

## CHAPTER III

### METHOD

In this chapter, the researcher discusses several points. They are about research design, research development procedures, product trials, and research procedures.

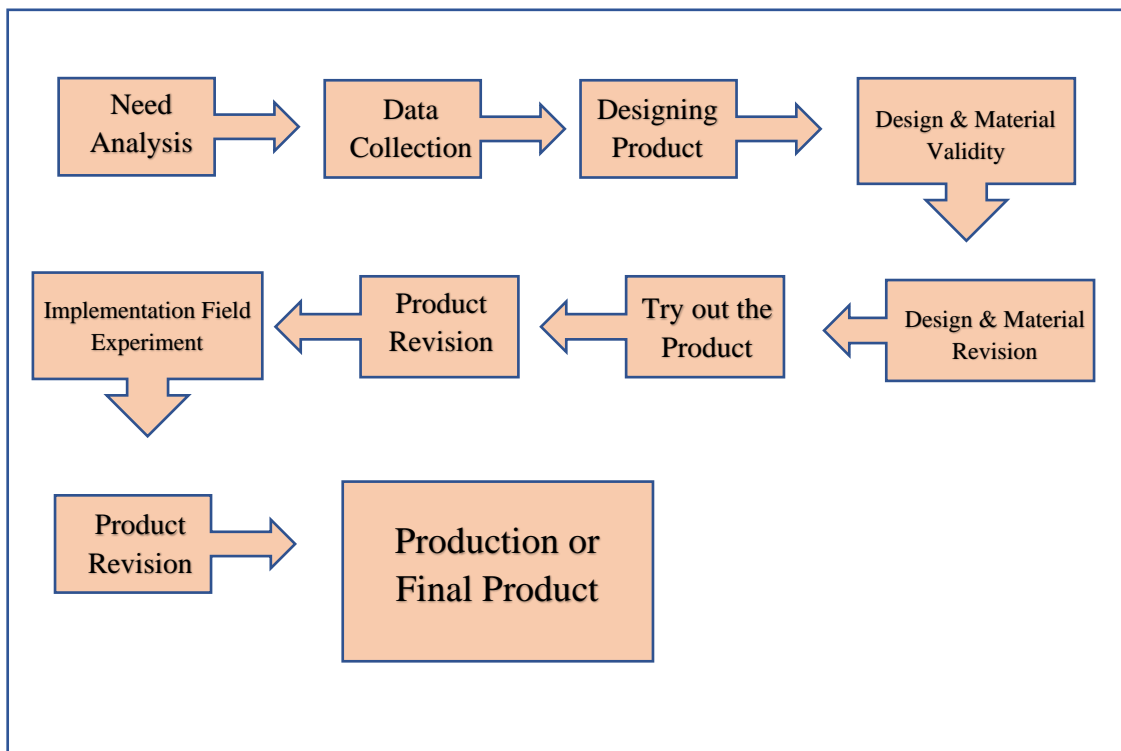
#### A. Research Design

The research is about the developing English children storybook with reference to Sarinah's book to introduce gender equality values for young learners. The researcher used Research and Developing (R&D) method, because this method is product oriented. *Metode penelitian dan pengembangan atau dalam bahasa Inggrisnya Research and Development (R&D), adalah metode penelitian yang digunakan untuk menghasilkan produk tertentu dan menguji keefektifan produk tersebut* (Sugiyono, 2010). It means that, in R&D method the researcher made new product and test the effective of product's quality. In addition, Research and Development (R&D) is the term commonly used to describe the activities undertaken by firms and other entities such as individual entrepreneurs in order to create new or improve products and processes (Hall, 2006).

From two definitions can be concluded that R&D is one of method in a process or research that is used by researcher to develop or make new product and also test of the product's quality. This method effective to be used in this research.

There are several steps to conduct Research and Development (R&D). Sugiyono (2010) explained ten steps in R&D research. The steps are explained in detail start from need analysis until final production.

