

CHAPTER III

RESEARCH METHOD

This chapter presents the Research Design, Research procedure, Analysis, Design, Development, Implementation, and Evaluation.

A. Research Design

In this research, the researcher used the R&D (research and development method). According to Asher ¹. Research and Development is a process or steps to develop new products and make the product a perfect responsibility.

Other models within the R&D approach, such as the Dick and Carey model, Kemmis and McTaggart, and Gerlach and Ely, each have distinct characteristics and approaches. For example, the Dick and Carey model focuses more on the relationship between learning objectives and teaching strategies, as well as emphasizing the assessment and testing of learning materials repeatedly to improve their quality. The Kemmis and McTaggart model is more widely known for action research in classroom settings and is commonly used in participatory education development, while the Gerlach and Ely model emphasizes needs analysis and the impact of the learning environment.

However, in the context of this study, ADDIE was chosen due to its detailed structure and clear steps, starting from needs analysis and leading to the evaluation of the effectiveness of the developed materials. The ADDIE process emphasizes in-depth analysis at the beginning to understand the issues and needs, followed by the design and development of materials that are tailored to the pre-established learning objectives. The Implementation phase allows for the testing of the materials in the field, while the Evaluation phase ensures that the materials are effective and meet expectations, both during the process and after implementation. The organization and flexibility of this model enable the researcher to make continuous improvements throughout the development process, resulting in materials that not only align with the pesantren curriculum but also address the specific learning needs of the students.

¹ Asher Curtis, Sarah McVay, and Sara Toynbee, "The Changing Implications of Research and Development Expenditures for Future Profitability," *Review of Accounting Studies* 25, no. 2 (2020): 405–37, <https://doi.org/10.1007/s11142-019-09528-6>.

Therefore, the ADDIE model offers the advantage of clear organization in each phase and helps the researcher manage time, resources, and the evaluation process effectively and efficiently. This model strongly supports the goal of this research to produce high-quality reading materials that are effective for use in the educational process at pesantren.

B. Development Procedure

The development procedure of the ADDIE model. In this model, consists of five phases that include analysis, design, development, implementation, and evaluation.

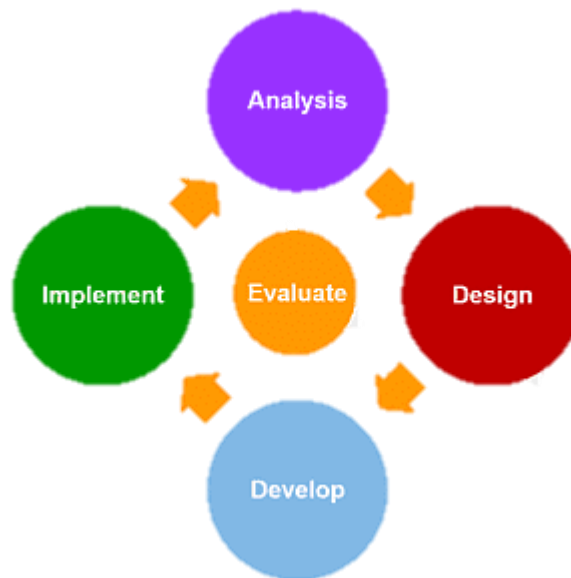


Figure 3.1. ADDIE Model

ADDIE development model is developed by Dick and Carry as cited by ², for designing learning systems analysis. The researcher developed English reading material based on the student's needs. Development procedures for making the application as instructional media, consist of five stages, there are:

² Rifqa Gusmida and Nur Islami, "The Development of Learning Media for the Kinetic Theory of Gases Using the ADDIE Model with Augmented Reality," *Journal of Educational Sciences* 1, no. 1 (2017): 1, <https://doi.org/10.31258/jes.1.1.p.1-10>.

1. Analysis

In the analysis stage, the researcher conducted an initial observation at Pesantren Bahrul Ulum Tambakberas Jombang. The researcher visited the pesantren to explain the purpose of the study and to submit a formal permission letter. After obtaining approval, the researcher conducted an interview with the caretaker of the pesantren to gather information related to institutional policies, the needs of English learning, the general characteristics of the students, and the types of reading materials that are appropriate for the pesantren environment.

In addition to interviewing the caretaker, the researcher also interviewed the English teacher to obtain data on the current condition of reading instruction in the classroom, the general level of students' reading ability, the common difficulties encountered in reading activities, and the suitability of the reading materials used so far. The data collection at this stage did not involve direct interviews with students; instead, it focused on the perspectives of the institution's management and the English teacher as parties who have direct experience with the learning process.

