

CHAPTER I

INTRODUCTION

A. Background of The Study

The rapid development of digital technology has significantly transformed various aspects of human life, including education. In the era of 21st-century learning, technology is no longer merely a supporting tool but has become an essential component of the teaching and learning process. Teachers are expected to integrate technology into classroom instruction to create learning experiences that are more effective, interactive, and relevant to students' needs. Consequently, digital learning media have become increasingly important in supporting English language learning, enabling students to access learning resources more flexibly and encouraging teachers to provide innovative learning experiences¹.

Despite the growing integration of digital technology in education, the implementation of digital learning media in English classrooms at SMPN 1 Karangrejo remains limited. Based on the preliminary study conducted by the researcher, English learning still relies primarily on conventional printed textbooks and student workbooks. The English teacher explained that students often forgot to bring their books to class, left them at school, misplaced them, or accidentally exchanged them with their classmates. As a result, some students were unable to complete classroom activities or homework effectively. In addition, many students perceived the printed workbooks as less engaging because they mainly contained written explanations and exercises without interactive learning features. These conditions indicate that the learning resources currently used have not fully supported students' learning needs in English classes.

¹ Daryanto and Syaiful Karim, *Pembelajaran Abad 21* (Gava Media, 2017); Victoria I. Marín and Linda Castañeda, 'Developing Digital Literacy for Teaching and Learning', in *Handbook of Open, Distance and Digital Education*, ed. Olaf Zawacki-Richter and Insung Jung (Springer Nature Singapore, 2023), https://doi.org/10.1007/978-981-19-2080-6_64.

The findings of the preliminary study are consistent with previous studies reporting that conventional printed learning materials provide limited opportunities for students to engage actively with learning content. Printed textbooks generally present information in a static format and offer limited multimedia support, making it difficult to accommodate diverse learning preferences. In contrast, digital learning resources provide more flexible access and enable the integration of various multimedia elements that can support students' understanding of learning materials².

One of the digital learning media that has attracted considerable attention in recent years is the electronic book (e-book). An e-book is an electronic version of a printed book that can be accessed through various digital devices, including laptops, tablets, and smartphones³. Compared with conventional printed books, digital e-books offer several advantages, such as portability, ease of access, efficient storage, and the integration of multimedia elements including images, hyperlinks, videos, and interactive activities⁴. These features enable teachers to present learning materials more effectively while providing students with greater flexibility to access learning resources anytime and anywhere. Therefore, digital e-books have become one of the promising learning media to support English learning in secondary schools.

² Asrowi Asrowi et al., 'The Impact of Using the Interactive E-Book on Students' Learning Outcomes', *International Journal of Instruction* 12, no. 2 (2019): 709–22, <https://doi.org/10.29333/iji.2019.12245a>; Ria Safna et al., 'The Use of Printed and Digital Reading Materials in English Language Learning at Mts Nurul Haramain: A Comparative Analysis', *EDUTECH: Jurnal Inovasi Pendidikan Berbantuan Teknologi* 4, no. 3 (2024): 219–27, <https://doi.org/10.51878/edutech.v4i3.3394>.

³ Alexander Hamonangan Simamora et al., 'E-Book Berdasarkan Model Pembelajaran Berbasis Proyek Pada Mata Kuliah Media Pembelajaran', *Jurnal Pedagogi Dan Pembelajaran* 5, no. 1 (2022): 64–74, <https://doi.org/10.23887/jp2.v5i1.46353>; Farikha Septia Ningsih and Hanum Kholidiya Ulya, 'Pemanfaatan E-Book Sebagai Sumber Belajar Pada Kurikulum Merdeka', *Revorma: Jurnal Pendidikan Dan Pemikiran* 4, no. 1 (2024): 45–53, <https://doi.org/10.62825/revorma.v4i1.98>.

