

Chapter Three

Methodology

This chapter discusses the methodology used to conduct the study about students' challenges in making video project and their strategies to overcome those challenges. This contains the design of the research, research setting, research population and sample, instruments of the study, technique of data collection, and analysis of data.

Research Design

The researcher used quantitative research to conduct the study since the purpose of this research was to describe the trends or tendencies of EED of UMY students toward the challenges and strategies in making video project. A quantitative research according to Creswell (2012) is a research design where the researcher seeks to describe trends by asking specific and narrow questions to get observable data on variables using an instrument to calculate the variables, and then the data are analyzed using mathematical measures called statistics. In the researcher's point of view, quantitative research design was the most suitable design for this research as it could be used to investigate a large group of people's attitudes or opinions toward one topic by using an instrument consisting of specific questions. The result of quantitative research design was used to inform a large group of people's views and the diversity of their views toward one topic. This was suitable for this research, for this research aimed in informing EED of

UMY students' views or opinion and their diversity of their opinions toward their challenges in making video project, and also their strategies to overcome those challenges.

The researcher employed a survey research. Based on Creswell (2012), a survey research is a procedure in quantitative research, in which the researcher does a survey to numbers of people or to all population to find out the attitudes, opinions, or characteristics of the population. Survey research was suitable for this study as it could describe a large group of students' opinions about making video project assignment. Moreover, the researcher employed a cross-sectional survey design in this study. Based on Creswell (2012), "in a cross-sectional survey design, the researcher collects data at one point in time" (p.377). The researcher chose a cross-sectional survey because it was suitable with this research. This research was to examine current attitudes of video making project. Moreover, the researcher did this study to get the information about the EED of UMY students' current attitudes or beliefs about the challenges and strategies of making video project.

Research Setting

This research was conducted at English Education Department of Universitas Muhammadiyah Yogyakarta (EED of UMY). The main reason of the researcher for choosing this place is that English Education Department is one of majors in UMY which employ video project as an assignment for the students. Moreover, EED of UMY is a major which regularly use video project as an

assignment for the students. There are some courses at EED of UMY which use video project as an assignment, such as Listening and Speaking for Formal Setting, Capita Selecta on Grammar, ICT, and Teaching English as Foreign Language. The EED of UMY was the best place to obtain the opinions about video project from respondents, which were students at EED of UMY, because the students had experienced many kinds of video project.

This research was conducted in two months, starting from March 1st, 2017. The first up to third week were used to distribute the questionnaires to the students. The fourth week of March, 2017 until the last week of April, 2017 was used to analyze and report the data obtained.

Research Population and Sample

The first important aspect of doing a research is deciding the population. According to Creswell (2012), a population is a group of people who have same characteristic that differentiate them from other groups. In this study, the populations were all students at EED of UMY. The numbers of all students at EED of UMY were 569 students with 160 students of batch 2013, 153 students of batch 2014, 124 students of batch 2015, and 132 students of batch 2016.

The researcher narrowed the study into a smaller population, which was a target population. Creswell (2012) described target population or called as sampling as a list of individuals in a population that researcher can reach. The target populations of this study were students at EED of UMY batch 2015. The researcher chose students of batch 2015 because they had more experience in

making video project compared to batch 2014 and 2016 students. Although batch 2014 students were more senior than batch 2015 students, they had made only 1 video project, while batch 2015 students had experienced making 3 video project assignments.

Students of batch 2015 had enough experience to answer questions in the questionnaire, as they had passed courses which required them to create various kinds of video project. They also had experienced the challenges in its making process. To this, they exactly had strategies to overcome and made it successful. Their knowledge enriched the data of this research as they had experienced more challenges and also strategies in making video project. It was easier for both the researcher and respondents to prove whether or not the challenges and strategies mentioned in the questionnaire were experienced by them.

Batch 2015 consisted of 4 classes with total number of 124 students. However, when the researcher did this research, the numbers of batch 2015 students who did key-in in the fourth semester were 119 students. The 119 students were the students who are accessible and easy to locate. Hence, the total numbers of batch 2015 students which were studied changed into 119 students.