The steps in this research :



**Figure 3.1 : The Process of Developing Product (Sugiyono, 2010)**

Development Procedure	Activity
Need Analysis	A need analysis is the first step in the research process. It contains prospective issues and problems that could arise from a variety of sources. At this point, a primary product would be chosen based on the requirements of schooling.
Data Collection	Based on the need for analysis, gather data. Data planning would be done for product design. Several methods were employed for data collection. Along with gathering data, the researcher also gathered knowledge and literature reviews for use as references in building product plans. At this stage, it's crucial to decide what the product would be and whether it can actually solve the issue.
Designing Product	A design plan in the form of an image or shape was required while creating new products. Because the effectiveness of the planning and design had not yet been established, the outcome is still a hypothesis that would be confirmed by testing. The manufactured product is currently undergoing a need and problem analysis. The thing that was made can deal with the issue.
Design & Material Validity	After planning and setting up the content and design product, the product needs to be validated to find the weakness of the product and to improve strength of it. In validity the researcher would present some experts to assess the product.
Design & Material Revision	After the product had been validated, the researcher can identify its flaws, and after doing so, the researcher would revise the product by minimizing the flaws and repairing it.
Try Out The Product	Before the sample is really implemented, the product would go through this stage of testing. These phases serve as a means of

	evaluating the efficacy of the old and new products.
Product Revision	After the product had been tested, the researcher can identify its shortcomings, and after doing so, the researcher would reduce these weaknesses and revise the product. Then develop the product before doing the real implementation of it.
Implementation or Field Experiment	It is product implementation; at this point, determining a product's effectiveness necessitates comparing the new product to the old one.
Product Revision	After the product had been implemented, the researcher can know that the product is effective for introducing gender equality values. If there are some weaknesses, the researcher should only make small corrections and revisions before production or publication.
Production or Final Production	In the final step, the researcher would publish the product if the product got valid predicate by the experts.

**Table 3.1 : Process of Developing Product**

Research and Development (R&D) is not only used for technology and science but also for education. It aims to develop and validate the educational product such as media, module, lesson plan, syllabus, and other device like textbook material in order to support teaching learning process. Here, the researcher used the ADDIE model.

The ADDIE paradigm is built on the theoretical underpinnings of learning design, claims Aldoobie (2015). As a result, the program was created in relation to problem-solving efforts using the analysis's findings in accordance with the demands and traits of the students. The ADDIE model was also used as a blueprint for developing a product

since it includes straightforward fundamental stages, supports technology media, and is simple to apply.

Furthermore, ADDIE model is one of the most common models used in the instructional design field a guide to producing an effective design. This model is an approach that helps instructional designers, any content's developer, or even teachers to create an efficient, effective teaching design by applying the processes of the ADDIE model on any instructional product. In fact, the elements made by following the ADDIE model can be used in any environment as online or face to face.

