Chapter III: Research Methodology

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RESEARCH METHODOLOGY

This chapter describes the design of research methodology applied in the research. The explanation and the chronicles are as follow: research design, population and sample of the research, research instruments, research procedures and data analysis.

3.1 Formulation of Problems

The questions of the research are stated as follows:

- Do student's writing skills in narrative text significantly improve through the use of films as the media?
- 2. What are the students' responses toward the use of films as the media in improving their writing skill?

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3.2 Research Design

3.2.1 Design

The research method in this study was quasi-experimental design. It investigated whether film could assist teacher in teaching writing narrative text. The subject of the study was two groups: one group as an experimental group which got treatments and another group was a control group. This study focused on nonequivalent control group design since control group and experiment group were not chosen randomly (Hatch and Farhady, 1982). The formula of this design is shown in table 3.1 as follows:

	6	The Experim	e 3.1 ental Design	4		
	Groups	Pretest	Treatment	Posttest		
	Experimental	T ₁ E	X	T ₂ E		
	Control	T ₁ C	-	T ₂ C		
T ₁ E = Pretest for experimental group T ₂ E = Posttest for experimental group X = Treatments						
T ₁ C	C = Pretest for control group					
T_2C	= Posttest for co	ntrol group				
		PUS	TAK	latch and Farhady, 1982)		

3.2.2 Research Variable

According to Brown (1991), a variable is defined as an observed or quantified representation of a construct that is the actual underlying characteristic or ability of

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human being. In addition, Casey and Sowell (1982) identify variable as something that takes on different values quantitatively and qualitatively in a given situation.

There were two types of variables that were used in this research. They were independent variable and dependent variable. In this research, the independent variable was films, while the dependent variable was teaching writing.

3.3 Research Population and Sample

3.3.1 Population

Population is a whole subject of the research (Arikunto, 1998). Furthermore, Casey and Sowell (1989) define population as basically a group that has one or more characteristic in common, which can vary widely in size.

Population in this research was the ninth grade students of a junior high school in Bandung which spread into ten classes. They were registered in the academic year of 2011/2012; each class had 30 students. This school was selected as the place to conduct the research because the researcher did teaching training (PLP) there.

3.3.2 Sample

In determining the research sample, the sampling used was purposive sampling. This was used primarily when there are a limited number of people that have expertise in the area being researched. The researcher also usually assumed that she could use her knowledge of the population to judge whether or not a particular sample would become representative. Hence, it was less time consuming and it was also easier to implement in school (Fraenkel and Wallen, 1990).

This study took two classes: 9F was as the experimental group and 9G was as the control group. They were chosen due to the recommendation of their English teacher that all members of the selected group have similar characteristic. Each class consisted of 30 students.

3.4 Hypothesis

The null hypothesis (H_0) and alternative hypothesis (H_a) are as follows:

 H_0 : There is no difference in writing skill of narrative text between experimental and control groups for students who received films as the media and those who did not. They belong to the same population. In other words, the use of films as the media could not assist students in improving their writing skills on narrative text.

 H_a : There is a difference in writing skill of narrative text between experimental and control groups for students who received films as the media and those who did not. They belong to the different population. In other words, the use of films as the media could assist students in improving their writing skills on narrative text. Films were likely to improve the students' writing skills on content, organization, sentence construction, and mechanic.

However, this study has been designed to test the null hypothesis (H_0) , meaning testing two-tailed hypothesis.

3.5 Clarifications of the Key Terms

- Film is a series of images that are projected into a screen to create the illusion of motion.
- Media is all aids which may be used by teachers and learners to attain certain educational objectives.
- **Teaching writing narrative text** is an instruction that enable students to acquire writing skill especially a text that is aimed to entertain, amuse, and teach a moral lesson.

3.6 **Data Collection**

Research Instrument 3.6.1

The intention of using instrument in this study was to elicit and to capture the whole relevant data. The instruments in this study were as follows:

3.6.1.1 Test

The writing composition test carried out for the purpose of this study was in the form of writing test to make a narrative text. It was employed to both groups in the first meeting of construction (pretest) and in the last meeting (posttest). Their writings were analyzed by using scoring sheet.

