an appendix.

1.3.2.4 Reflecting

Reflecting on the teacher, teaching in the classroom is an essential aspect of professional growth and development in the field of education. It involves a thoughtful and critical examination of one's teaching practices, strategies, and interactions with students to improve the overall learning experience. In this cycle the researcher noted some detailed exploration of this teaching and learning process.

3.4 Data Analysis

The observation inventories, interviews, lesson plans, and student work were the primary focal points of the analysis of the data. Whether or not all of the conditions for interactive classroom storytelling have been completed may be determined by referring to the list of criteria. In the event that it becomes apparent from the inventory of findings, the researcher presented a more in-depth study of the possible factors that are responsible for the unobserved characteristics. To make the data more understandable and accessible, the definition offers an explanation of whether or not a particular item on the observation checklist has been checked off.

Interviews are recorded with the participants' permission and transcribed. Kemmis et al. (2013) characterize this collaboration between researcher and subjects. The interview transcript is then encoded until it is analysed. In addition, the Lesson Plan of the teacher examines how HOTs are promoted in teaching practice. This is evident from the instructional procedure. In the meantime, students' oral and written works were analyzed using the framework (Saifer, 2018) to determine their HOTs level after analyzing brief functional texts. Saifer (2018) stated that this was done in order to determine the HOTs level of the written works. The analysis is predicated on reflections and modifications in the following cycle.

Furthermore, to validate the results, this study drew data derived from a variety of interconnected sources, including as interviews, document analysis, and observations made in classroom settings. In addition, a qualitative analysis was performed on the data by triangulating the sources of the data.

3.5 Concluding Remarks

This chapter has presented the research design, data collection, procedures, and data analysis applied in the study.