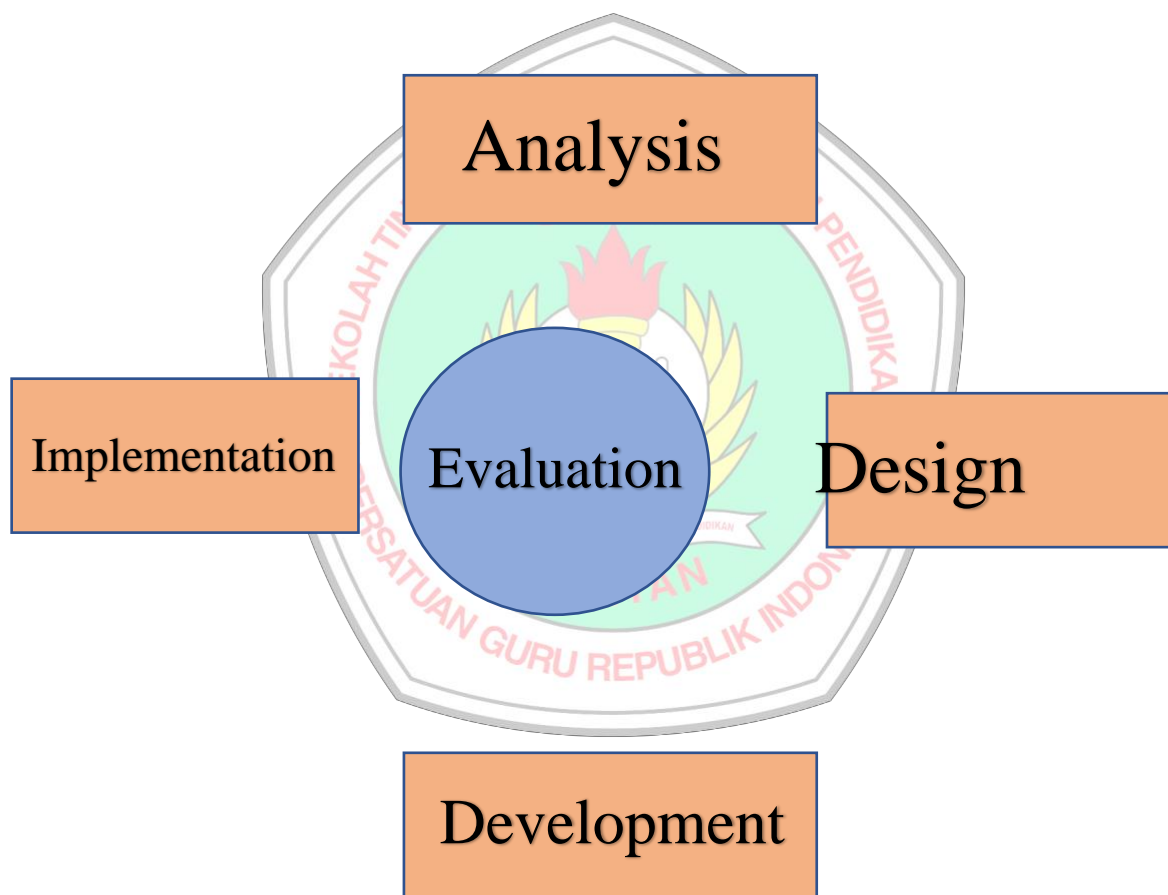
The acronym ADDIE, which stands for the crucial elements in the process of developing the instructional design, also serves as a representation of this methodical procedure. The ADDIE model's phases are connected to one another and work together. It is clear that evaluation is a key component of the ADDIE's last stage. Evaluation assesses the efficacy, efficiency, worth, and value of the instructional design process and the implementation stage.

Instructional designers and content developers use the ADDIE model as a method when creating educational course materials. Because of its adaptability, the model had become the de facto approach for many instructional designers, including Dick & Carey (2005).

The ADDIE model is based on the theoretical foundation of learning design. As such, the program was developed related to problem-solving efforts from the analysis results following the student's needs and characteristics. The ADDIE model was also

utilized as a guide in creating a product since it had simple basic stages, can use technological media, and is easy to use (Kurniawan, Kurniasari, & Rakhmawati, 2021).

In addition, ADDIE is an iterative process, where each phase can suggest improvements to the previous phase. Meanwhile, the ADDIE model consists of analysis, design, development, implementation, and evaluation.



**Figure. 3.2 ADDIE Model**

Additionally, a combination of qualitative and quantitative methods would be used in this study. It's because data from both qualitative and quantitative instruments

would be used to design the product. This information would be utilized to improve and assist the stages of the product's development. A solid final product can be built and organized with its assistance.

The specific explanation of ADDIE model is below :

No	Developing Procedure	Activity
1	Analysis	This phase consisted of several steps: analysis of research that conducted the same research to see inputs and improvements during development; determination of resources and targets; characteristics of targets; and analysis of how to deliver well to predetermined targets.
2	Design	At this stage, it began to identify many aspects, starting from the methods used during product development, designing materials to be the product or storyboard contents, the suitability of the products developed with the target characteristics, and the selection of tools and materials to be used from the beginning of manufacture to the completion of the product development.
3	Development	In this phase, the developer creates the content to be developed. This content included all components related to characters, illustration models to be used, character design, coloring, and layout. This phase also produced tangible outputs used in training. It is the last chance to make necessary corrections before delivering the English children's storybook.
4	Implementation	This phase was the realization of the previous phases. English children's storybooks were given to students and were used for their intended purpose. The primary purpose of this phase was learning. However, it is also essential to identify suggestions and input for future revisions.
5	Evaluation	In this last phase, the researcher evaluated the product being developed. It started with meeting objectives and new opportunities identified during the implementation phase. Data collection techniques and instruments