The researcher used total target sampling in this study. Creswell (2012) explained that sample consists of individuals who are going to be studied. The researcher studied all students of EED of UMY batch 2015. The total numbers of batch 2015 students who did key-in in the fourth semester were 119 students. The researcher chose the total sampling because the researcher wanted to get rich data for the research.

Instruments of the Study

There are two research questions or objectives in this study. The first objective is to find out the challenges faced by EED of UMY students in making video project. The second objective is to know the strategies which are used by the students to overcome the challenges in making video project. To get data for the first research question, the researcher used questionnaires with five-point scales starting from “strongly disagree” until “strongly agree”. The second research question was answered by obtaining questionnaire with five-point scales starting from “never” until “always” to know whether or not the students employ the strategies and how often did they use the strategies. All of the statements in the questionnaire were adapted from experts’ statements. Questionnaire, as described by Creswell (2012), is a form which is used in a survey research design in which respondents fill in and return it to the researcher.

There were 31 questions employed in this study consisting of 2 different topics: 16 questions are about students’ challenges in making video project, while 15 questions are about students’ strategies in overcoming the challenges. All the statements in the questionnaire were derived from experts’ opinions in journals and books. There was one extra question for each questionnaire in a form of open-ended question. The respondents were allowed to give short answer to state the challenges or strategies which were not mentioned in the questionnaires. The questionnaire was in *Bahasa Indonesia* because the respondents understood easier when they were asked in their mother tongue language.

Table 3.1: Scale of challenges faced by the EED of UMY students in video making project

No.	Scale	Score
1	<i>Sangat tidak setuju</i> /Strongly disagree	1
2	<i>Tidak setuju</i> /Disagree	2
3	<i>Netral</i> /Neutral	3
4	<i>Setuju</i> /Agree	4
5	<i>Sangat setuju</i> /Strongly agree	5

Table 3.2: Scale of strategies used by the EED of UMY students in overcoming the challenges of video making project

No.	Scale	Score
1	<i>Tidak pernah</i> /Never	1
2	<i>Jarang</i> /Rarely	2
3	<i>Kadang-kadang</i> /Sometimes	3
4	<i>Sering</i> /Often	4
5	<i>Selalu</i> /Always	5

Technique of Data Collection

This research employed a cross-sectional research as the design for this study. Specifically, this research used the cross-sectional survey by distributing questionnaires. The researcher distributed the questionnaires to the sample of this study who were the 119 students of batch 2015 at EED of UMY. The students of batch 2015 were asked to answer several questions in the questionnaire. At first, the researcher planned to distribute printed-out questionnaires to the students directly. However, considering the access to the respondents, the researcher decided to use online questionnaires. The link of the online questionnaire is <https://goo.gl/forms/LDtadxLAFOhNpAfN2>. The online questionnaires were made using Google Form and were distributed by sharing the link via LINE application. The researcher joined the LINE groups of batch 2015 students then shared the link. Besides, the researcher also shared the link using personal chat to

the respondents. It took two weeks for the researcher to gather the data of the questionnaires from the respondents.

Analysis of Data

After distributing the questionnaires to the students, the researcher gathered the data. The data of the online questionnaire was automatically saved to Microsoft Excel format. The Microsoft Excel presented the amounts of students choosing different answers. The further step after getting the data was analyzing it through SPSS. The first step was checking the validity of each statement in the questionnaire. It was an essential step in analyzing the data because the researcher needed to know which question items could be used and which questions could not be used for the next stage. According to Cohen, Manion, and Morrison (2011), analyzing the validity of the data is important because if a part of a study is not valid then it is useless.

Instrument Testing. The instruments of the study were tested through two stages. In the first stage, the validity of question items was tested. After that, the valid questions were tested through reliability test. The explanation of the validity and reliability test is described below.

