

## INTEGRATING E-BOOK MEDIA INTO MEANINGFUL LEARNING FOR ENHANCING YOUNG LEARNERS' ENGLISH READING COMPREHENSION

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### ABSTRACT

Reading comprehension is an essential skill for elementary school students; however, many students experience difficulties in understanding reading texts. This study aimed to improve students' reading comprehension through the implementation of the Meaningful Learning strategy assisted by e-book media. This research employed Classroom Action Research conducted in two cycles involving 18 elementary school students. The research instruments included reading comprehension tests, observation sheets for teacher and student activities, and assessment rubrics. The findings revealed an improvement in students' reading comprehension across the cycles. In Cycle I, only 61.11% of students achieved the good and very good categories. After revising the learning activities and optimizing the implementation of Meaningful Learning supported by e-book media in Cycle II, the percentage increased to 77.78%, and no students were categorized as poor. The results indicate that the integration of Meaningful Learning strategy with e-book media effectively enhances students' reading comprehension.

**Keywords:** meaningful learning, e-book media, reading comprehension, classroom action research

### INTRODUCTION

Reading comprehension is one of the most essential skills in English language learning, particularly for young learners at the elementary school level. In learning English as a foreign language, students are not only expected to recognize written words but also to understand meanings, identify information, connect ideas, and interpret messages from texts. Reading comprehension involves the interaction between textual information and the reader's prior knowledge, language ability, vocabulary knowledge, and cognitive processes. Therefore, comprehension is not a passive process but an active meaning-making activity in which learners construct understanding from what they read (Kintsch & van Dijk, 1978; Perfetti & Stafura, 2014). For young learners, early reading comprehension is important because it becomes the foundation for later academic success and broader language development.

At the elementary school level, reading comprehension should be introduced through simple, meaningful, and age-appropriate learning activities. Young learners, especially Grade II students, are still developing their basic literacy skills, vocabulary knowledge, and ability to process written information. Their reading comprehension is

influenced by several factors, such as oral language ability, decoding skills, vocabulary mastery, memory, and background knowledge (Cain et al., 2004; Kendeou et al., 2009). If students have limited vocabulary or lack familiarity with the topic of the text, they may find it difficult to understand the content even when they can read the words aloud. Thus, English reading instruction for young learners should help students connect words, pictures, meanings, and experiences.

In the context of English language education, teaching reading to young learners requires careful attention to students' cognitive and emotional characteristics. Young learners usually learn better when the lesson is enjoyable, visual, interactive, and related to their daily experiences. However, teaching English to children is often challenging because teachers need to maintain students' motivation, provide suitable materials, manage classroom interaction, and address different levels of ability (Copland et al., 2014). In many EFL classrooms, students are introduced to English reading through conventional textbooks and teacher explanation. While these practices may help students become familiar with written English, they may not always support deep comprehension if students are not actively involved in constructing meaning. A similar condition was found among Grade II students of SDN 04 Tallunglipu. Based on preliminary classroom observation, many students still experienced difficulties in understanding simple English reading texts. Some students had difficulty identifying the main idea, finding explicit information, understanding unfamiliar vocabulary, and answering comprehension questions. In addition, students' motivation during reading activities was not optimal because the learning process was still limited in the use of interactive and visual media. This condition indicates that English reading comprehension instruction needs to be improved through a more meaningful, engaging, and student-centered approach.

One learning approach that can be used to address this problem is Meaningful Learning. Meaningful Learning emphasizes that students learn more effectively when new information is connected to their existing knowledge and experiences. Learning becomes meaningful when students do not merely memorize information but understand relationships among concepts, ideas, and contexts. In reading comprehension, Meaningful Learning can help students activate prior knowledge before reading, relate text content to familiar situations, and construct meaning during and after reading. Mayer (2002) explains that meaningful learning supports transfer of knowledge because students are encouraged to understand and apply information rather than simply remember it.

Meaningful Learning is highly relevant for Grade II students because young learners need concrete examples and familiar contexts to understand English texts. For example, before reading a short text about animals, family, school, or daily activities, the teacher can ask questions, show pictures, introduce key vocabulary, and relate the topic to

students' experiences. These activities help students build readiness before reading and make the text easier to understand. In this sense, reading comprehension is not taught as an isolated skill but as a process that involves preparation, interaction, and reflection. This is consistent with the idea that effective comprehension instruction should include vocabulary support, knowledge building, discussion, and engagement with texts (Duke et al., 2021). In addition to an appropriate learning approach, instructional media also play an important role in improving students' reading comprehension. One medium that can support English reading instruction is the e-book. E-book media provide digital reading materials that may combine written text, pictures, colors, audio, animation, and interactive features. These features are useful for young learners because they can make abstract information more concrete and attractive. Multimedia learning theory suggests that students can learn more effectively when information is presented through both verbal and visual channels, as long as the design does not overload students' cognitive capacity (Mayer & Moreno, 2003). Therefore, e-books can support reading comprehension when they are designed and used appropriately.

