

CHAPTER III

RESEARCH METHODOLOGY

This chapter elaborates the research methodology which deals with the research question, research design, participants and site, data collection, and data analysis.

3.1 Research Question

The research question of this study as formulated in the previous chapter are described as the following:

How can critical reading strategies improve students' higher-order thinking skills?

3.2 The Research Design

To answer the research question, this research designed in an action research model. It would analyze and interpret the data qualitatively. Furthermore, this research design chosen since the researcher would implement critical reading strategies in senior high school to find out the improvement of students' higher-order thinking skills (HOT's). As Zuber Skerritt (1996) suggest an action research is a project or programme to bring a better practical improvement, innovation, change or develop someone understanding the practices.

The efforts in achieving those aims include identifying a 'problematic' situation or issue that the participants consider worth looking into more deeply and systematically and encouraging teachers to gain their own conclusions and solutions in their own teaching problem, which are more realistic and to the point. The word 'problematic' here does not mean that the practice of teachers' teaching has problems. Rather, word 'problem' means that there is a gap between the reality and the teachers' idealism. Action research has purpose to find something that can fill that gap (Burns, 2010). In action research study, researcher do not only play their role as teachers. Burns (2010) adds several roles that exist in this kind of study, which are investigator

explorer, and participant in teachers' teaching practice. These additional roles are closely related to the idea of reflective practice and teacher as researcher, in which teachers evaluate and fix the problems that occurred in their own teaching practice (Burns, 2010).

The classroom action research consists of two cycles. Lewin (as cited in Cohen *et al.*, 2007) separates action research into four main stages, those are planning, acting, observing, and reflecting. Thus, Kemmis and Mc Taggart (1988) stated that there are four basic steps in the action research. They are planning, acting, observing, and reflecting. The planning steps consist of problem identification, while in acting and observing step the researcher gathers data, interprets data, and acts on evidence of the research. After that the result of the research is evaluated and it is continued to the next cycle. As they also mentioned that "action research develops through *theself-reflective spiral*: a spiral of cycles of *planningacting* (implementing plans), *observing* (systematically), *reflecting* . . . and then re-planning, further implementation, observing and reflecting . . ." (p. 300)

Kemmis and McTaggart (as cited in Cohen *et al.*, 2007) stated that "the first cycles which recur until the action researcher has achieved a satisfactory outcome and feels it is time to stop" (p. 7). Burns (2010) adds that action research is not a lock-step process. Rather, it is a dynamic and recursive process, which means that a new decision and plan will emerge during the process of research.

Those stages that had been mentioned above create a formation in a series of spirals, as McKernan (as cited in Cohen *et al.*, 2007) suggests. In order to give clearer insight about spiral series of action research, Figure 3.1 depicts the cycles of action research:

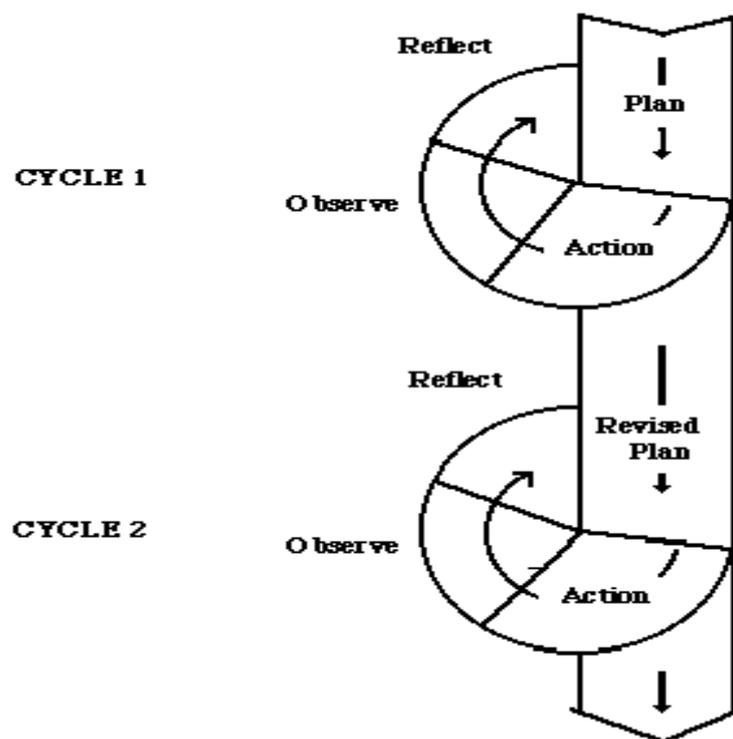


Figure 3.1 Cyclical Action Research Model

This action research determined as a process in which participants examine their own educational practice systematically and carefully, using the techniques of research. It involves the researcher with a method for solving everyday problems in school, in order to improve both students and teachers' learning effectiveness. The researcher has opportunity as model for students, not only the skill needed for effective learning but also curiosity and excitement about gaining new knowledge (Kitchen and Stevens, 2008).

Since, this classroom action research conducted into several cycles, there were two cycles done to answer the research questions. In the first cycle, the planning phase was conducted by preparing some aspects that would be implemented in acting phase. When all of the activities in planning phase were done, the other phases (Acting, Assessing, Reflecting / Evaluating) of this cycle were conducted. The following table is the list of activities done in each cycle of the first cycle:

Table 3.1
Activities in the First Cycle

No	Phases	Activities
1	Planning	a. Determining the school (a research site) b. Determining the external observer c. Designing lesson plan <ul style="list-style-type: none"> • Determining the standard of competences; • Determining the basic of competences; • Setting the learning objectives; • Choosing appropriate media; • Determining the procedures of assessment. d. Determining the standard of students' thinking level e. Designing the research instruments <ul style="list-style-type: none"> • Designing the observation guide • Designing the students' assessment
2	Acting	a. Implementing critical reading strategies to the learning activity; b. Discussing the material explained with the students.
3	Assessing	a. Assessing the students (discussion); b. Written task.
4	Reflecting	a. Reflecting the acting phase based on the

		observation result; b. Analysing the students' writings c. Organizing another plan to be conducted in the next cycle.
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As the result of the first cycle has not been reached the minimum criterion, another cycle of this research was conducted. The activities done in the second cycle was similar with the previous cycle by considering the issues found in the first cycle. The following table describes the activities conducted in the second cycle:

Table 3.2
Activities in the Second Cycle

No	Phases	Activities
1	Planning	a. Determining the issues on the previous cycle; b. Designing lesson plan <ul style="list-style-type: none"> • Determining the basic competence; • Determining the standard competence; • Determining the learning objectives; • Revising the learning objectives. c. Creating the research instruments <ul style="list-style-type: none"> • Clarifying instruction in the students' assessment • Designing observation guide. d. Choosing the materials
2	Acting	a. Implementing critical reading strategies b. Discussing the material explained with the students

3	Assessing	<ul style="list-style-type: none"> a. Assessing the students (discussion); b. Written task.
4	Reflecting	<ul style="list-style-type: none"> a. Reflecting the acting phase based on the observation result; b. Analysing the students' writings.

3.3 Participants

This research took place in one senior high school in Cimahi, West Java, Indonesia. Furthermore, researcher took one class as a sample. The research was conducted in tenth grade students since they had a potential to engage with some reading texts that obligate them to develop their higher-order thinking skills.

3.4 Research Procedure

The procedure of this study are gathered by several steps that can be described as follows.

3.4.1 Selecting Critical Reading Strategy

The researcher began to find the formulation of critical reading strategy. The selected critical reading strategy are adapted from Brown (2001). Bloom's Taxonomy provides an important framework for teachers to use to focus on higher order thinking. By providing a hierarchy of levels, this taxonomy can assist teachers in designing performance tasks, crafting questions for conferring with students, and providing feedback on student work (see Appendix 3).

3.4.2 Selecting Song Lyrics

The researcher started to begin the research by learning and selecting song lyrics that used in this research. Thus, begin with classifying the song either from the artist, album, theme, or genre of the song. Three song lyrics were selected

from Taylor Swift’s newest album titled Reputation—Look What You Made Me Do, End Game, and Delicate.

Additionally, those songs elaborate Taylor Swift’s reputation since it consists of word *reputation* in each song, especially the album. As well as, each song represents something that affects Taylor Swift’s reputation. Researcher expected that students can discover the elaboration between both song lyrics and the album. Furthermore, it also expected as an indicator whether students achieved the higher-order thinking skills to analyze, evaluate, and conjecture these main hidden information.