Validity. The validity of the questionnaires was checked through several steps. The first step mentioned by Cohen, Manion, and Morrison (2011) was by checking its face validity. This was done by the researcher herself and 3 EED of UMY students. This aimed to ensure that the questionnaire was clear and well-structured to ease the respondents in filling the questionnaire. The process was

started by the researcher ordering the questions in an easy-to-read arrangement. To check whether or not the arrangement of the questions were understandable, the researcher asked 3 EED of UMY students to check its readability. Furthermore, they were asked to read the questionnaire and give opinion whether the statements were understandable or not. After finished reading the questionnaire, they gave feedback related to the questionnaire. All of them stated that the questionnaire was understandable, well-structured, and they did not have any difficulties to understand the questions in the questionnaire.

Moreover, the researcher did the next step of validity test. According to Cohen, Manion, and Morrison (2011) this was labeled as content validity. The content validity was done by doing expert judgment. The process was started by choosing 3 experts to give opinion and judge the questionnaire. Regarding to the researcher's accessibility to reach the experts, the researcher chose 3 teachers at EED of UMY to do the expert judgment. First, the researcher texted and asked the teacher one by one whether or not they were able to do the expert judgment. It turned out that all of the 3 teachers agreed and had willingness to help. After that, the researcher met the teachers and gave the questionnaire draft. The researcher asked them to give score ranged from 1 to 4 of its relevance with the title of the research. All 3 teachers finished reading and scoring the questionnaire in 1 to 7 days. After that, the researcher got a lot of useful feedback from all experts and did revision according to their feedback. The revised version of the questionnaire was then distributed to 15 EED of UMY students as a piloting test. The result of validity test to the experts is described in the table below.

Table 3.3: Validity for the questionnaire of the EED of UMY students' challenges in making video project

Q Item	Rater 1	Rater 2	Rater 3	s1	s2	s3	$\sum s$	V	Validity
Q 1	4	2	4	3	1	3	7	0.78	Moderate
Q 2	4	4	4	3	3	3	9	1.00	High
Q 3	4	4	4	3	3	3	9	1.00	High
Q 4	4	4	4	3	3	3	9	1.00	High
Q 5	4	4	4	3	3	3	9	1.00	High
Q 6	4	4	4	3	3	3	9	1.00	High
Q 7	4	2	4	3	1	3	7	0.78	Moderate
Q 8	4	4	3	3	3	2	8	0.89	High
Q 9	4	4	4	3	3	3	9	1.00	High
Q 10	4	4	4	3	3	3	9	1.00	High
Q 11	4	4	1	3	3	0	6	0.67	Moderate
Q 12	4	4	4	3	3	3	9	1.00	High
Q 13	4	3	4	3	2	3	8	0.89	High
Q 14	4	4	4	3	3	3	9	1.00	High
Q 15	4	3	4	3	2	3	8	0.89	High
Q 16	4	2	4	3	1	3	7	0.78	Moderate

According to the table, the validity scores of all items were from 0.67 up to 1.00. As stated by Retnawati (2016), to be called as valid questions, the score of every item has to be 0.4 to 0.8. As seen from the table, all question items were valid because they scored more than 0.4. Thus, all question items in the challenges of making video project can be used.

Table 3.4: Validity for the questionnaire of the EED of UMY students' strategies to overcome the challenges in making video project

Q Item	Rater 1	Rater 2	Rater 3	s1	s2	s3	$\sum s$	V	Validity
Q 1	4	4	4	3	3	3	9	1.00	High
Q 2	4	4	4	3	3	3	9	1.00	High
Q 3	4	4	4	3	3	3	9	1.00	High
Q 4	4	4	4	3	3	3	9	1.00	High
Q 5	4	2	3	3	1	2	6	0.67	Moderate
Q 6	4	4	4	3	3	3	9	1.00	High
Q 7	4	4	4	3	3	3	9	1.00	High
Q 8	4	3	4	3	2	3	8	0.89	High
Q 9	4	4	4	3	3	3	9	1.00	High
Q 10	4	3	4	3	2	3	8	0.89	High
Q 11	4	4	4	3	3	3	9	1.00	High