		<p>were carried out through interviews, validation sheets, teacher, students response questionnaires, and observation sheets. Validation was measured through media validation sheets, material validation, and teacher. Then, the data results were processed, and the average was determined as the result score of the validator and the response during the trial to test the product feasibility and validity in achieving the objectives.</p>
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**Table 3.2 : Activity of Research by Using ADDIE Model**

**B. Research Development Procedure**

The procedure used in accordance with the development of theory in research design, namely development steps using the ADDIE model. The researcher created reading material for fourth, fifth, and sixth grade students in SD N Alam Pacitan, specifically an English children's storybook. The steps that are applied in developing book material are as follows :

**1. Research Procedure Phase 1 (Need Analysis)**

The first stage of this research is an analysis step to identify problems. In this stage, the researcher found some problems in the education aspect, such as gender inequality in children's books. At this stage, the researcher made observations at the target school, namely SD N Alam Pacitan, to find out the condition of the children's reading books there and find out how the learning system was (whether it applied gender equality values to students or not). In addition to observation, researchers also interviewed teachers and students to obtain this information.



## **2. Research Procedure Phase II (Designing Product)**

In this stage, the researcher makes the designed product. The researcher makes a design for the development of children's story books that contain the values of gender equality in each story with reference to Sarinah's book. The researcher comes up with a simple concept that can make students interested. In designing the product, the researcher paid attention to the quality and essentials of the book.

## **3. Research Procedure Phase III (Development)**

Following the completion of the design phase, the concept is embodied in the next phase, namely the development phase. At this point, all of the product's components are clearly and systematically organized. The result of the product is ensured in accordance with the student's needs and characteristics.

## **4. Research Procedure Phase IV (Implementation)**

After passing the development phase, the next step is implementation. In this stage, the researcher implemented the product. Implementation means trying out the product in a real environment. The first step of implementation is validation of the product. Validation of the product is performed to find out the eligibility rate of products before they are tried out in the field or in a real environment. Aspects are rated by validators, which include media expert, material expert, and teacher.

Meanwhile, the criteria for media expert, material expert, and learning expert or teacher as follows:

- a. Media expert is people who are competent in the field of graphic design with the minimum criteria of S1 in education or non-education.
- b. Material expert are lecturer with minimum criteria for S2 in the field of education who are competent in compiling story content, sentence structure, and everything related with the content of storybook.
- c. The teacher who gives the assessment is a teacher with an English educational background and a minimum education of S1.

Based on the criteria above, the validators would evaluate and validate the product as follows:

No	Expert	Name	Description
1	Media Expert	Zainal Fanani, S.Pd.	Computer center staff at STKIP PGRI Pacitan
2	Material Expert	Anis Sutrisno, M.SI.	English lecturer at STKIP PGRI Pacitan
3	Teacher	Maya Nurhidayati, S.Pd	English teacher in SD Alam Pacitan

**Table 3.3 : List of Validators**

Besides, the researcher would try out the product in fifth grade A of SD Alam Pacitan to get data on students' responses. The assessment and questions based on the responses students provided were accompanied by a suggestion for the assessment scale.

## 5. Research Procedure Phase V (Evaluation)

This step evaluates how effective and efficient the lesson was. In actuality, evaluation should take place before, during, and after all phases of the instructional design process. Before implementing the final version, this phase aims to make the instruction better.

