DEVELOPMENT OF READING SKILLS BY USING DIGITAL READING PLATFORMS FOR 1ST YEAR BACHELOR'S STUDENTS IN FACULTY OF EDUCATION MAHACHULALONGKORNRAJAVIDYALAYA UNIVERSITY IN THAILAND

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Abstract

Despite the importance of English reading skills for university students, current instructional approaches often do not sufficiently develop reading comprehension, critical reading strategies, and learner autonomy among 1st Year EFL students. This study therefore aimed to 1) investigate the problems and needs related to English reading skills of 1st Year Bachelor's Students in the Faculty of Education at Mahachulalongkornrajavidyalaya University; 2) develop a digital reading platform–based instructional model to improve students' reading skills; and 3) evaluate the effectiveness of the model on students' reading skills and their satisfaction with the instruction. The study employed a quantitative research design using a pre-experimental one-group pretest–posttest approach. The population and sample consisted of 52 1st Year Bachelor's Students in the Faculty of Education at Mahachulalongkornrajavidyalaya University during the second semester of the 2025 academic year (20 October 2025–20 February 2026). The research instruments included lesson plans based on digital reading platforms, an English reading skills test administered as both pre-test and post-test, and a satisfaction questionnaire. The data were analyzed using mean, standard deviation, percentage, and dependent sample t-test.

The results of the research were as follows:

1. The analysis of students' reading skills through digital reading platforms demonstrated improvement during the instructional process. The average worksheet score (E_1) was 16.55 ($\bar{X}$ = 16.55, S.D. = 1.91), and the overall efficiency of the five instructional units was 82.75 percent. This exceeded the established criterion, indicating that the digital reading platform was effective in promoting reading skill development.

2. Students' learning achievement significantly improved after the instruction. The post-test mean score ($\bar{X}$ = 77.60, S.D. = 7.63) was higher than the pre-test mean score ($\bar{X}$ = 68.44, S.D. = 8.11), with a mean gain of 9.16 points. A paired-samples t-test revealed that

the difference was statistically significant ($t(51) = 22.80$, $p < .001$). This result confirms that the digital reading platform significantly enhanced students' reading achievement.

3. Students' use of the platform and their opinions toward digital reading platforms were at a moderate level. The mean score for platform usage was 3.36 (S.D. = 1.11), and the mean score for opinions toward the digital reading platform was 3.37 (S.D. = 1.06). In contrast, students' satisfaction with the lesson plan was at a high level, with a mean score of 3.47 (S.D. = 1.09) out of 5.00. These findings indicate that students were satisfied with the digital reading platform instruction and perceived it as beneficial for developing their reading skills.

Keywords: Digital Reading Platforms, Reading Skills Development, EFL Students, English Reading Comprehension, Technology-Enhanced Learning

Introduction

In the contemporary digital era, information and communication technology has become an essential component of educational systems worldwide, particularly in higher education. Rapid advancements in digital technologies have transformed the ways knowledge is accessed, processed, and shared. Consequently, teaching and learning practices have gradually shifted toward technology-enhanced and learner-centered approaches. Universities are increasingly expected to integrate digital technologies into instruction to meet the learning needs and behaviors of 21st-century students (Anderson, 2008; Siemens, 2005). Within this changing educational environment, English as a Foreign Language (EFL) instruction must also adapt to prepare learners to engage with academic content in digital and multilingual contexts. Among the four language skills, listening, speaking, reading, and writing play a particularly critical role in academic settings. Reading enables university students to access textbooks, research articles, and various academic materials necessary for learning. For EFL learners, reading proficiency is not only a language skill but also a fundamental academic competence that significantly influences learning outcomes across disciplines (Grabe & Stoller, 2011; Nation, 2009). Despite studying English for many years prior to entering university, many first-year EFL students continue to experience difficulties in reading English texts independently. Common problems include limited vocabulary knowledge, slow reading speed, weak comprehension strategies, and difficulty identifying main ideas or making inferences from texts (Grabe, 2009). These challenges often affect students' academic confidence and motivation, particularly during the transition from secondary school to higher education, where reading demands are significantly higher.

Traditionally, reading instruction in EFL contexts has relied heavily on printed textbooks and teacher-centered explanations. Although such approaches provide structured learning environments, they often emphasize surface-level comprehension and provide limited opportunities for individualized practice. As a result, many students fail to develop flexible reading strategies and independent reading habits necessary for academic success (Richards & Rodgers, 2014).

In recent years, digital technology has emerged as a powerful tool for enhancing language learning and addressing limitations of traditional instruction. Digital reading platforms—including e-books, online reading applications, and educational websites—offer flexible and interactive learning environments that support reading development. These

platforms provide various features such as audio-supported texts, vocabulary support, comprehension questions, and progress tracking, which can help learners engage more actively with reading materials (Hockly, 2015; Reinders & White, 2016). Research in reading theory emphasizes that reading fluency involves not only speed but also accuracy, expression, and comprehension. Fluent readers can process texts efficiently, allowing them to focus cognitive resources on meaning construction (Rasinski, 2012). Studies have also demonstrated a strong relationship between reading fluency and reading comprehension, suggesting that learners who read fluently are better able to understand texts and integrate new information with prior knowledge (Nation, 2009).