3.6.1.2 Interview Guides

The interview questions consisted of six questions. It was administered to investigate the students' perception towards the use of films in writing narrative text. In this study, only six students were interviewed. It was because of the limitation of time. KA

3.6.1.3 Film

Films or movies for this study were taken from the original movie disc. This study used films which were copied from the disc and edited it by using AVCWare DVD Ripper Ultimate and Windows Movie Maker software. Besides, this study also selected films which are suitable for students' age and have simple plot and language. 33 Thus, some films were chosen, such as Guliver's Travels, Despicable Me, Up, and Hachiko Dog's Story. By using those softwares, the films were also edited for the unimportant scenes which contain pornography, violence, bad words, and other things which could make the students loss their concentration. The films were shown KANIJO in the class by using Over Head Projector (infocus).

3.6.2 **Research Procedures**

3.6.2.1 Preparing the Lesson Plan

For this study, two lesson plans were designed. The first lesson plans were designed to be implemented during treatments to the experimental group. The lesson plans also were designed for four treatments. The first and the last meeting were allocated to conduct the pretest and posttest, while the rest four meetings were allocated to implement the treatments using films. The lesson plans were designed based on the National Curriculum of English for ninth grade students which consists of competence standard, basic competence, indicator, instructional objective, and lesson materials. In addition, method/technique, steps of the activity, source lesson, and the evaluation were also involved. The second lesson plans were designed for the control group.

3.6.2.2 Preparing the Material

The materials given to the experimental group were about narrative taken from Gerrot, Linda, and Peter Wignell (1994). Then, the film entitled Guliver's Travels, Despicable Me, Up, and Hachiko Dog's Story were used to the experimental group. The examples of narrative texts were also found on the internet given to the control group.

3.6.2.3 Pilot Test

Pilot test was intended to measure whether or not the instructions for the pretest were valid and reliable for the ninth grade students. It was tried out to 30 students outside the experimental and control groups. The test was in the written form which required the students to write a narrative text.

3.6.2.4 Pretest

First writing performance test or pretest was conducted to both groups as the first step of the research. This test was purposed to obtain the data of the students' basic writing skill and to ascertain that students from both groups had the same capability and the same English proficiency before they received the treatments. The test was in the written form which required the students to write a narrative text.

3.6.2.5 Treatments

The films were used as the media in teaching writing narrative text in this research. The treatments were designed for four meetings to the experimental group. In contrast, the control group was treated using conventional method. Time allocation for each meeting consisted of two hours of instruction (one hour of instruction was forty five minutes). Time schedule of the research can be seen in the table3.2:

Table 3.2

No.	Experime	ental Group	Control Group		
	Date	Material	Date	Material	
1.	November 16, 2011	Pretest	November 16, 2011	Pretest	
2.	November 17, 2011	Watch film, identify main idea and make main idea into a paragraph	November 17, 2011	Read a text and identify the main idea	
3.	November 21, 2011	Watch film, identify generic structure of film and text and make draft	November 21, 2011	Identify generic structure of text and make draft	
4.	November 23, 2011	Watch film and collaborative writing	November 23, 2011	Collaborative writing	

Time Schedule of Research

5.	November 28,	Watch film and	November 28,	Make outline
	2011	make outline	2011	and drafting
		and drafting		
6.	November 30,	Posttest	November 30,	Posttest
	2011		2011	
	0	ENDI	DIK	

Treatments process applied to the experimental group was administered by asking students to watch several films and make a narrative text based on the stories of the film given. Students could choose one of them and elaborated their own imagination to change the origin story of the film given or still want to write down the origin story of film given. The film might stimulate students to find the topic they want to write.

3.6.2.6 Posttest

The study conducted the posttest at the end of the research. It was conducted to measure the students' writing skill after the treatments. It was distributed to both experimental and control groups. This was intended to find out the differences between students' score of both groups. The posttest was almost similar to the pretest.

3.6.2.7 Interview

An interview was employed to the experimental group to investigate their responses toward the use of films and also to figure out the difficulties in conducting films in learning process mainly in teaching writing narrative text. The questions of the interview were presented in the appendix.