Several studies have shown that electronic books and multimedia storybooks can support children's literacy development. E-books can help students understand stories, learn vocabulary, and become more engaged in reading activities when the digital features are relevant to the text content (Korat & Shamir, 2008; Segers & Verhoeven, 2002). Multimedia stories that include pictures, narration, and animation can also help young learners understand story content and language more effectively (Verhallen et al., 2006). In addition, interactive electronic storybooks can promote vocabulary learning when students are guided to pay attention to word meanings and text content (Smeets & Bus, 2012). However, e-book media should not be used merely as technological tools. The effectiveness of e-books depends on how teachers integrate them into the learning process. Research syntheses show that e-books may support literacy and language outcomes, but their benefits are stronger when they are accompanied by appropriate guidance, relevant interactive features, and meaningful reading activities (Zucker et al., 2009; Bus et al., 2015). Similarly, technology-enhanced storybooks can improve story comprehension and vocabulary, but irrelevant animations or distracting features may reduce students' attention to the text (Takacs et al., 2015). Therefore, teachers need to select e-books carefully and use them within a structured learning strategy.

The integration of e-book media into Meaningful Learning can create a more effective English reading comprehension experience for Grade II students. Before reading, students can be guided to observe pictures, predict the topic, and connect the text with their prior knowledge. During reading, the teacher can use the e-book to present text, images, and audio support while guiding students to identify key vocabulary and important

information. After reading, students can answer comprehension questions, retell the story, match words with pictures, or complete simple tasks based on the text. These activities help students construct meaning step by step and participate actively in the learning process. In recent studies, the comparison between digital and printed reading materials has shown that digital reading can be beneficial when the features support comprehension and when adult or teacher guidance is provided (Furenes et al., 2021; López-Escribano et al., 2021). For EFL learners, screen-based reading may also increase motivation, although comprehension outcomes depend on the quality of instruction and media design (Liman Kaban & Karadeniz, 2021). This suggests that e-book media should be integrated thoughtfully into classroom instruction, especially for young learners who still need teacher assistance in understanding English texts.

Furthermore, technology-supported language learning has become increasingly relevant in primary education. Studies on computer-assisted language learning show that digital tools can support language learning when they are aligned with learning goals, students' levels, and classroom needs (Macaro et al., 2012). In English learning for young learners, digital media can provide visual support, repetition, and interactive experiences that help students understand language input more effectively (Butler, 2015). Therefore, using e-book media in English reading instruction is appropriate for Grade II students if it is integrated with meaningful activities and guided comprehension strategies. Based on the problems found among Grade II students of SDN 04 Tallunglipu and the theoretical support from previous studies, this research focuses on integrating e-book media into Meaningful Learning to enhance young learners' English reading comprehension. This study is expected to help students understand simple English texts by connecting reading materials with their prior knowledge and presenting them through attractive digital media. In addition, this study is expected to increase students' motivation, participation, and confidence in English reading activities. Thus, integrating e-book media into Meaningful Learning can be considered an alternative strategy for improving English reading comprehension among young learners at the elementary school level.

## METHOD

### 1. Research Design

This study employed Classroom Action Research (CAR) conducted in two cycles. Classroom Action Research was selected because the study aimed to solve a practical classroom problem related to young learners' English reading comprehension. Each cycle consisted of four stages: planning, action, observation, and reflection. In the planning stage, the researcher prepared lesson plans, e-book media, reading materials, observation sheets, assessment rubrics, and reading comprehension

tests. In the action stage, the researcher implemented the Meaningful Learning strategy assisted by e-book media. In the observation stage, teacher and student activities were observed during the learning process. In the reflection stage, the results of each cycle were evaluated to improve the next cycle. This design was considered appropriate because it allowed the researcher to improve students' reading comprehension gradually through continuous classroom-based intervention.

## 2. Participants

The participants of this study were 18 Grade II students of SDN 04 Tallunglipu. The research was conducted in a regular classroom setting during the academic year. The students were selected as research participants because preliminary observation showed that they had difficulties in English reading comprehension. These difficulties included identifying main ideas, understanding explicit information, recognizing vocabulary in context, and drawing simple conclusions from reading texts. Since the participants were young learners, the learning activities were designed to be simple, visual, interactive, and appropriate to their level of English proficiency.

