

Developing a Digital Pocketbook for Teaching Reading to Eight-Grade Students in Bandung

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Abstract

Many students have difficulty in understanding English reading passages. This was specially revealed by the needs survey conducted prior to this study. This study aims to develop a multimodal interactive Digital Pocketbook to support the learning process, particularly reading of procedural texts among eighth-grade junior high school students. Three objectives serve as guidelines in this study: (1) to describe the process of developing the Digital Pocketbook, (2) to evaluate the feasibility of the Digital Pocketbook, and (3) to investigate the responses of students' and teacher to the Digital Pocketbook. This study employed a Research and Development (R&D) model based on the ADDIE model developed by Branch. The participants consisted of 10 students in a Small-scale trial and 32 eighth-grade students in a Large-scale trial. Media and content experts were also involved. Data were collected through expert validation sheets, student and teacher response questionnaires, and field notes. The research results indicate that: (1) the product can be developed systematically through the five stages of the ADDIE model; (2) both media experts rated the product as "Very Feasible", with an average score of 97.92% from the media experts, while the subject matter expert assigned a score of 95.62%, also falling into the "Very Feasible" category; and (3) the results of the response questionnaires indicated that all evaluations fell into the "Very Feasible" category. Students' responses reached 89.25% in the Small-scale trial and 88.04% in the Large-scale trial, while the teacher's response achieved 95%. These findings indicate that the Digital Pocketbook, which integrates text, text-to-speech audio, video, and interactive quizzes, serves as a practical and effective reading support tool for eighth-grade students in learning about procedure texts.

Keywords: Digital Pocketbook; Learning Media; Reading; ADDIE; EFL.

INTRODUCTION

Reading is one of the essential skills in English language learning, particularly in the context of English as a Foreign Language (EFL). Conceptually, reading is a complex process involving the interaction between the reader's abilities, the characteristics of the text, and the context that influences the formation of comprehension (Alshehri & Zhang, 2022). Reading ability plays a role in supporting vocabulary development for academic success, language comprehension, and student self-confidence (The., 2024; Alias et al., 2025). Furthermore, reading success is heavily influenced by mastery of vocabulary and grammar (Güzel, 2022). Therefore, reading skills serve as a crucial foundation in English language learning and must be optimally facilitated (Ali, 2022).

However, in Indonesia English is still taught as a foreign language so mastering it presents various challenges (Rahmah & Qamariah, 2023), such as limited vocabulary, a lack of effective reading strategies (Pahamzah et al., 2022), as well as low student interest and participation, as junior high school students in Indonesia often exhibit only moderate intrinsic motivation to learn English despite having higher extrinsic motivation (Nurhayati et al., 2024). In fact,

vocabulary and motivation play a crucial role in the reading success of EFL students (Li & Gan, 2022), so a desire to learn must be fostered first to motivate students to expand their vocabulary. Therefore, supportive media that can foster this interest are needed, given that reading comprehension success is also influenced by the selection of appropriate learning media (Neswary & Prahani, 2023) and that language proficiency and higher order cognitive skills must be facilitated through effective learning (Vettori et al., 2024). This is in line with the *Merdeka Curriculum*, in which the use of digital media is increasingly relevant because it supports student engagement, comprehension, and independent learning (Wiranegara et al., 2025; Yang, 2023).

