#### CHAPTER III

#### RESEARCH METHOD

## 3.1 Research Design

This study used the mixed method (mix method) which was the quantitative and qualitative methods the types of data in this study are primary data. The data source used in this study was the result. Questionnaire of grade 12 science and social studied students at SMA Muhammadiyah 1 Malang as users of the Quizizz. The questionnaire used close-ended questions and the interview used open-ended questions. Data collection uses a qualitative method as we know the way the data is collected, namely using opinions from others or the perspective of the intended source. Using this method could make getting a broader answer different from the quantitative method which relies on data and must be concrete.

The quantitative method involved collecting facts and figures of these two things that couldn't be separated because this method must be valid based on the data that had been made. The way to collect the data could be through the question of yes or no to the source then how many people did this and did not, after everything is gathered data was formed that could later be tested for truth.

## 3.2 The Research Subjects

The subjects of this study were the students majoring in social (sixteen students) and science (fourteen students) in the 12th grade of senior high school. The reason the researcher chose grade 12 students to get more data was so that they knew what problems were being experienced by students and then thought about the possibility of solving the problem.

#### 3.3 Data Collection

The researcher chose two instruments for collecting all the data, namely: This study used the mixed method (mix method) which was the quantitative and qualitative methods. (Sugiyono, 2017).

## 3.3.1 Questionnaires

This research used a mixed method, namely the quantitative and qualitative methods (Sugiyono, 2017). Use the questionnaire as a tool to collect data containing a statement for the respondent to answer. Then the resulting answer from each respondent would be recorded and then made in a grouping that had been adjusted.

The results of the questionnaire were analyzed statistically descriptively by looking at the values of the (mean) of each indicator to determine the perception students had problems using the Quizizz application in the Muhammadiyah 1 Malang. Using close-ended made it easier for the researcher to collect data by separating the answers given by the resource person and in such a way could make me understand how beneficial is it the use of this Quizizz application was in learning activities.

There were several indicators analyzed in this study to find advantages using the Quizizz in the eyes of Muhammadiyah 1 Malang grade 12th students. The indicators is easy indicators, material mastery indicators, satisfaction indicators, motivation indicators, and liveliness indicators. According to Ni Wayan (2021), there were five aspects in collecting data in the questionnaires section, these five aspects were made to make it easier for researchers to collect data.

# 1. Easy Indicators

Easy indicators explain how students feel while using the Quizizz app whether it feels easy and fun during learning activities.

- 1) Is the Quizizz app easy to use in learning?
- 2) Does the Quizizz app feel fun in teaching?
- 3) Is using the Quizizz application effective when learning?

## 2. Material mastery indicators

Indicators of material mastery as long as students use this quizziz can help them understand the material provided by the teacher.

- 1) Does Quizizz help to recall the material that has been given?
- 2) Does Quizizz improve understanding of the material being studied?

### 3. Satisfaction indicators

Satisfaction indicators explained how the feel of students using Quizizz for learning media.

- 1) Do you feel challenged while using the quiz application to get better grades?
- 2) Does a quiz make learning boring?
- 3) Can Quizizz reduce the worry of studying?

# 4. Indicators of Motivation

Motivation indicators explain whether students feel motivated in learning during the use of Quizizz, motivated to get better grades.

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- 1) Does quizizz increase morale in teaching?
- 2) Does quizizz increase motivation to learn?
- 3) Are you motivated to get the highest rankings and scores while using Quizizz?

### 5. Liveliness indicator

The last indicator is activeness that focuses on students' perceptions of whether they become more active in the classroom.

- 1) Does Quizizz make you more active learners?
- 2) Does taking Quizizz make me study before doing the questions?

#### 3.3.2 Interview

Interviews were also an instrument of data collection with qualitative methods chosen by researchers. An interview served as a means of verifying or validating information that had been previously gathered (Moha, 2015). That is, an interview was conducted to confirm the veracity of the information or find out information, to get valid data to help a study. Based on

this method I used using the mixed method for quantitative methods using questions with closed questions. The qualitative method, used interviews with open-ended questions, on open-ended question instruments, data were analyzed using the method of interview. The results of this study were delivered by formal and informal presentation methods.

This research referred to the perspective of students on the advantages of using the Quizzes application in teaching activities in Grade 12 Class science and social students, then this interview instrument was By conducting an interview, Researchers would find it easier to get information related to the effectiveness of using applications in teaching activities. Several questions were asked of students related to the advantages of using the Quizizz in learning activities.

In the interview several questions would be given to students, the number of questions that would be given questions and among them. I would select several students to later be given questions that I had prepared and students were asked to give answers directly.

# 3.3.3 Procedures for collecting data

After the researcher collected the data, the researcher analyze with the following steps:

- 1. Formulating the questionnaire
- 2. Distributing questionnaires that have been created using a Google Form and then shared via WhatsApp Classman Representative
- 3. Conducting interview sessions with several subjects who have filled out questionnaires
- 4. Transcribing the interview.

## 3.4 Data Analysis

After the data was collected, then the next steps were carried out as follows:

- 1. Identifying students' perceptions of the advantages of using the Quizizz.
- 2. Analyzing the responses given by the subjects through questionnaires.

- 3. Analyzing the results of the interviews.
- 4. Drawing conclusions.

