

CHAPTER III

RESEARCH METHODOLOGY

A. Research Methodology

1. Research Design

This research was used the ADDIE model, which uses the ADDIE approach. Research and development related to a specific product. The Researcher developed Addie's Models are developed as a guide for building material. This research procedure adapts the ADDIE development model which consists of five stages (Sugiyono, 2015).

To be able to produce certain products, research that is needs analysis is used to test the effectiveness of these products so that they can function in the wider community, therefore research is needed to test the effectiveness of these products. This research concludes that: Research and development related to a particular product. The research steps on the development of ADDIE are as follows:

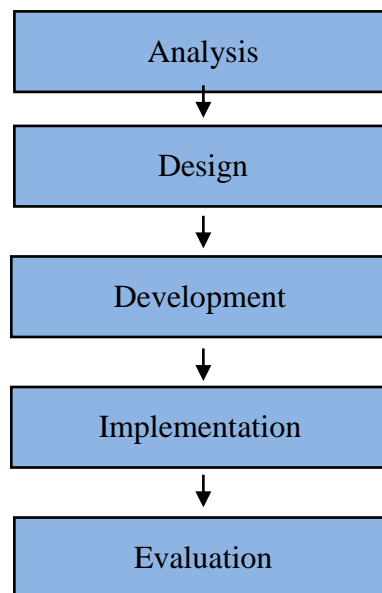


Figure 3.1 Development ADDIE Models

Source: (Sugiyono, 2015)

The research steps on the development of ADDIE are as follows:

a. Analysis

At the analysis stage, the activities carried out include:

- 1) Analyzing student needs in the learning process
- 2) Analyzing the characteristics of students regarding the knowledge, attitudes, and skills that students already have.
- 3) analyzing product development, analyze product feasibility, and analyze requirements against new learning models or methods.
- 4) Analyze the need for relevant materials to achieve the desired competence

b. Design

The design stage in the three activities are

- 1) Selection of materials according to the needs of students and the competencies to be achieved by students.
- 2) Determine effective learning strategies according to student needs and prepare materials and assessments
- 3) Determine the method of assessment and evaluation.

The results have obtained from this stage alone and finished with the completion of the design.

c. Development

At the development stage, the focus is on the following two activities:

- 1) search and collect relevant resources to enrich the material and illustrated images for better understanding of students as well as ensure, edit, and manage the layout of the textbooks.
- 2) The next activity in the development stage is to validate the draft development product and revise it after expert input.

d. Implementation

Implementation is the media trial stage. At this stage, development is applied in learning to know its effect on the quality of learning, including its effectiveness, interest, and efficiency.

e. Evaluation

Make product improvements based on Field trials and Final Product Making in the form of learning modules. The last stage is to evaluate, in this study a formative evaluation is carried out, because this type of evaluation is related to the development research stage to correct the resulting product development. Therefore, the evaluation of the ADDIE model is carried out in stages.

2. Research Setting

The research was conducted at Temajuk Village from Mei to June 2022 in the academic year 2022/2023. The vocational Village is located on Jl. Pasir Putih POS: 79466, Kec. Paloh , Sambas, West Kalimantan.

B. Population and sample

1. Population

The population of this study was students from the English Village of Temajuk, Sambas, West Kalimantan, Indonesia as many as,255 people in elementary school. The population is a generalization context consisting of objects and subjects that have certain quantities and characteristics determined by the researcher to be studied and then draw conclusions.

Based on a brief description of the population, the object of this research population is 59 students who take part in English learning activities at Temajuk English Village. The number of students who participated in this English Village learning activity were several students at SDN 16 Temajuk with different grade levels ranging from class IV to class V. Most of the students who took part in English learning activities at Temajuk English Village still did not have the basic experience of learning the language. English because the SD in Temajuk Village has not implemented English language learning for students as part of the subjects in elementary school,10 students were chosen intentionally for data collection.

2. Sample

The sample is part of the number and characteristics of the population. In this study, the sample is students from basic level until high that want to learn English in this program. The sample is part of the number and characteristics possessed by the population Sugiyono (2013). The sampling was carried out in a planned manner, by reviewing the research context and obtaining relevant data from students who were considered capable of achieving the predetermined competencies (Benoot *et al.*, 2016).