Based on observations at a junior high school in Bandung, a gap was found between students' needs and the available learning resources. The *English for Nusantara* textbook series published by *Kemendikbudristek* presents texts and exercises directly without adequate explanation of communicative goals, text structure, and linguistic elements. In the second semester, students studied procedural texts in Chapter 3 "Love Our World", but they relied solely on the teacher's explanations and found it difficult to compose procedural texts due to the many linguistic elements they needed to master. This situation has led to students' dependence on the teacher's explanations and their own notes. Students also lack mastery of new vocabulary, meaning that the independent learning required by the *Merdeka Curriculum* has not yet been fully realized. This is supported by the results of a needs analysis conducted on 32 eighth-grade students, which reinforce these findings: 81.25% of students find it difficult to understand reading passages and consider the material in textbooks hard to understand. Meanwhile, 93.75% of students want more engaging learning materials for reading activities. These on the ground conditions form the basis for students' learning needs; it is for this reason that the Digital Pocketbook was developed as a more interactive learning resource. The theoretical framework for this study is based on the statement by Alshehri & Zhang (2022) who view reading as a dynamic interaction between the reader, the text, and the context. This differs from digital books, which typically merely convert the print format to a screen. The Digital Pocketbook is a learning medium specifically designed to integrate authentic content, practicality of use, and ease of access into a single digital platform (Syafriyetti et al., 2024). According to Hasibuan et al. (2024), a pocketbook refers to a concise literary work designed to fit in a pocket, making it easy to carry around; in its digital form, it can be accessed at any time without the need for other media.

Various previous studies have demonstrated the instructional effectiveness of the Digital Pocketbook in diverse educational contexts. Magdalena et al. (2024) reported that a mobile pocketbook based on Problem-Based Learning achieved a high level of validity and successfully improved students' science literacy through interactive content presentation and by fostering independent learning. Specifically in the context of EFL, Sanusi et al. (2024) developed a Digital Pocketbook for learning English vocabulary in the field of pharmacy, which proved to be valid, practical, and effective with a validation score above 90%. In line with this, Sholihah et al. (2023) also developed a Digital Vocabulary Pocket Book for learning English vocabulary specifically for Business and Online Marketing. These products have proven to be suitable for use, with validation scores from language experts, media experts, and content experts each exceeding 89%, and receiving a 94% positive response from students. Collectively, these findings underscore the significant potential of the Digital Pocketbook as a medium capable of supporting material comprehension while fostering student engagement in the learning process, particularly when the vocabulary presented is tailored to students' fields of study or majors.

However, previous research has identified several gaps that form the basis of this study. Previous media developments focused on building literacy skills and expanding vocabulary in specific contexts tailored to users' needs. They have not yet targeted reading skills for EFL learners. Furthermore, these three media are generally in the form of apps that must be downloaded and installed, which could potentially cause issues with storage capacity and device compatibility. Furthermore, the content presentation remains static and does not yet integrate an audio text-to-speech feature that could support students' reading comprehension in a more interactive way. These gaps prompted the development of an interactive, web-based Digital Pocketbook with an audio text-to-speech feature as a learning medium for reading procedure texts for eighth-grade junior high school students.

This study offers a novel approach by developing a "Digital Pocketbook for Teaching Reading" as a medium to help eighth-grade students comprehend procedural texts, in alignment with the learning needs and outcomes of the *Merdeka Curriculum*. This medium is web based, allowing direct access via a link without installation, and is multimodal. According to Hellwig et al. (2022), multimodality refers to the simultaneous use of various modes in instructional media, such as speech, text, images, audio, and gestures. In line with this, Spjeldnæs & Karlsen (2024) note that this implementation can enhance student engagement in learning. This digital pocketbook integrates structured Procedure Text material (text/verbal mode), images and vocabulary with illustrations (visual mode), text-to-speech (audio mode), demonstration videos (audiovisual mode), and interactive practice activities (interactive mode) elements not previously found comprehensively in prior research.

Based on the above discussion, this study aims to develop and implement the Digital Pocketbook as a learning aid to support the reading of procedural texts for eighth-grade junior high school students. This medium was chosen because it is practical, easily accessible via students' digital devices, and capable of integrating various learning elements into a single medium. With these advantages, the Digital Pocketbook is expected to serve as a more interactive and effective learning medium to support the reading of procedural texts. This study is guided by the following research questions: (1) How is the digital pocketbook developed using the ADDIE model?; (2) To what extent is the developed digital pocketbook feasible for learning?; and (3) How do teachers and students respond to the developed digital pocketbook?