## 3. Research Instruments

The instruments used in this study consisted of reading comprehension tests, observation sheets, assessment rubrics, and documentation. The reading comprehension tests were administered at the end of each cycle to measure students' achievement after the implementation of Meaningful Learning assisted by e-book media. The test items focused on students' ability to understand simple English texts, identify main ideas, find explicit information, understand vocabulary, and answer comprehension questions. Observation sheets were used to record teacher and student activities during the teaching and learning process. The observation focused on students' participation, attention, responses to e-book media, and involvement in reading activities. Assessment rubrics were used to evaluate students' reading performance during classroom activities. Documentation was used to support the research data, including lesson plans, students' worksheets, learning materials, photographs, and students' test results.

## 4. Data Collection Procedures

The data were collected through tests, observations, and documentation. First, the researcher conducted preliminary observation to identify students' initial reading comprehension problems. After that, the researcher designed the learning activities by integrating e-book media into the Meaningful Learning strategy. In Cycle I, students were guided to connect the reading materials with their prior knowledge before reading. During the reading activity, the e-book was used to present texts, pictures, and visual support to help students understand the content. After reading, students

completed comprehension tasks. At the end of Cycle I, a reading comprehension test was administered. The results were analyzed and reflected upon to identify weaknesses in the learning process. Improvements were then made in Cycle II by providing clearer instructions, more vocabulary support, guided questions, and more interactive use of e-book media. At the end of Cycle II, another reading comprehension test was conducted to measure students' progress. Classroom observations and documentation were carried out throughout both cycles.

## 5. Data Analysis

The collected data were analyzed using descriptive quantitative and qualitative analysis. Quantitative data were obtained from students' reading comprehension test scores. The scores were calculated and converted into percentages to determine students' achievement levels. Students' reading comprehension levels were classified into four categories: very good, good, fair, and poor. Qualitative data were obtained from observation sheets and documentation. These data were analyzed descriptively to describe the implementation of Meaningful Learning assisted by e-book media and students' participation during the learning process. The success indicator of this study was achieved if at least 70% of students reached the good or very good category in English reading comprehension. Thus, the improvement of students' reading comprehension was determined by comparing the results of Cycle I and Cycle II.

## RESULT AND DISCUSSION

### Result

This classroom action research was conducted in two cycles to improve Grade II students' English reading comprehension at SDN 04 Tallunglipu through the integration of e-book media into Meaningful Learning. The research focused on students' ability to understand simple English texts, identify main ideas, find explicit information, and draw simple conclusions. The success indicator of this study was achieved if at least 70% of students reached the good or very good category.

### 1. Students' Reading Comprehension Results in Cycle I

Before implementing the second cycle, students' reading comprehension was first evaluated in Cycle I. The assessment was conducted after the implementation of Meaningful Learning assisted by e-book media. The purpose of this evaluation was to identify students' initial progress in understanding simple English reading texts, including their ability to identify main ideas, understand explicit information, and draw simple conclusions. The results of students' reading comprehension in Cycle I are presented in Table 1.

Table 1. Students' Reading Comprehension Results in Cycle I

Category	Score Range	Number of Students	Percentage
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<b>Very Good</b>	85–100	3	16.67%
<b>Good</b>	70–84	8	44.44%
<b>Fair</b>	55–69	1	5.56%
<b>Poor</b>	<55	6	33.33%
Total		<b>18</b>	<b>100%</b>

The results of Cycle I showed that students' English reading comprehension was still varied. There were 3 students, or 16.67%, in the very good category and 8 students, or 44.44%, in the good category. Meanwhile, 1 student, or 5.56%, was in the fair category, and 6 students, or 33.33%, were still in the poor category. Overall, only 11 out of 18 students, or 61.11%, achieved the good and very good categories. These results indicate that the implementation of Meaningful Learning assisted by e-book media in Cycle I had not yet met the success indicator, which required at least 70% of students to reach the good or very good category. Based on classroom observation, several students still had difficulty understanding the meaning of simple English texts, identifying main ideas, and answering comprehension questions. Some students also needed more guidance in using the e-book media effectively during reading activities.

## 2. Students' Reading Comprehension Results in Cycle II

After analyzing the results of Cycle I, several improvements were made in Cycle II. The teacher provided clearer instructions, strengthened vocabulary explanation, used more guided questions, and optimized the e-book media to help students understand the reading texts more effectively. The learning activities were also designed to encourage students to connect the text content with their prior knowledge. The results of students' reading comprehension in Cycle II are shown in Table 2.

