

## **CHAPTER III**

### **METHODOLOGY**

#### **A. Research Methodology**

##### **1. Research Design**

Research designs are the specific procedures involved in the research process: data collection, data analysis, and report writing (J. W. Creswell, 2012). Classroom research is an undertaken by teacher to enhance their own or colleagues' teaching, to test the assumptions of educational theory in practice, or as a means of evaluating and implementing whole-school priorities (Hopkins, 2014). Action research is an inquiry-oriented teacher education process that can lead to greater understanding of local teaching issues or challenges, and the discovery of new approaches and solutions for meeting those challenges (Burns et al., 2016). The processes in Classroom Action Research (CAR) used in this research involved four stages per cycle; planning stage, action stage, observation stage, and reflection stages.

In this research, the researcher used affirmation comics to build student motivation and the purpose of this research was achieved using classroom action research. In this research pre-observation was done for identify the students learning motivation level. And the result would be analyzed and used to plan the first cycle. This research is designed to involve data triangulation and the table below highlights the direction of the study as planned initially by the researcher.

##### **2. Subject of Research**

The subject of research is to limit the subject of research as an object, thing or person where the data for the research variable is inherent, and at issue (Arikunto, 2016). This study involved an English teacher and eleventh-grade students of SMA PANCA BHAKTI Pontianak. Based on the pre-observation, the researcher found students' problems in learning motivation.

The problems faced by students showed signs of lack of learning motivation in their English subjects, such as being less proactive in doing their English assignments (both homework and in-session practice). The research confirmed the problem after interviewing the English teacher and students and then looks at the degree of student learning motivation. Therefore, in this study, the researcher will use one class to be studied, class XI since that class already represents all classes for researchers to conduct research.

### **3. Collaborator**

A Collaborator in this research was english teacher, namely Mrs. S. In classroom action research, a collaborator is a certain person who helps the researcher to collect the data (Astuti, N.Y., 2016). Mrs. S as a collaborator helped the researcher in getting qualitative data (observation). The collaborator's function is to provide input and reflections to improve the quality of teaching and learning activities and to reduce the bias of participant observation results (Aunurrahman et al., 2020).

### **4. Technique of Data Collection**

Data collection is an important aspect of research. Data collection techniques are the most strategic step in research, because the main purpose of research is to obtain data (J. W. Creswell, 2012). Data collection technique is conducted steps by steps. researcher collects the data during the research. Then, researcher analyzes the data and reflection note. Researcher reflects the data and conclude of final result. The researcher collected the necessary data to achieve the research purpose by giving online questionnaire placed on google form.

#### **a. Observation Technique**

The researcher would collect qualitative data using the observation technique, which is highly significant in this study. According to Cohen et al., (2017), using observation as a primary mode of study has the

potential to provide more valid or authentic data than using mediated or inferential techniques. Therefore, the checklist observation sheet would be used to note and fill out in-class conditions during the teaching and learning process.

b. Indirect Communication

To collect the data in this research, the researcher used indirect communication. This technique would be done by giving/deploying several questions to the subject of research through questionnaires. An internet survey is a type of survey in which the tool(s) of data collection is placed on a website/online survey platform arranged by the researcher and the respondents will gain access to answer the questions and submit the filled questionnaire online (Ary et al., 2014).

## **5. Tools of Data Collection**

Data collection is the process of collecting and measuring information about targeted research variables in a particular system and then enabling people to answer relevant questions and evaluate the results. Cohen et al., (2017) states data collection instruments are tools that are selected and used by researcher in collecting data so that these activities can be systematic and made easier by them. In this study, researcher used a questionnaire and observation checklist as a data collection tool.

a. Questionnaire

The questionnaire is a data collection tool that is applied by giving a number of questions or written statements to the respondent to answer. Cohen et al., (2017) states the questionnaire was a widely used and useful instrument for collecting survey information, providing structured, often numerical data, being able to be administered without the presence of the researcher, and often being comparatively straight forward to analyze. In this research, the researcher used close-ended questionnaire and open-ended questionnaire in collecting data. The researcher adopted close-ended questionnaire to measure students' learning motivation from Tuan

et al., (2014) and open-ended questionnaire to measure use of affirmation comics in the class. In the data collection process and the details are displayed in the following table.

