

CHAPTER III

RESEARCH METHOD

This chapter serves detailed explanations of the research design, population and sampling, research instrument, data collection method, and data analysis method.

A. Research Design

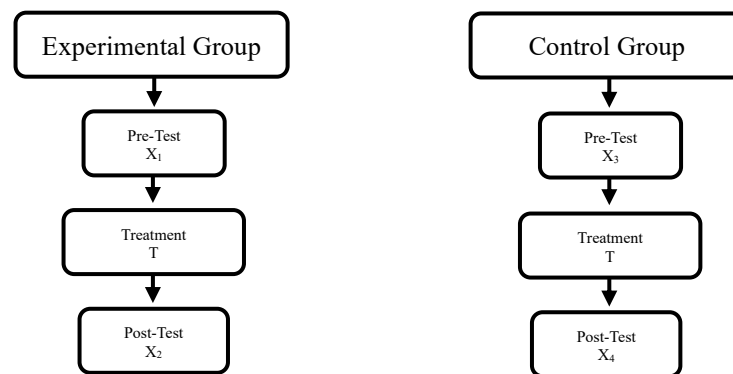
According to Creswell (2009), research design is a strategy for doing research. The research design contains a series of procedures to conduct research. Quantitative research design is employed by the researcher in this research. According to Bryman (2016 as cited in Ghanad, 2023), quantitative is used to measure and explain findings from various kinds of perspectives. The findings will be presented in the statistical data, which is it means that the data will be numerical rather than descriptive data. Quantitative research design has some designs, but the researcher uses experimental research design. According to Ghanad (2023), an experimental design aims to find out relationships between independent and dependent variables. So, it is in line with the researcher's research objective, namely "investigating the effectiveness of the animated video from the English Fairy Tales YouTube Channel on the students' narrative writing skills".

Furthermore, an experimental research design also has some types, namely a pre-experimental, a quasi-experimental, and a true-experimental. But the appropriate type to study this research is the quasi-experimental design. According to Rasyid (2022), quasi-experimental design is a research design that using the existing group as the subject, or nonrandomized assignment. Quasi-experimental

design consists of an experimental group and a control group. It is also supported by Creswell (2009), who stated that in the quasi-experimental design, the researcher needs two groups: the control group and the experimental group.

The experimental group will be treated using special treatment, namely animated videos from the English Fairy Tales YouTube channel, and the control group will not be treated using animated videos, instead using picture series.

Diagram 3.1: Procedures of Experimental and Control Research Design



Notes:

- X₁ : Pre-Test of Experimental Group
- X₂ : Post-Test of Experimental Group
- X₃ : Pre-Test of Control Group
- X₄ : Post-Test of Control Group
- T : Treatment

Based on Diagram 3.1, Creswell & Cresswell (2018) stated that research procedures for the experimental group cover a pre-test, a special treatment, and a post-test. Moreover, they also explained that procedures for the control group are almost same. But the difference is located in the kind of special treatment given.

B. Population and Sample

According to Ary et al. (2010), population is all parts of the subject research, either in the form of events, people, or objects. The researcher chooses the tenth-grade students at SMK Pawyatan Daha 1 as the subject of the research because narrative text is a material taught in senior high school students, primarily the tenth-grade students. The sample is a smaller population group, called observed subjects. The samples used in this research are two classes of the tenth-grade students at SMK Pawyatan Daha 1, namely Pemasaran 1 class and Pemasaran 2 class. The number of students in the Pemasaran 1 class is 28, and the number of students in the Pemasaran 2 class is 27. Thus, the total number of samples is 55. The Pemasaran 1 class is the experimental group, and the Pemasaran 2 class is the control group.

C. Research Instrument

According to Creswell & Guetterman (2019), instrument is a medium to observe, measure, or document the data collection. The researcher uses an instrument "test." The first test is a pre-test, which is used to identify the students' skills in writing a narrative text before they are given a medium to help them write the text. And the second test is a post-test, that is used to identify the students' skills in producing a narrative text after they are given a medium to help them write the text. The tests are used to get the data by testing the students' writing skills, especially writing narrative text. Through students' writing, the researcher will get the data, namely the students' scores in writing a narrative text.