### C. Product Trials

#### 1. Trials Design

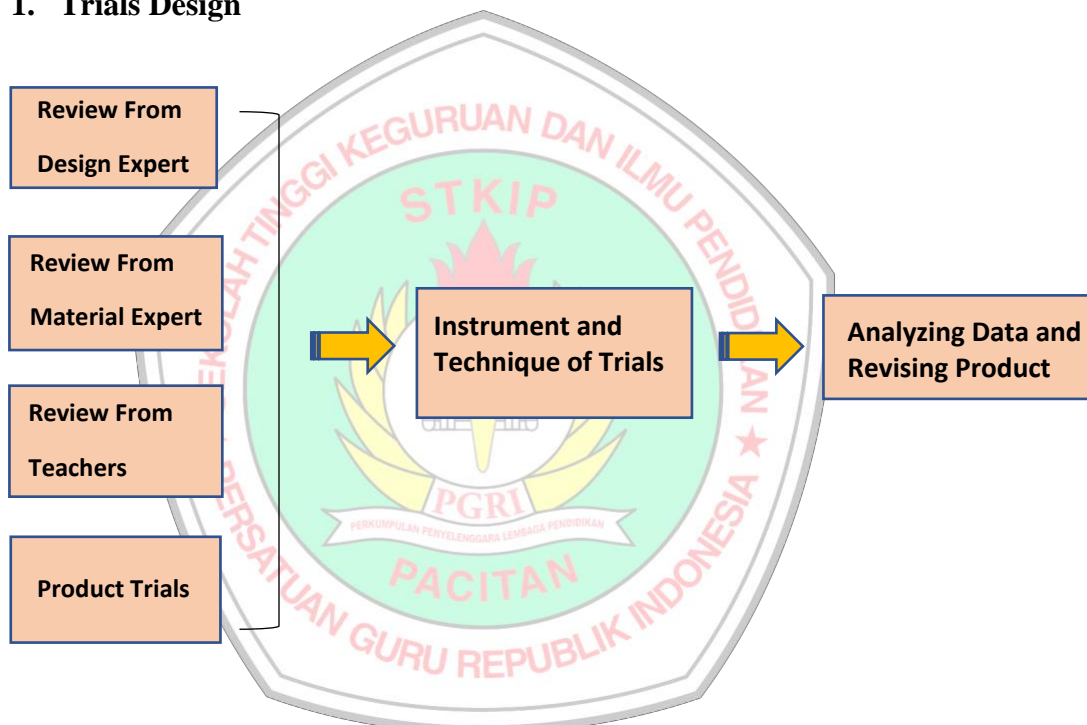


Figure. 3.3 Trials Design

## 2. Data of The Research

Data obtained from the following sources: 1) the existing product of the English children's storybook resulting product; 2) the evaluation from each expert (1 design expert, 1 material expert, and 1 teacher); and 3) the students' responses. The researcher got the following source data;

### a. Population

Population is the important element of research. The population is all of research object that have characteristics as data sources which used in research. The population of this research is students of SD Alam Pacitan in academic year of 2022/2023.

### b. Sample

From the population, the researcher took the sample. According to Sugiyono (2010), *sampel adalah sebagian dari jumlah dan karakteristik yang dimiliki oleh populasi tersebut*. It means that a sample is a subset selected, randomly or otherwise, to represent the population. For the sample of this research, the researcher chooses one class from the samples. The samples are taken from fifth grade A students at SD Alam Pacitan in the academic year 2022-2023.

## 3. Place of the Research

This research is held in the fifth grade A students at SD Alam Pacitan. It is located at Sidoharjo Village, Pacitan Regency, East Java.

#### 4. Time of the Research

The time of the research and the explanation can be shown in the following table :

Activity	Month									
	October	November	December	January	February	March	April	May	June	
Planning										
Submitting the Research's Title										
Creating a Thesis Proposal										
Thesis Proposal Seminar										
Collecting Data										
Developing the Product										
Testing the Product (experts' judgment and English Teacher)										
Revising the Product										
Implementation of The Product (young English learners' response)										
Analysis Data										
Writing the Report of The Research										
Creating S1 Thesis										
Thesis Examination										

Table. 3.4 Time Setting of The Research

#### 5. Research Instrument

Instruments can help the researcher collect data and support the research.

The instruments in this research are :

##### a. Checklist and Table

A checklist and table would be used as instruments for conducting the documentation technique of collecting data. It would be designed based

on the needs of the researcher and the amount of information related to the topic of research. The information gleaned from the researcher's searches would be entered into a checklist and table.

**b. Questionnaire Sheet**

A tool for using the questionnaire approach to gather data is the questionnaire sheet. On the printed paper, the survey sheet would be made. According to the number of questions on the list and the number of respondents, the number of sheets would be changed.

**c. Field Notes and Recorder**

For data collection, field notes and a recorder would be used in the interview technique. The researcher would record the answers from the respondents using a recorder and write some important points in the note book.

**d. Camera**

It is used for research documentation, including photographs and videos. It is used during the observation and product testing.

**6. Data Source of Development**

This research had two types of data source, primary data and secondary data source. The detail explanation would be delivered below.