METHOD

This study employed a Research and Development (R&D) approach to develop the Digital Pocketbook, a digital-based interactive learning material. This development aims to support practical and interactive learning of procedural texts in junior high school. This model was chosen because of its flexible and organized framework, which allows for the systematic creation of materials based on student needs, as well as continuous assessment through user feedback and expert validation at each stage of development. The development model used is the ADDIE model, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation (Branch, 2009).

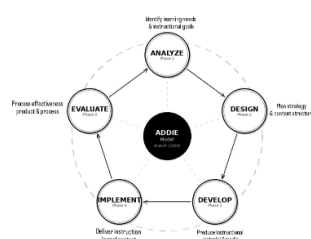


Figure 1. The ADDIE Development Model (Branch, 2009)

This study was conducted at a junior high school in Bandung, focusing on eighth-grade students'. A total of 10 students participated in the Small-scale trial, and 32 students participated in the Large-scale trial. The class was selected using purposive sampling, based on the variation in students' English proficiency levels and the class's active and responsive learning dynamics, following the subject teacher's recommendation.

Data were collected through interviews, students' needs analysis questionnaires, field notes, expert validation sheets, and teacher and student feedback questionnaires. Interviews, needs analysis questionnaires, and field notes were used to identify student needs and support the product development process. Expert validation sheets were used to assess the product's feasibility, while teacher and student feedback questionnaires were used to determine the product's practicality and acceptance. Qualitative data were analyzed through data reduction, data presentation, and drawing conclusions. Meanwhile, quantitative data were analyzed using descriptive statistics in the form of mean values and percentages based on a four-point Likert scale to determine the product's feasibility.

Table 1. Likert Scale by Sugiyono (2022)

Scale Types	Score
Strongly Agree	4
Agree	3
Disagree	2
Strongly Disagree	1

To determine the percentage of validator results and questionnaire responses from both teachers and students, the following formula is used:

$$\Sigma = \frac{x}{n} \times 100\%$$

Note:

Σ = Percentage result

x = Total Score Obtained

n = Maximum score

After obtaining the total validation score, the next step is to determine the eligibility criteria, as shown in the table below:

Table 2. Categories of Validity Arikunto (2010)

Percentage %	Validity Category
81% - 100%	Very Feasible
61% - 80%	Feasible
41% - 60%	Moderately Feasible
21% - 40%	Less Feasible
<20%	Not Feasible

After obtaining the questionnaire results, the next step is to determine the categories of student and teacher response variables, as shown in the following table:

Table 3. Variable Category of Students Satisfaction Arikunto (2010)

Percentage %	Criteria
81% - 100%	Very Feasible
61% - 80%	Feasible

41% - 60%	Feasible Enough
21% - 40%	Less Feasible
<20%	Very Unfeasible

RESULTS AND DISCUSSION

Results

The development of the Digital Pocketbook in this study utilized the ADDIE model proposed by Branch, which consists of five phases; Analysis, Design, Development, Implementation, and Evaluation (Branch, 2009). The results of the development at each phase are presented systematically in the following section.

1. The Process of Developing Digital Pocketbook

Analyze

Based on observations during the study, it was found that students used the *English for Nusantara* textbook published by Kemendikbudristek. Although the textbook aligns with the current curriculum, the Procedure Text material tends to be presented directly in the form of dialogues, texts, and exercises without explicit explanations of the text's content. This situation causes students to rely on the teacher's explanations and their own personal notes. To corroborate the findings from these observations, the researcher then distributed a needs analysis questionnaire to 32 students. In order to identify their learning difficulties and needs regarding English learning materials from the early stages of the study. The results of the student needs analysis questionnaire are presented in Table 4:

Table 4. Students' Needs Analysis Results

No	Statement	4	3	2	1
1	I find it difficult to understand English reading texts.	34.38%	46.87%	12.5%	6.25%
2	Reading texts in the textbook are difficult to understand.	37.5%	43.76%	15.62%	3.12%
3	I have difficulty identifying the structure and purpose of English texts	43.76%	40.62%	12.5%	3.12%
4	I have difficulty understanding vocabulary in reading texts.	43.76%	37.5%	15.62%	3.12%
5	English learning feels boring without learning media.	40.62%	50%	9.38%	-
6	I need learning materials that provide clear explanations to help me understand English reading passages.	34.37%	56.25%	9.38%	-
7	I am more interested in learning using digital media.	46.88%	43.75%	6.25%	3.12%
8	I need interesting learning media for reading activities.	46.88%	46.87%	6.25%	-
9	I want to use audio-visual media in learning English.	56.25%	37.5%	6.25%	-

10	I find that audio-visual media is very effective in helping me understand the material	50%	46.88%	3.12%	-
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The results of the needs analysis survey indicate that students experience widespread difficulties in learning to read English, as reflected by a consistent percentage of 81.25% across three aspects overall text comprehension, the readability of textbook material, and vocabulary mastery as well as 84.38% in the aspect of identifying text structure and purpose. On the other hand, students' high demand for learning media is also evident: 90.62% find learning boring without media and require clear explanations; 90.63% are more interested in learning with digital media; 93.75% need engaging media for reading activities; 93.75% prefer visual-audio-based media; and 96.88% stated that audio media effectively helps them understand English material more easily. These findings underscore the need to develop learning media that integrates visual and audio elements to enhance students' comprehension and engagement in reading instruction.

Design

The design phase was carried out based on the findings from the analysis phase. The researcher designed the Digital Pocketbook as an alternative multimodal learning medium that explains the concept of Procedure Text in detail and systematically, tailored to the students' needs, learning outcomes, and the English curriculum material for eighth-grade in the second semester. The first stage began with the design of the media's visual concept, including the selection of colors, illustrations, content structure, layout, features, icons, and fonts using the Canva application. This conceptualization was necessary to ensure that the media's appearance would be appealing and easy for eighth-grade junior high school students to understand.

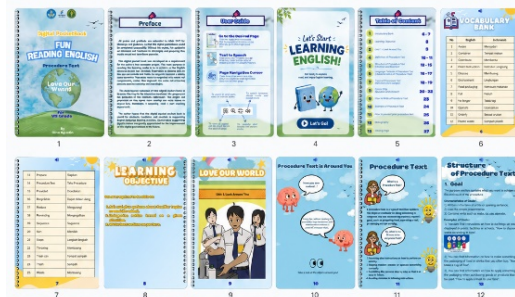


Figure 2. Initial Design

In addition, we have integrated relevant sections from the book *English for Nusantara* as a primary supplementary learning resource, so that students can access the sections in that book on a single platform without having to switch to a textbook.



Figure 3. Integrating Content from the Book English for Nusantara

Once the media design was fully developed in Canva, it was exported and integrated into the Heyzine Flipbook platform to create an interactive and user-friendly digital flipbook. At this

stage, several learning support features are added, including a text-to-speech audio feature using ElevenLabs, indicated by a speaker icon on specific pages (Figure 4); integration of interactive quizzes based on Wordwall (Figure 5); instructional videos via YouTube links (Figure 6); and navigation features to help students access content more easily (Figure 7) :

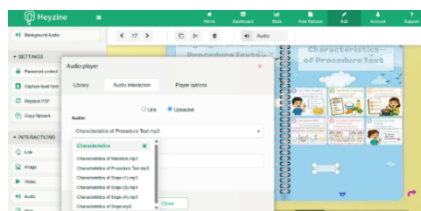


Figure 4. Audio Integration



Figure 5. Wordwall Quiz Integration

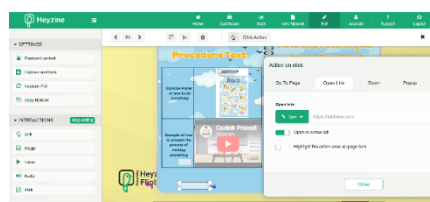


Figure 6. Video Integration



Figure 7. Navigation Features Integration

The entire design process was carried out using the Canva app. This initial design was then prepared as a prototype to be validated by media and content experts during the development phase.