Q Item	Rater 1	Rater 2	Rater 3	s1	s2	s3	Σs	V	Validity
Q 12	4	2	4	3	1	3	7	0.78	Moderate
Q 13	4	3	4	3	2	3	8	0.89	High
Q 14	4	3	4	3	2	3	8	0.89	High
Q 15	4	2	4	3	1	3	7	0.78	Moderate

The validity scores for the strategies of making video project ranged from 0.67 up to 1.00. According to Retnawati (2016), the score of the validity has to be 0.4 to 0.8 to be inferred as valid questions. The table showed that all question items passed the requirement and can be inferred as valid question items. Hence, all questions can be used and none was omitted.

In conclusion, all items in the variable of challenges in making video project were valid. The total questions of this category became 16 items. Moreover, all items in the variable of strategies to overcome the challenges in making video project were also valid. The total questions of this category became 15 items. Thus, all question items of each variable can be used. The total numbers became 31 questions.

Reliability. The reliability of the valid question items was checked through SPSS application. According to Cohen, Manion, and Morrison (2011), “Cronbach’s Alpha of the questionnaire must be 0.70 or higher to be reliable” (p.640). This means that the items of the questionnaire of this study must score 0.70 or higher to be called as reliable question items. The reliability scale is shown in the table below.

Table 3.5: Reliability scale

> 0.90	Very highly reliable
0.80-0.90	Highly reliable
0.70-0.79	Reliable
0.60-0.69	Minimally reliable
< 0.60	Unacceptably low reliability

The result of the reliability test showed that the questionnaire items for the challenges and strategies in making video project were reliable. The Cronbach's Alpha score for the questionnaire of EED of UMY students' challenges in making video project was 0.820, and the questionnaire of EED of UMY students' strategies to overcome the challenges in making video project scored 0.793. These scores had passed the requirements for the question items to be inferred as reliable questions. The result of the reliability test is showed in the table below.

Table 3.6: Reliability result of the questionnaires

Questionnaire	Cronbach's Alpha	Interpretation
The EED of UMY students' challenges in making video project	0.820	Highly reliable
The EED of UMY students' strategies to overcome the challenges in making video project	0.793	Reliable

Data Analysis. The researcher used descriptive statistics to analyze the data. Cohen, Manion, and Morrison (2011) described descriptive statistics as a statistic that only describes and shows the data, and then researcher evaluates and infers the meaning of the description. This type of statistic was suitable with the purpose of this research which aimed to describe the challenges and strategies in making video project without making any inferences and predictions of the result. The descriptive statistic in this research was used to answer the first and second research questions, which were: "What are the EED of UMY students' challenges in making video project?" and "What are the EED of UMY students' strategies to overcome the challenges in making video project?".

The researcher analyzed the data of this research using measure of central tendencies. According to Cohen, Manion, and Morrison (2011), “the central tendency of a set of scores is the way in which they tend to cluster round the middle of a set of scores, or where the majority of scores are located” (p.627). The researcher chose measure of central tendency because the researcher wanted to see distribution and pattern of the data. To describe the data, the researcher looked at the mean score of each category. The researcher knew the mean score of each question item of the challenges and the strategies by 119 batch 2015 EED of UMY students in making video project. Furthermore, the researcher made mean criteria to know the frequency of facing the challenges and the frequency of using the strategies. The mean criteria were described in the table below.

Table 3.7: Mean criteria for questionnaire of the EED of UMY students’ challenges in making video project

Mean Score	Criteria
1 - 2	Never-faced challenge
2.01 - 3	Rarely-faced challenge
3.01 - 4	Moderately-faced challenge
4.01 - 5	Frequently-faced challenge

Table 3.8: Mean criteria for questionnaire of the EED of UMY students’ strategies to overcome the challenges in making video project

Mean Score	Criteria
1 - 2	Never-used strategies
2.01 - 3	Rarely-used strategies
3.01 - 4	Moderately-used strategies
4.01 - 5	Frequently-used strategies