# CHAPTER 3

# RESEARCH METHOD

## 3.1 Research Method

In this research, a descriptive case study was used as the research design. This design was selected because a descriptive case study can describe detailed explanations about a phenomenon, event, group or organization and enables a researcher to closely examine the data within a specific context (Zainal, 2017). A case study is described as an empirical investigation into a current phenomenon in depth and within its real-world context (Yin 2003 as cited in Hollweck, 2015). In this case the descriptive case study helps to describe how to implement flipped classroom in the classroom.

## 3.2 Focus of the Research

The study focused on how the teacher implemented the flipped classroom as a teaching method in the class. Through the descriptive case study, this research investigated the implementation of the flipped classroom in pre, while, and post learning activity.

## 3.3 Setting and Participant of the Research

This research was conducted in Technology Enhanced Language Learning course, majoring in English Education Department (EED) at one of the universities in West Java, Indonesia. Then, this study involved a representative English lecturer from EBAC (Edgar Brood Academic Chair) who conducted collaborative teaching with an English Lecturer in the TELL course. His name is NH (initial), he has several experiences in teaching more than 9 years such as he taught 3$^{rd}$ graders for 6 months, Service Coordinator/ Academic Manager and Teacher at an international school owned by Pearson, Wall Street English Paris Van Java Bandung and now at the Edgar Brood Academic Chair & PA International Foundation as a representative English Lecturer at Siliwangi University, Tasikmalaya.

The participant was recruited because he utilized a flipped-classroom method in the TELL course. Moreover, he uses Canvas as a media for designing activity outside the classroom or pre-activity. Moreover, he has been using Canvas since 2018. Furthermore, the first thing that he did was create a course and the course named TELL B Class. Then, there are several tools provided in the course such as Home, Announcement is the pages to make the announcement to the students (weekly or emailed right away), Modules is a pages that include group of activities carried out by students ( warm up, material of the study, quizzes, and discussion prep template), Grades is the pages to grade the students activities such as assignment, students attendance, student's participation, quizzes, and etc, and for the last is setting is the pages to adjust the courses like what do you want (Enclosure 4). Besides, when the problems occur on Canvas, he solves the problems by googling for the solutions and reading Canvas forums. Henceforth, the activity in class is for discussion and group presentation. On the other hand, he has been teaching English for more than nine years. Then, the way he taught is exciting, unique and it became an exciting notion for the researcher to investigate the method of teaching.

Before collecting the data, the researcher asked permission first from the participant and asked him to read and sign the consent form to analyze the data from the interview results. Besides, it is to prove that there was no coercion to become a participant. Based on the research ethic, the participants' data is kept confidential. After analyzing the data, the researcher rechecked to the participants that all data was valid.

## 3.4 Technique of Collecting the Data

This study collected data through interviews. Interviews yield "direct quotations from people about their experiences, thoughts, feelings, and knowledge" (Maher & Dertadian, 2018). Furthermore, the kind of interview is email interview, email interview is one of the data collection techniques electronically or online where information or data is sent constantly between researchers and participants within a certain period of time. The reason for collecting data by email interview is

that now there is still a time during the covid-19 pandemic where almost all activities are changed to online, for example, learning activities at school. As Kementrian dan Kebudayaan (2020) said that "online learning is carried out to provide a meaningful learning experience for students, without being burdened with the demands of completing all curriculum achievements for grade promotion and graduation." Another reason for collecting the data via email is because the researcher and the participant have different geographical areas and collecting data via email is more efficient. Moreover, email interviews were conducted to explore the implementation of teaching using flipped classroom.

Then, for the data collection stage, the researcher first asked for approval from the respondents. After the approval sheet was signed, the next step was to collect data by sending email containing questions based on the theories such as Bloom's Taxonomy revised theory (1956) is used to explore how teachers transfer knowledge with the flipped classroom method, then Piaget and Vygotsky (1978) theory is used to explore how teachers create active learning with the flipped classroom method and for the last is Mastery Learning theory (2012) is used to find out how teachers apply independent learning with the flipped classroom method. In sending interview questions, the questions can be written in the body of the email or attaching it to the email as a separate document (Burns, 2010). After sending the email, the researcher gets the expected data, and the following process is data analysis.

**3.5 Technique of Analysing the Data**

The data were analyzed by using thematic analysis. Thematic analysis is a method for identifying, analyzing, organizing, describing, and reporting themes found within a data set (Braun & Clarke, 2006). This method was selected because the thematic analysis will analyze the data in great detail and deal with diverse subjects via interpretations (Boyatzis, 1998). There are six steps of analyzing the data by Braun & Clarke (2006) such as:

a. Familiarizing the data

In this stage, the researcher should read and re-read the data interview transcript until the researcher is familiar with the data. Then, the topic of the data is the implementation of the flipped classroom.

