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ENHANCING READING LITERACY AND TEACHER ENGAGEMENT THROUGH *READS* ROADMAPS AND INTERACTIVE E-BOOK

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Abstract: Reading literacy remains a major challenge in Indonesian junior high schools, where many students still struggle to understand texts beyond the literal level, while teachers often face difficulties in sustaining effective reading instruction. These problems are closely related to limited teacher engagement and the lack of integration between structured literacy strategies and digital learning resources. Although previous studies have discussed structured reading models or digital tools separately, empirical evidence that combines both while addressing teacher reading engagement remains limited. This study aimed to investigate the implementation of READS Roadmaps integrated with interactive e-books and to examine their contribution to improving students' reading literacy and teachers' reading engagement. Using a Classroom Action Research design, the study was conducted in three cycles with eighth-grade students at a public junior high school in Padang. Data were collected through classroom observations, reading literacy tests, questionnaires, interviews. The findings showed a sustained improvement in students' reading literacy across the cycles, particularly in inferential and evaluative reading. In addition, teachers demonstrated higher motivation, confidence, and more active involvement in planning and delivering reading instruction. Overall, the results indicate that integrating READS Roadmaps with interactive e-books offers a practical and effective approach to enhancing reading literacy and strengthening teacher engagement in junior high school contexts.
Keywords: *reading literacy; teacher reading engagement; READS Roadmaps; interactive e-books.*

INTRODUCTION

Reading literacy is widely recognized as an essential component of contemporary education because it strongly influences students' academic achievement, cognitive development, and capacity for lifelong learning. In the context of 21st-century education, reading literacy is no longer limited to decoding written texts but involves the ability to interpret, evaluate, and critically engage with information across various formats and contexts. Recent international assessments continue to indicate that many students struggle to achieve these competencies.

The Organisation for Economic Co-operation and Development (OECD, 2023) defines reading literacy as the capacity to understand, use, reflect on, and engage with written texts in order to achieve personal goals, develop knowledge, and participate effectively in society. This definition highlights the importance of higher-order thinking skills, including inference, evaluation, and reflection, which are essential for students' success in modern learning environments.

Despite ongoing curriculum reforms, reading literacy remains a persistent challenge in many education systems, including Indonesia. Findings from the Programme for International Student Assessment (PISA) 2022 reveal that Indonesian students continue to perform below the OECD average in reading literacy, particularly in tasks that require inferential and evaluative comprehension (OECD, 2023). These results suggest that a substantial proportion of students have difficulty moving beyond literal understanding to deeper levels of text interpretation. Such conditions indicate a gap between curriculum expectations and classroom realities, emphasizing the need for more effective

instructional approaches that actively engage students in meaningful reading practices.

At the national level, the Indonesian government has responded to these challenges through the implementation of the Merdeka Curriculum, which places literacy as a foundational competency across subjects. This curriculum promotes student-centered learning, differentiation, and the integration of digital technology to support deeper learning experiences (Kemendikbudristek, 2023). However, several recent studies indicate that the successful implementation of literacy-oriented instruction is highly dependent on teachers' engagement, instructional strategies, and access to appropriate learning resources (Widodo & Santosa, 2023; Rahmawati & Rahayu, 2023). In many classrooms, reading instruction remains teacher-centered and text-based, with limited opportunities for students to actively interact with texts or apply higher-order reading strategies.

In addition to student-related challenges, teacher reading engagement has emerged as a critical factor influencing the effectiveness of literacy instruction. Teacher reading engagement in this study refers to teachers' active cognitive, emotional, and behavioral involvement in planning, implementing, reflecting on, and improving reading instruction. This concept extends beyond general teacher motivation or self-efficacy because it specifically focuses on sustained instructional involvement in literacy practices, including strategic reading instruction, reflective teaching, collaboration, and the integration of digital literacy resources. Recent studies on teacher engagement emphasize that engaged teachers demonstrate greater instructional adaptability, reflective practice, and commitment to improving student learning outcomes (Collie et al., 2023; Klassen & Kim, 2024). In literacy instruction contexts, teacher engagement is closely associated with the ability to design meaningful reading activities, facilitate higher-order comprehension, and sustain supportive literacy environments.