⁴ Manal Sanjaya, 'Pengaruh Penggunaan Buku Elektronik Terhadap Hasil Belajar', preprint, Open Science Framework, 28 June 2023, <https://doi.org/10.31219/osf.io/fyu4h>; Neza Almaida et al., 'The Effectiveness of E-Book Based Learning Media in Physics Education During the Covid-19 Pandemic', *Yayasan Darussalam Bengkulu* 4, no. 3 (2023): 95–103, <https://doi.org/https://doi.org/10.62159/isej.v4i3.1762>.

The development of digital e-books is closely related to the principles of multimedia learning. According to Mayer's Cognitive Theory of Multimedia Learning (2009; 2021), students learn more effectively when information is presented through both verbal and visual channels rather than through text alone. The integration of text, images, and instructional videos enables learners to process information more efficiently, thereby facilitating deeper understanding of the learning materials. Furthermore, Multimodal Learning Theory emphasizes that learning becomes more meaningful when students interact with multiple modes of communication, such as written text, visual illustrations, audio, and video. Therefore, integrating instructional videos into a digital e-book provides richer learning experiences and supports English learning through various forms of content representation⁵.

To ensure that the developed product addressed the actual learning needs of students, the researcher conducted a needs analysis involving eighth-grade students at SMPN 1 Karangrejo. The results indicated that most students expected English learning materials that were easily accessible, visually attractive, interactive, and integrated with multimedia features, particularly instructional videos. Students also expressed the need for learning resources that could be accessed both inside and outside the classroom to support independent learning. These findings confirmed that the development of a digital e-book integrated with instructional videos was relevant to the students' learning needs and the current learning context.

⁵ Richard E. Mayer, *Multimedia Learning*, Third edition (Cambridge University Press, 2021), <https://doi.org/10.1017/9781316941355>; Richard E Mayer, *Multimedia Learning* (Cambridge University Press, 2009), <https://doi.org/10.1017/9781316941355>.

Several previous studies have demonstrated the potential of digital learning media in supporting English language learning. Ma'arif and Claudia (2021) developed a digital English e-book for junior high school students. Although the product successfully provided digital learning materials, it mainly consisted of text, images, and simple interactive elements without integrating instructional videos⁶. Similarly, Dewi (2025) developed an interactive e-book based on visual literacy to improve students' comprehension of literary texts. However, the developed product primarily emphasized visual presentation and did not incorporate audiovisual explanations⁷. In another study, Nitiasih et al. (2024) developed micro-learning videos for English instruction. While the videos effectively supported English learning, they functioned as standalone instructional media rather than being integrated into a digital learning resource such as an e-book⁸.

Based on the previous studies, it can be observed that digital e-books and instructional videos have generally been developed as separate learning media. Most existing studies focus either on developing digital e-books with limited multimedia features or producing instructional videos as independent learning resources. In addition, only a few studies have integrated interactive educational games into digital learning media that enable students to practice and evaluate their understanding immediately after studying the materials. Consequently, there is still limited research that combines learning materials, instructional videos, interactive educational games, evaluations, and answer keys into one integrated digital learning platform for junior high school English learning.

⁶ Iin Baroroh Ma'arif and Shintia Ira Claudia, 'Developing English Digital Book for IX Grade Students of Junior High School', *APPLICATION: Applied Science in Learning Research* 1, no. 2 (2021): 83–88, <https://doi.org/10.32764/application.v1i2.1833>.

⁷ Anita Candra Dewi, 'Pengembangan E-Book Interaktif Berbasis Literasi Visual Untuk Meningkatkan Pemahaman Teks Sastra Di Smp', *Jurnal Skripta* 11, no. 1 (2025): 60–70, <https://doi.org/10.31316/skripta.v11i1.7658>.

⁸ Putu Kerti Nitiasih et al., 'Micro Learning Media for Teaching English at Junior High School Students', *Journal of Education Technology* 7, no. 4 (2024): 629–35, <https://doi.org/10.23887/jet.v7i4.69627>.