Table 3.1 Familiarizing the data

| Bloom's Taxonomy revised | 4. How is your preparation before teaching using the flipped classroom method? |
|---|---|
| | My previous experience as a student (elementary-undergraduate) has been pretty much occupied with rote learning – that is I come to the class, the lecturers/ teachers present the materials, we do activity, and that's it  I can see that the classroom is not dynamic. We are pretty much urged to memorise lessons, and that to me is not what education should be. Education should be for transformation, and to be like that, dynamic activity in the classroom is the key. |
| | 5. As it is known that flipped classroom activities are divided into two, there are inside and outside classrooms.  So, what preparations do you do for activities inside the classroom? |
| | Inside the classroom is basically the follow-up to the materials students have done before the class. I try to make it dynamic and active. |
| | I normally start with a pop-up quiz or warm-up then start giving the points of the materials, ask students to discuss and come up with a conclusion, games and reflection. |
| | 6. How to sort the activities for inside and outside the classroom? |
| | As I use e-learning Canvas, before the class (normally one week before the class), I publish a module and inside the module students do several activities such as warm-up, watching videos or reading PPTs/ journals/ book chapters, games, quiz, and read discussion questions for the class. So basically, I provide everything for |

| | |
|---|---|
| | the class in the module, including the questions for discussions. I also encourage students to ask any questions about the materials that they do not understand yet. Those questions will be answered in the class. |

7. How do you facilitate students in remembering and understanding?

The concept of scaffolding is very important here. We cannot always expect our students to know everything, so we have to provide them with what they need. For example, when reading journals, I provide them with the questions they need to find and even the page number. That way students can read for a purpose (remember that reading journal articles is different from reading novel. We don't have to read everything). My PPTs are always interactive as well by providing them with initial questions (brainstorming) and some reflection questions whenever there are points, I want my students to think more. Basically, we have to provide them with the example (templates, questions, etc.).

8. What activities did students do in remembering and understanding?

Students are ensured to not only remember but the most important thing is to understand. The questions being posed are all critical questions and they are free to express their opinions. Group discussions are always good to stimulate their thinking and collaborative learning.

9. How do you facilitate students in analyzing and applying?

In the PPTs for example, there are always critical thinking questions being asked. This is to ensure that students practice active reading – that is reading and reflecting instead of just reading for memorisation.

10. What activities did the students do in analyzing and applying?

Before the class and when they receive materials, there are always Group Discussion Prep template where students are provided with key words from the reading, questions, and a chance to ask/clarify things they do not understand from the reading.

11. How do you facilitate students in evaluating and creating?

Students are always ensured to reflect on the issue being discussed and relate it to real life problems. This is very important so that when they leave the classroom, their mindset and attitude change to be better, wiser, and more considerate. The course is also normally project-based – that is for the final test, students will do real life projects that reflect their understanding such as making lesson plans using technology, infographic posters, research poster, or even drama performance.

12. How are the activities that occur in evaluating and creating?

Evaluating and creating are normally the last step in Bloom's taxonomy. In the class, project-based is always the final test where they can reflect what they learn throughout the course and translate it into tangible products such as I mentioned in question 11.

13. As we know that every method must have obstacles, then what are the obstacles you face when you use the flipped classroom?

Agree, no method is perfect. There are always some drawbacks. For example, the first time I applied this method many students resisted because they were not used to the method. Secondly, since it is on e-learning, technology affordances (gadgets, internet data, etc.) can be a problem as well.

| | 14. How do you solve this problem? |
| | First thing first, as a teacher we need to make sure that our students understand the purpose of what we do. Once they understand, they can at least change their mind. It is always hard at the beginning, but once you do it nicely and constantly, they will accept it eventually. Always listen to them and never hesitate to adjust the system. We need to make sure that students feel empowered and understood. For the internet, try our best to help them such giving them internet data (quota) and any other flexibility. |

b. Generating initial codes

In this stage, the researcher highlights some points that are interesting and relevant to the topic. This stage aims to analyze and identify the smallest potential part of the meaning. Then, the researcher marked the potential code such as blue, green, yellow, red and wrote notes about the code. The initial code of this research will be explained in table 3.2