Recent studies further suggest that the effectiveness of literacy instruction is strongest when structured pedagogy, digital learning resources, and teacher engagement operate in an integrated manner rather than separately. Structured instructional frameworks provide systematic guidance that supports comprehension development, while interactive digital tools enhance motivation and active participation through multimodal learning experiences. However, the successful implementation of these approaches depends heavily on teachers' engagement in adapting instruction, facilitating interaction, and reflecting on classroom practices. This interaction indicates that literacy improvement is not solely determined by instructional models or technology, but also by teachers' sustained pedagogical involvement in managing literacy learning environments.

Although previous studies have examined structured reading models, interactive e-books, and teacher engagement separately, limited research has explored how these three components interact simultaneously in literacy instruction, particularly in Indonesian junior high school contexts. Most existing studies focus primarily on student outcomes without sufficiently examining how integrated instructional innovation influences teachers' engagement and instructional practices. Therefore, this study aims to develop, implement, and evaluate the integration of READS Roadmaps and interactive e-books to improve students' reading literacy while simultaneously strengthening teachers' reading engagement through Classroom Action Research.

Therefore, this study aims to investigate the implementation of READS Roadmaps integrated with interactive e-books in an Indonesian junior high school context. Specifically, the study seeks to examine how this integrated approach contributes to improving students' reading literacy and enhancing teachers' reading engagement through a Classroom Action Research design. By addressing both cognitive and instructional dimensions of literacy, this study is expected to provide empirical evidence and practical insights for developing sustainable, context-responsive literacy instruction aligned with current curriculum demands.

METHOD

This study employed a Classroom Action Research (CAR) design to investigate the implementation of READS Roadmaps integrated with interactive e-books and to examine their contribution to improving students' reading literacy and teachers' reading engagement. Classroom Action Research was selected because it allows teachers and researchers to identify classroom problems systematically, implement instructional interventions, and refine teaching practices through reflective cycles. The CAR design followed a cyclical process consisting of planning, action, observation, and reflection

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stages, enabling continuous instructional improvement across the research cycles. In addition to implementing instructional activities, each cycle was designed to identify classroom challenges and evaluate how instructional adjustments could improve literacy learning outcomes and teacher engagement.

The research was conducted in three cycles. In Cycle I, classroom observations showed that many students still experienced difficulty in inferential comprehension and participated passively during discussion activities. Students relied heavily on teacher guidance and were not yet familiar with analytical reading tasks. Reflection results indicated that students required clearer scaffolding, vocabulary assistance, and more structured collaborative activities. Based on these findings, several adjustments were implemented in Cycle II, including the addition of guided prompts, visual supports, structured peer discussion tasks, and revised embedded comprehension questions within the interactive e-books. These modifications helped students engage more actively in inferential reading and collaborative discussion. In Cycle III, reflections indicated that students had become more familiar with the READS stages but still required opportunities for independent analysis and summarization. Therefore, instructional activities emphasized student autonomy by reducing teacher scaffolding and encouraging students to generate independent interpretations, collaborative reasoning, and self-developed summaries. These continuous revisions reflected the iterative and problem-solving nature of Classroom Action Research.

The study was conducted at SMP N 7 Padang, a public junior high school located in Padang, Indonesia. The participants consisted of one eighth-grade class and one English teacher who participated actively throughout the research process. The class was selected purposively based on preliminary classroom observations indicating low reading literacy performance, limited student participation during reading instruction, and the teacher's willingness to collaborate in literacy-focused instructional improvement. In Classroom Action Research, contextual relevance and the potential for pedagogical improvement are prioritized over statistical generalization; therefore, the selected class represented an appropriate context for investigating literacy intervention in an authentic classroom environment.

The English teacher functioned as the primary classroom instructor during the intervention, while the researcher acted as a facilitator, observer, and collaborative planner throughout the research cycles. To minimize potential bias related to the assessment of teacher engagement, classroom observations and teacher engagement evaluations involved an independent observer who used structured observation guidelines and engagement indicators. Collaborative observation and reflective discussions were conducted after each cycle to improve the credibility and trustworthiness of the findings.

To obtain comprehensive data on students' reading literacy development and teachers' reading engagement, multiple instruments were employed. Classroom observation sheets were used to document the implementation of READS Roadmaps stages, the use of interactive e-books, and classroom interactions during reading instruction. The observations focused on students' participation, engagement with texts, and responses to reading activities, as well as the teacher's instructional strategies and engagement.