Representing a known population of 59 elementary school students from grades IV to grade V, as a sample selected 10 elementary school students consisting of grade IV and V students who had participated in the Temajuk English Village learning activities which were carried out 2 times in learning activities every week during one month. The sample in this study is student achievement from the lowest, middle to highest levels in learning English at Temajuk English Village

3. Sampling

In this study, the researcher will use a purposeful sampling technique. Purposeful sampling is a technique widely used in qualitative research to identify and select the problems encountered are based on various information obtained during research activities to examine the most effective use of boundaries resource (Patton, 2002). The researcher identifies and select individuals or groups of individuals who incredibly knowledgeable about or experienced with exciting phenomena studied in a study (Cresswell & Plano Clark, 2011). Sampling is intentional with regard to the research context and the participants involved are thought to be able to provide relevant data (Benoot *et al.*, 2016). Determination of the sample to represent a known population of 59 students using a purposeful sampling technique was obtained from a random data selection technique based on certain considerations to select individuals in this study.

C. Data Collection Techniques and Tools

1. Technique of data collection

Data collection techniques are methods used by researcher to collect data and process data. In this study, the researcher will use a questionnaire to analyze the needs of the Temajuk English village participants. According to Sugiyono (2019), data collection is the most strategic step in research because the purpose of this research is to acquire data. The study had to use instruments as data collectors for the data to be accurate.

In this study, data collection techniques were carried out by indirect communication techniques. Indirect communication technique is a method of asking or distributing questions to data sources or research subjects supported by intermediary media as a means of communication. Indirect communication skills in this study were asked in the form of a questionnaire.

2.Tools of Data Collection

There are some tools for collecting data in this research, there were.

a. Expert Judgment analysis.

The expert assessment questionnaire aims to find out what suggestions and inputs should be improved in the learning module using an expert assessment questionnaire. The experts in question are English language experts and tutors. The following is an adaptation questionnaire from BNSP (National Education Standards Agency).

**Tabel 3.1 The Organization of Expert judgment
Questionnaire**

No	Component of Evaluation	Aspects	Number of Items	References
The Appropriateness of the Content				
1.	Content	Completeness	1,2,3,4	BNSP
		Language Futures	5,6	
The Appropriateness of the Presentation				
2	Presentation	Student’s center	7,8,12	BNSP
		Systematic	9,11	
		The balance between the units	10	
The Appropriateness of the Language				
3	Language	The appropriateness at developmental level of students	13,116	BNSP
		Language accuracy	14,15	
		The unity of ideas	17	
The Appropriateness of the Graphic				
4.	Graphic	Lay-out	18,19,20,22,23	BNSP
		Typography	21,24,	

The expert questionnaires are tested by lectures of English study program.

The researcher used the Likert scale as a guide for asking questions or arguments and providing alternative answers, namely "Strongly agree," "Agree," "Disagree," and "Strongly disagree." According to Sugiyono (2019:93), Likert scales are used to measure the attitudes, opinions and perceptions of a person or group of people towards social phenomena. The questionnaire uses the Likert scale in the form of a checklist.

b. Field Notes

The collection of field notes is so widely regarded as essential that standardized criteria for qualitative research reporting encourage

researchers to include a statement of collection of field notes in manuscripts. The collection of field notes is so widely regarded as essential that standardized criteria for qualitative research reporting encourage researchers to include a statement of collection of field notes in manuscript (O'Brien, Harris, Beckman, Reed, & Cook, 2014).

c. Questionnaire

The questionnaire is part of the data collection technique which is carried out by give some instruments of questions or written statements to respondents to answer (Sugiyono, 2013, 142). The researcher chose this data collection tool to examine the respondents' responses to the feasibility test for the application of the designed learning materials. In this study, an English village teaching material evaluation questionnaire was used to be distributed to respondents. A questionnaire is a list of questions that will be given to respondents either directly or indirectly. This research tool is usually a question or statement that can be answered according to its form to the informant. The questionnaire used in this study is the Student Response Questionnaire. The questionnaire in this study used a scale Likert scale consisting of five scales, namely: (5) Sangat Praktis, (4) Praktis, (3) Cukup praktis, (2) Kurang praktis, (1) Tidak praktis.

