

DEVELOPMENT OF ENGLISH READING MATERIALS TO IMPROVE READING COMPREHENSION FOR GRADE ELEVEN STUDENTS AT SMAN 2 RANTAU SELATAN

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Abstract

This study aimed to develop effective English reading materials to enhance the reading comprehension skills of Grade XI students at SMAN 2 Rantau Selatan. Using the ADDIE model—comprising the stages of Analysis, Design, Development, Implementation, and Evaluation—the research employed classroom observation, interviews, expert validation, and pretest-posttest evaluations. Findings from the initial analysis indicated that students struggled to understand reading texts due to the lack of contextual relevance, unattractive content, and materials that did not match their interests or proficiency levels. The newly developed materials, focused on narrative texts and enriched with visual and culturally relevant elements, underwent validation by subject matter and media experts, resulting in validity scores of 90% and 85%, respectively. Effectiveness testing revealed a substantial improvement in student performance, with the average score rising from 58 (pretest) to 84 (posttest), and 93% of students achieving mastery. These results suggest that the developed materials are both valid and effective for use in senior high school English instruction.

Keywords: *ADDIE; Narrative text; Reading material development; RnD*

1. Introduction

English is widely recognized as a global language used for international communication across various fields such as education, business, science, and diplomacy. According to Crystal (2000), English serves as a global language because it is spoken and understood by people from different nations to interact globally. As such, English plays a vital role in supporting academic development and cross-cultural understanding, especially in non-native contexts such as Indonesia.

Among the four language skills—listening, speaking, reading, and writing—**reading** holds a central place in language learning, particularly in academic settings. Reading is a cognitive process that involves decoding symbols to derive meaning. It is not limited to recognizing individual words or sentence structures but also encompasses higher-level interpretation, inference, and analysis of textual content. Haryadi (2010) stated that reading is an interaction between the reader and the writer, where effective communication occurs only if the reader can decode and understand the intended message conveyed through the text. Similarly, Arina (2020) emphasized that readers

need to reconstruct the meaning presented by the author based on their prior knowledge and conceptual understanding.

However, based on classroom observations at SMAN 2 Rantau Selatan, it was identified that many students encounter difficulties in comprehending English texts, particularly narrative texts. This issue is partly attributed to the use of non-contextual and unengaging teaching materials that do not align with students' linguistic proficiency, interests, or local experiences. The lack of illustrations, relatable content, and structured skill development further demotivates learners and hampers their reading performance.

In addition, the existing materials do not sufficiently support the gradual development of reading comprehension skills. They often fail to consider students' backgrounds, local culture, or daily experiences, resulting in lower engagement and limited understanding of the texts. As Grabe (2009) notes, effective reading instruction must be grounded in materials that support active cognitive processing, scaffolded learning, and contextual relevance.

To address this gap, there is a pressing need to design and develop reading materials that are contextually appropriate, engaging, and systematically structured. This study focuses on the development of English narrative reading materials for Grade XI students, aligned with their cognitive level and cultural context. The development process follows the ADDIE model, which consists of five phases: Analysis, Design, Development, Implementation, and Evaluation. This model has been widely adopted in instructional design due to its systematic, flexible, and learner-centered approach (Branch, 2016).

Through the application of the ADDIE framework, the reading materials are expected to not only meet curricular standards but also foster student motivation, engagement, and comprehension skills. The aim of this study is to create valid, effective, and relevant English reading materials that enhance the reading performance of senior high school students in Indonesia.

2. Literature Review

2.1 The Nature of Reading

Reading is a complex cognitive process that involves the interpretation and construction of meaning from written symbols. Kintsch (2012) emphasized that reading comprehension involves more than just recognizing words; it requires the reader to actively integrate the information in the text with prior knowledge and to make logical inferences. He outlined three levels of mental representation that reflect a reader's depth of understanding: the surface code, the text base, and the situation model, which reflects the reader's integrated mental representation of the text.

Reading activities play a critical role in shaping a learner's language ability. As Haryadi (2010) explains, reading is an interactive process between the writer and the reader, wherein readers must interpret messages encoded in the text based on their own conceptual frameworks. Without adequate reading skills, learners struggle to construct meaning, hampering communication and learning.