The instructions used in the pre-test and post-test for the experimental and control groups cover:

1. Instruction of pre-test for the experimental group:

Please write a narrative text with the theme “Fairy Tales” based on your own creativity, with a minimum of 75 words for the orientation, 125 words for the complication, and 75 words for the resolution. The duration is 60 minutes.

2. Instruction of pre-test for the control group:

Please write a narrative text with the theme “Fable” based on your own creativity, with a minimum of 75 words for the orientation, 125 words for the complication, and 75 words for the resolution. The duration is 60 minutes

3. Instruction of post-test for the experimental group:

Please write a narrative text with the theme “Fairy Tales” based on the video’s title that you have gotten in the folded paper, with a minimum of 75 words for the orientation, 125 words for the complication, and 75 words for the resolution. The duration is 60 minutes.

4. Instruction of post-test for the control group:

Please write a narrative text with the theme “Fable” based on the picture series on the instrument sheet, with a minimum of 75 words for the orientation, 125 words for the complication, and 75 words for the resolution. The duration is 60 minutes.

D. Data Collection Method

The researcher collects the data by using an instrument “test”, which covers a pre-test and a post-test. The result of the test will be assessed by the researcher herself. Implementation of single rater is caused by the practical limitations, namely, the time. Involving more than one rater will require extra time for coordination and training. Even if it is limited to only one rater, the quality of the assessment is still maintained by using a clear and structured scoring rubric, which will guide the researcher to score the students’ writing without being subjective. The following are detailed procedures for collecting data in the experimental class and the control class:

1. Experimental Group

a. Pre-Test

Pre-test is conducted to know the students’ early skills in writing narrative text. Before they are asked to write narrative text, the researcher explains the material about narrative text by showing a PPT. The more detailed processes in pre-test cover:

- (1) The researcher opens the class, greeting the students, and giving a simple ice breaking
- (2) The researcher gives material about narrative text and fairy tales by showing PPT to the students
- (3) The researcher makes sure the students have understood the material by asking for their review
- (4) The researcher instructs students to write a narrative text about a fairy tale in English

(5) The researcher asks the students to collect their writing

(6) The researcher says thanks to the students, and then closes the class

b. Treatment

Treatment is conducted to give a medium to ease the students writing. Treatment is given then the students are helped to write narrative text easier and better. The researcher gives treatment in the second meeting after the pre-test day. The steps of treatment cover:

(1) Treatment I (Pre-Writing)

(a) The researcher starts the class by greeting the students.

(b) The researcher introduces the students to the English Fairy Tales YouTube channel

(c) The researcher explains the function of the video in their learning activity

(d) The researcher shows an animated video from English Fairy Tales to stimulate the students' ideas, entitled The Enchanted Horse

(e) The researcher translates and delivers the meaning of the content in the video

(f) The researcher invites the students to mention the contents from the video using the students' own words

(g) The researcher asks the students to write the main points discussed together on their book

(h) The researcher says thanks to the students and then closes the class

(2) Treatment II (Drafting)

- (a) The researcher begins the class and greets the students
- (b) The researcher invites the students to recall their memories about the content of the previous video
- (c) The researcher distributes a drafting paper to each student
- (d) The researcher instructs the students to write a narrative text based on the main points that have been written on their book
- (e) The researcher commands the students to collect their writing
- (f) The researcher says thanks the students and then closes the class

(3) Treatment III (Revising)

- (a) The researcher starts the class and greets the students
- (b) The researcher distributes the students' writing
- (c) The researcher guides the students to revise the content of their writing by giving some questions, such as “Have you understood the content of your writing?” “Have you written the orientation, complication, evaluation, resolution, and the coda?”
- (d) The researcher asks the students to revise language characteristics of the text, such as “Have you written using the simple past tense?” “Have you written using the correct punctuation?” “Have you written using the correct capital letter?” “Have your words been written correctly?”

(e) The researcher commands the students to collect their final writing

(f) The researcher says thanks to the students and then closes the class

c. Post-Test

Post-test is held to collect data after the students are given treatment.