Figure 8. Early Product Prototype

Development

The development phase aimed to transform the prototype design into a complete, ready-to-use Digital Pocketbook product, including the Home page, navigation menu, foreword, and the full chapter on Procedure Texts. Based on feedback from validators, the researchers revised the product, including adding user guidelines and adjusting the text-to-speech audio speed, to ensure the final product is truly suitable for use in the learning process. Figure 9 shows the final, revised design of the media:



Figure 9. Final Design Digital Pocketbook

The developed media can be accessed at: <https://heyzine.com/flip-book/d6084b50e1.html>

2. Media Feasibility of Digital Pocketbook

Once the product was fully developed, the next step was to conduct a validation process involving two media experts (university lecturers) and one subject matter expert (an English teacher at the research site). This feasibility test was designed to assess the media's suitability before it was Small-scale trialed. Validation was conducted using a validation questionnaire with a Likert scale consisting of 4 (Strongly Agree), 3 (Agree), 2 (Disagree), and 1 (Strongly Disagree). Table 5 shows the results of the two media validations as follows:

Table 5. Media Expert Validation Results

Media Validation Aspect	Validator 1	Validator 2	Average
Usability	100%	100%	100%
Functionality	87.5%	100%	93.75%
Linguistics & Content Aspect	100%	100%	100%
Total			97.92%
Category			Very Feasible

Based on the results of the media validation conducted by two validators, an average score of 97.92% was obtained, falling into the "Very Feasible" category. The highest scores were obtained in the usability and linguistics & content aspects, each receiving 100%, indicating that the media is very easy to use and that the language and content presented are appropriate and on target, while the functionality aspect received a score of 93.75%, indicating that all features and navigation of the media functioned properly.

In addition to expert validation of the media, subject matter validation was also conducted by subject teachers at the research site to ensure the content's alignment with classroom learning needs. The validation results are presented in Table 6:

Table 6. Subject Matter Expert Validation Results

Material Validation Aspect	Score (%)
Learning Objectives Aspect	100%
Language Appropriateness Aspect	87.5%
Material Selection Aspect	100%
Exercise Usage Aspect	95%
Average	95.62%
Category	Very Feasible

Based on the validation results conducted by subject teachers at the research site, an average score of 95.62% was obtained, falling into the "Very Feasible" category. In the aspect of learning objectives which assesses the alignment of the subject matter with the learning objectives in the current curriculum a score of 100% was obtained. In the language appropriateness aspect which assesses the use of concise language that is easily understood by students a score of 87.5% was obtained. In the content selection aspect which assesses the alignment of the procedure text content with students' learning needs a score of 100% was obtained. In the question usage aspect which assesses the alignment of quiz questions with the taught material a score of 95% was obtained.

Overall, the results of the content and media expert validation confirm that the Digital Pocketbook is suitable for use as a learning tool for reading procedural texts. These two sets of results complement each other, indicating that the Digital Pocketbook is valid from both a content and technical perspective, and is therefore suitable for testing in the next phase.

3. Students' and Teacher Responses to the Digital Pocketbook

Implementation

After receiving expert validation, the next step was a limited implementation involving 10 students to identify both technical and non-technical challenges before the full-scale pilot. During the pilot, the students appeared enthusiastic and began to get used to using the platform. Technical challenges were also identified, including difficulties accessing links and network limitations that caused the audio feature to perform suboptimally; these were subsequently addressed by providing QR codes and personal hotspots before the large-scale began.