**Table 3.1 Close-ended questionnaire**

<b>Aspects</b>	<b>Indicators</b>	<b>Number of Item</b>	<b>Total Item</b>
Self efficacy	The students' beliefs and attitudes toward their capabilities to achieve academic success	<b>1,2,3,4,5,6,7</b>	<b>7</b>
Active learning strategies	The type of activity during class (face-to-face, online, or outside of class) that engages learners in deep thought about the subject matter in students' course.	<b>8,9,10,11,12,13,14,15</b>	<b>8</b>
English Learning Values	Students values about learning English	<b>16,17,18,19,20</b>	<b>5</b>

**Table 3.2 Open-ended questionnaire**

<b>No</b>	<b>Aspects</b>	<b>Indicators</b>	<b>Number of Item</b>	<b>Total Item</b>
1	Interesting about affirmation comics	Students' interest in the application of affirmation comics in class and their response to it.	<b>2</b>	<b>1</b>
2	Positive effect from affirmation comics	Students' experience positive emotions and interact with others and with life's challenges in a positive way.	<b>1, 3</b>	<b>2</b>
3	The lack of affirmation	Students' responses or reasons about the lack of	<b>4,5</b>	<b>2</b>

	comics about motivation	affirmation comics in motivating students in class		
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b. Observational Checklist

Observation sheets are used in what is sometimes called systematic or structured observation, in which it involves the use of coding system or checklist prepared before (J. W. Creswell, 2012). An observation checklist is a list of things that an observer is going to look at when observing a class. Observation checklists do not only provide a structure and framework for an observation, but it also functions as a contract of understanding between the observer and the teacher, who may feel more at ease and receive specific comments on areas of the class as a result. The observation checklist is one of the most frequently used data collection tools in classroom action research to provide information about what happened or is happening during the observed situation. The observation checklist used in this research includes a description of Students' performance in the classroom and also the class environment. The observation would be carried out by the researcher and collaborators. Table of observation checklist can be seen in appendix 1.

**6. Try Out**

A try-out would be conducted to measure the readiness of all the tools to collect data. This try out would involve 8 students from another class in the same school. This try-out would pay attention to several important points, such as the clarity of the instructions, the participants' understanding of questions or statements in the questionnaire, the efficiency of completing the questionnaire, and participants' motivation in completing the questionnaire properly or providing data correctly. These points would be measured by using an open-ended questionnaire with question items suggested by Ary et al., (2014) can be seen in appendix 8.

The try out result showed that there was no necessary change to be made in the tools of data collection. The student involved in this try out reported that there were no confusing items and the instruction was all clear. There was no offensive items that they found in the tools. However, they reported that 25% of the students felt less motivated to complete the data because it takes time to complete. The recommended time for the students to complete all data from the tools are between 10 and 30 minutes.



**Table 3.3 Result of Try Out**

## 7. Technique of Data Analysis

Data analysis is the process of systematically searching and compiling data obtained from interviews, field notes, and other materials so that they are easy to understand and the findings can be informed to others (J. W. Creswell, 2012). In this study, the data analysis process consisted of several cycles. Each cycle involves four main steps, namely planning, action, observation, and reflection, which are then used to revise the process in the next cycle.

The data analysis technique comes from the interpretation of data collection. Data analysis procedures are needed to determine answers to research questions, analyze information obtained from the researcher's

observation checklist and questionnaires on the level of student motivation. Using descriptive statistics and thematic analysis. It will be specified in the following:

**Table 3.4 Triangulation Data**

<b>Research Question</b>	<b>Data Source 1</b>	<b>Data Source 2</b>	<b>Data Source 3</b>
How can the affirmation comics as an innovation build students' motivation of the eleventh-grade students of SMA Panca Bhakti Pontianak in the academic year of 2021/2022?	Observed classroom activities focusing on engagement to the lesson, performance in tasks/exercises, and classroom environment	Student survey on their self-efficacy, values on English learning, and active learning strategies	Student survey on their attitudes towards the use of affirmation comic (i.e., content features, and positive and negative effects to learning motivation)
<b>Analysis Procedure</b>	Qualitative Approach: Thematic Analysis	Quantitative Approach: Descriptive Statistics	Qualitative Approach: Thematic Analysis

### 1. Descriptive Statistics

After the data has been collected, the researcher would prepare and organize data from the closed-ended questionnaire for statistical analysis. The researcher assigned a numeric score to each response category for each question/item. Since the tool of data collection used 5-point Likert scale with degree of agreement, the type of score in this research is interval score. At this point, the response from freshly-collected data has been coded into interval score. The following table shows the Likert point for each response (degree of agreement) in every questionnaire item that would be used to determine/code the collected data.

**Table 3.5. Likert point for each response in questionnaire item**

<b>Option</b>	<b>Score for Positive Statement</b>	<b>Score for Negative Statement</b>
Strongly Agree	5	1
Agree	4	2
Neutral	3	3
Disagree	2	4
Strongly Disagree	1	5

In the conduct of this research, the data collection administering the closed-ended questionnaire involved a total subject of 10 students in both cycle 1 and 2. After coding the responses into numerical data, the first main stage of statistical procedure carried out in this research was 1) descriptive statistics were used to determine the level of motivation that the students have in all cycles based on three indicators: self-efficacy, active learning strategy, and English learning value. This was done by using individual average score of all students in each indicator grouped per cycle. This stage has resulted in the number of students that have low and high level of motivation in each cycle across all three indicators. Subsequently, 2) the descriptive statistics were also used to analyze the students' responses in each item obtained the questionnaire. This was done by using mean score for each learning motivation statement of the questionnaire that describe which indicator has low and high level of motivation, as well as each item of the indicators. Particularly, the overall mean score will be used to determine the level. Meaning that, the items/indicators that score lower than the overall mean score are indicated as to have low level and those with the opposite condition have high level.