The information obtained from the caretaker and the English teacher helped the researcher identify that reading materials that are relevant to the cultural and educational context of the pesantren have greater potential to support students' engagement in reading activities. Therefore, the researcher considered that the use of reading materials based on the biographies of NU figures is appropriate for the pesantren context and aligns with the values promoted in the institution.

Furthermore, the researcher collected references from Muktabar books and widely accepted academic sources to ensure that the developed materials have a strong scholarly foundation. The results of this analysis then guided the researcher to the design stage, in which the structure, content, level of difficulty, and types of exercises of the supplementary reading materials were planned.

Table 3.1 The Instrument of the Interview for Need Analysis

No	Question
1.	In your opinion, what is the main reason why it is important for students in Islamic boarding schools to study the biographies of Nahdlatul Ulama (NU) figures?
2.	What aspects of these figures' lives should be more prominently highlighted in books? (e.g., their struggles, education, religious values, or social contributions)
3.	What are your views on efforts to develop supplementary English-language reading materials based on the biographies of Nahdlatul Ulama (NU) figures?
4.	To what extent do you believe that biographical reading materials based on NU figures can support English language learning in Islamic boarding schools?
5.	What are your hopes for the benefits this supplementary reading book can provide for English language learning in Islamic boarding schools?
6.	Do you have any specific suggestions or input to ensure this book accurately portrays the values of Nahdlatul Ulama figures and remains relevant to students at the An Nashriyah Bahrul Ulum Islamic boarding school in Tambakberas, Jombang?

2. Design

In the design stage, the researcher develops the supplementary reading book by referring to authoritative and reliable sources. The researcher begins this process by reviewing several well-established texts to ensure that the biographical information presented is accurate and aligned with the scholarly tradition of Islamic boarding schools. The biographies of K.H. Hasyim Asy'ari, K.H. Wahab Hasbullah, and K.H. Bisri Syansuri use references written by their descendants, scholars, and institutional historians. These sources provide a strong foundation for presenting each figure clearly and comprehensively. To make the book relevant for students, the researcher includes a section that presents values and character lessons that can be learned from each NU figure. The introductory part of the book also shows the historical and familial connection among K.H. Hasyim Asy'ari, K.H. Wahab Hasbullah, and K.H. Bisri Syansuri so that students understand their collective contribution to the intellectual heritage of Nahdlatul Ulama.

After determining the structure and content, the researcher organizes the book systematically, starting with an introduction, followed by the biographies of each figure, and ending with a reflection on the key values presented. This entire process results in a coherent book design that aligns with the objectives of the research. At the end of the design stage, the researcher prints out the draft of the book as an initial step before continuing to the next stage, which is the development stage.

To ensure that the product design is conceptually, systematically, and purposefully structured before entering the development and expert validation stages, the overall structure, material organization, pedagogical principles, and visual design considerations for this companion reading book are formulated in the form of a product blueprint. This blueprint serves as a comprehensive design framework that functions as a reference throughout the development process and as the basis for product validation and revision. For a more detailed and comprehensive description, the complete product blueprint can be seen in Appendix 2.

3. Development

After completing the design of the supplementary reading book, the researcher continued the process by developing the product through expert validation. The researcher submitted the draft to several experts, including a language expert and a content expert, to ensure that the material consisting of the biographies of prominent NU figures was accurate, clear, and appropriate for students at the Islamic boarding school.

Both experts reviewed the structure, language quality, content accuracy, and relevance of the values presented in the book. They provided suggestions for improvement, especially regarding readability, coherence of the biographical narratives, and the suitability of the material for students' learning needs. Based on their feedback, the researcher revised and refined the product to achieve better clarity and instructional quality.

To evaluate the appropriateness of the product, the researcher measured the validation results using a Likert scale.

Table 3. 2 Validation Rating Scale

Category	Score
Strongly agree	5
Agree	4
Doubtful	3
Disagree	2
Strongly disagree	1

3

To calculate the data, the researcher uses the formula as the following ⁴:

1. Determine maximal score

$$Y = \text{Maximal Rating Scale} \times \text{Quantity of Respondents}$$

2. Percentage

$$P = \frac{\text{Total score}}{Y} \times 100\%$$

The benchmark used to give the percentage of the expert team's validation results can be seen in the table:

Table 3.3 Validation of the Assessment Feasibility Scale

Percentage	information
81-100%	Very Good
61-80%	Good
41-60%	Fair
21-40%	Poor
0-20%	very Poor

The following is a media expert and material expert validation instrument:

Table 3. 4 Validation Language Expert

No	Aspects
1.	Grammar
2.	Diction
3.	Sentence Clarity
4.	Cohesion
5.	Coherence

³ Riduwan, *Dasar-Dasar Statistika* (Bandung: ALFABETA, 2003).