To address this research gap, the present study develops an interactive digital e-book entitled *Speak Up Book* to support English learning for eighth-grade students at SMPN 1 Karangrejo. Unlike previous studies, the developed product integrates learning materials, instructional videos, interactive educational games, exercises, evaluations, answer keys, and QR code-based access into a single digital platform. This integration allows students to access various learning resources through one medium while enabling teachers to utilize multimedia-supported instructional materials in classroom activities. Therefore, the developed e-book is expected to provide a more practical, accessible, and interactive learning resource that supports both classroom instruction and students' independent learning.

Therefore, this study aims to develop a digital e-book with video features entitled *Speak Up Book* to support English learning for eighth-grade students at SMPN 1 Karangrejo. The developed product is expected to provide a practical, accessible, and multimedia-supported learning resource that facilitates classroom instruction and independent learning.

B. Research Problems

Based on the background and identification of the problems described earlier, the research problems formulated in this study are as follows:

1. How is a digital e-book with video features developed to support English learning for the eighth-grade students at SMPN 1 Karangrejo?
2. How effective is the developed digital e-book with video features in supporting English learning for the eighth-grade students at SMPN 1 Karangrejo?

C. Research Objectives

Based on the research problems formulated above, the objectives of this study are as follows:

1. To develop a digital e-book with video features to support English learning for the

eighth-grade students at SMPN 1 Karangrejo.

2. To determine the effectiveness of the developed digital e-book with video features in supporting English learning for the eighth-grade students at SMPN 1 Karangrejo.

D. Significance of The Research

This research is expected to provide both theoretical and practical contributions as follows:

1. Theoretical Significance

- A. The results of this research are expected to enrich the theoretical insights in the field of English language learning media development, particularly in the use of digital e-books with video features at the junior high school level.
- B. This study may serve as an academic reference for future researchers who intend to conduct similar studies in the area of interactive and digital-based learning media development.
- C. Theoretically, this research can strengthen the understanding of Multimodal Learning Theory and Cognitive Theory of Multimedia Learning, which emphasize the integration of visual and auditory elements to enhance students' comprehension.

2. Practical Significance

Practically, this research is expected to support English learning by providing an innovative digital e-book integrated with instructional videos and interactive educational games that can be utilized in junior high school classrooms. The practical contributions of this research are described as follows:

A. For Teachers

The product developed through this research can serve as an innovative teaching media that helps teachers deliver English lessons more effectively, attractively, and interactively in line with technological advancements.

B. For Students

The developed digital e-book can support students in learning English independently, flexibly, and interactively, making learning activities more engaging and helping them better understand the learning materials.

C. For Schools

This research contributes to the digitalization of learning and supports the development of technology-based learning resources within the school environment.

D. For Other Researchers

The results of this study can serve as a model or reference for further research and product development using the Research and Development (R&D) approach, particularly in the field of digital English learning media.

E. Scope and The Limitation of the Research

This research focuses on the development of a digital e-book with video features **to support English learning** for the eighth-grade students of SMPN 1 Karangrejo in the 2025/2026 academic year. The product is developed using the ADDIE model, which consists of the Analysis, Design, Development, Implementation, and Evaluation stages. The materials included in the e-book are adapted to the current curriculum and cover several English topics for eighth-grade students, such as **Simple Past Tense, Recount Text, Narrative Text, Procedure Text, and Asking and Giving Opinions**. Furthermore, the

developed e-book is designed to support English learning by facilitating students' understanding of English materials through interactive learning activities, instructional videos, and interactive educational games.

This research is limited to the development and testing of the digital e-book for the eighth-grade students of SMPN 1 Karangrejo. The evaluation of the product focuses on its **validity, practicality, and effectiveness** based on assessments conducted by material experts, media experts, teachers, and students, as well as students' learning achievement measured through pre-test, post-test, and the N-Gain score. This study does not include large-scale implementation in other schools or educational levels, nor does it cover English materials beyond those included in the developed e-book.

