

CHAPTER III

METHODOLOGY

This chapter provides the methodology in conducting the research and a description of the research procedure to find out the answer to research questions. This chapter presents the main parts of the investigation: research design, research procedure, site and participant, data collection, and data analysis.

3.1 Research Design

This research was carried out with a qualitative approach because it is related to the aims of this research, namely to find out; 1) how the use of gamification through Wordwall educational website engages students in learning English and, 2) how students perceive the use of gamification through Wordwall educational website in learning English. Coles and McGrath (2010) state that qualitative research is concerned with people, about subjective attitudes and beliefs.

The present research was conducted through action research design. As stated by Coles and McGrath (2010) action research is self-reflective and collaborative where the action means doing something followed by the evaluation. In addition, Gall, Gall, and Borg (2003) mention that one of the action research's purposes is to develop a greater understanding of individual students' thoughts and actions as well as to develop a deeper understanding of teachers' experiences with an educational innovation—in which using gamification through Wordwall educational website.

Specifically, it used participatory action research. It is considered suitable for the present research where the researcher also acted as the pre-service teacher in the classroom to give interventions and for the sake of improving students' English learning. As stated by Cohen, Manion, and Morrison (2017), in participatory action research, the researcher becomes the part of the action in the research itself and has roles as the facilitator, summarizer of knowledge, formulator, and guide.

In the process of the present research, the teaching and learning process was divided into cycles. As introduced by Kemmis and McTaggart (1988) as conducted in the classroom, they can experience new things in learning English and re-

planning in successive cycles of improvement which can help to define assumptions, ideas, and issues more clearly.

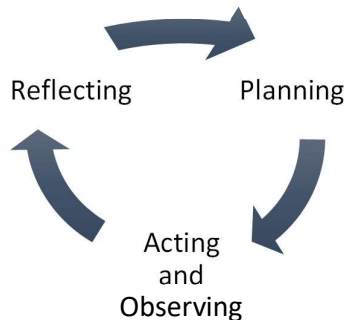


Figure 3. 1 The Cycles of Action Research by Kemmis and McTaggart (1988)

In the first cycle, planning, action and observation, and reflection were carried out to obtain basic data to identify problems as well as introduce them to the intervention to be given. In this cycle, the observer had provided an intervention using a simple Wordwall educational website. Then, in the second cycle, the sections were repeated with changes in the intervention such as the type of gamification activity through a Wordwall educational website which increased in difficulty and which was suitable for the next material.

a. In the planning part, the researcher began by preparing and planning how the lesson was carried out in several meetings. In the second cycle, the lesson plans were designed for several meetings to find out the student engagement in learning English through a gamification tool (Wordwall educational website). The items contained in Wordwall educational website based on the topics taught for the class. The first type of Wordwall educational website used was *Whack-a-mole* for comparative learning materials. It is a type of gamification activity where students need to click on as many words as possible related to comparative. The second activity is called *Maze chase* where the character played by students is chased by several monsters when the character is entering the room with the answers to the questions that have been given about superlative learning materials.

b. Then, the action was conducted while doing observation. The classroom observations were made during the class meetings. It involved all students in one class to explore student engagement. Observations recorded by field notes were assisted by audiotapes. In addition, this data was supported by the recorded

videotapes which was helpful to review the real situation in the classroom and give more information about the classroom activities.

c. After that, the reflecting part was conducted through interviews. From the classroom observation data, the interview was conducted towards 10 students that showed their student engagement in learning English and those who showed their disengagement in learning English after they were given the interventions. Coles and McGrath (2010) state that the researcher needs to keep going through the cycles until getting satisfied with the student's level of achievement.

3.2 Site and Participants

Since the research was conducted in a qualitative paradigm, the researcher identified participants and site on purposeful sampling, based on people and places that can help the researchers understand the central phenomenon (Creswell, 2012). In addition, the research used purposive sampling where the researcher was capable to choose certain students in one class that had characteristics needed for the present research. As stated by Cohen, Manion, and Morrison (2017) and Coles and McGrath (2010) in purposive sampling the researcher can choose certain people who have information or characteristics that are being sought.

Thus, the present research was conducted at one of junior high schools in Bandung which had the policy that allowed students to bring their phones to school to conduct the gamification activity using Wordwall educational website as one of this action research procedures. As for the participants, it involved thirty-three students of eight-grade students. Related to the purposive sampling, the researcher chose participants who were able to join the activities using their phones for applying gamification activities via Wordwall educational website. Furthermore, from class members, this research used purposively selected 10 students who showed engagement and disinterest after being given the intervention.

3.3 Data Collection

The data was collected through observation and interview. As stated by Coles and McGarth (2010) qualitative research will describe attitudes, beliefs, and feelings through observations and interviews. Creswell (2012) also explains that interviews and observations are usually used in qualitative research so that students' perceptions will not be limited. It also means that this research used methods of

triangulation that look at the data from more than one angle—different methods and different individuals. The interviews were conducted to both students and the English teacher to get information answering the research questions. Thus, the research conducted the interviews to reveal what the students and the English teacher said about the students' actions and the observations to reveal what students did. Coles and McGrath also explain that the use of triangulation can give a more complete description of the issue and improve the accuracy of the data collected.

3.3.1 Observation

To collect data in qualitative research, observation is always considered to be used. Creswell (2012) states that observation is an open and first-hand information gathering process by observing people and places in the research sites. In addition, observation is essential to be used since there is a difference between what participants say and what they do. In other words, observations reveal what people do (Coles & McGrath, 2010).

