

CHAPTER III

RESEARCH METHOD

A. Research Design

This research examines the effectiveness of podcast media on improving speaking skills at XI grade of MAS Al-Falah Padang during the 2024/2025 academic year. In this research the researcher using experimental research design.

According to Sugiyono(2015) Quantitative research methods can be defined as research methods based on the positivist ideology, in which sampling techniques are generally utilized randomly, data collecting is conducted using research instruments, and data analysis is quantitative/statistical with the goal of testing prepared hypotheses.

This research employs a quasi -experimental design with post-test only control design. The reason the researcher chosed this design is because researchers were unable to randomize classrooms, they utilized a quasi-experimental approach for this investigation. To avoid pre-test effects that may modify students' speaking abilities, a post-test-only design was used. The pre-test was not employed since speaking is an ability that is significantly impacted by practice, and administering a pre-test biases the research results.

In this design, there are two groups, each chosen at random. The first group was given treatment (X), while the second group was not. The experimental group is the one that receives treatment, whereas the control group is the one that does not. The treatment's effect is $(0^1:0^2)$. In actual

research, the effect of treatment is assessed using various tests, such as t-test statistics.

B. Population and Sample

1. Population

Sugiyono (2015) states that the phrase “population” is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by the researcher to be studied and then concluded. Class eleven students with a variety of majors, and different gender including IPA, IPS, and IPK, were used in this study at MAS AL-FALAH Padang. There are 78 pupils enrolled in the eleventh grade at MAS AL-FALAH Padang.

2. Sample

According to Sugiyono (2015) sample is represents a subset of the population's size and characteristics. The sample consisted of two existing classes; one experimental class and one control class. The researcher choosed the combined class from XI IPS and IPK male as a control class group, and the combined class from IPS and IPK female as a experimental class group. The classes differed in major and gender composition; however, both groups were at the same grade level and followed the same English curriculum.

3. Research variable

Research variables were everything that researchers decide to

obtain information and draw conclusions. There were two variables in this research namely the independent variable and the dependent variable.

a. Independent Variable(X)

According Sugyono(2015) Independent variable: Also known as a variable stimulus, predictor, or antecedent. The independent influences or causes the dependent variable's change or emergence.

b. Dependent Variable(Y)

According Sugyono(2015) Dependent Variable: also known as output, criterion, or consequent variable. The dependent variable is the one that is influenced by or results from the presence of the independent variable.

C. Instrument of the Research

In this study, the researcher collected data through quasi experimental with post-test only control design. According to Sudijono as cite in Effendy (2019: 35), the post-test was the test carried out with the aim of finding out whether all the teaching materials that were classified as important can be understood by students as well as possible. In this research to know the peers knowledge of the students' after given the treatment.

D. Procedure of the research

1. Pra-experimental stage

The pre-experimental stage is the preparatory stage before conducting an experiment or treatment. First, the researcher consulted with lecturers and teachers regarding the suitability of the content of the podcast media

with speaking skill at XI grade of MAS Al-Falah Padang contained in the independent curriculum, the researcher measured the validity of the research instrument by conducting a trial of the research instrument. This is done to find out how effective the use of podcast media is in speaking skill at XI grade of MAS Al-Falah Padang.

2. Implementation of Experiments

a. Experiment

Students receive treatment as part of the experimental stage's implementation. The method used was teaching writing skills through the use of podcasts to teach speaking skills.

Table 3.1 Steps of Teaching and Learning Activities in Experiment Class and Control Class

Experimental class	Control class
Introduction 1. To begin the lesson, the teacher will greet the class with “Assalamu’alaikum warahmatullahi wabarakatuh.” Followed by prayer based on their beliefs. 2. Inquiring about the students’ condition, then, students’ attendance is checked. 3. Create an apperception by asking some students about their opinion on breakfast. Do you have breakfast	Introduction 1. To begin the lesson, the teacher will greet the class with “Assalamu’alaikum warahmatullahi wabarakatuh.” Followed by prayer based on their beliefs. 2. Inquiring about the students’ condition. Then, students’ attendance is checked. 3. Create an apperception by asking some students about