After the issues encountered during the Small-scale trial were resolved, the Digital Pocketbook was subsequently rolled out in a full-scale implementation phase through a three-session teaching module on Procedure Texts using the Project-Based Learning (PjBL) model, aligned with the learning outcomes in the *English for Nusantara* textbook, Chapter 3 "Love Our World," Unit 1 "Look Around You". Based on field notes, the use of the Digital Pocketbook during the first session focused on understanding the concepts and examples of Procedure Texts, accompanied by a short quiz via Wordwall; students were then divided into groups to design a Procedure Text poster project. The second session was used to monitor the progress of the projects as an indicator of students' reading comprehension, while the third session was used to present the posters they had created. After the entire learning sequence, the researcher distributed a response questionnaire to the students. The questionnaire consisted of 10 statements covering aspects of ease of use, visual appearance, the usefulness of features, and the Digital Pocketbook's contribution to students' comprehension and interest in reading procedural texts in English. The questionnaire was administered during both the Small-scale trial pilot and the Large-scale trial, so the results could illustrate the consistency of students' responses across these two implementation phases. A summary of the students' responses from both phases is presented in Table 7 :

Table 7. Students Response Small-scale trial & Large-scale trial Result

No.	Statement	Small-Scale Trial	Large-Scale Trial
1.	Digital Pocketbook is easy to use when I'm studying procedure texts.	85%	87.5%
2.	Digital Pocketbook's interface features attractive images, colors, and layouts.	95%	93.75%
3.	The features in Digital Pocketbook are easy to use during the learning process.	82.5%	84.37%
4.	Digital Pocketbook makes it easier for me to read English texts.	87.5%	87.5%
5.	Digital Pocketbook helps me better understand the content of procedure texts.	85%	85.94%
6.	Digital Pocketbook can be used as a self-study tool outside of class.	90%	88.28%
7.	Digital Pocketbook has increased my interest in reading English.	92.5%	87.5%
8.	I feel more interested in reading English texts after using the Digital Pocketbook.	87.5%	85.94%

9.	Digital Pocketbook is an alternative for reading English texts.	92.5%	89.06%
10.	I want to use the Digital Pocketbook to study other English materials.	95%	90.63%
Average		89.25%	88.04%
Category		Very Feasible	Very Feasible

Based on Table 7, the results of the Small-scale trial showed an average student response rate of 89.25%, while the results of the large-scale trial showed an average rate of 88.04%. Both results fall into the “Very Feasible” category, indicating that the Digital Pocketbook is considered practical for use on both a small and large-scale. In both trial phases, this medium consistently received positive feedback. In the small-scale trial, the interface's visual appeal (Item 2) and students' willingness to use the Digital Pocketbook for other materials (Item 10) were tied for the highest ratings at 95%, while in the large-scale trial, visual appeal (Item 2) remained among the highest-rated aspects at 93.75%. This suggests that the Digital Pocketbook’s visual design is one of its key strengths in capturing students’ attention and interest during the learning process, whether in small or large groups with different demographic characteristics. In addition, a feedback questionnaire was also administered to one English teacher who was directly involved in teaching using the Digital Pocketbook. The results of the teacher’s feedback questionnaire are presented in Table 8:

Table 8. Teacher Response Result

No.	Statement	4	3	2	1
1.	The Pocketbook’s digital interface (images, colors, layout) is engaging and suitable for middle school students.	✓			
2.	The language used in the resource is easy for students to understand.	✓			
3.	The resource is easy to use during classroom learning activities.		✓		
4.	The content in the resource aligns with the learning objectives and the current curriculum.	✓			
5.	The media helps teachers deliver content on Procedure Texts.	✓			
6.	The media can be easily integrated into classroom learning activities.		✓		
7.	The audio feature text-to-speech supports the delivery of content to students.	✓			
8.	The media increases students’ interest and engagement in learning.	✓			
9.	The media is suited to the characteristics and learning needs of middle school students.	✓			
10.	The media is suitable for use as an alternative English teaching resource.	✓			
Total		95%			
Category		Very Feasible			

The survey results showed a total score of 95%, falling into the “Very Feasible” category. Teachers rated the media highly in terms of its appearance and ease of use, the alignment of the material with learning objectives and the curriculum, and the support provided by the text-to-Speech audio feature in delivering the material. However, ratings for the integration of the media into classroom learning activities were relatively lower, as the integration of digital

media into learning requires closer supervision of students. In terms of motivation, teachers assessed that the media was able to increase student interest and engagement and was suitable for use as an alternative English teaching material. Based on these results, the Digital Pocketbook received positive feedback from teachers and was deemed suitable for use as a learning medium for Procedure Texts in the classroom.