3.4.3 Preparing Lesson Plans

In this research, three lesson plans were designed in three meetings. Those lesson plans aimed to figure out students’ higher-order thinking skills through reading song lyrics. The following table is a summary of the lesson plans, the detail can be seen in Appendix 1.

Table 3.3
Summary of Lesson Plans

No.	Lesson Plans	Material	Activities
1.	1 st Meeting	<p>“<i>What’s behind the song?</i>”</p> <p>The song titled Look What You Made Me Do by Taylor Swift.</p> <p>The topic drawn from the song; Taylor’s New Reputation part 1</p>	<p>Teacher gave the materials based on the books intended <i>what’s behind the song</i>. Guiding questions from 2013 Curriculum textbook is start from the lower-order thinking skill questions to the higher-order ones.</p> <ol style="list-style-type: none"> 1. Previewing <ol style="list-style-type: none"> a. Building knowledge b. Show the song lyric 2. Outlining and Summarizing <ol style="list-style-type: none"> a. Identify the main information behind the lyric b. Make a short essay

			3. Questioning, Reflecting, Evaluating a. Classroom discussion
2.	2 nd Meeting	First Treatment. The song titled End Game by Taylor Swift. The topic drawn from the song; Taylor's New Reputation part 2	Teacher gave the materials about the multimodality aspects of the song. Critical reading strategy was implemented by questioning the students with higher-order thinking skills questions. 1. Previewing a. Recall the last meeting b. Give treatment by explaining the supported materials and giving higher-order thinking guidance questions c. Show the video clip 2. Outlining and Summarizing a. Identify main information behind the lyric and the relation with its video clip b. Make a short essay 3. Questioning, Reflecting, Evaluating a. Classroom discussion
3.	3 rd Meeting	Second Treatment. The song titled Delicate by Taylor Swift. The topic drawn from the song; Taylor's New Reputation part 3	Teacher gave the materials about an imagery behind the song lyrics. Critical reading strategy was implemented by questioning the students with more specific higher-order thinking skills questions. 1. Previewing a. Recall the last meeting

			<ul style="list-style-type: none"> b. Give treatment by explaining the supported materials and giving higher-order thinking guidance questions c. Show the song lyric <p>2. Outlining and Summarizing</p> <ul style="list-style-type: none"> a. Identify main information behind the lyric b. Students should focusing into one topic they do really curious behind that song c. Make a short essay <p>3. Questioning, Reflecting, Evaluating</p> <ul style="list-style-type: none"> a. Classroom discussion
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3.4.4 Administering Reading Assessment

The reading assessment was conducted in each cycle to determine students' learning achievement. As well as, it was administered three times, where it was supposed to determine students' higher-order thinking skills improvement. The first meeting (first cycle) was conducted on the April 3rd 2018, and the assessment engage with the materials from 2013 Curriculum textbook. Thus, the first assessment conducted to find out the issues about students' higher-order thinking skills. Then, the second meeting (first cycle) was conducted on April 17th 2018, and the assessment engage with the first treatment where critical reading strategy being implemented. The last assessment (second cycle) was conducted on 24th April 2018 cycle, this final assessment administered to reveal the issues from the learning process in the first cycle.

3.4.5 Treatment Phase

During learning reading using critical reading strategies to enhance students' higher-order thinking, the students were asked to write their response based on the

following guidance questions strategies as adopted from Bloom's (2001). There are three level of HOTS's guidance questions explained by researcher, as follows:

a. Analysing

- Why do you think ...?
- And what evidence can you give to support your opinion?

b. Evaluating

- What is your opinion of ...?

c. Creating

- What would happen if ...?
- What would you improve?

Furthermore, the conditional treatments also given in order to reveal the best results. The following treatments as follow the supported materials about multimodality aspects of the song and imagery, also guided students to read critically and questioning the song lyrics.

3.4.6 Administering Interview

Interview was administered to the students after all of teaching sessions were completed. Interview addressed randomly to six students in addition to gain better and deeper understanding based on their writings and different perception of students' higher-order thinking level.

3.5 Data Collection

To achieve the objective of this study, the researcher needs to collect some data. Nunan and Bailey (2009) mention that qualitative data in second language classroom research can be in many forms. In this study, the data collection techniques divided into three. Thus, three different kinds of data collection techniques were used by the researcher as mentioned below.

