

CHAPTER III

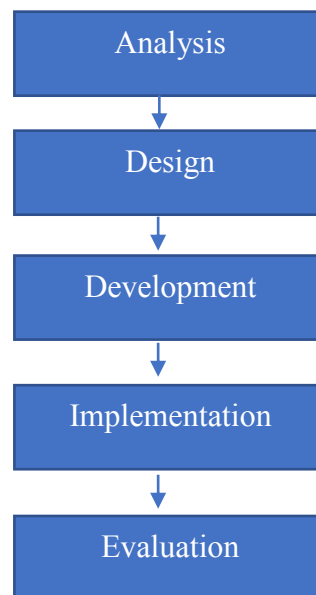
RESEARCH METHODOLOGY

A. Research Design

The research used in this analysis is research and development (R&D). The type of research used in the development of some of these LKS materials is the Research and Development Method (R&D) method. According to Sugiyono (2019: 395), research and development (R&D) is a research method used to produce certain products and measure their efficacy. Then, according to Nusa Putra (2015: 67), research and development (R&D) is a systematic and thoughtful research process to find, improve, develop and produce superior, new, effective, reliable, profitable and competitive Products, Models, and Methods.

Based on the above definition, researcher conclude that research and development are related to a particular product. This research product includes the design of various themes of learning materials for students in the form of LKS. The design of teaching materials contains simple English vocabulary and teaches how to pronounce it correctly which is developed based on the needs of students by applying a genre-based approach in the learning process as a learning design in Nyayum Village. Researcher developed Eddie's Models which was developed as a guide for teaching materials. This research procedure adapts the ADDIE development model consisting of five stages (Sugiyono, 2015).

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



Source: (Sugiyono, 2015)

Picture 3.1. The steps of the development model ADDIE

The research and development carried out are to develop material products of Local and Traditional songs in English learning for Nyayum Village, Landak, West Kalimantan. The effort to develop the material consists of five stages as follows.

a. Analysis

The first stage is research and data collection. The first stage measures need to use observation techniques. Observations are aimed at experts, and students for a process that defines what was learned, how the availability, and relevance of teaching materials used in English village activities then, was identified for various problems related to the materials needed in Nyayum Village.

b. Design

The design stage is a design plan that is carried out to determine learning objectives. The design consists of activities to determine learning objectives and determine the main material to be discussed in teaching and learning activities in the form of field designs from Self Introduction and Introducing my family as well as product development

processes. This activity is a systematic process that starts from setting learning objectives, designing scenarios or teaching and learning activities, designing learning tools, designing learning materials and evaluating learning outcomes. The design of this learning model/method is still conceptual and will underlie the next development process.

c. Development

Development contains activities to make designs into products and test the validity of the product repeatedly until the product is produced in accordance with the specified specifications. The steps at this stage are as follows :

a. Product validation by validator

At this stage, validation is carried out by material experts and media experts to determine the validity of the LKS that has been developed before evaluating or revising the product.

b. Product Revision

The product revision is carried out after validation by the validator expert, then the product is revised according to the validator's expert comments and suggestions.

c. Final Product

After the revision, the researcher produced the final product before distributing it.

d. Implementation

The trial stage is limited. Limited trials are carried out in limited groups in trials of the use of materials in limited groups, then the subjects of research fill out questionnaires aimed at assessing products that have been developed. Then, product revisions are carried out. After receiving an assessment in a limited group, the product is revised according to input, criticism, and suggestions. Revisions are made to correct the shortcomings of the product.

e. Evaluation

The evaluation stage aims to find out the feasibility and quality of the product developed. Evaluation instruments in the form of assessment questionnaires addressed to expert judgement. Expert judgement validates by giving scores and suggestions that are a reference to product design revisions.

Cited in (Sugiyono, 2015)

B. Research Setting

This research was conducted in one of the Nyayum Village, Landak. This village is located on Jl. Serimbu, Kec. Kuala Behe., Ngabang, West Kalimantan. This research was conducted from March to June 2022 in the academic year 2022/2023.

C. Population, Sample, and Sampling

1. Population

Population is the prowess of individuals atau objek who have certain characteristics or traits to be studied (Hanlon and Larget, 2011). The population in the study was taken from fourth, fifth and sixth graders. The number of participants in the fourth, fifth and sixth grades who participated in the English Village of Nyayum village was 31 students. The students who attend the English Village in Nyayum Village are locals, most of them do not understand English lessons in their schools.

2. Sample

Sample Samples are part of individuals in a population, usually there is data available to individuals in the sample (Hanlon and Larget, 2011). The sample is the part of the population to be observed. The sample in this study was 18 participants for data collection.