F. Product Specification

The product developed in this research is an interactive digital e-book with integrated instructional video features designed to support English learning for eighth-grade students at SMPN 1 Karangrejo. The development of this product was based on the results of the needs analysis conducted during the Analysis stage of the ADDIE model. The needs analysis indicated that students required English learning materials that were easily accessible, visually attractive, interactive, and integrated with multimedia features. Furthermore, students expected learning resources that could be accessed both inside and outside the classroom to support classroom instruction and independent learning. Therefore, every component of the developed digital e-book was designed to accommodate these identified needs. The complete specifications of the product are presented as follows:

1. Product Form

The product is an interactive digital e-book that can be accessed through various digital devices, including laptops, computers, tablets, and smartphones. The e-book is

published using Heyzine Flipbooks, which enables smooth page navigation and interactive functions. The selection of this platform was based on the results of the needs analysis, which indicated that students required learning resources that were easy to access, practical to use, and available across different digital devices. Consequently, students can access the e-book anytime and anywhere without installing additional applications, supporting both classroom instruction and independent learning.

2. Content and Learning Materials

The content of the developed e-book is aligned with the English syllabus for Grade VIII based on the Merdeka Curriculum. The selection and organization of the learning materials were determined based on both the curriculum requirements and the results of the needs analysis conducted during the Analysis stage. The needs analysis revealed that students required comprehensive, well-structured, and easy-to-understand English learning materials that could be accessed independently and supported through multimedia resources. Therefore, the developed e-book includes five main topics: Simple Past Tense (Verbal and Nominal), Recount Text, Narrative Text, Procedure Text, and Asking and Giving Opinions. These materials are presented systematically, beginning with learning objectives, explanations, examples, guided practice, interactive activities, and evaluations to facilitate students' understanding and support the development of integrated English language skills.

3. Main Features

The features incorporated into the developed e-book were designed based on the students' learning needs identified during the needs analysis. The findings indicated that students preferred learning resources that were interactive, visually attractive,

easy to understand, and supported by multimedia elements. Therefore, several interactive features were integrated into the e-book to accommodate these needs and to support English learning more effectively. The main features include:

- Instructional videos that provide clear explanations and learning demonstrations similar to teacher guidance in the classroom.
- Illustrations and infographics that help students understand learning materials through visual representation.
- Interactive educational games and quizzes that enable students to practice, reinforce, and evaluate their understanding in an enjoyable way.
- QR Code integration that allows students to access instructional videos and interactive activities quickly and conveniently.
- A vocabulary glossary that helps students understand unfamiliar words encountered during the learning process.
- Answer keys that provide immediate feedback and support students' independent learning.

All of these features are integrated into one digital platform to create a multimodal learning experience that supports classroom instruction as well as independent learning.

4. Design and Appearance

The visual design of the developed e-book was created by considering the results of the needs analysis, which indicated that students preferred learning materials with an attractive, simple, and easy-to-read appearance. Therefore, the e-book adopts a student-centered design that emphasizes readability, visual appeal, and user-friendly

navigation. The design specifications are as follows:

- Page size: 1410 × 2250 pixels
- Layout: Portrait orientation for comfortable reading on digital devices
- Font: Open Sans as the primary font to ensure readability
- Color scheme and illustrations: Designed using colors and visual elements appropriate for junior high school students to create an engaging learning atmosphere
- Navigation: A simple and consistent layout that enables students to move easily between learning sections
- Design software: The entire visual design was created using Canva to ensure consistency, clarity, and an attractive presentation.
- These design elements were selected to provide students with a comfortable digital reading experience while supporting effective English learning.