⁴ Taufiqurrachman, "Cara Hitung Kuesioner Pada Skala Likert," SAINTEKMU, 2022, <https://saintekmu.ac.id/myblog/taufiqurrachman/read/cara-hitung-kuesioner-pada-skala-likert>.

6.	Appropriateness to Reader Level
7.	Consistency
8.	Readability
9.	Reading Skills

Table 3.5 Validation NU Nahdhotul Ulama Expert

No	Aspect
1.	Historical Accuracy
2.	Compliance with Aswaja Nu Values
3.	Quality of Biographic Presentation
4.	Reference Quality
5.	Relevance to Nu Education

The following is a media expert and material expert validation instrument, see Appendix 3. Validasi Language Expert, Appendix 4. Validasi from NU. This scale allowed the researcher to quantify expert judgments on various aspects of the material, including content accuracy, language clarity, layout, and overall feasibility. The numerical scores obtained from the Likert scale were then analyzed to determine whether the supplementary reading book met the required criteria for further implementation.

After the validation and revision process was completed, the researcher continued to the implementation stage. At this stage, the researcher selected a sample of students to use the supplementary reading book in order to observe how they interacted with the material and to identify its effectiveness in supporting their reading skills. This implementation became an essential step for ensuring that the developed product aligned with students' learning characteristics and met the objectives of the study.

4. Implementation

After the product is validated by the expert, then it is ready to implement to the students read supplementary. The researcher explains the content of the product, where the researcher focuses on key Figures of NU

The implementation stage is product trials. It means that the product has been revised and ready to be implemented for the user of the product. If still found revision then revised to make a good product. The readers of the product

are students. To calculate student respondent data, researcher used formulas sourced from Taufiqurrachman ⁵.

The instrument is used for this stage in the form of a questionnaire. The aim is to respond to data from students obtained from a questionnaire given to some students of Pesantren Bahrul Ulum in Tambakberas Jombang Jombang. The assessment of the answers given is in the form of statements in the form of a Likert scale. The criteria and questionnaire scores based on the Likert scale are listed in the table.

Table 3.6 Rating Scale

Criteria	Score
Strongly agree	4
Agree	3
Doubtful	2
Disagree	1

6

The results of the analysis of the questionnaire sheet can be calculated as the percentage of student response scores using the following equation:

1. Determine maximal score

$$Y = \text{Maximal Rating Scale} \times \text{Quantity of Respondents}$$

2. Percentage

$$P = \frac{\text{Total score}}{Y} \times 100\%$$

Table 3.7 Percentage of Student Response Questionnaire Scores

Percentage	Information
76-100 %	Very Good
51-75%	Fair
26-50%	Poor
1-25 %	Very Poor

7

⁵ Taufiqurrachman.

⁶ Riduwan, *Dasar-Dasar Statistika*.

Table 3.8 The following is a student response questionnaire:

No	ASSESSMENT	SS	S	N	TS
1.	This reading material is interesting to read.				
2.	The language used is easy to understand.				
3.	The illustrations and pictures in the material support understanding of the content.				
4.	This material is relevant to English learning in class.				
5.	This material helps me understand the biographies of Nahdlatul Ulama (NU) figures				
6.	This material improves my English reading skills.				
7.	I feel motivated to learn English after reading this.				
8.	This material presents information in a structured and clear manner.				
9.	This material helps me understand the values of Nahdlatul Ulama (NU) figures.				
10.	This material is suitable for students in Islamic boarding schools.				
11.	The topics covered in the material align with the needs of Islamic boarding school students.				
12.	The reading texts in the material provide useful new information.				
13.	This material helps me understand the importance of NU figures' contributions to society.				
14.	This material provides new insights into local culture and history.				
15.	This material helps me improve my analytical reading skills.				

5. Evaluation

Evaluation is a crucial stage in this research because it ensures that the developed product truly meets the expected quality and feasibility standards. Referring to the ADDIE model, the evaluation process consists of two types: formative and summative evaluation. Formative evaluation is conducted during the development process by analyzing input, criticism, and suggestions from media and material experts. At this stage, researcher conduct systematic

revisions based on aspects of content accuracy, clarity of presentation, technical quality, visual design, language use, and usability. This process serves as the basis for gradually correcting product weaknesses, thereby improving quality with each revision cycle.

Meanwhile, summative evaluation is conducted after the product has been revised to assess its overall effectiveness and feasibility when used in a learning context. This evaluation aims to ensure that the product is not only theoretically valid but also practical for use by students and educators. Through this comprehensive series of evaluations, the resulting product is more tested, valid, and ready for implementation in the learning process, optimally supporting the objectives of teaching materials development activities.