3. Sampling

Sampling is a way to determine a sample. According to Sugiyono (2019: 133), the purposive sampling technique is a sampling technique with certain considerations. In purposive sampling techniques, the

emphasis is on being a sample due to consideration of characteristics. Researchers use the term selection over sampling because the word "sampling" describes the entire population. The reason why researchers choose purposive selection is because not all samples have criteria that match the criteria that have been set. Therefore, the researcher chose a purposive selection technique that establishes certain criteria that must be met by the sample used in the study. The researcher selects based on the inclusion characteristics selected for the researcher purposes.

Sampling by taking into account the context of the study and participants is expected to provide relevant data (Benoot et al., 2016; Fraenkel et al., 2011). Collect data using field notes, including audio recordings. In addition to field notes, documents in the form of student texts will be deliberately selected. In this study, 3 student texts will be selected for analysis. Each of these texts will be analyzed according to predetermined criteria. Here are the criteria:

1. If participants can answer all the questions, then students are classified as high achievers.
2. If the participant can only answer half of the questions, then the student is classified as a mid-achiever.
3. If the participant can only answer less than half or even cannot answer the questions that have been given, then the student has a low performance.

The text here is not only in the form of written words, but also oral activities carried out by participants was recorded and transcribed to see the student's ability to speak English.

G. Technique and Tool of Collecting Data

1. The technique of Collecting Data

Data collection technique is the most strategic step in research because the main purpose of research is to obtain data. According to Sugiyono (2019:296), data analysis questions are related to calculations to answer the

problem formulation and hypothesis testing carried out. The data collection technique used in this research is participant observation and document technique. Observation is a way of collecting data by direct observation and systematic recording of objects. According to Tersiana (2018:12), observation is an overall process of observing and observing behavior under certain conditions. Observations made by researchers using observation and recording. In this study, the observations made were participant observation. Participant observations are researcher and observers who participate in activities carried out by the group under study to be able to conduct interviews, take notes, and retrieve documentation. In this study, the researcher collected the texts that had been completed by the participants during the learning process. The text contains data describing the results of teaching and learning activities. Text provided by researcher.

2. Tools of Collecting Data

The following are the data collection tools used in this study, including:

a. Participant observation

Observation is an activity to find data that can be used to draw conclusions or diagnoses (Hanafi, 2017, p. 68). The type of observation carried out in this study is participant observation. The main researcher as an English teacher. The second, third and fourth research partners acted as collaborators. Researchers are involved in the daily activities of the people who are observed or used as sources of research data (Sugiyono, 2013, p. 145). Participant observation activities in this study were carried out by making a summary of field notes, including audio recordings related to participant activities, which were carried out in 4 meetings in two weeks. Thus, the data obtained were completer and more accurate based on the facts that occurred during the study.

b. Documentation

Documentation was complementary parts of the use of observation and interview methods in research qualitative (Sugiyono, 2013, p. 240). Documentation is the method used as data collection in this study in the

form of notes, transcripts, books, newspapers, inscriptions, minutes of meetings, agendas, etc (Sidiq & Choiri, 2019, p. 72). The researcher used documentation in the form of images obtained from the research activities of English Village in Desa Nyayum as a data collection tool in this study.

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, p. 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. The questionnaire used in this study is a form of evaluation questionnaire on the feasibility test of the student learning material design which will later be evaluated by expert validators in their field to test the validity of the product to be developed.

1. Validation expert sheet

The expert validation sheet referred to in this study consisted of a validation sheet to obtain the validity of the data and the feasibility of the worksheets as learning materials in the English village learning activities of Nyayum Village. The validation sheet in this study uses a Likert scale consisting of five rating scales, namely: (5) Very Good, (4) Good, (3) Fairly Good, (2) Less Good, (1) Not Good. The use of the Likert scale is useful for measuring attitudes, perceptions, and opinions of a person or group of people towards the potential and problems of an object, the design of a product, the process of making products and products that have been developed or made (Sugiyono, 2017, p. 165). The material expert validation sheet was used to collect data on student worksheets as teaching materials for Nyayum English village based on assessment aspects such as material, language, presentation, and attractiveness of using worksheets for learning English. Expert validation in this study is as follows:

a) Material's Expert Validation

The material expert validation sheet was used to assess the feasibility aspect of the content and the feasibility aspect of presenting teaching materials in the form of worksheets that were developed and used in this study for students in Nyayum Village.