before going to school? 4. Give an opportunity to one of the students to tell about their opinion on breakfast.	their opinion on breakfast. Do you have breakfast before going to school? 4. Give an opportunity to one of the students to tell about their opinion on breakfast.
Core activities 1. The teacher explains about expression of stating opinion, and also function of the expression of stating opinion. 2. The teacher provides examples of expression of stating opinion so that students can learn the format of expression of stating opinion. 3. Give students the opportunity to ask questions from the material. 4. The teacher shows the students a video podcast about the expression of stating opinion material. 5. Students discuss their thoughts on a podcast video with their companion in both English and their native language.	Core activities 1. The teacher explains about expression of stating opinion and also function of the expression of stating opinion. 2. The teacher provides examples of expression of stating opinion so that students can learn the format of expression of stating opinion. 3. Give students the opportunity to ask questions from the material. 4. The teacher gives exercises on the given expression of stating opinion material. 5. After the exercise is done, students are asked to read their respective expression of stating opinion material. To the front.

6. The teacher evaluates students speaking skills based on how they communicate their messages. 7. The teacher asks some random questions about the students' performance in explaining the subject of the podcast video they watched. 8. The teacher and other students correct together if there are mistakes and fix them.	6. Correct the work's outcomes together.
Closing 1. The teacher allows students to ask clarifying questions if they are still unclear. 2. The teacher examines the topic matter and concludes with "expression of stating opinion" for the students. 3. Concluding greetings	Closing 1. The teacher allows students to ask clarifying questions if they are still unclear. 2. The teacher examines the topic matter and concludes with "explanatory text" for the students. 3. Concluding greetings

b. Post-test

A post-test was administered to students after the treatment was completed. This post-test was administered to compare the

effectiveness of using podcast media in speaking skills at XI grade on MAS Al-Falah Padang to the untreated classes.

3. Post Experimental stage

This is the final stage of the research. Data from the experiment was examined using statistical methods. The researcher gives an assignment in the form of a short interview between students and researchers as a form of recreating the video podcast with the same topic that has been studied in previous meetings.

E. Technique of Data Collection

This research data consisted of the students' responses to the questions. The post-test result administered at the end of treatment. For the experimental group, writers employed podcast learning media to teach expression of stating opinion. For the control group, writers utilized typical tactics in expression of stating opinion.

In this term, the writer used a post-test only control design. After providing treatment several times, the writer given a post-test to both classes to determine the effectiveness of podcast-based learning materials.

The author compares the post-test results for the two classes.

F. Technique of Data Analysis

To find out the effectiveness of using Podcast media on improving speaking skill at XI grade of MAS Al-Falah Padang, the researcher analyzed the data using several steps, as follows :

1. Descriptive Statistics

Descriptive statistics were used to describe the students' speaking scores in both the experimental and control groups. This analysis aimed to provide a general overview of the data distribution, including the minimum score, maximum score, mean, and standard deviation. Descriptive statistics helped the researcher to see the overall performance of students' speaking skills in each group before conducting further statistical analysis.

2. Normality Test

The normality test is a test used to determine whether the distribution of the obtained data is normal or not. In this research, the normality test will be conducted using the SPSS 27 computer program, with a significance level of >0.05 indicating a normal distribution, while a significance level of >0.05 indicates a non-normal distribution. If the data is not normal, the Wilcoxon signed rank test will be used.

3. Inferential Statistics

Inferential statistics were used to test the research hypothesis and determine whether there was a significant difference between the speaking scores of the experimental and control groups. Statistical hypothesis testing commonly referred to as the null hypothesis (H_0), is used to state the absence of a relationship between variable X and variable Y. The purpose of this hypothesis is to test the difference in means between two independent groups of data or samples. The hypothesis testing uses the Mann-Whitney U Test formula in the SPSS

27 computer program. This non-parametric test was used to see if there was a statistically significant difference in speaking skill scores between students taught using Podcast media and those taught using conventional methods.

The Mann-Whitney U Test's decision-making criteria were as follows: if the significance value (Asymp. Sig. / p-value) was less than 0.05, it indicated that there was a significant difference between the two groups, implying that using Podcast Media had a significant effect on students' speaking skills. On the other hand, a significance value greater than 0.05 suggested that there was no significant difference between groups.

4. Interpretation

The final step of data analysis was interpretation. The results of the descriptive and inferential statistical analyses were interpreted to answer the research questions and test the hypothesis. The interpretation focused on explaining whether the use of podcast media was effective in improving students' speaking skills and which speaking aspects showed the most improvement based on the findings.