Evaluation

The evaluation phase in this study was conducted formatively, throughout the development process, and summatively, after large-scale implementation, in line with Branch's (2009) view that evaluation serves as an ongoing process that drives decision-making, rather than as a final summary of results.

Formative evaluation began during the Analysis phase, when the needs analysis questionnaire (Table 4) revealed that students struggled with reading comprehension and expressed a strong preference for audiovisual learning media; this evidence directly informed initial design decisions, including the incorporation of text-to-speech audio and video features. During the Development phase, formative evaluation continued through expert validation: a 97.92% rating from media experts (Table 5) and a 95.62% rating from subject matter experts (Table 6) provided the evidence base for two specific revision decisions: the addition of a user guide page and adjustments to the text-to-speech playback speed. Leading to adjustments in the functionality aspect, which had scored only 93.75%. A further formative cycle occurred during a small-scale trial with 10 students, where field observations identified two technical obstacles: difficulty accessing flipbook links and unstable audio playback due to network limitations. These were addressed by providing QR codes and personal hotspots prior to the large-scale trial, illustrating a direct evaluation to revision cycle.

A summative evaluation was conducted following a large-scale implementation involving 32 students across three PjBL-based teaching sessions, using a predetermined pass threshold of >81% in the "Very Feasible" category. Against this threshold, the product's performance across all validation measures media (97.92%) and materials (95.62%) as well as student responses in both small-scale (89.25%) and large-scale (88.04%) evaluations and teacher responses (95%). These results consistently exceeded the 81% criterion, indicating that the Digital Pocketbook met the acceptability standards established prior to testing.

Overall, the results of the formative and summative evaluations confirm that the evidence-based iterative revisions conducted during the Design, Development, and Implementation phases were effective, and the final product met the validity and practicality criteria established for this study, supporting its use as an alternative reading medium for procedural texts among eighth-grade students.

Discussion

This study aims to develop the Digital Pocketbook as a supporting medium for reading instruction, specifically for Procedure Text material, among eighth-grade junior high school students using the ADDIE development model. The following discussion is organized around three research objectives: the media development process, the level of media feasibility, and the responses of teachers and students to the developed media.

1. The Process of Developing Digital Pocketbook

Students' difficulties in understanding procedural texts turned out to be caused more by the limited scaffolding explanations in the textbook sources than by their linguistic ability alone. This finding underpinned the design decision to develop a medium that not only digitizes the

text, but also adds layers of explanation and new modalities to the same material. The process began by designing the visual concept of colors, illustrations, layout, and icons using Canva to match the characteristics of junior high school students, and then integrating the resulting design into the Heyzine platform to produce an interactive flipbook. At this stage, three supporting features were added gradually: text-to-speech audio through ElevenLabs to accommodate students' preference for audio materials, interactive quizzes based on Wordwall to provide immediate feedback, and demonstration videos from YouTube to strengthen visual understanding.

This series of integrations simultaneously reinforces and expands the argument of Mistang et al. (2025) that dependence on textbooks lowers student engagement: such dependence is a symptom of inadequately scaffolded materials, not a symptom of the print format itself, and this gradually constructed multimodal solution becomes a direct response to that symptom. The choice of this link-based platform was developed instead of an application that must be downloaded, as in previous studies (Sholihah et al., 2023; Magdalena et al., 2024; Sanusi et al., 2024).

2. Media Feasibility of Digital Pocketbook

Validation by media experts yielded an average score of 97.92% in the "Very Feasible" category, with the usability and linguistic & content aspects each receiving a perfect score of 100%, while the functionality aspect received a score of 93.75%. Validation by content experts also yielded an average score of 95.62% in the same category, supported by a score of 100% in the learning objectives and content selection aspects. Perfect scores in the usability, linguistic, and content aspects indicate that the visual design and language simplification align with student characteristics, consistent with the high levels of validity reported by (Sanusi et al., 2024; Magdalena et al., 2024; Sholihah et al., 2023). However, the relatively lower functionality score which was not an issue in either of those studies, reflects the structural compromises inherent in this multimodal design. This aligns with (Dewi et al., 2025), who found that the complexity of the learning content itself imposes a heavier cognitive load on EFL learners than the method of content delivery. Nevertheless, this discrepancy does not call into question the overall validity of the product, which still far exceeds the 81% threshold in both types of validation, indicating that experts distinguish between technical maturity and pedagogical accuracy as two separate dimensions of quality.