Table 3.1 - Material's Expert Validation Sheet Grid

Indikator Penilaian	Butir Penilaian
Aspek Kelayakan Isi	
- Kesesuaian Materi dengan Standar Kompetensi (SK) dan Kompetensi Dasar (KD)	1, 2
- Keakuratan Materi	3, 4
- Kemutakhiran Materi	5
- Mendorong Keingintahuan	6
Aspek Kelayakan Penyajian	
- Teknik Penyajian	7
- Pendukung Penyajian	8, 9
- Penyajian Pembelajaran	10

Source: (BSNP, 2018)

b) Media's Expert Validation Sheet

The media expert validation sheet was used to assess the feasibility aspect of graphics and the feasibility aspect of language teaching materials in the form of worksheets developed and used in this study for English village students in Nyayum Village.

Table 3.2 – Media's Expert Validation Sheet Grid

Indikator Penilaian	Butir Penilaian
Aspek Kelayakan Kegrampilan	
- Ukuran Modul	1, 2
- Desain Isi Modul	(3a; 3b), (4a; 4b), (5a; 5b), (6a; 6b; 6c; 6d; 6e)

Aspek Kelayakan Bahasa	
- Lugas	7, 8
- Kesesuaian dengan Perkembangan Siswa	9
- Kesesuaian dengan Kaidah Bahasa	10

Source: (BSNP, 2018)

2. Student's respon questionare

The questionnaire used in this research is the Student Response Questionnaire to the LKS as learning material in the English Village Nyayum learning activities. The questionnaire in this study also used a Likert scale consisting of five scales, namely: (5) Sangat Setuju, (4) Setuju, (3) Kurang Setuju, (2) Tidak Setuju, (1) Sangat Tidak Setuju. The type of questionnaire that will be distributed to students is a closed questionnaire where in each statement several alternative answers will be provided. The following are the steps for making a questionnaire, namely:

- a) Develop a questionnaire grid.
- b) Formulate statement items and alternative answers.
- c) Respondents only need a checklist (√) on each alternative answer that has been provided correctly.
- d) Determine the score on each question item. Each respondent's answer will be assessed using a Likert scale.

Table 3.1 - Student Response Questionnaire

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

Source: (Setia, 2018)

The use of student response questionnaires in this study aims to determine student responses to the practicality of using worksheets as learning materials for English learning activities in English Village Nyayum. Student

response questionnaires are also part of the evaluation phase to assess the practicality of teaching materials in the form of worksheets that were developed and applied in this study to English Village Nyayum students. Therefore, student responses from the questionnaire were used as data collection to be studied in this study.

H. Data Analysis Technique

This study analysis the data collection by the Data Collection form and reflection reports using content analysis content analysis puts together similar data in the framework of certain concept and themes and arranges and interprets them in the away that the reader can understand.

Themes of ADDIE model obtained from Data Collection Form and Research Reports. In both forms similar data were attached to certain concepts and themes so as to be presented in a significant, comprehensible manner at this process (Usta1, 2017).

According (Sugiyono, 2015), there are five steps on the development of ADDIE are as follows:

1. Analysis. In the first step, the researcher conduct material needs analysis, student characteristics, software analysis and normative Analysis.
2. Design. Next step is making flashcards, prepare materials and assessment questions to make Media background image.
3. Development, the third stage in using the ADDIE model is development.

After making the design of learning materials, the next step is to develop the learning materials that have been made. The researcher writes and produce learning material designs that have been made to be perfected through the revision stage and learning materials are produced based on the structure and predefined design. During this development stage, several things were carried out, including:

- a. The learning material

The making of learning material in this study was designed and developed by researchers in the form of a prototype. The content of this

learning material consists of materials that are contextual to students' lives and also adapt to the applicable curriculum. And the material was developed itself by the researcher.

b. Product feasibility validation

The next step is to validate the product feasibility. The validation of this learning media is carried out by expert validators based on requests related to considerations of the development of learning materials as the product of this study that are developed theoretically and practically. And this expert validator consists of material expert validators and media experts.

1) The material expert validation

The material expert who acts as a validator for the validation process of developing learning materials in this study uses one expert. Validation carried out by material experts is related to the relevance aspect of the material. In addition, the validator also provides comments and suggestions for revising the part of the learning materials developed.

2) The media expert validation

The media expert who acts as a validator for the validation process of developing learning materials in this study uses one expert. Validation carried out by material experts is related to the appearance of the material. In addition, the validator also provides comments and suggestions for revising the part of the learning materials developed.

