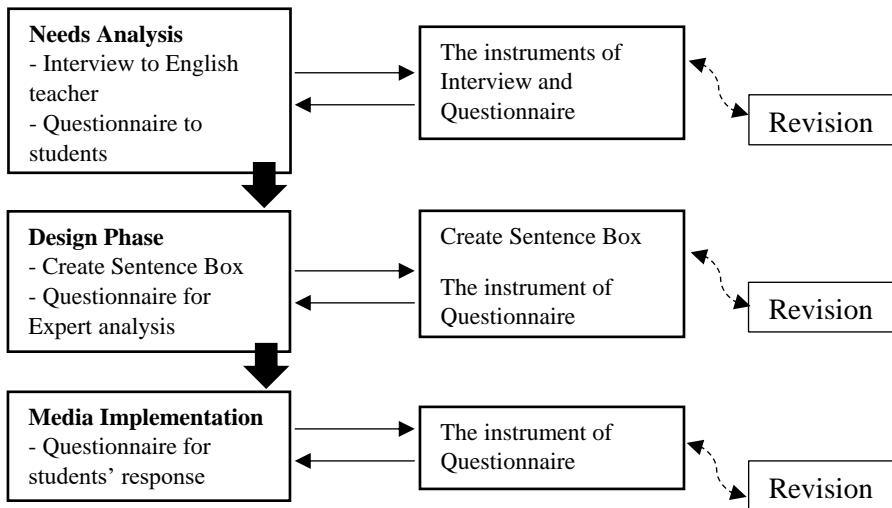


CHAPTER III RESEARCH METHOD

3.1 Research Design

The research method in this study used Design-Based Research. It adopted Hannafin and Peck's model in Isman et al. (2005). There were three phases: the needs analysis, the design phase, and the media implementation.

**Figure 1. The Research Design
(Adopted from Hannafin and peck's Theory)**



Additional Information:



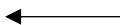
: Go to the next Phase



: Evaluation to Advisor



: Consultation to Advisor



: Approved by Advisor

3.2 Research Procedures

3.1.1 Needs Analysis

This phase was necessary to identify the teacher's problem and the students' need to learn the simple present. While conducting a needs analysis, there were two steps. The first step was interviewing the teacher. In the second step, the researcher gave students a questionnaire. The researcher interviewed an English teacher and gave a questionnaire to the tenth graders to design a teaching medium. After analyzing data from the interview and questionnaire, the researcher consulted the result of the data obtained from the teacher to the lecturer. She gave feedback as an evaluation to revise if there were any mistakes.

3.1.2 Design Phase

The media designed in this phase, and the result of the needs analysis were used to design a Sentence Box as a medium for teaching the simple present. After designing the Sentence Box for the teaching medium, a researcher consulted the product with an expert in teaching aids. He gave evaluations or suggestions by filling out the questionnaire the researcher provided. The revision took from the result of an expert's evaluations and suggestions.

3.1.3 Media Implementation

The researcher implemented the medium in the class of tenth graders. The assessment was conducted by giving the questionnaire to students. The assessment aimed to determine students' responses toward learning simple present using a Sentence Box. The result of students' answers was used to evaluate and revise the product to enhance the medium's appearance.

3.3 Research Participants

There were three participants in this study;

- a. For the needs analysis, there were the English teacher of the tenth graders by interviewing her about the teacher's problem in teaching the simple present and ten students of the tenth graders to ask the student's needs in learning the simple present.
- b. For the design phase, there was one participant only. He is an expert in teaching aids at Unipdu University, named Mr. Dr. Achmad Fanani, M.Pd., was the Teacher Training and Education Department lecturer. The purpose of involving him was to analyze the medium for teaching the simple present.
- c. For the media implementation, there were the tenth graders students to assess Sentence Box in learning simple present by filling out the response questionnaire.

3.4 Research Instruments

There were three research instruments in this study;

1. Needs analysis

- a. Interview

This research instrument was used in the first needs analysis phase (see Appendix 1). This interview purposed to gain the information from the English teacher which related to students' needs and it could determine the context of the medium.

- b. Questionnaire

Questionnaire 1: This instrument was addressed to students (see Appendix 3). The questions focused on finding information on students' needs related to the design of the medium.