2.2 Types of Reading Strategies

According to Rizki Perdiana (2022), there are several types of reading strategies commonly employed in language learning:

1. Skimming: A rapid reading technique used to understand the main idea or general theme of a text by focusing on titles, headings, and topic sentences.
2. Scanning: Used to find specific information such as numbers, names, or key terms without reading the entire text.
3. Extensive Reading: Involves reading longer texts such as novels or articles for overall understanding and enjoyment. It promotes fluency and vocabulary acquisition (Day & Bamford, 1998).
4. Intensive Reading: A detailed reading method that emphasizes analysis of language structure, grammar, and content, often used in academic contexts.
5. Literal Reading: Focuses on understanding directly stated information in the text.
6. Inferential Reading: Requires the reader to make logical connections and interpret meaning beyond the explicit content.
7. Critical Reading: Involves evaluating a text's arguments, logic, and evidence, allowing readers to assess the credibility and effectiveness of the author's message.

These strategies are essential for building robust reading comprehension, especially in EFL (English as a Foreign Language) classrooms.

2.3 Reading Comprehension

Pang et al. (2015) define reading comprehension as an active, complex process that involves constructing meaning by interacting with text. Comprehension extends beyond decoding to include skills such as inferring, summarizing, and connecting new ideas to existing knowledge. According to Hariyanti and Damanik (2024), reading comprehension is influenced by multiple factors including the reader's motivation, background knowledge, the difficulty of the text, and the reading strategies employed. Therefore, improving reading comprehension requires not only the use of appropriate materials but also instruction in effective strategies such as predicting, questioning, and summarizing. Teachers must help students apply these strategies in various contexts to strengthen their reading skills.

2.4 Materials Development

Materials development refers to the design, creation, evaluation, and adaptation of instructional content to facilitate language learning. Ahmad (2015) notes that effective materials should be relevant, engaging, and tailored to learners' needs. Tomlinson (2011) further argues that materials should provide meaningful, enjoyable learning experiences and should consider learners' cultural and cognitive backgrounds. Materials development can take different forms, including:

1. Original Development: Creating materials from scratch based on learners' needs.
2. Adaptation: Modifying existing materials to better fit a local context.
3. Selection: Choosing appropriate content from available sources (Rombot, Boeriswati, & Suparman, 2020).

In this study, reading materials were developed using all three approaches, tailored specifically to the needs of Grade XI students.

2.5 ADDIE Instructional Design Model

The ADDIE model (Analysis, Design, Development, Implementation, Evaluation) is a systematic instructional design framework widely used in curriculum

and materials development. Branch (2016) describes ADDIE as flexible and iterative, allowing designers to continuously revise materials based on feedback and outcomes. The ADDIE model guides the developer from needs analysis to final evaluation, ensuring that each stage contributes to the overall quality of the instructional product. Its application in language education promotes the alignment of learning goals, instructional methods, and assessment tools.

2.6 Scientific Approach in Language Learning

The scientific approach in language learning encourages students to construct knowledge through inquiry, observation, analysis, and reflection—mimicking the process used by scientists (Puspita, Wardani, & Rabbani, 2023). This approach is aligned with the current Indonesian curriculum and emphasizes student-centered learning. It requires learners to observe phenomena, ask questions, collect data, and present their findings—thereby cultivating critical thinking and problem-solving skills.

3. Research Method

3.1 Research Design

This study employed a Research and Development (R&D) design using the ADDIE model, which stands for Analysis, Design, Development, Implementation, and Evaluation. The ADDIE model provides a structured, iterative process for creating instructional materials based on learners' needs. According to Sugiyono (2019), the model is suitable for developing educational tools because it ensures a logical sequence of actions from need analysis to effectiveness evaluation. Tegeh et al. (2014) also emphasize that ADDIE is grounded in sound instructional design theory and allows for ongoing refinement throughout the development cycle.

3.2 Setting and Participants

The research was conducted in March 2025 at SMAN 2 Rantau Selatan, located on Jl. Kancil Sigambal, Rantauprapat, North Sumatra. The participants included Grade XI students enrolled in the even semester of the 2024/2025 academic year. A total of 30 students (10 males and 20 females) participated in the study. An English teacher and a media expert were also involved as validators in the development and validation phases.