Table 2. Students' Reading Comprehension Results in Cycle II

Category	Score Range	Number of Students	Percentage
<b>Very Good</b>	85–100	3	16.67%
<b>Good</b>	70–84	11	61.11%
<b>Fair</b>	55–69	4	22.22%
<b>Poor</b>	<55	0	0%
Total		<b>18</b>	<b>100%</b>

After reflecting on the weaknesses in Cycle I, the learning activities were revised in Cycle II. The teacher provided clearer instructions, more vocabulary guidance, more interactive reading activities, and better use of e-book media. Students were also given more opportunities to connect the reading materials with their prior

knowledge before reading the texts. The results of Cycle II showed an improvement in students' reading comprehension. There were 3 students, or 16.67%, in the very good category and 11 students, or 61.11%, in the good category. Four students, or 22.22%, were in the fair category, and no students were in the poor category. In total, 14 out of 18 students, or 77.78%, achieved the good and very good categories. This means that the success indicator was achieved in Cycle II. The improvement from 61.11% in Cycle I to 77.78% in Cycle II shows that integrating e-book media into Meaningful Learning was effective in enhancing students' English reading comprehension. The use of e-book media helped students understand texts more easily because the reading materials were supported by visual elements and contextual content.

### 3. Students' Activity Observation Results

In addition to measuring students' reading comprehension through tests, this study also observed students' learning activities during the implementation of Meaningful Learning assisted by e-book media. The observation focused on students' attention, participation, response to the e-book media, involvement in reading activities, and interaction during the learning process. The results of students' activity observations in Cycle I and Cycle II are presented in Table 3.

Table 3. Students' Activity Observation Results

Cycle	Meeting	Total Score	Maximum Score	Percentage	Category
I	1-3	29	52	55.77%	Fair
II	4-6	38	52	73.08%	Good

The observation results showed an improvement in students' learning activities from Cycle I to Cycle II. In Cycle I, students' activity reached 55.77%, which was categorized as fair. In Cycle II, the percentage increased to 73.08%, which was categorized as good. This improvement indicates that students became more active, attentive, and engaged during the learning process. The use of e-book media encouraged students to participate in reading activities because the texts were presented in a more attractive and visual format. Students showed better responses when they were asked to observe pictures, read simple sentences, answer questions, and discuss the content of the e-book.

### 4. Teacher Activity Observation Results

Teacher activity was also observed to evaluate the quality of the learning implementation in each cycle. The observation focused on how the teacher managed the classroom, delivered instructions, used e-book media, guided students in reading

activities, and encouraged students to connect new information with their prior knowledge. The results of teacher activity observations are presented in Table 4.

**Table 4. Teacher Activity Observation Results**

Cycle	Meeting	Total Score	Maximum Score	Percentage	Category
<b>I</b>	1–3	38	60	63.33%	Good
<b>II</b>	4–6	45	60	75.00%	Very Good

The results of teacher activity observation also showed improvement. In Cycle I, the teacher activity score reached 63.33%, which was categorized as good. In Cycle II, it increased to 75.00%, which was categorized as very good. This improvement reflects better classroom management, clearer instruction, and more effective use of e-book media. In Cycle II, the teacher was able to guide students more actively in connecting the reading texts with their prior knowledge. The teacher also provided more support in vocabulary explanation, comprehension questioning, and reading practice. These improvements helped students understand the reading texts more effectively.

## 5. Rubric-Based Reading Assessment Results

To obtain a more detailed picture of students' reading performance, a rubric-based assessment was also conducted. This assessment evaluated students' ability to identify main ideas, understand explicit information, recognize important vocabulary, and draw conclusions from simple English texts. The comparison of students' rubric-based reading performance in Cycle I and Cycle II is presented in Table 5.

**Table 5. Rubric-Based Reading Assessment Results**

Cycle	Average Score	Maximum Score	Percentage	Category
<b>I</b>	14.2	20	71.00%	Good
<b>II</b>	16.8	20	84.00%	Very Good

The rubric-based reading assessment showed that students' reading performance improved from Cycle I to Cycle II. In Cycle I, the average score was 14.2 out of 20, with a percentage of 71.00%, categorized as good. In Cycle II, the average score increased to 16.8 out of 20, with a percentage of 84.00%, categorized as very good. This improvement indicates that students demonstrated better reading comprehension skills after the learning activities were revised. They became more capable of identifying main ideas, understanding explicit information, recognizing important vocabulary, and drawing simple conclusions from English texts.