3.7 Data Analysis

After collecting the data by using the instruments, it was analyzed. The process of the data analysis was conducted on the pretest and posttest scores. To find out the students' improvement in writing narrative by using films after the treatments, the data from final test scores were used. The result was shown on the students' writing skill of narrative text in experimental group after treatments given.

3.7.1 Scoring Sheet for Writing Test Data Analysis

Students' pieces writing were analyzed by the scoring guide based on ESL Composition Profile (Jacobs et al., 1981). Table 3.3 below shows the grading scale.

Table 3.3

Grading Scale

Aspects of writing	Range	Score	Criteria
Content	25-22	Excellent to very good	Knowledgeable – substantive - thorough development of thesis/genre - relevant to assigned topic.
	21-18	Good to average	Some knowledge of subject - adequate range - limited development of thesis/genre - mostly relevant to topic but

			lacks detail.
	17-11	Fair to poor	Limited knowledge of subject - little substance - inadequate development of thesis/genre.
	10-5	Very poor	Does not show knowledge of subject - non substantive - not pertinent or not enough to evaluate, or no relation to assigned thesis/genre.
Organization	25-22	Excellent to very good	Organization clearly stated and supported – well- organized and very thorough development of introduction, body, and conclusion well- organized and very thorough development of supporting details.
AIND	21-18	Good to average	Somewhat choppy - main ideas stand out, but organization unclear limited development of introduction, body, and or conclusion, and/or limited development of supporting details.
	17-11	Fair to poor	Ideas confused or disconnect - lacks of logical sequencing and development of introduction, body, and/or conclusion-inadequate development of supporting details.
	10-5	Very poor	Does not communicate - no organization – or not enough to evaluate.
Sentence Construction	25-22	Excellent to very good	Effective use of simple, compound and complex sentences correctly

	21-18	Good to average	punctuated – effective use of coordinators, subordinators – few errors of verb tense, number, word order, pronouns, prepositions. Inconsistent control of simple, compound, and/or complex sentences – minor problems in the use of coordinators, subordinators, verb tense, number, word order, pronouns, prepositions but meaning seldom obscured
IVERS,	17-11	Fair to poor	Major problems in simple, compound, and/or complex sentences – frequent errors of coordinators, subordinators, verb tense, number, word order, pronouns, prepositions – meaning confused or obscured.
NJ.	10-5	Very poor	Virtually no mastery of sentence construction rules – dominated by errors – does not communicate – ot not enough to evaluate.
Mechanic	25-22	Excellent to very good	Few errors of spelling, punctuation, capitalization – includes clearly defined paragraphs and title page.
	21-18	Good to average	Occasional errors of spelling punctuation, capitalization, unclear paragraphing – no use of spell check or grammar check, but meaning not obscured
	17-11	Fair to poor	Frequent errors of spelling punctuation, capitalization,

confused or obscure	ing ed.
10-5Very poorDominated by error spelling punctuation capitalization, parage	s of 1, graphing,
handwriting eligible enough to evaluate	e – or not

3.7.2 Data Analysis on Pilot Test

Heaton (2003) states that "an appropriate test must cover three requirements such as: (1) valid, (2) reliable, and (3) practical." A test as the research instrument for collecting data, must consider those three aspects mentioned above. Regarding those requirements, before administering pretest, pilot test or try out of instrument was employed to another class with the same grade to ninth grade students outside the control and experimental groups. It was required to analyze the reliability and validity of the test. Validity referred to appropriateness, meaningfulness, and usefulness of the specific inferences a researcher makes based on the data obtained through the use of an instrument (Fraenkel and Wallen, 1990). Meanwhile, reliability referred to the consistency of scores and answers provided by an instrument (Fraenkel and Wallen, 1990). The obtained scores of the students' writing performance then were analyzed. The try out result was assessed using ESL Composition Profile (Jacobs et al., 1981) in terms of content, organization, sentence construction, and mechanic. Then, it was computed by using SPSS version 17.0.