Table 1. *Indicators of classroom observation*

Aspect Observed	Indicators
Implementation of READS Roadmaps	Teacher applies Read, Engage, Analyze, Discuss, and Summarize stages systematically during reading instruction
Use of Interactive E-Books	Interactive features (audio, visuals, quizzes) are utilized to support reading activities
Student Reading Engagement	Students actively participate, respond to questions, and interact with texts
Teacher Reading Engagement	Teacher demonstrates enthusiasm, confidence, and strategic guidance during reading instruction

The interactive e-books used in this study were teacher-adapted digital reading materials developed using Canva and Liveworksheets platforms to support literacy instruction aligned with the READS Roadmaps framework. The e-books were designed based on students' reading levels, curriculum objectives, and reading topics relevant to junior high school English learning contexts. The interactive e-books combined written texts with multimedia and interactive

features, including audio narration, vocabulary support, visual illustrations, embedded comprehension questions, hyperlinks, and reflective activities. These features were intended to support active reading engagement and scaffold students' comprehension processes.

The organization of the interactive e-books was systematically aligned with the five stages of READS Roadmaps. During the Read stage, students accessed texts supported by audio narration and visuals to improve basic comprehension and vocabulary recognition. In the Engage stage, visual prompts and prediction questions were used to activate prior knowledge and encourage students' responses to texts. In the Analyze stage, embedded inferential and evaluative questions guided students to identify implicit meanings and analyze textual evidence. During the Discuss stage, collaborative prompts and guided discussion tasks facilitated peer interaction and idea exchange. Finally, in the Summarize stage, students completed reflective summary tasks independently to demonstrate overall comprehension.

To evaluate the effectiveness of the intervention, a reading literacy test was administered to assess students' reading literacy across three levels of comprehension: literal, inferential, and evaluative. The test was designed in alignment with the objectives of the READS Roadmaps and the literacy standards of the Merdeka Curriculum. The test was administered at different stages of the research cycles to monitor students' progress.

Table 2. *Indicators of students' reading literacy test*

Reading Level	Indicators
Literal	Identifying explicitly stated information and main ideas
Inferential	Drawing conclusions and interpreting implicit meaning
Evaluative	Evaluating ideas, author's intent, and text relevance

In addition, teacher reading engagement questionnaire was employed to measure teachers' emotional, cognitive, and behavioral engagement during reading instruction. The questionnaire covered dimensions including motivation, confidence, reflective practice, collaboration, professional involvement, and digital engagement. The responses were collected using a Likert-scale format.

Table 3. *Indicators of teacher reading engagement questionnaire*

Dimension	Indicators
Personal Engagement	Motivation and interest in reading instruction
Reflective Engagement	Reflection on reading strategies and classroom practices
Collaborative Engagement	Collaboration with colleagues in literacy instruction
Professional Engagement	Engagement in professional learning related to literacy
Digital Engagement	Use of digital tools and interactive e-books in reading instruction

To ensure the consistency of READS Roadmaps implementation across the research cycles, the study employed a structured instructional checklist based on the five stages of the framework: Read, Engage, Analyze, Discuss, and Summarize. The checklist was used during classroom observations to confirm that each instructional stage was implemented systematically in every cycle. Lesson plans were also developed collaboratively between the researcher and the teacher prior to each cycle to maintain alignment between instructional objectives, interactive e-book activities, and literacy tasks. Reflective discussions conducted after each cycle were used to evaluate implementation consistency and identify necessary instructional refinements while maintaining fidelity to the READS framework.

Semi-structured interviews were conducted with the teacher at the end of each cycle to obtain reflective insights regarding instructional challenges, classroom interaction, students' reading development, and teachers' engagement during the implementation process.

To ensure the trustworthiness of the findings, instrument validity and reliability were addressed before and during the implementation of the study. Content validity was established through expert judgment. All instruments, including classroom observation sheets, reading literacy tests, and the teacher reading engagement questionnaire, were reviewed by experts in English language education and literacy instruction to evaluate their clarity, relevance, and alignment with the research objectives and the READS Roadmaps framework.