Overall, the findings show that integrating e-book media into Meaningful Learning improved both students' reading comprehension achievement and classroom participation. The e-book media made the reading materials more interesting and

easier to understand, while Meaningful Learning helped students connect new information with their prior knowledge. Therefore, this strategy can be considered effective for enhancing young learners' English reading comprehension, particularly for Grade II students of SDN 04 Tallunglipu.

## Discussion

The findings show that integrating e-book media into Meaningful Learning improved Grade II students' English reading comprehension at SDN 04 Tallunglipu. The improvement can be seen from the increase in students who reached the good and very good categories, from 61.11% in Cycle I to 77.78% in Cycle II. This result indicates that students understood English texts better when the reading materials were presented through meaningful, visual, and interactive learning activities. Meaningful Learning helped students connect new information from the text with their prior knowledge, so reading was not treated only as word recognition but as a process of constructing meaning (Mayer, 2002).

The improvement in reading comprehension also supports the view that comprehension depends on several components, including vocabulary knowledge, background knowledge, memory, and the ability to interpret information from texts. In Cycle I, some students still had difficulty identifying main ideas and understanding explicit information. However, after the teacher revised the learning activities in Cycle II by providing clearer instructions, vocabulary guidance, and more interactive reading tasks, students' comprehension improved. This finding is consistent with Cain et al. (2004), who explain that reading comprehension is influenced by verbal ability and component comprehension skills. It is also supported by Perfetti and Stafura (2014), who emphasize that word knowledge plays an important role in reading comprehension.

The use of e-book media contributed to students' better understanding because the digital texts were supported by pictures and visual elements. For young learners, visual support is important because it helps them understand unfamiliar vocabulary and connect text content with concrete images. E-book media made the reading process more attractive and reduced students' dependence on teacher explanation. This finding is in line with Korat and Shamir (2008), who found that educational e-books can support children's literacy development. Similarly, Smeets and Bus (2012) state that interactive electronic storybooks can promote vocabulary growth when learners are guided through meaningful activities.

The improvement in students' learning activities from 55.77% in Cycle I to 73.08% in Cycle II also shows that e-book-assisted Meaningful Learning increased classroom engagement. Students became more active in observing pictures, reading simple English texts, answering questions, and discussing text content. This is relevant to Copland et al. (2014), who argue that teaching English to young learners requires motivating, interactive,

and age-appropriate strategies. Digital learning media can support these needs when they are used purposefully in classroom instruction.

The teacher's activity also improved from 63.33% in Cycle I to 75.00% in Cycle II, indicating better classroom management and more effective use of e-book media. This confirms that technology alone is not sufficient; teacher guidance remains essential. Bus et al. (2015) explain that electronic storybooks have both affordances and limitations, depending on how they are designed and used. Takacs et al. (2015) also emphasize that multimedia features can support children's literacy when they are relevant to the learning goals. Therefore, the improvement in this study was influenced not only by the use of e-books but also by the teacher's ability to integrate them into Meaningful Learning.

Finally, the rubric-based reading assessment increased from 71.00% in Cycle I to 84.00% in Cycle II. This indicates that students became better at identifying main ideas, understanding explicit information, and drawing simple conclusions. The finding supports Duke et al. (2021), who state that comprehension instruction should include vocabulary support, knowledge building, discussion, and engagement with texts. It also aligns with Furenes et al. (2021), who found that digital reading can be beneficial when supported by appropriate design and adult guidance. Thus, integrating e-book media into Meaningful Learning can be considered an effective strategy for enhancing young learners' English reading comprehension.

## CONCLUSION

Based on the results of this classroom action research, it can be concluded that integrating e-book media into Meaningful Learning effectively enhanced Grade II students' English reading comprehension at SDN 04 Tallunglipu. The strategy helped students understand simple English texts by connecting reading materials with their prior knowledge and presenting them through attractive digital media. The improvement was shown by the increase in students' reading comprehension achievement from Cycle I to Cycle II. In Cycle I, 11 out of 18 students, or 61.11%, reached the good and very good categories. After revising the learning activities and optimizing the use of e-book media in Cycle II, the number increased to 14 students, or 77.78%. This result indicates that the success indicator was achieved because more than 70% of students reached the expected category. In addition, students became more active and engaged during reading activities. They showed better participation in observing pictures, reading simple texts, answering questions, and discussing text content. The rubric-based assessment also showed improvement in identifying main ideas, understanding explicit information, and drawing conclusions. Therefore, e-book-assisted Meaningful Learning is recommended as an alternative strategy for improving young learners' English reading comprehension.

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