In this study, the pilot test was carried out to 30 students of different class at the same grade of this study. Class 9H was chosen as the sample in pilot test and this test was conducted on November 9th, 2011. They were asked to write a narrative text based on the film that they have watched. The result of the pilot test is shown in the AN IS following table.

Table 3.4

Pilot Test Result

Cronbach's	
Alpha	N of Items
.930	2

Table 3.5

Reliability Interval

Interval	Category
.90 and above	Excellent reliability; at the level of the best standardized tests
.8090	Very good for a classroom test
.7080	Good for a classroom test; in the range of most. There are probably a few items which could be improved.
.6070	Somewhat low
.5060	This test needs to be supplemented by other measures (e.g., more tests) to determine grades
.50 or below	Questionable reliability

(Nunnally & Bernstein, 1994)

Since the reliability of this instrument was 0.930, the test was reliable. The reliability value was excellent. In evaluating the students' writing results (see appendix), they could practice a narrative text. Students had no obvious obstacles in conducting writing test. They understood the instructions easily. Therefore, instructions procedure of the test did not change. It can be concluded that the NIN instrument can be used as the pretest and posttest.

3.7.3 Data Analysis on Pretest

The pretest scores were statistically analyzed by using SPSS 17.0. The calculation included normality distribution, homogeneity variance, and independent ttest. The data analysis is presented in detail as follows:

3.7.3.1 Normality Distribution

Firstly, the normality distribution was analyzed. The steps in determining normality were: setting the null hypothesis, $H_0 =$ the score between experimental and control groups were normally distributed; setting level of significant at 0.05 (twotailed test); computing normality using Kolmogorov-Smirnov in SPSS 17.0; comparing score between test result and level of significant value. If Asymp.Sig > 0.05, the null hypothesis was not rejected which meant the sample score was normally distributed. In contrast, if Asymp.Sig < 0.05, the hypothesis was rejected which meant the score was not normal (Hatch and Farhady, 1982).

In this research, the result shows that the probability (Asymp.sig) of the control group is 0.082 and the experimental group is 0.183 which are higher than the level of significance (0.05). Thus the null hypothesis is not rejected because the control and the experimental group are normally distributed (see appendix).

3.7.3.2 Homogeneity Variance

Secondly, calculate homogeneity variance. Some steps in measuring data were: setting the hypothesis, H_0 = data between the two groups was homogeneous; setting the level of significant at 0.05; measuring the homogeneity variance using Levene's test formula in SPSS; comparing the result of Lavene's test and alpha level of significant. If Asymp.Sig < 0.05, the null hypothesis was rejected which meant the two groups were not equal. In contrary, if Asymp.Sig > 0.05, the null hypothesis was not rejected which meant the variance data of two groups were equal (Hatch and Farhady, 1982).

The test of homogeneity of variance shows that the probability value of the pretest is higher than the level of significance (0.661 > 0.05) which means the null hypothesis is not rejected; the data of pretest from experimental and control groups are homogeneous or equal (see appendix).

3.7.3.3 Independent t-test computation

Thirdly, determine the independent t-test. Independent t-test was used to analyze the significant differences between the pretest means score in experimental 44

and control groups. The steps in calculating independent t-test were: setting the null hypothesis which states that there is no significant difference of means between the control and experimental groups; setting the level of significance t-test 0.05 (two-tailed). If the significance value of pretest of the control and experimental group is smaller than 0.05, then H₀ is rejected. On the other side, if the significance value is larger than 0.05, then H₀ is retained (Hatch and Farhady, 1982:88); calculating t-test score using SPSS 17.0; comparing t_{obt} and t_{crit}. If t_{obt} > t_{crit}, it means that the hypothesis is not rejected, there is a significant difference between two groups. In contrary, if t_{obt} < t_{crit}, the hypothesis is rejected, there is no significant difference between the two groups (Kranzler, G. & Moursund, J., 1999).

The result of computation of independent t-test shows that the data from the experimental and control groups are equal with t_{obt} is lower than t_{crit} (0.441<2.000) The t_{crit} is 2.000 at the level of 0.05. It indicates that the null hypothesis is retained. In other words, there is no difference between means of experimental and control groups. This result implies that the experimental and control group are similar in their initial ability. It is presented in appendix.