**CHAPTER III**

**RESEARCH OF METHODS**

**3.1 Design of Research**

Model of Development in this research is undertaken to develop media by using Podcast as teaching media on students’ speaking skills. To gain the purpose, it is needed a research approach that highlights an effort to produce the teaching speaking skills. Therefore, in designing the model, the researcher uses Research and Development.

This study is classified as a Research and Development (R&D) study which aimed to develop a Podcast for teaching listening recount text to grade X students. It adapted R&D research method proposed by Gall, Gall and Borg (2003) who stated that educational R&D findings of the research will be used to develop new products and procedures with some modifications which proposes 6 steps of R & D cycle. The steps are; 1. Gathering data and information, 2. Need Analysis, 3. Media Design, 4. Validating to Expert, 5. Revising, 6. Final Product.

Educational research and development (R & D) is a process used to develop and validate educational products. The steps of this process are usually referred to as the R & D cycle , which consists of studying research findings pertinent to the product to be developed, developing the product based on the finding, field testing it in the setting where it will be used eventually, and revising it to correct the deficiencies found in the field testing stage. In indicate that product meets its behaviorally defined objectives.

**3.1.1 Procedure of Development**

The procedure of development in this research is based on Borg and Gall development model. This model includes ten steps as the researcher said before, but the researcher just took six steps in this research based on limited time and money.

1. **Need Analysis**

The first step is need analysis. This step will be done to search information how is important the product will be developed. It consisted of review the literature. A literature review is undertaken to collect research findings and other information pertinent to the planned development. As in basic applied research, one purpose of the literature review is to determine the state of knowledge in the area of concern.

The literature review in this research is concerned with interviewing as a foundation of knowledge upon which to develop a given educational product. In this step, the researcher will interview the vice principal of curriculum areas, teacher of English subject and students. Related to Podcast as a media in teaching speaking, need analysis consisted of describing use Podcast.

1. **Planning**

The next literature review will concern with the formulating of speaking learning material, lesson plan and validation instruments as the planning.

1. **Developing of speaking skills materials based on Podcast as a teaching media on Teaching Speaking Skills**

After the initial planning has been completed, the next major step in the R & D cycle is to build a preliminary form of the educational product that can be field testing. Before making media by using Podcast as teaching media in teaching speaking skills, the researcher will study this media. It is done to learn it more. So, the developing media will be easier and faster. Developing the content of media has done in steps. The next stage, the researcher designed the system planning of the media. System planning is implemented by using Podcast. In the use media, there are two actors related to the system. They are students and teacher. Furthermore, the researcher will make the planning design of the applying Podcast. The researcher will do some assessment of the applying Podcast. It will be started from the topics. Next, the researcher will conduct the developing media. It is the media that will be applied in field testing. In the applying Podcast consists of speaking material, discussion forum topic and questions quiz and game form. Furthermore, the basic competence developed and structured into a lesson plan, teaching materials, and assessment instruments.

1. **Preliminary Field Testing of Podcast as Speaking Skills Materials**

The purpose of the preliminary field test is to obtain an initial qualitative evaluation of the new educational product. The field trials consisted of a small group trial in order to determine the feasibility and appropriateness of the use of instructional design. At this stage the subjects visited and learned Podcast as teaching media on teaching speaking skills

1. **Podcast Revision**

In all phases of the R & D cycle involving product evaluation. It is important to establish field sites similar to those in which the product will be used when it is fully developed. After the preliminary field test of this media, all data will be compiled and analyzed. From these results to replan the site and then go on to make the revision called for.

1. **Main Field Testing of Podcast as Speaking Skills Materials**

The purpose of the main field test in R & D cycle is to determine whether the product under development meets its performance objectives. Generally an experimental design is used to answer this question.

**3.2 Research Subject**

The subject of this research is students of SMP N 2 Padang Bolak at the grade VIII students in the academic year of 2021/2022. This subject will be determined by using cluster random sampling technique.

**3.3 Instruments of Collecting Data**

This section will discuss the research instrument used in this research. The researcher used two data collection techniques namely descriptive qualitative data and quantitative data. Qualitative data and quantitative results will be obtained from questionnaire validation expert, reviews of material expert and teaching strategy expert. The data will be from the field trials obtained from the comments or responses, questionnaire result and test results. Questionnaire of validation is for instructional design expert and teacher. Questionnaire of validation is made in order that the researcher knows some suggestions and revisions should be made by the researcher. It will be created to gather information about validity of the strategy. Besides, it can help researcher know the weakness of the strategy. The questionnaire is given to the expert reviewer consisting of instructional design expert and teacher. They assess the prototype and give suggestion to revise the prototype. The test will be undertook from the questionnaire validation of the test expert. After the test is valid based on the questionnaire validation, the test will be given to the subjects. Besides data from the result of the test, the documentation is needed to help the researcher run the research. According to Arikunto, the documentation method is used to look for the data concerning matters or the variable that took the form of the note, transcript, book, newspaper, magazine, inscription, notes of a meeting, agenda, etc. The Researcher uses the documents related to the object of research such as students’ name list and lesson plan.

**3.4 Technique of Analyzing Data**

The type of data this study is qualitative data and quantitative data, the data is statistically analyzed descriptively. Qualitative data in the form of comments and suggestions for improvement of the product matter experts and media experts then analyzed and described in qualitative descriptive to revise the products developed. Qualitative data is also derived from the opinions and suggestions of the students. Then the quantitative data will be obtained from the assessment scores matter experts and teaching strategy experts. After that, the researcher will look for the score average of all of the quantitative data from all validation questionnaires used this formula below:

P = ×100%

Where :

P : Percentage

∑ : Sum of validation score (was given from validator)

∑ : Sum the highest score

Validation criteria which used in the program validation are shown in the table below.

**Table 3.4 Program Validation Criteria**

|  |  |
| --- | --- |
| **Percentage (%)** | **Validation Criteria** |
| 76-100 | Valid |
| 56-75 | Valid enough |
| 40-55 | Less valid |
| 0-39 | Invalid |