3.5.1 Reading Assessment

In this study, firstly the data collected from the result of the students' reading assessment. Burns (2010) suggests that in conducting a research, the techniques should be well-matched to what the researcher is trying to find out. Tests, or written tests for more specific, can be used as "sample of learner language" (Nunan and Bailey, 2009, p. 323). Therefore, since this study was interested mainly in the students' higher order thinking, by observing students' reasoning is a powerful way to assess higher-order skills (Brookhart, 2010). By then, there was a need to collect the students' writings over a period of time and identify the improvement in each assessment (Burns, 2010).

Three reading assessment used to determine students' higher-order thinking improvement. This data collection exposed the condition of students from each meeting. Moreover, this method was important since the students' performance before and after the action was conducted to portray the expected results, then capture the students' progress. The data contributed to decision-making phase, whether the students had already achieved the target, or there was a need to do the next cycle.

3.5.2 Classroom Observation

This technique is chosen to gain the information of the data. Therefore, the main purpose of using observation is to explore students' learning process while criticalreading strategies being taught. Then, to get a good comprehension of the classroom observation, the researcher decided to write field notes. According to Creswell (2002), observation is an activity in which "the researcher takes field notes on the behavior and activities of individuals at the research site" (p. 213). The key of observation is "making familiar things strange" (Burns, 2010, 57), which means that the researcher sees things that commonly happen in classroom in different ways. In other words, the researcher believes that everything that emerges in classroom happens for a reason and it is worth investigating.

3.5.3 Interview

The interview was conducted in the end of the teaching schedule or in the last meeting of teaching phase. Specific participants were selected from the tenth

grade students. Six students were selected to be interviewed. The chosen students were randomly picked as the interviewee. Therefore, the aim of selecting six students in this interview was to gain better and deeper understanding based on their writings and different perception of students' higher-order thinking level.

The interview was conducted in bilingual in order to ease the students facing difficult word selection to express their responses easily. Interview technique allowed the participants to express their interpretation without any forces from researcher's perspectives (Creswell, 2009). It can also explore more information from the participants who cannot be obtained from observation or another instruments for collecting qualitative data (Creswell, 2008).

The steps to interview the students for this research are proposed by Creswell (2008) including: (1) selecting interviewees based on the purposeful sampling; (2) recording the entire interview, including the questions which are asked by the researcher; (3) writing the main idea from interviewees' responses; and (4) sticking with the questions, but keep maintaining the flow of the interview.

Furthermore, the questions for interview consisted of four questions to gain in depth and clear information toward students' higher-order thinking level based on the implementation of critical reading strategies in teaching reading song lyrics. The first question related to evaluating level in higher-order thinking which asking their opinion through three song lyrics they have read. The second question was about the reason behind their opinion related to three song lyrics they read, since this question intended to find out their analysing level in higher-order thinking skill. The last question related to the higher level in higher-order thinking which is evaluating, it was about what they will do if they had an opportunity to be in the making of that songs. Afterward, the students' answers of interview questions were transcribed and then described. Finally, the result of the interview were interpreted to conclude the findings.

3.6 Data Analysis

In order to answer the research questions, there were some steps to analyse the data obtained from the reading assessment, the classroom observation, and interview, namely data reduction, data display, and conclusion (Alwasilah, 2011). The data which has been collected from the result of reading assessment,

classroom observation and interview were analyzed and interpreted by using descriptive data analysis. Qualitative data analysis method is more appropriately applied to action research than quantitative (Gay, Airasian & Mills, 2005) cited in Hamied and Malik (2016). It is also supported by Brown (2010), “is a continuing process of reducing information to find explanation and patterns” (p. 104). In addition, data analysis is the process of making sense the data that were obtained through data collection. There is no exact way or rule to analyze and present qualitative data, since qualitative data heavily rely on interpretation (Cohen *et al.*, 2007 and Wolcott, 1994, as cited in Creswell, 2002).

3.7 Concluding Remarks

Chapter three has discussed the methodology in conducting the research and description of research procedure in order to find out the answer from research questions stated in Chapter 1. This chapter also has presented several main parts of the study which are formulation of problems, research design, site and participants, research procedure, data collection and data analysis technique. The next chapter will elaborate findings and discussion of this research.