3.3 Procedure

The development process followed the five stages of the ADDIE model:

a. Analysis

The researcher conducted classroom observations, interviews with the English teacher and students, and document reviews. These steps aimed to identify gaps in the existing reading materials. It was observed that most students lacked access to textbooks and the available texts were not aligned with their needs. The materials were text-heavy, lacked illustrations, and did not include supportive learning activities. This indicated the necessity for supplemental materials that were both engaging and contextually relevant.

b. Design

At this stage, learning objectives were established based on the Grade XI curriculum and syllabus. A gap was identified in the existing textbook, which included an exposition text in Unit 4, whereas the syllabus specified narrative text for that unit. Accordingly, a narrative module titled *Folktales* was designed to align with the

curriculum while incorporating images, vocabulary support, and comprehension exercises.

c. Development

Two experts participated in the validation process: a material and language expert (an English teacher from the same school) and a media expert (a graduate in Visual Communication Design). The reading materials were developed using authentic and culturally relevant texts adapted to students' reading levels. Initial drafts were revised based on feedback from both experts. Content was enhanced with visual elements and exercises targeting comprehension and vocabulary acquisition.

d. Implementation

The developed materials were implemented in the classroom over a series of sessions. The scientific approach was used to guide instruction. Activities included:

- Observing visual prompts
- Participating in question-and-answer sessions
- Searching for related information
- Analyzing sentence structures
- Presenting summaries
- Composing original folktales

Students completed a pretest before implementation and a posttest after the instructional cycle to measure improvement in reading comprehension.

e. Evaluation

Evaluation was conducted both qualitatively and quantitatively. Students' feedback was collected regarding the relevance, clarity, and engagement of the materials. Additionally, test scores from the pretest and posttest were analyzed to assess learning gains.

3.4 Data Collection Techniques

Data were collected through:

- Observation: Classroom behaviors and material use
- Interviews: Feedback from students and the English teacher
- Expert validation: Structured assessment using scoring rubrics
- Pretest and posttest: Student scores before and after implementation.

3.5 Data Analysis Techniques

The data were analyzed using descriptive statistics and expert validation percentages. Quantitative data from the pretest and posttest were analyzed to calculate the mean improvement in reading scores. The following formula was used to calculate validity:

$$\text{Percentage Validity} = \left(\frac{\text{Total Score Obtained}}{\text{Maximum Possible Score}} \right) \times 100$$

Validation was conducted separately for content (by a subject matter expert) and media (by a design expert). Qualitative feedback was analyzed thematically to support the quantitative results.

4. Discussion

The development of English reading materials in this study was guided by the ADDIE instructional design model, which facilitated the structured creation of relevant and effective content for Grade XI students. The following discussion outlines the outcomes at each stage of the ADDIE process and their implications for instructional practice.

4.1 Analysis Phase

Findings from classroom observations and teacher interviews highlighted several critical issues in the existing instructional context. Most students lacked personal access to English textbooks, and the materials provided were not aligned with learners' needs or the prescribed curriculum. The available texts were not contextualized to the students' experiences, lacked visual engagement, and did not provide guided comprehension activities. These limitations reduced student motivation and hindered reading comprehension. These findings are consistent with the views of Arina (2020) and Pang et al. (2015), who emphasize the importance of aligning instructional materials with students' backgrounds and learning goals to promote meaningful engagement.

4.2 Design Phase

In response to these issues, instructional objectives were designed based on the official Grade XI syllabus. The design emphasized the inclusion of narrative texts that reflect students' cultural context, promote vocabulary development, and stimulate engagement through the use of illustrations and interactive comprehension exercises. The new content, titled *Folktales*, was tailored specifically to fill the curricular gap found in Unit 4 of the school's English textbook, which originally focused on exposition texts rather than the required narrative genre.