2. Design Phase

- a. Validation Questionnaire

Questionnaire 2: This instrument was addressed to an expert in teaching aids (see Appendix 5). The questionnaire was related to the layout and content for the formative evaluation of Sentence Box.

3. Media Implementation

- a. Response Questionnaire

Questionnaire 3: This instrument was addressed to students (see Appendix 8). This questionnaire contained

questions to gain students' responses toward Sentence Box which had been implemented.

3.5 Data and Source of Data

In the needs analysis phase, the data obtained through teacher's statements and students' answers related to the students' needs in learning the simple present. The data used in designing the teaching medium. The data source came from interviewing the English teacher and giving a questionnaire to the tenth graders.

In the design phase, the data was gained through an expert evaluation and suggestions in designing and revising the teaching medium if any weaknesses were found. The source of data got by giving a questionnaire to an expert in teaching aids.

In media implementation, the data obtained from students' responses toward Sentence Box medium in learning the simple present. The source of data was gained by giving a questionnaire to the tenth graders.

3.6 Steps of Collecting Data

There were three steps in collecting data:

1. Needs Analysis
 - a. Listing the questions of an interview to be asked to the English teacher.

- b. Consulting the draft of an interview to the advisor. If there was no revision, it could be continued to ask the English teacher.
 - c. Interviewing the English teacher to know the teacher's problem in teaching the simple present (see Appendix 1).
 - d. Listing the questions to make the students' questionnaire.
 - e. Consulting the draft of the questionnaire to the advisor. If there was no revision, it could be continued to give the questionnaire to students.
 - f. Giving a questionnaire to the tenth graders to know the students' needs in learning the simple present (see Appendix 3).
2. Design Phase
 - a. Designing the medium after getting the result from the English teacher's statement and students' answers.
 - b. Validating the medium by giving a questionnaire to an expert in teaching aids to evaluate the designed medium. He did two activities. First, he checked the list of tables and wrote any suggestions in the provided column. If there was no revision, the medium could be implemented in the class (see Appendix 5).
 3. Media Implementation

- a. Listing the questionnaire of the students' responses that must be given to the students (see appendix 8).
- b. Consulting the draft of response's questionnaire to the advisor. If there was no revision, the questionnaire could be given to the students (see appendix 8).
- c. Implementing the medium to the tenth graders and giving a questionnaire to the tenth graders to assess the teaching medium implemented by using a checklist questionnaire.

3.7 Steps of Analyzing Data

There were three steps in analyzing data:

5.1 Needs Analysis

- a. Getting the result in the form of teacher's statement.
- b. Using descriptive analysis by transcribing the result from the English teacher interview (see Appendix 2).
- c. Getting the result of the students' questionnaire.
- d. Using descriptive analysis by putting the result of the students' questionnaire in the form of table (see Appendix 4).
- e. Customizing between the teacher's statement and the students' answers to design Sentence Box.

5.2 Design Phase

- a. Designing Sentence Box by considering the previous result.

- b. Revising the Sentence Box medium after getting the result of an expert in teaching aids in the form of evaluations and suggestions by using descriptive analysis (see Appendix 6).
- c. Getting the final result of the second validation from the expert (see Appendix 7).

5.3 Media Implementation

- a. Collecting the result of the students' responses, then recap it by using descriptive analysis in the form of recapitulation table (see Appendix 9).
- b. If there was the “NO” answer from the students' responses, the researcher will develop the Sentence Box medium into a good way for sustainability purpose.

To make it easier in identifying the data collection and the data analysis, it could be seen in the following table.

Table 1. The Drawing of Collecting and Analyzing Data
Based on Hannafin and Peck's Theory

No.	Time	Steps of Collecting Data	Time	Steps of Analyzing Data
Needs Analysis				
1.	December, 10 th 2022	Interviewing an English Teacher	December 11 th 2022	Analyzing the result of the teacher's statement in the form of a transcript
2.	December, 16 th 2022	Giving a questionnaire to students	December, 17 th 2022	Analyzing the result of students' answers in the form of a table
Design Phase				
3.	February, 23 rd 2023	Validating teaching medium to the expert of teaching aids	February, 24 th 2023	Analyzing the result of expert analysis answer by consulting and revising
Media Implementation				
4.	March 7 th 2023	Giving a questionnaire in the form of students' responses toward learning the simple present by using Sentence Box	March, 8 th 2023	Analyzing the result of students' responses in the form of a table