## 2. Thematic Analysis

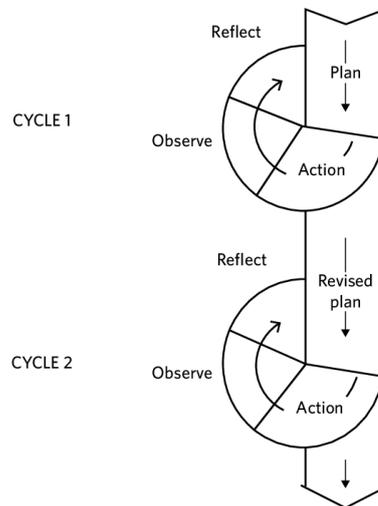
Data would be analyzed from observation checklists and open-ended questionnaire using thematic analysis. Thematic analysis is one way to analyze data to identify patterns and find themes through data that

has been collected by researchers (Ary et al., 2014). Before the thematic analysis was carried out, the data from the observations would be coded into numbers for all answers in each statement (YES=1, NO=0). The observation will also include some brief notes to provide more context of the YES/NO answer in the statement. After that, the researcher would categorize the data into 2 main themes; student performance and class environment, which would later produce several sub-themes (e.g., positive and negative student performance). After the thematic analysis is done, the data is summarized and a final screening or verification is held by researchers and collaborators at the reflection stage of the CAR cycle. Finally, the researcher and the collaborators would conclude a logical and comprehensive explanation of how motivated the students are towards their learning shown by their performance, and how the classroom environment reflects their learning motivation. Additionally, the four-stepped cycle would be carried out continuously when the analyzed data from both questionnaire and the observation suggest requiring more data collection, so that the purpose of this research is achieved.

## **8. Research Procedures CAR**

Action research is a cyclical process with many stages to answer the question of research together with the processed data from the questionnaire using descriptive statistics. In this research, the researcher used affirmation comics to build student motivation and the purpose of this research would also be achieved using classroom action research. In this research, a pre-observation would be conducted to identify the students learning motivation before a further procedure is carried out. The result would be analyzed and used to plan the first cycle. This research would conduct 2 to 3 cycles depending on changes that occurred in learning motivation aspects, such as self-efficacy, active learning, English learning values, student performance, and class environment. The cycle would be consist of four steps that are adopted from (Ary et

al., 2014). This illustration below shows how the four-stepped cycle of this proposed research would be conducted.



**Figure 1 cycling process of Classroom Action Research according to (Ary, 2014)**

a. Pre-Observation

Pre-observation is used to determine the level of student motivation at the beginning before using affirmation comics. the researcher gave a questionnaire to the students at the beginning before the start of the research via a google form.

b. Plan

The researcher would initially consult with the English instructor about learning techniques before starting the teaching and learning process. This relates to the amount of time spent doing research, the materials used in the classroom, and the teaching and learning process. The researcher intends to conduct research in cycle 1 of this project, which includes: 1) researchers and collaborators Using Affirmation Comics, selecting and preparing affirmation comics to be implemented. 2) develop data collection instruments, such as observation guides, questionnaires, and questionnaires, to be used during the research, 3)

inform students that the research would be conducted in class, and 4) explain the purpose and significance of the research to students. The action plan can be seen in Appendix 3.

c. Action

Affirmation comics are divided into two main steps. The first main step is displaying the comics which would be related to the development of self-efficacy, student performance, and class environment. As an aspect of learning motivation. The second main step is presenting the interpretation of affirmation comics which will be related to their English learning. This step would help develop active aspects of learning and English learning values.

Here are some steps for using affirmation comics in the classroom

1. The researcher used the time of the last step in learning in class
2. The researcher would ask students what they did today and appreciate what they did today
3. The researcher shows an affirmation comic to students
4. Students are asked to read together some of the affirmation comics
5. Researchers and students jointly interpret the meaning of today's affirmation comics and apply it

d. Observe

Collaborators observe the actions of teachers and students during the teaching and learning process. The collaborators then filled out a checklist of observations to collect data on student performance and class environment. After that, the researchers observed the level of student motivation by preparing a questionnaire provided for students.

e. Reflect

In this activity, researchers would reflect on the observations made to determine whether the innovations offered are effective and whether the results of implementing affirmation comics are in accordance with the research objectives.