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The reliability of the students' reading literacy test was examined through pilot testing before the main study. The internal consistency analysis using Cronbach's Alpha yielded a coefficient of $\alpha = 0.835$, indicating good reliability for educational research. The teacher reading engagement questionnaire also demonstrated acceptable reliability with a Cronbach's Alpha coefficient of $\alpha = 0.812$ across engagement dimensions. In addition, inter-rater reliability procedures were applied during classroom observations by involving an independent observer to ensure consistency in documenting instructional practices and classroom interactions.

Data analysis was conducted using both quantitative and qualitative approaches. Quantitative data from reading literacy tests and teacher engagement questionnaires were analyzed descriptively to identify patterns of improvement across the research cycles. Meanwhile, qualitative data from classroom observations and semi-structured interviews were analyzed thematically to identify patterns related to students' participation, reading behaviors, instructional interaction, and teacher engagement.

The integration of qualitative and quantitative findings was conducted through data triangulation. Quantitative improvements in reading literacy scores and teacher engagement dimensions were interpreted alongside qualitative evidence from classroom observations and interview reflections to provide a more comprehensive understanding of the intervention outcomes. This triangulation process strengthened the credibility of the findings by ensuring that statistical trends were supported by observable classroom behaviors and reflective insights from the implementation process.

RESULTS AND DISCUSSION

This section presents and discusses the findings of the Classroom Action Research on the implementation of READS Roadmaps integrated with interactive e-books at SMP N 7 Padang. The results are organized according to the research questions and are discussed by integrating empirical findings with relevant theoretical perspectives and recent studies.

Implementation of READS roadmaps and interactive e-books

The implementation of READS Roadmaps integrated with interactive e-books was carried out progressively across three research cycles, with each cycle reflecting improvements in instructional organization, teacher facilitation, and student engagement. The implementation process demonstrated how structured literacy stages and digital resources complemented each other in supporting reading instruction.

In Cycle I, both the teacher and students were in the initial adaptation stage. Classroom observations indicated that the Read and Engage stages were implemented relatively effectively, as students were able to follow the text with the support of audio narration and visual features embedded in the interactive e-books. However, limitations were evident during the Analyze and Discuss stages. Many students focused on surface-level information and experienced difficulty identifying implicit meanings or explaining ideas in their own words. Student participation during discussions was limited, and the teacher frequently intervened to guide comprehension. The use of interactive e-books in this cycle was primarily supportive, serving as a tool to attract attention rather than to promote deeper analysis.

Reflective interview data also indicated that the teacher initially experienced uncertainty in facilitating analytical reading activities. One interview excerpt showed: "At the beginning, students were still waiting for direct explanations from the teacher. It was difficult to encourage them to analyze the text independently, especially during discussion activities."

In Cycle II, notable improvements were observed in the quality of implementation. The teacher demonstrated greater confidence in managing the READS stages and integrating interactive e-book features more strategically. Embedded questions, visual prompts, and vocabulary support features were used intentionally to guide students during the Analyze stage. As a result, students began to show improved inferential understanding and were more willing to participate in group discussions. Peer interaction during the Discuss stage increased, and students were able to respond to guided questions with greater clarity. The Summarize stage also improved, as students began to produce short summaries with teacher scaffolding.

By Cycle III, the implementation of READS Roadmaps and interactive e-books reached a more effective and stable stage. The teacher was able to facilitate all five READS stages smoothly within the lesson time, and students demonstrated increased independence in engaging with texts. Classroom observations revealed that students

actively interacted with interactive e-book features, revisited texts to confirm understanding, and responded to higher-order questions with minimal guidance. During the Discuss stage, students exchanged ideas more confidently and justified their answers based on textual evidence. One classroom observation excerpt noted: "Students no longer waited for teacher explanations before responding to questions. Several groups actively debated their interpretations using evidence from the text."