**a. Primary Data Source**

The main information comes from the evaluations made by professionals, English teachers, and young learners. The rating given to

assess how suitable the product is. They receive a questionnaire from the researcher as the tool for gathering the primary data.

#### **b. Secondary Data Source**

The secondary data is a collection of opinions, suggestions, and comments made while making judgments by professionals, English teachers, and young learners. All of things serve as new pieces of information for creating the merchandise.

### **7. Data Collection Technique**

#### **a. Observation**

Observation is a technique to collect data that involves systematically selecting, watching, and recording the behavior and characteristics of living beings, objects, or phenomena. In this research, the researcher observed the school, including student character, the learning process, the book collection, and the students' understanding level of gender.

#### **b. Documentation**

Documentation is conduct to collect and combine some informations related to the research. This documentation consist of screenshot, video, picture, or others which support with the main study.

#### **c. Interview**

The interview is the verbal communication between the interviewer and the respondent. The questions in an interview should be

focused, clear, and encourage open-ended responses. In this study, researchers asked about the student's character, learning process, and whether the values of gender equality had been implemented.

#### **d. Validation Sheets and Student's Response Sheets**

The validation sheets and students responses sheets are used to collect data from the assessments by the experts and students.

### **8. Technique of Analyzing the Data**

This research had two types of data, which consist of quantitative and qualitative data. The quantitative data is taken from the score as material judgment by the experts, English teachers, and young learners. Meanwhile, the qualitative data is taken from the suggestions, judgments, and comments of the experts, English teachers, and young learners.

The researcher measure the score of each aspect in the questionnaire by using the formulation which was proposed by Arikunto (2008 : 235). It would be shown below :

$$P = \frac{\sum Si}{s} \times 100 \%$$

P = Score Percentage

$\sum Si$  = The amount of gains score

s = Maximum score



Then, the researcher converted the mean of each aspect to be qualitative data by using the term which was proposed by Purwanto (2002:102) as follows :

Scale (%)	Letter Grade	Category
86 – 100	A	Very Good
76 – 85	B	Good
66 – 75	C	Enough
55 – 65	D	Poor
≤ 54	E	Very Poor

**Table 3.5 Category Scale Proposed by Purwanto 2002**

#### **D. Research Procedure**

In conducting this research, the researcher follows these steps :

##### **1. Preparation**

###### **a. Formulating the Research Title**

The researcher's first step is to create a title, which is then discussed with the advisor. After the advisor agrees, the researcher asks permission of the school and consults with the English teacher. It is important to give the school and teacher information about the research that would be done.

###### **b. Arranging the Research Proposal**

The researcher organized the research proposal after obtaining permission and advice from the English teacher. Here, the researcher consults with the advisor extensively for suggestions and revisions to the proposal arrangement.

### **c. Seminar Proposal**

In this step, the researcher presented the research proposal. The researcher should explain her research plan briefly and answer the advisor's questions. After doing the proposal seminar, the researcher got permission to do this research.

## **2. Processing**

### **a. Preparing the Research Instrument**

Here, the researcher prepared all instruments needed for the research, including the observation sheet, interview sheet, recorder, and other instruments.

### **b. Collecting the Data**

The researcher gathered data in this step through observation and an in-depth interview. The observation is done in the school library and in class. In collecting the data, the researcher used some instruments, including a field note book and camera when doing observation. A tape recorder would be used in the interview step.

### **c. Developing Product**

The researcher developed the product. The product is an English children's storybook with reference to Sarinah's book to introduce gender equality values for young learners. In developing the product, the researcher follows some steps, including design and revision.

### **3. Implementation**

The researcher tried outing the product to the fifth grade A students of SD Alam Pacitan through an English children's storybook. Besides, the researcher got validation from the experts.

### **4. Finishing**

#### **a. Analyzing the Data and Constructing the Report**

In this stage, the researcher analyzed the data that had been collected through expert validation and student responses. Then, the researcher made a conclusion. The final step in this research is to construct the report based on the results of the data analysis.

#### **b. Submitting the Report**

The final step in the report process is to submit the report. In this stage, the researcher submitted the report of the research to be read by the reader, the researcher, and the academic society.