5. Purpose of Use

The development of the digital e-book aims to support English learning by providing an interactive, accessible, and technology supported learning resource that accommodates students' learning needs. Specifically, the developed product is intended to:

- Provide students with accessible learning resources that support independent and flexible learning anytime and anywhere.
- Assist teachers in delivering English instruction through innovative, interactive, and technology-supported learning materials.

- Support students' understanding of English learning materials through the integration of instructional videos, interactive educational games, visual illustrations, and multimedia-based learning activities.
- Support the implementation of the Merdeka Curriculum by providing digital learning media that are aligned with students' learning needs and current technological developments.

6. File Format and Accessibility

The final product is an interactive digital e-book containing structured English learning materials, instructional videos, interactive educational games, exercises, evaluations, answer keys, and a vocabulary glossary. The product was designed using Canva and published through Heyzine Flipbooks, enabling students to access the e-book conveniently through laptops, computers, tablets, and smartphones. The online format was selected based on the results of the needs analysis, which indicated that students required learning resources that were flexible, practical, and easily accessible both inside and outside the classroom. The e-book can be accessed through an online link, allowing students to review learning materials independently whenever needed.

G. Definition of Key Terms

To avoid any misinterpretation of the key concepts used in this study, several essential terms are defined as follows:

1. Instructional Media

Instructional media refer to all tools, materials, technologies, or learning resources used to facilitate and support the teaching and learning process. They function as communication tools that help teachers deliver instructional content more effectively while assisting students in understanding learning materials through visual,

auditory, or audiovisual representations. According to Brown (2007), instructional media play an important role in creating meaningful learning experiences by supporting students' active participation during instruction.⁹ Furthermore, Branch (2009) emphasizes that instructional media are essential components of instructional design because they help organize learning experiences and facilitate the achievement of learning objectives¹⁰.

In this study, instructional media refer to the interactive digital e-book developed by the researcher to support English learning for eighth-grade students at SMPN 1 Karangrejo. The e-book integrates instructional materials, instructional videos, interactive educational games, and other multimedia features into one digital learning resource that can be used during classroom instruction as well as independent learning..

2. Digital E-Book

A digital e-book is an electronic learning resource that presents instructional materials in digital format and can be accessed through various electronic devices, such as laptops, computers, tablets, and smartphones. Compared with conventional printed books, digital e-books provide greater flexibility, portability, and accessibility, enabling learners to study anytime and anywhere¹¹. In addition, digital e-books can

⁹ H. Douglas Brown, *Teaching by Principles: An Interactive Approach to Language Pedagogy*, 3. ed (Pearson Education, 2007).

¹⁰ Robert Maribe Branch, *Instructional Design: The ADDIE Approach* ("ADDIE_Branch_Textbook." n.d., 2009), <https://doi.org/10.1007/978-0-387-09506-6>.

¹¹ Almaida et al., 'The Effectiveness of E-Book Based Learning Media in Physics Education During the Covid-19 Pandemic'; Amrina Amrina and Sri Nur Rahmi, 'Utilizing the E-Book System in Supporting Students' Literacy and Independent Learning', *Sciencetechno: Journal of Science and Technology* 3, no. 2 (2024): 233–54, <https://doi.org/10.70177/sciencetechno.v3i2.1356>.

integrate various multimedia elements that enrich students' learning experiences and facilitate their understanding of learning materials¹².

In this study, the digital e-book refers to an interactive English learning medium developed by the researcher to support English learning for eighth-grade students at SMPN 1 Karangrejo. The developed e-book integrates English learning materials, instructional videos, interactive educational games, illustrations, exercises, evaluations, answer keys, and a vocabulary glossary into one digital learning platform. These multimedia features are designed to facilitate students' understanding of English learning materials and support both classroom instruction and independent learning..