3. Students' and Teacher Responses to the Digital Pocketbook

The consistency of student response scores in the small-scale trial (89.25%) and the large-scale trial (88.04%) indicates that evaluations of the Digital Pocketbook's quality are determined more by the quality of its content and media design than by the technical issues that arose in the early stages. These results also indicate that formative evaluation within the ADDIE model was effective, as access and audio issues were successfully resolved before the large-scale trial was conducted. On the other hand, the 95% teacher response rate shows that although the media was rated as highly suitable, the integration of the media into learning activities remained the aspect with the lowest score. This suggests that the implementation of digital media depends not only on the quality of the media but also on teachers' readiness to manage the learning process. These findings are consistent with those of Sihombing et al., (2025) who state that teachers' readiness to integrate technology is influenced by self-efficacy and institutional support, not merely by the suitability of the media. The results of this study also support the findings of Sanusi et al. (2024), who reported that the Digital Pocketbook achieved a validation rate above 90% and was proven to be valid, practical, and effective in supporting learning.

Thus, the Digital Pocketbook has strong potential as a learning medium, although the success of its implementation remains influenced by technical stability and teachers' readiness to integrate it into the learning process in accordance with the flexibility principles of the Merdeka Curriculum (Suryati et al., 2025).

CONCLUSION

This study developed a Digital Pocketbook as a learning medium for reading procedural texts for eighth-grade junior high school students. This was based on the results of a needs analysis, which showed that 81.25% of students found it difficult to understand reading texts and considered the material in textbooks hard to grasp. Meanwhile, 93.75% of students wanted a more engaging learning medium for reading activities. Based on three objectives; (1) the development was carried out through the five stages of the ADDIE model. The first stage began with field observations and a needs analysis. This was followed by interface design using Canva, the development of an interactive flipbook based on Heyzine with ElevenLabs AI text-to-speech features, videos, and Wordwall quizzes, and the implementation of instruction using the Project-Based Learning model; (2) the Digital Pocketbook was deemed very feasible for use, as evidenced by a media expert validation score of 97.92% covering the aspects of usability, functionality, and linguistics & content, and a subject matter expert validation score of 95.62% covering the aspects of learning objectives, language appropriateness, content selection, and the use of questions all of which fell into the "Very Feasible" category; and (3) Student and teacher feedback showed positive results. In the Small-scale trial, the average student response rate reached 89.25%, and in the Large-scale trial, the student response rate was 88.04% with both falling into the "Very Feasible" category. Teachers provided positive evaluations with a score of 95% in the "Very Feasible" category. This was supported by the students' high level of enthusiasm and engagement during the learning process. Overall, the Digital Pocketbook proved to be valid, feasible, and well-received as an alternative medium to support independent learning of procedure texts.

This study has several limitations, including that it was conducted on a small-scale, involving only one class, and did not use pre-tests and post-tests to measure the product's effectiveness in improving students' reading skills. In addition, subject matter validation and teacher response data were obtained from a single English teacher, who served both as the content validator and as the practicing teacher. Therefore, future research is expected to test the Digital Pocketbook on a large-scale, measure its effectiveness more rigorously, and develop this product for other types of texts or integrate it with other language skills such as speaking and writing.

ACKNOWLEDGMENTS

The researcher would like to express sincere gratitude to all parties involved in this research, especially Institut Keguruan dan Ilmu Pendidikan (IKIP) Siliwangi, the research participants, and all other parties who provided support and assistance, enabling the successful completion of this study.

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