The findings indicate that the effectiveness of READS Roadmaps and interactive e-books increased as both teachers and students became more familiar with the structured stages and digital tools. This progression is consistent with recent perspectives on structured literacy instruction, which emphasize the role of explicit stages and guided practice in supporting higher-order reading comprehension (Duke & Cartwright, 2023; Kim et al., 2022). In addition, the increasing effectiveness of interactive e-books across cycles aligns with studies suggesting that digital reading tools are most impactful when integrated within a clear pedagogical framework rather than used in isolation (Neumann & Neumann, 2022; Day et al., 2024). Furthermore, the gradual improvement in classroom interaction supports findings from Sung et al. (2023) and Liu and Huang (2023), which highlight that multimodal digital reading environments can increase students' participation, collaborative discussion, and engagement in literacy learning. The gradual refinement of instructional strategies across cycles further highlights the importance of sustained implementation and reflective practice in maximizing the impact of structured literacy instruction supported by interactive digital resources.

Table 4. *Summary of READS roadmaps and interactive e-books implementation across cycles*

Aspect	Cycle I	Cycle II	Cycle III
Read Stage	Implemented with guidance	Implemented consistently	Implemented independently
Engage Stage	Limited student response	Increased student participation	High student engagement
Analyze Stage	Frequent scaffolding needed	Improved inferential analysis	Students analyze texts independently
Discuss Stage	Low interaction	Active peer discussion	Sustained collaborative discussion
Summarize Stage	Teacher-led summaries	Guided student summaries	Student-generated summaries

Improvement of teacher reading engagement

The findings show a positive improvement in teacher reading engagement across the three research cycles. In Cycle I, the teacher displayed moderate engagement, particularly during lesson preparation and initial implementation. While the teacher showed interest in using READS Roadmaps and interactive e-books, challenges related to time management, unfamiliarity with digital features, and uncertainty in facilitating higher-order reading activities affected instructional confidence.

In Cycle II, a noticeable increase in teacher engagement was observed. The teacher became more proactive in planning reading activities, selecting appropriate interactive e-book features, and facilitating student discussion. Increased confidence was reflected in clearer instructional explanations and more flexible responses to students' questions.

Interview reflections indicated that the structured stages of READS Roadmaps helped reduce uncertainty in organizing literacy instruction. The teacher stated: "The READS stages helped me organize the lesson more clearly. I became more confident because each activity already had a clear direction and purpose."

The structured framework of READS Roadmaps appeared to support the teacher's instructional efficacy by providing systematic guidance during lesson planning and classroom implementation. This finding is consistent with studies suggesting that structured instructional frameworks can reduce instructional ambiguity and support teachers' confidence in facilitating higher-order literacy learning (Kim et al., 2022; Duran & Yoon, 2023).

In addition, the interactive e-books contributed positively to teacher engagement by improving instructional efficiency and increasing students' responsiveness during reading activities. Features such as audio narration, embedded questions, visual prompts, and vocabulary support reduced the need for repeated teacher explanation and enabled students to participate more

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independently during reading activities. As students became more active during discussions and collaborative tasks, the teacher also demonstrated greater enthusiasm and involvement in facilitating classroom interaction.

This finding suggests that teacher engagement was strengthened not only through professional motivation but also through the interaction between pedagogical structure, digital support, and positive classroom response. The increasing responsiveness of students appeared to reinforce the teacher's sense of instructional effectiveness and professional involvement during literacy instruction. These findings are consistent with Collie et al. (2023) and Klassen and Kim (2024), who emphasize that teacher engagement develops through dynamic interaction between instructional clarity, classroom participation, and supportive teaching environments. Similarly, Hiver et al. (2023) and Zhang and Tsung (2023) argue that reflective instructional experiences and positive student interaction contribute significantly to sustained teacher engagement and professional growth.

By Cycle III, teacher reading engagement showed sustained improvement across personal, reflective, collaborative, professional, and digital dimensions. The teacher demonstrated greater confidence in facilitating analytical reading activities, integrating interactive e-book features strategically, and encouraging collaborative literacy discussion. The improvement in teacher reading engagement is further illustrated by quantitative data comparing pre-teaching and post-teaching conditions across engagement dimensions.