Post-test is carried out in the fifth meeting. The steps of the post-test cover:

(1) The researcher opens the class and greets the students

(2) The researcher invites the students to review the material of the narrative text and how to write the narrative text as discussed in the last treatment day

(3) The researcher allows the students to take a small folded paper that has a different title of an animated video inside

(4) The researcher asks the students to wear the headphones, then watch and understand the content of their animated video carefully

(5) The researcher distributes a post-test paper to the students

(6) The researcher tells the students to write a narrative text based on the content in the video

(7) The researcher asks the students to collect their writing

(8) The researcher says thanks to the students, and then closes the class

2. Control Group

a. Pre-Test

Pre-test in the control group is also conducted to know the students' early skills in writing narrative text. The following are the steps to do the pre-test:

- (1) The researcher opens the class and greets the students
- (2) The researcher gives material about narrative text and fable by showing a PPT to the students
- (3) The researcher makes sure the students have understood the material by asking for their review
- (4) The researcher asks the students to write a narrative text about a fable in English
- (5) The researcher invites the students to collect their writing
- (6) The researcher says thanks to the students and then closes the class

b. Treatment

The treatment in the control group is different from the treatment given in the experimental group. The experimental group is treated with an animated video, while the control group uses a picture series. The following are the steps to do the treatment in the control group:

- (1) Treatment I (Pre-Writing)
 - (a) The researcher opens the class and greets the students
 - (b) The researcher shows and introduces a picture series to the students

- (c) The researcher explains the function of the picture series in their learning activity
- (d) The researcher distributes a paper of a picture series to the students
- (e) The researcher asks the students to write any ideas that appear based on the picture series under each picture
- (f) The researcher asks the students to review their writing, make sure that their writing is appropriate to the content of the picture series
- (g) The researcher asks the students to collect their picture series paper
- (h) The researcher says thanks to the students and then closes the class

(2) Treatment II (Drafting)

- (a) The researcher opens the class and greets the students
- (b) The researcher distributes the students' picture series paper and drafting paper
- (c) The researcher asks the students to write a narrative text based on the ideas of their picture series
- (d) The researcher asks the students to collect their writing and picture series paper
- (e) The researcher says thanks to the students and then closes the class

(3) Treatment III (Revising)

- (a) The researcher opens the class and greets the students
- (b) The researcher distributes the students' writing
- (c) The researcher guides the students to revise the content of their writing by giving some questions, such as "Have you understood the content of your writing?" "Have you written the orientation, complication, evaluation, resolution, and the coda?"
- (d) The researcher asks the students to revise the language features of text, such as "Have you written using simple past tense?" "Have you written using the correct punctuation?" "Have you written using the correct capital letter?" "Have your words spelling been written correctly?"
- (e) The researcher asks the students to collect their final writing
- (f) The researcher says thanks to the students and then closes the class

c. Post-test

Post-test in the control group is also conducted to collect data after the students are given treatment. The following are the steps to do the post-test:

- (1) The researcher opens the class and greets the students
- (2) The researcher asks the students to review the material of the narrative text and how to write the narrative text as discussed in the last treatment day

- (3) The researcher distributes the post-test paper that also contain the picture series
- (4) The researcher asks the students to write narrative text based on the served-picture series
- (5) The researcher asks the students to collect their writing
- (6) The researcher says thanks to the students, and then closes the class

E. Data Analysis Method

According to Creswell (2012) quantitative data analysis method contains steps to transform the data from the instrument into a final result used to answer the research question. Furthermore, he states the steps for analyzing the data, first preparing the numeric data itself, second analyzing data using descriptive and inferential statistics in a statistics system, and third stating the interpretation of the system's results.

1. Preparing The Numeric Data

Preparing data is crucial to make sure that all the needed data is already collected and no data is missed. Analyzing data using descriptive statistics is needed to provide general information about the relevant numerical data, such as the mean, standard deviation, and range of scores. While, inferential statistics is needed to test the hypothesis and draw a conclusion from the data in the descriptive statistics.