3. Video Features

Video features refer to the integration of instructional videos into digital learning media to facilitate the delivery of learning materials through audiovisual presentations. Video-based learning enables students to receive information through both visual and verbal channels, allowing them to understand learning materials more effectively. According to Mayer, the integration of words and pictures supports students' cognitive processing more effectively than the use of words alone¹³. Similarly, Ong Long et al. (2023) state that instructional videos provide clear explanations, increase students' access to learning materials, and support flexible learning in various educational settings.¹⁴

In this study, video features refer to the instructional videos integrated into the digital e-book through QR Codes and YouTube links created by the researcher. These

¹² Richard E Mayer, *Multimedia Learning*.

¹³ Richard E Mayer, *Multimedia Learning*; Richard E. Mayer, *Multimedia Learning*.

¹⁴ Ong Ace Hong Ong Long et al., 'A Review on The Use of Video in Education: Advantages and Disadvantages', *Innovative Teaching and Learning Journal* 7, no. 2 (2023): 25–40, <https://doi.org/10.11113/itlj.v7.132>.

videos contain explanations of English learning materials, examples, and learning demonstrations related to each topic presented in the e-book. The integration of instructional videos is intended to support English learning by providing clearer explanations, facilitating students' understanding of the learning materials, and enabling students to review the lessons independently whenever necessary.

4. English Learning Materials

English learning materials refer to instructional content designed to help students develop their English language knowledge and skills in accordance with the learning objectives and curriculum. Effective English learning materials should be systematically organized, relevant to students' needs, and supported by appropriate instructional media to facilitate meaningful learning experiences (Harmer, 2015; Tomlinson, 2011).

In this study, English learning materials refer to the instructional content presented in the digital e-book developed for eighth-grade students at SMPN 1 Karangrejo based on the Merdeka Curriculum. The materials include Simple Past Tense (Verbal and Nominal), Recount Text, Narrative Text, Procedure Text, and Asking and Giving Opinions. Each topic is systematically organized through learning objectives, explanations, examples, guided exercises, evaluations, instructional videos, interactive educational games, and answer keys. The integration of these components is intended to support English learning by facilitating students' understanding of the learning materials and providing opportunities for both classroom instruction and independent learning.

H. Organization of the Research

This thesis is systematically organized into six chapters to provide a clear understanding of the research process and findings. The organization of this thesis is presented as follows:

1. Chapter I: Introduction

This chapter presents the background of the study, research problems, research objectives, significance of the study, scope and limitation of the study, product specification, definition of key terms, and the organization of the research. It explains the rationale for developing a digital e-book with video features to support English learning for eighth-grade students at SMPN 1 Karangrejo.

2. Chapter II: Review of Related Literature and Theoretical Framework

. This chapter discusses the theories that serve as the foundation of the research, including theories of English language learning, instructional media, digital e-books, instructional videos, multimedia learning, the ADDIE instructional design model, and Research and Development (R&D). This chapter also reviews previous studies related to digital learning media and identifies the research gap addressed by this study.

3. Chapter III: Research Methodology

This chapter explains the research methodology employed in this study. It describes the Research and Development (R&D) approach using the ADDIE model, including the research design, research setting and participants, research procedures, research instruments, data collection techniques, data analysis techniques, and product validation procedures.

4. Chapter IV: Research Findings

This chapter presents the findings of the research obtained from each stage of the ADDIE model, including the Analysis, Design, Development, Implementation, and Evaluation stages. It also presents the results of the needs analysis, product development, expert validation, product revisions, implementation process, teacher and student responses, and the effectiveness of the developed product based on the pre-test, post-test, and N-Gain analysis.

5. Chapter V: Discussion

This chapter discusses the research findings by relating them to relevant theories and previous studies. It explains how the developed digital e-book supports English learning, highlights the novelty of the product, and discusses the validity, practicality, and effectiveness of the developed product based on the research findings.

6. Chapter VI: Conclusion and Suggestions

This chapter presents the conclusions drawn from the research findings and discussion. It also provides suggestions for teachers, students, schools, and future researchers regarding the implementation and further development of digital learning media to support English language learning.