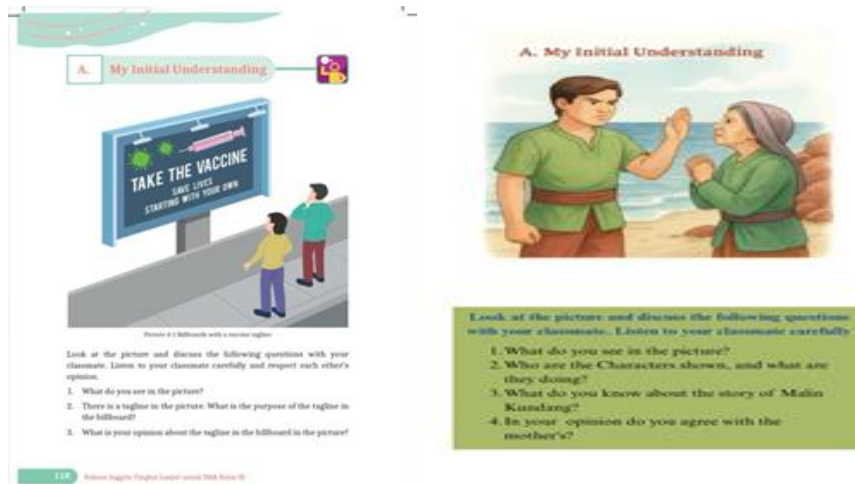
Before

After

3. Development Phase

The reading materials were developed in accordance with the design specifications and validated by two experts. The subject matter expert focused on the relevance, structure, and clarity of the materials, while the media expert evaluated layout, visual design, and integration between text and illustration. The validation results were highly favorable, with the subject matter expert assigning a 90% validity score and the media expert assigning 85%. These results indicate a high level of acceptability and readiness for classroom implementation.

Materials were further improved based on the validators' feedback. Texts were adapted for language level and cultural relevance, and visual elements were enhanced to support comprehension. This aligns with recommendations from Tomlinson (2011) and Rombot et al. (2020), who advocate for authentic, visually supported texts to improve engagement and comprehension.



Before

After

4. Implementation Phase

The instructional materials were implemented in a real classroom setting with 30 Grade XI students. The scientific approach, as suggested by Puspita et al. (2023), guided the teaching strategy. Students were involved in observing visual prompts, analyzing language structures, conducting peer discussions, and creating original stories. This learner-centered methodology encouraged critical thinking and contextual understanding.

A pretest was administered before the intervention and a posttest after the implementation. The pretest average was 58, while the posttest average increased to 84, indicating a 26-point improvement. Additionally, 93% of students achieved mastery, further demonstrating the materials' effectiveness.

No	Date	Learning Materials
1	Monday, 10 March 2025	Observasi and interview with teacher, student, and document.
2	Wednesday, 12 March 2025	Perform pre-test
3	Saturday, 15 March 2025	Narrative text types and purpose, and read the text of Malin Kundang.
4	Monday, 17 March 2025	Perform post-test
5	Wednesday, 23 April 2025	Evaluation

Table 1: The Trial Schedule

5. Evaluation Phase

The evaluation phase focused on three critical components: student feedback, material validity, and instructional effectiveness. Each aspect was assessed through structured data collection and analysis.

5.1 Student Feedback

Qualitative feedback was obtained from students following the implementation of the developed reading materials. Their responses were categorized into five key areas:

1. **Engagement:** Students reported that the texts were more enjoyable and relatable than previously used materials, which increased their motivation to read.
2. **Clarity:** Vocabulary and sentence structures were deemed easier to understand, which improved comprehension and reduced reading anxiety.
3. **Visual Design:** The inclusion of relevant illustrations helped students visualize content, aiding retention and understanding.
4. **Relevance:** Topics were aligned with students' daily lives and local cultural experiences, making the material more meaningful.
5. **Comprehension Support:** Comprehension questions and exercises placed at the end of each passage were helpful in reinforcing key ideas and checking understanding.

These insights affirm that the materials enhanced both the cognitive (comprehension) and affective (engagement) dimensions of reading. These results are in line with Grabe's (2009) assertion that contextualized and scaffolded materials significantly improve second-language reading comprehension.

5.2 Validity of Materials

The validity of the developed English reading materials was assessed by two experts: a subject matter expert (SME) and a media design expert. Each used a 4-point rubric to evaluate five criteria. The results are shown below.