The following are more detailed explanations of how the researcher prepares the data:

a. Formulating The Scoring Rubric

Scoring rubric is used as reference in evaluating the students' writing. There are some elements that should be evaluated in a writing, every element has indicators as the main base of consideration. The indicators of every element are developed by the researcher and have been approved by the English expert, namely an English teacher of SMK Pawyatan Daha 1 Kediri.

Table 3.1: Scoring Rubric

Element	Indicator	Score	Quality
Content	The student states the idea and supporting idea clearly, coherently, and appropriately to the instruction.	16-20	Excellent
	The student states the idea and supporting idea clearly and coherently but briefer than the instruction	11-15	Good
	The student states the idea and supporting idea as less clear/less appropriate to the topic, and briefer than the instruction	6-10	Fair
	The student states the idea and supporting idea unclearly/incoherently, and inappropriately to the instruction	0-5	Poor
Organization	The students insert all structures of the text clearly	16-20	Excellent
	The students insert all structures of the text less clearly	11-15	Good
	The students do not insert the structures of the text completely, but the content of each structure is clear	6-10	Fair
	The students do not insert the structures of the text completely, and the content of each structure is not clear	0-5	Poor
Vocabulary	The student chooses the appropriate words with the correct spelling	16-20	Excellent
	The student chooses the appropriate words with a few spelling mistakes	11-15	Good
	The student chooses less appropriate words with a few spelling mistakes	6-10	Fair
	The student chooses inappropriate words with a few spelling mistakes	0-5	Poor

Grammar	The student implements the use of grammar in the appropriate way	16-20	Excellent
	The student implements the use of grammar is not entirely correct, but it can be understood	11-15	Good
	The student implements the use of grammar is not entirely correct, and it is hard to understand	6-10	Fair
	The student implements the use of grammar incorrectly	0-5	Poor
Mechanics	The student writes the punctuation and capitalization appropriately	16-20	Excellent
	The student makes 0-25% mistake in writing the punctuation and capitalization	11-15	Good
	The student makes 26-70% mistakes in writing the punctuation and capitalization	6-10	Fair
	The student makes 71-100% mistakes in writing the punctuation and capitalization	0-5	Poor

(Source: Brown, 2003)

b. Determining The Students' Writing Score

The researcher assesses the students' pre-test and post-test based on the scoring rubric to get the students' scores or data. Each student's writing, either pre-test or post-test has five scores from 5 elements, then the amount of these will be the student's final writing score, pre-test score and post-test score.

2. Analyzing Data

The researcher uses IBM SPSS Statistics as the statistic system. The following are more detailed explanations of how the researcher analyzes the descriptive statistics and inferential statistics in the IBM SPSS Statistics:

a. Descriptive statistics

The researcher calculates the score of pre-test and post-test from experimental and control group to know the mean, standard deviation, and the range of scores.

b. Inferential statistics

After calculating those scores, the researcher analyzes inferential statistics to test the hypothesis and knowing the result whether the animated video from the English Fairy Tales YouTube Channel affects the students' writing skill, or not. The criteria of the hypothesis acceptability are described below:

Table 3.2: The criteria of the Hypothesis Acceptability

If: Sig. (2-tailed) < 0.05 = H ₀ rejected If: Sig. (2-tailed) > 0.05 = H ₀ received
--

(Source: Creswell, 2011)

- (1) If the significance value (Sig. 2-tailed) is less than 0.05, the null hypothesis (H₀) is rejected and the alternative hypothesis (H₁) is received. It means that there is a significant difference between the mean scores of the experimental group and the control group, which is the animated video from the English Fairy Tales YouTube Channel affects the students' narrative writing skills.
- (2) If the significance value (Sig. 2-tailed) is more than 0.05, the null hypothesis (H₀) is received and the alternative hypothesis (H₁) is rejected. It means that there is no significant difference between the mean scores of the experimental group and the control group, which is the animated video from the English Fairy Tales YouTube Channel does not affect the students' narrative writing skills.

3. Stating The Interpretation

Stating the interpretation of the research result can be done after testing the hypothesis. It is going to explained in the next chapter.