A validation sheet is an assessment sheet on student worksheets as learning materials that are validated by validators who are experts in their fields to obtain qualitative and quantitative data. For the acquisition of qualitative data, it can be in the form of input and advice from experts or validators to revise student worksheets as learning materials that are developed. And the assessment is given by the validator to the validation instrument by providing a check list on the scoring criteria that have been provided in the questionnaire. Meanwhile, for the acquisition of quantitative data, it is used to

process data in the form of values or percentages. Qualitative data and quantitative data in this study were obtained through a questionnaire with an assessment using a Likert scale with five levels of criteria, which were then analyzed using the percentage score formula. The formula for calculating the percentage in this research is as follows: The following calculation formula for processing the data as a whole item:

$$P = \frac{\Sigma X}{\Sigma Xi} \times 100\%$$

Description:

P : Percentage (%)

ΣX : The total score of all respondents' answers

ΣXi : Total maximum score in the whole instrument

(adopted from Nurhayati, 2020)

Based on the results obtained from data processed using the formula above, the results are compared with the eligibility criteria as following:

Table 3.4 Eligibility Criteria

Category	Percentage	Criteria	Description
5	81-100%	very valid	not revised
4	61-80%	Valid	not revised
3	41-60%	quite valid	partial revision
2	21-40%	less valid	revision
1	0-20%	not valid	revision

(adopted from Riduwan, 2013)

Based on the determination of the value of the validity of the development of learning materials in this study, the minimum criteria of "valid" were determined, then the learning materials in the form of student worksheets that were developed were used for making several revisions.

4. The fourth stage in using the ADDIE model is implementation.

The design of learning materials that have been developed is then applied after the product revision. Learning materials in the form of student

worksheets that have been developed, then implemented for students who take part in learning activities at English Village Nyayum. At this stage, the learning materials are implemented only as product trials conducted by researchers in small study groups to observe the teaching activities of the tutors and determine student responses to the learning materials that have been developed. The implementation stage is a real step to implement the learning system that we are making. The main goal of

These steps include the following:

- a. Guiding students to achieve goals or competencies.
 - b. Addressing the problem of learning outcome gaps faced by students.
 - c. Ensure that at the end of the learning program, students need to have the necessary competencies – knowledge, skills, attitudes – what kind of learning methods are effective to use in the delivery of learning materials? and what kind of efforts or strategies can be made to attract students' interest in the delivery of the learning material presented?
5. The final stage is to conduct an evaluation that includes a formative evaluation and a summative evaluation. Formative assessment is used to collect data on each step used for improvement and summative assessment at the end of the program to determine the impact on learning participants and the quality of learning at large. In this study only a formative evaluation was carried out, since this type of evaluation is related to the stage of development research to correct the resulting development product. Evaluation on the ADDIE model has been carried out in stages. Based on the above definition, the researcher concluded that: Research and development related to a particular product. The product of this study is 2 themes about self-introduction and introducing my family as a learning design in the English village of Nyayum Village. Researcher will develop procedures adapted to the Eddie Model that will be developed as material guides.

After knowing the validator of teaching materials, a feasibility test was also carried out on students to determine the feasibility of the product

assessed from the practice of using teaching materials in the form of worksheets as teaching materials developed in this study for learning activities in Kampung English Nyayum. And this is assessed based on several responses from students who take part in the English Village Nyayum learning activities. Therefore, the researchers distributed questionnaires to students as data acquisition regarding students' responses to the learning materials developed. Data obtained from student response questionnaires in the form of 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 study is as follows:

$$P = \frac{\Sigma X}{\Sigma Xi} \times 100\%$$

Description:

P : Percentage (%)

ΣX : The total score of all respondents' answers

ΣXi : Total maximum score in the whole instrument

(adopted from Nurhayati, 2020)

The following are the criteria for the practicality of learning materials for the acquisition of scores per student:

Table 3.5 - Practical Criteria for Student Worksheets

Category	Criteria Range	Practical Criteria
5	41-50	sangat praktis
4	31-40	Praktis
3	21-30	cukup praktis
2	11-20	kurang praktis
1	1-10	tidak praktis

Based on the results obtained from data processed using the formula above, the results are compared with the practical criteria as following:

Table - 3.6 Practical Criteria

Category	Percentage	Practical Criteria	Description
5	81-100%	very practical	not revised
4	61-80%	Practical	not revised
3	41-60%	quite practical	partial revision
2	21-40%	less practical	revision
1	0-20%	not practical	revision

(adopted from Riduwan, 2013)

Based on the determination of the value of the practical of the development of learning materials in this study, the minimum criteria of "practical" were determined, then the learning materials in the form of worksheet developed were used by doing several revisions.