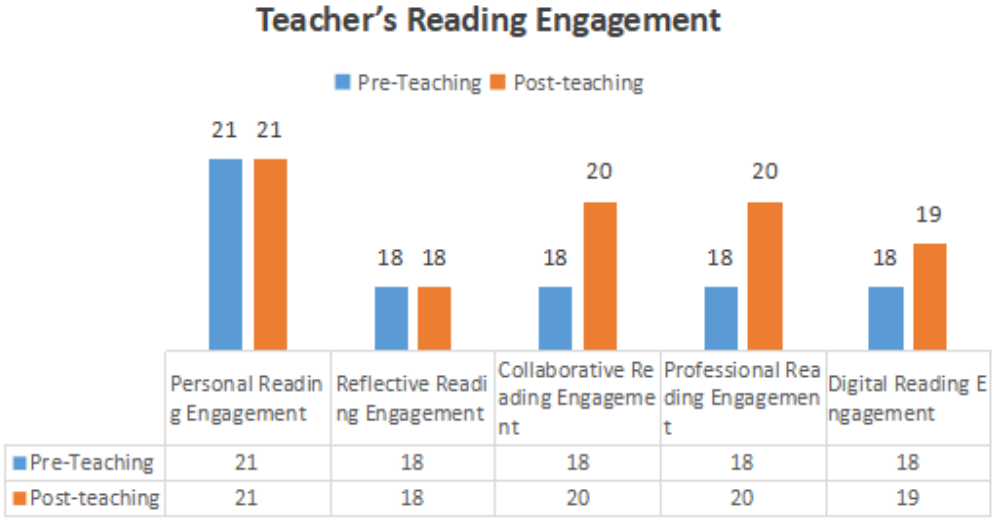


Figure 2. *Teacher reading engagement before and after the implementation of READS roadmaps and interactive e-books*

Overall, the findings indicate that the integration of structured literacy instruction and interactive digital resources not only supported students' reading development but also strengthened teachers' instructional engagement, confidence, and reflective participation in literacy instruction.

Improvement of students' reading literacy

Students' reading literacy demonstrated a meaningful and sustained improvement across the three stages of assessment: pre-test, post-test 1, and post-test 2. The progression of scores reflects the gradual development of students' reading comprehension as they engaged with structured reading stages supported by interactive digital texts.

In the pre-test stage, the average score of students' reading literacy was relatively low, indicating that many students experienced difficulties in understanding texts beyond the literal level. Classroom observations conducted prior to the intervention revealed that students tended to focus on identifying explicit information and showed limited ability to draw inferences, interpret implicit meanings, or evaluate ideas presented in the texts. These findings suggest that students required systematic scaffolding and more engaging instructional support to develop higher-order reading skills.

Following the implementation of Cycle I, post-test 1 results showed a clear improvement in students' reading literacy. The increase in average scores indicates that the introduction of READS

Roadmaps began to support students in navigating texts more strategically. During this stage, interactive e-books played an important role in facilitating comprehension through features such as audio narration, visual aids, and embedded guiding questions. These features helped students clarify vocabulary, connect ideas, and begin making simple inferences, although some students still required teacher guidance, particularly in analytical and evaluative tasks.

More substantial improvement was observed in post-test 2 after the completion of Cycle II and Cycle III. The marked increase in the average score suggests that students benefited from sustained exposure to structured reading instruction and repeated practice with higher-order reading activities. By this stage, students were more capable of identifying implied meanings, justifying their answers using textual evidence, and summarizing texts independently. The READS stages, particularly Analyze, Discuss, and Summarize, encouraged deeper engagement with texts, while interactive e-books supported motivation and active participation.

Classroom observations also demonstrated qualitative changes in students' literacy behavior. One observation note stated: "Students revisited the text independently before answering inferential questions and began discussing alternative interpretations with peers."

Overall, the quantitative results demonstrate that students' reading literacy improved not only incrementally but also sustainably across the research cycles. From a theoretica65l perspective, this pattern reflects key principles of reading literacy development that emphasize the importance of structured scaffolding, repeated practice, and active meaning-making in supporting higher-order comprehension. The substantial increase from the pre-test to post-test 2 indicates that the integration of READS Roadmaps and interactive e-books was effective in enhancing students' reading comprehension skills. This finding supports recent research on reading literacy, which highlights that structured instructional scaffolding and repeated engagement with analytical and evaluative reading tasks are essential for developing higher-order comprehension (OECD, 2023; Duke & Cartwright, 2023). Moreover, the role of interactive e-books in facilitating motivation and active engagement is consistent with studies showing that multimedia-supported texts can enhance inferential comprehension when aligned with instructional objectives (Alghamdi & Palaiologou, 2023; Day et al., 2024). These findings also support research by Teng (2022) and Cho et al. (2022), which emphasizes that digital reading environments can strengthen comprehension monitoring, metacognitive strategy use, and students' active interaction with texts.