No.	Aspect	Maximum Score	Score Obtained
1	Consistency of content with basic competencies	4	4
2	Determination of the structure of the reading text	4	3
3	Relevance of the material to the student context	4	4
4	Correctness of English language use	4	3
5	Clarity of instructions	4	4
Total		20	18

$$\text{Percentage Validity} = (18 \div 20) \times 100 = 90\%$$

Table 2: Validation Results from Subject Matter Expert

No.	Aspect	Maximum Score	Score Obtained
1	Layout and visual design	4	4
2	Consistency of format and aesthetics	4	3
3	Readability (font, color)	4	4
4	Compatibility of illustrations with reading content	4	3
5	Integration between text and images	4	3
Total		20	17

$$\text{Percentage Validity} = (17 \div 20) \times 100 = 85\%$$

Table 3: Validation Results from Media Expert

5.3 Instructional Effectiveness

To evaluate learning gains, a pretest and posttest were administered to 30 students. The results are presented below.

No	Nama siswa	Pree-test	Post test	Description
1	student 1	58	82	Increased
2	Student 2	58	84	Increased
3	Student 3	58	84	Increased
4	Student 4	58	84	Increased
5	Student 5	60	84	Increased
6	Student 6	57	84	Increased
7	Student 7	58	84	Increased
8	Student 8	58	84	Increased
9	Student 9	58	84	Increased
10	Student 10	61	85	Increased
11	Student 11	62	74	Increased
12	Student 12	58	84	Increased
13	Student 13	58	84	Increased
14	Student 14	58	84	Increased
15	Student 15	56	83	Increased
16	Student 16	58	84	Increased
17	Student 17	59	69	Increased
18	Student 18	55	84	Increased
19	Student 19	58	84	Increased
20	Student 20	58	84	Increased
21	Student 21	58	84	Increased
22	Student 22	58	84	Increased
23	Student 23	58	77	Increased
24	Student 24	58	84	Increased
25	Student 25	53	84	Increased
26	Student 26	58	84	Increased

27	Student 27	58	80	Increased
28	Student 28	58	84	Increased
29	Student 29	58	84	Increased
30	Student 30	54	84	Increased

Table 4: Pretest and Posttest Scores of Participating Students

Test Type	Average Score	Improvement
Pretest	58	
Posttest	84	+26

Table 5: Average Pretest and Posttest Scores

Category	Student Count	Percentage
Completed	28	93%
Not Completed	2	7%

Table 6: Student Learning Completion Rates

The results indicate that 93% of students achieved mastery, based on the school's minimum completion standards. This high rate of success confirms that the developed reading materials were effective in improving students' reading comprehension skills.

5. Conclusion

This study aimed to develop effective English reading materials to improve the reading comprehension skills of Grade XI students at SMAN 2 Rantau Selatan. The research followed the ADDIE development model, encompassing five stages: Analysis, Design, Development, Implementation, and Evaluation. Each phase was carefully executed to ensure that the materials addressed learners' needs, curricular alignment, and instructional effectiveness. The developed materials—focused on narrative texts contextualized to students' lives—were validated by both content and media experts. The validation results indicated high levels of acceptability, with scores of 90% from the subject matter expert and 85% from the media expert. These results confirmed that the reading materials were pedagogically sound, visually engaging, and aligned with educational standards. Effectiveness testing through a pretest-posttest design demonstrated a significant improvement in students' reading comprehension. The average score increased from 58 (pretest) to 84 (posttest), and 93% of students met the minimum mastery criteria. Qualitative feedback from students also revealed that the materials were perceived as engaging, clear, relevant, and supportive of comprehension. Based on these findings, it can be concluded that the reading materials developed using the ADDIE model are valid, practical, and effective for use in English language instruction at the senior high school level. The integration of culturally relevant content, illustrations, and targeted comprehension activities contributed to both the cognitive and affective development of learners. For future research, it is recommended that similar materials be developed for other genres or language skills (e.g., listening, writing), comparative studies be conducted using control and experimental groups to strengthen

generalizability, larger samples and diverse school settings be included to test the scalability and adaptability of the materials, and digital or interactive versions of the materials be explored to support blended and remote learning environments. The findings of this study contribute to the growing body of literature on instructional material development and highlight the importance of contextual, student-centered resources in enhancing language learning outcomes.

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