The form of the questionnaire that would be distributed is a close ended questionnaire where in each statement several alternative answers will be provided. The following are the steps for preparing a questionnaire, namely:

- 1) Develop a questionnaire grid.
- 2) Formulating question items and alternative answers.
- 3) Respondents only need a check list (✓) on each alternative answer that has been provided correctly.
- 4) Determine the scoring on each question items. Each respondent's answer would be rated using the Likert scale.

Table 3.2
Student response questionnaire

Kriteria	Indikator	Butir Penilaian
Respon Siswa	A. Materi	1, 2, 3
	B. Bahasa	4, 5, 6
	C. Tampilan	7, 8, 9, 10

Adapted (Krismasari, 2015)

D. Validity

In this study, to test the validity of data, the researcher used test credibility as a research qualitative method. Seven tools that can use to test the credibility of data in this qualitative research are prolonged engagement, persistent observation, triangulation, peer debriefing, negative case analysis, referential adequacy checks, and dan member checking. Because tools of collecting data in this study used more than one data collection technique and also looked at as a data credibility test tool before, the researcher used triangulation as a test tool in this study the validity of the data using various data sources and various data collection methods. in this study used some tools of data collection, including Expert Judgment analysis. ,Field Notes, and Questionnaire.

E. Technique of Data Analysis

Data analysis in this study was conducted to formulate conclusions from the research objectives, data analysis is a very important part of the scientific method because data analysis can give data meaning and meaning that is useful for solving research problems. The data analysis technique used in this research and development is to collect data through survey instruments. The data is then analyzed for use in research and development processes. Data analysis is the process of systematically compiling data into categories, describing it into units, arrange into patterns, choose which ones are important and which will be studied, and draw conclusions so that they are easily underst

ood by oneself and others. Based on the number of questionnaires used, and expert judgment analysis.

1. Expert judgment questionnaire

The researchers analyzed the data using the guideline data. The researchers used Likert scale to collect data. The table below defines rating categories according to Sugiyono (2019:146) Likert scale. The data for this questionnaire were collected using Irmawati, dkk, 2017: 48. The formula for calculating the percentage in this research is as follows:

$$\text{Persentase Indeks \%} = \frac{\text{totalskoryangdiperoleh}}{\text{skortertinggi(angka 4)}} \times 100\%$$

As a basis for making decisions in determining the validity and revising, the considerations shown in table 3.3 below are used:

Tabel 3.3 Product Development Validity Assessment Guidelines

Persentase	Validity Criteria	Description
81-100%	Very Feasibility	Not Revised
61-80%	Feasibility	Not Revised
41-60%	Feasibility	Partial Revisi
21-40%	Les Feasibility	Revision
0-20%	Not Feasibility	Revision

(Adopt Ridwan, (2013: 15)

In this study, the value of validity is determined with the minimum criteria of "Valid", then the contextual based worksheet which was develop has been used by doing some revisions. After knowing the validity of the validator teaching materials, a feasibility test was also carried out on students to determine the feasibility of the product assessed from the practical use of teaching materials in the form of worksheets as learning materials developed in this study for learning activities at Temajuk English Village And this was assessed based on some of the responses of students who took part in the learning activities of Temajuk English Village.

2. Practicality

After 4 meetings in the English village learning in Temajuk village, the researchers distributed questionnaires to students as data acquisition regarding students' responses to the learning materials developed. Data was obtained from student response questionnaires in the form of quantitative data using a Likert scale with five levels of criteria, then analyzed using the percentage score technique.

The formula for calculating the percentage in this research is as follows:

The formula for calculating the percentage in this research is :

$$\text{Persentase Indeks\%} = \frac{\text{totalskoryangdiperoleh}}{\text{skortertinggi (angka 5)}} \times 100\%$$

(Adopt Irmawati, dkk, 2017: 48)

As a basis for making decisions in determining practicality and revising student worksheets contextual based the considerations shown in table 3.4 below are used :

Table 3.4
Product Development Practicality Assessment Guidelines

Persentase	Practical Criteria	Description
81-100%	Very Practical	Not Revision
61-80%	Practical	Not Revision
41-60%	Quite Practical	Partial Revision
21-40%	Less Practical	Revision
0-20%	Not Practical	Revision

(Adopt Riduwan, (2013: 22)

In this study, the validity value is determined by the minimum criteria of "practical", so contextual-based worksheets can be considered as developed.