Table 6. *Students' reading literacy scores across pre-test and post-tests*

Assessment Stage	Pre-Test	Post-Test 1	Post-Test 2
Total Score	2150	2607	3044
Average Score	67	81	95
Average Increase (%)	22.48%	18.00%	44.34%

Although the findings indicate positive improvements in students' reading literacy and teacher engagement, several limitations should be acknowledged. As a Classroom Action Research study conducted within one classroom context, the findings cannot be generalized broadly across different educational settings. In addition, improvements observed during the research cycles may not have resulted solely from the intervention itself. Other factors, such as increased attention during the research process, repeated exposure to reading activities, classroom familiarity with instructional routines, and students' gradual adaptation over time, may also have contributed to the observed progress.

Furthermore, the continuous interaction between the teacher, researcher, and students throughout the cycles may have increased motivation and participation due to the reflective and collaborative nature of the research process. Therefore, while the findings suggest that integrating READS Roadmaps and interactive e-books contributed positively to literacy instruction, the study does not claim absolute causality. Future studies involving larger participant groups, comparison classes, or longer implementation periods may provide stronger evidence regarding the long-term effectiveness of the intervention.

Overall, despite these limitations, the study provides practical evidence that combining structured literacy frameworks with interactive digital resources can support both students' reading literacy development and teachers'

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instructional engagement in junior high school literacy contexts.

CONCLUSION

This study concludes that the integration of READS Roadmaps and interactive e-books can effectively enhance both students' reading literacy and teachers' reading engagement in a junior high school context. The findings from the three Classroom Action Research cycles demonstrate that structured reading stages, when consistently implemented and supported by interactive digital texts, contribute to meaningful improvements in reading instruction and literacy learning outcomes.

The implementation of READS Roadmaps provided a clear instructional framework that supported students in progressing from surface-level comprehension toward deeper inferential and evaluative understanding. Across the research cycles, students demonstrated gradual improvement in analyzing texts, participating in collaborative discussion, and generating summaries independently. The integration of interactive e-books further supported this process by increasing students' motivation and engagement through multimedia features, guided activities, and opportunities for active interaction with texts.

In addition to improving students' reading literacy, the study also highlights the positive contribution of the intervention to teacher reading engagement. The findings indicate that the structured nature of READS Roadmaps and the support provided by interactive e-books contributed to increased instructional confidence, classroom interaction, and reflective participation during reading instruction. The integration of pedagogical structure and digital support appeared to help teachers organize literacy instruction more effectively while encouraging greater student responsiveness during classroom activities.

Although the findings demonstrate positive outcomes, several limitations should be acknowledged. This study was conducted within a single classroom context involving one teacher and one group of students; therefore, the findings cannot be generalized broadly to other educational settings. In addition, as a Classroom Action Research study, the collaborative and reflective nature of the implementation may have influenced participants' motivation and classroom behavior during the intervention process. The absence of a comparison group also limits the ability to determine the extent to which the observed improvements resulted exclusively from the intervention. Furthermore, potential teacher-researcher bias may have occurred during the reflective and observational stages despite the involvement of an independent observer. The relatively short duration of the study also limits the ability to evaluate the long-term impact of the intervention on students' literacy development and teachers' instructional practices.

Therefore, while the findings suggest that integrating READS Roadmaps and interactive e-books offers a practical and feasible approach to supporting literacy instruction, the study does not claim long-term sustainability of the intervention. Instead, the results indicate the potential for sustainable literacy practices if supported by broader institutional implementation, continuous teacher development, and long-term integration within classroom instruction. Further investigation is still needed to evaluate the long-term effectiveness and sustainability of the approach across different educational contexts.

Future research may explore the implementation of READS Roadmaps and interactive e-books across multiple schools, grade levels, or subject areas to obtain broader evidence regarding instructional effectiveness. Future studies may also investigate the specific features of interactive e-books that most strongly support inferential and evaluative reading comprehension. In addition, experimental or longitudinal research designs involving larger participant groups and longer implementation periods are recommended to provide stronger evidence regarding the long-term impact, scalability, and sustainability of the intervention.

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