Table 3.2 Generating Initial Codes

| Codes | Meaning |
|---|---|
| Pink | Active reading |
| Brown | Students completing the module |
| Tosca | Warm-up in main activity |
| Blue | Dynamic Classroom |
| Blue | Group Discussion |
| Green | Games inside the classroom |
| Green | Independent learning |
| Red | Giving the point of material |
| Red | Providing students' needs before class |
| Orange | Reflection |
| Dark Blue | The Problem in Utilizing Flipped Classroom |
| Yellow | Solving the Problem in Utilizing Flipped Classroom |
| Purple | Active learning |

| Grey | Arranging Syllabus |
|------|--------------------|

Table 3.3 Calculating Codes

| Calculating Codes | | |
|-------------------|---------|-----------|
| Codes | Meaning | Interview |
| Pink | Active reading | 3 |
| Brown | Students completing the module | 4 |
| Tosca | Warm-up in main activity | 1 |
| Light blue | Dynamic Classroom | 4 |
| Blue | Group Discussion | 3 |
| Green | Independent learning | 3 |
| Green | Games inside the classroom | 1 |
| Red | Giving the point of material | 1 |
| Red | Providing students' needs before class | 2 |
| Orange | Reflection | 4 |
| Dark Blue | The Problem in Utilizing Flipped Classroom | 3 |
| Yellow | Solving the Problem in Utilizing Flipped Classroom | 3 |
| Purple | Active Learning | 3 |
| Grey | Arranging Syllabus | 3 |

c. Searching for themes

This stage was the process of sorting the different codes into the potential themes and then grouped based on the same colour such as red with red, yellow with yellow, etc. Then the researcher used visual representation to differentiate each code, for example, mind-map or tables.

Table 3.4 The Process of Searching Themes

| Potential Themes | | |
|-------|------------|------------|
| Themes | Sub-Themes | Activities |

| Pre-Activities | - Arranging syllabus<br>- Independent learning | - Providing students' needs before class<br>- Active reading<br>- Students completing the module |
| --- | --- | --- |
| While Activities | - Dynamic Classroom<br>- Active Learning | - Giving the point of material<br>- Group Discussion<br>- Games inside the classroom |
| Post Activities | - Reflection<br>- The Problem in Utilizing Flipped Classroom<br>- Solving the Problem in Utilizing Flipped Classroom | - Final test<br>- Making reflection |

d. Reviewing potential themes

In this stage, the researcher examined the themes against the gathered data extracts and examined whether it fits the data. After that, themes were reviewed with the actual data about the implementation of the flipped classroom in order to ensure that the positioning of the code has been clustered within the suitable theme and reviewed to the several theories consist of Bloom's Taxonomy (1956), Constructivism (1978), and Mastery Learning (1960s).

Table 3.5 Review Themes

| Potential Themes | Themes |
| --- | --- |
| Pre-Activities | Pre-Class Activities of Flipped Classroom |
| While Activities | While Class Activities of Flipped Classroom |
| Post Activities | Post Class Activities of Flipped Classroom |

e. Defining and naming themes

In this stage, the researcher identified each theme's detailed definition and determined the name of each theme based on the data obtained that is about the implementation of the flipped classroom. Moreover, there are three themes:

1.   Pre-Class Activities of Flipped Classroom
2.   While Class Activities of Flipped Classroom
3.   Post Class Activities of Flipped Classroom

f. Producing the report

In this stage, the researcher reported the result of the analysis with writing that is attractive, concise, coherent, logical, non-repetitive, and interesting from the story that is told by the data / in and across the theme.

**3.6 Steps of the Research**

In conducting the research, the researcher planned several steps as follow:

1.   Figure out the problem and understand the participant's phenomenon.
2.   Stating the research question as well as the objective based on the occurrence observed in the participant.
3.   Conducting a literature review on the flipped classroom
4.   Email interviews are used to collect data about participant phenomena.
5.   Analyzing the interview data using thematic analysis.
6.   Writing the findings based on the interview data. Then comes the interpretation and discussion.

**3.7 Time and Place of the Research**

Table 3.6 Research Schedule

| No | Description | Feb 2021 | Mar 2021 | Apr 2021 | May 2021 | Jun 2021 | Jul 2021 | Aug 2021 | Sept 2021 | Oct 2021 | Nov 2021 | Des 2021 | Jan 202 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Research proposal writing | ■ | | | | | | | | | | | |
| 2 | Research proposal examination | | ■ | | | | | | | | | | |
| 3 | Data collection | | | ■ | | | | | | | | | |
| 4 | Data analysis | | | | ■ | | | | | | | | |
| 5 | Report | | | | | | | ■ | ■ | | | | |
| 6 | Thesis Examination | | | | | | | | | ■ | ■ | ■ | ■ |