There are two kinds of observations; participative and non-participative. Since this present research used the participatory action research where the researcher became part of the research itself, it used the participant observation where the researcher collected data as well as engaged in the normal activities (Coles & McGrath, 2010).

In the present research, the observation was conducted to get data on how students engaged in learning English while implementing the gamification. The instruments used were field notes and recorded videos. Writing the field notes became the main way of recording data in the observation (Dawson, 2013) in several ways based on a motivational conceptualization of engagement and disaffection in the classroom; academic, behavior, cognitive, and affective orientation (Skinner & Pitzer, 2012). In the field note, there was some information targeted which were the descriptions to record the description of the student and reflections to record personal thoughts that the researcher had based on the broad themes (see Table 3.1).

Table 3. 1 Field note

Field note #1		
Date:		
Time:		
Location:		
Indicators	Descriptive Note	Reflective Note
Academic engagement: <ul style="list-style-type: none"> ○ student attentiveness ○ completing in-class and homework assignments 		
Behavioural engagement: <ul style="list-style-type: none"> ○ social and antisocial behaviours ○ inattentive behaviours ○ respect class rules 		
Cognitive engagement: <ul style="list-style-type: none"> ○ answering the questions ○ questioning of content 		
Affective/emotional engagement: <ul style="list-style-type: none"> ○ positive relationships with teachers and classmates 		

Besides that, observational data was recorded via video to review activities that occurred during class in case the researcher missed several things in the classroom. As stated by Bailey (1994) observational data can be useful for recording non-verbal behavior.

As based on Creswell (2012), the process of observing was started by selecting a site to be observed and looking around to understand the central phenomenon and get a general sense of the site, identifying the participants and setting the schedule, conducting multiple observations over time to obtain the best understanding of the site and the individuals, and designing some means for recording notes during an observation.

3.3.2 Interview

To give a more complete description of the issue and improve the accuracy of the data collected, conducting observation is not enough as the method of triangulation. Furthermore, interviews provide a depth of information that is suitable to find people's views on an issue and explore people's attitudes or beliefs in depth (Coles & McGrath, 2010). In this present research, the researcher conducted interviews with different individuals which were students and the English teacher.

From several types of interviews existed, this research used semi-structured interviews which use open-ended questions. It allows the students to express their perceptions on the topic (Coles & McGrath, 2010). In addition, the researcher used the one-on-one interview. It is a data collection process in which the researcher asked questions as well as recorded the answers of only one participant in the research at a time. Despite of quite consuming, it made each interviewee freely express their answers.

Interviews were conducted to collect perceptions and evidence of student engagement in 10 purposive samplings based on the level of engagement of students as well as to collect more information from their English teacher. The level of student engagement will be seen from the results of observations that have been made previously, namely engaged and disengaged students. However, the researcher also found those who were not fully engaged and not engaged but at a moderate level. From these observations, the researcher found 4 students who showed the most engagement, 3 students who were at a moderate level where they were not fully engaged or disengaged in learning English, and 3 students who showed the least engagement in learning English,

3.3 Data Analysis

Analyzing qualitative data for both observation and interview data collection has the same principles, processes, and procedures (Coles & McGrath, 2010) which is analyzed with the help of a coding system. It was utilized since it refers to deep interpretation and analysis of the data's meanings (Miles, Huberman, & Saldaña, 2014).

In this research, observational data were documented through field notes. Since the researcher became part of the research itself in this participatory action research, the observational data were also supported by recording videos. It was utilized to detect real situations in the classroom that were not previously noticed by the researcher in the classroom. Since the recorded video was a part of the field notes, the videos were analyzed through a coding system along with the field notes.

Subsequently, to analyze the data, the present research adopted the qualitative process of data analysis by Creswell (2012). It started with collecting the data such as field notes and interview transcripts, preparing data for analysis,

reading through data to obtain a general sense of material, coding the data by locating text segments and assigning a code label to them (see Table 3.2), and lastly coding the text for description and themes to be presented in the findings section (see Table 3.3) supported by some evidence to further strengthen the results.

Table 3. 2 Coding the data of observation and interview

Observation					
Indicators		S1	S2	(S3-S10)	Conclusion
Academic engagement	student attentiveness				
	completing tasks				
Behavioral engagement	Disruptive behavior				
	Response to class rules				
Cognitive engagement	Answering questions				
	Questioning of contents				
Affective engagement	Mutual relationship with teachers and peers				

Interview						
Indicators		S1	S2	(S3-S10)	teacher	Conclusion
Academic engagement	student attentiveness					
	completing tasks					
Behavioral engagement	Disruptive behavior					
	Response to class rules					
Cognitive engagement	Answering questions					
	Questioning of contents					
Affective engagement	Mutual relationship with teachers and peers					
Students' interest						
Perception of utility						
Perception of difficulty						

Table 3. 3 Coding the data for description and themes

Indicators		Observation	Interview	Conclusion
Academic engagement	student attentiveness	(the conclusion of the coding table)		
	completing tasks			
Behavioral engagement	Disruptive behavior			
	Response to class rules			
Cognitive engagement	Answering questions			
	Questioning of contents			
Affective engagement	Mutual relationship with teachers and peers			
Students' interest				
Perception of utility				
Perception of difficulty				