Digital reading platforms may provide valuable opportunities to support reading development through repeated exposure, immediate feedback, and multimodal learning environments (Stockwell, 2013). Features such as vocabulary glosses, translation tools, text-to-speech functions, and interactive quizzes can enhance learners' comprehension and motivation. Furthermore, digital platforms allow learners to access reading materials anytime and anywhere, encouraging regular reading practice and learner autonomy (Clark & Mayer, 2016). Despite the growing use of digital technologies in language education, empirical research focusing specifically on the development of reading skills through digital reading platforms in higher education remains limited. Previous studies have examined technology integration in language learning generally, but fewer studies have investigated how digital reading platforms can systematically improve EFL students' reading skills. Moreover, the effectiveness of such platforms may depend on factors such as digital literacy, motivation, and learner engagement (Godwin-Jones, 2018; Hubbard, 2013).

First-year EFL students represent a particularly important group for investigation because they are at a transitional stage of academic development. At this stage, students must adapt to increased academic reading demands and develop independent learning strategies. Therefore, exploring the use of digital reading platforms to support reading development may contribute to improving English language instruction in higher education.

In response to these educational challenges, the present study entitled "Development of Reading Skills by Using Digital Reading Platforms for 1st Year Bachelor's Students in the Faculty of Education at Mahachulalongkornrajavidyalaya University" aims to investigate the effectiveness of digital reading platforms in enhancing students' reading skills, including identifying main ideas, skimming, scanning, making inferences, and interpreting texts.

Research Objectives

1 . To study the problems related to reading skills of 1 st Year undergraduate (EFL) students in the Faculty of Education at Mahachulalongkornrajavidyalaya University.

2 . To develop reading skills using a digital reading platform for 1 st Year undergraduate (EFL) students in the Faculty of Education at Mahachulalongkornrajavidyalaya University.

3 . To evaluate the effectiveness of reading skills by using digital reading platform among 1 st Year undergraduate (EFL) students in the Faculty of Education at Mahachulalongkornrajavidyalaya University.

Research Methodology

Procedures

Population Sample and Key informants

The sample consisted of 52 first-year EFL students from the Faculty of Education at Mahachulalongkornrajavidyalaya University during the second semester of the 2025 academic year (20 October 2025–20 February 2026). These students were at the initial stage of developing their English reading skills, which are essential for academic learning in higher education. The study was conducted over five months.

These students participated in instructional activities designed to improve several reading skills, including identifying main ideas, skimming for general understanding, scanning for specific information, making inferences, and interpreting textual content.

The selected students took part in the instructional process using digital reading platforms and completed both pre-test and post-test assessments to measure the effectiveness of the instructional intervention. Their learning performance and responses were analyzed using appropriate statistical methods to determine the impact of the digital reading platform on students' reading skill development.

Research Instruments

The research instruments used in this study consisted of three main tools designed to collect data related to the development of students' reading skills through digital reading platforms.

1. Lesson Plans Based on Digital Reading Platforms: The researcher developed a set of lesson plans that integrated digital reading platforms to support the development of students' English reading skills. The instructional materials focused on several reading strategies, including identifying main ideas, skimming for general understanding, scanning for specific information, making inferences, and interpreting textual content. These lesson plans were implemented during the instructional period to facilitate students' reading practice through digital platforms.

2. English Reading Skills Test: An English reading skills test was designed to measure students' reading ability before and after the instructional intervention. The test was administered as both a pre-test and a post-test to evaluate the effectiveness of the digital reading platform in improving students' reading skills. The test assessed several aspects of reading comprehension, including identifying main ideas, scanning, skimming, inference-making, and interpreting textual information.

3. Satisfaction Questionnaire: A satisfaction questionnaire was developed to examine students' opinions and satisfaction toward the use of digital reading platforms in learning English. The questionnaire employed a five-point Likert scale ranging from strongly disagree to strongly agree. It measured students' perceptions of the usefulness, engagement, and effectiveness of digital reading platforms in supporting their reading skill development.

The collected data were analyzed using descriptive statistics, including mean, standard deviation, and percentage, to determine the effectiveness of digital reading platform instruction.

Data Collection Procedures

In this study, the researcher conducted the experiment and collected data from 52 first-year undergraduate (EFL) students enrolled in the Bachelor of Education Program in Teaching English as a Foreign Language at the Faculty of Education, Mahachulalong kornrajavidyalaya University, Ayutthaya Province, Thailand.

1. First, the researcher explained the objectives of the study, the learning procedures, and the roles and responsibilities of the students during the instructional activities conducted through the digital reading platform.

2. Second, a pre-test was administered to measure students' reading skills before the instructional intervention. The test was developed by the researcher and consisted of multiple-choice reading comprehension questions. The test duration was 50 minutes, and the scores were recorded to serve as baseline data for comparison with the post-test results.

3. Next, the researcher implemented instructional activities using digital reading platforms based on the prepared lesson plans. The instructional process included reading activities, comprehension exercises, and interactive tasks designed to improve students' reading skills. The instruction was conducted over a period of eight weeks according to the course schedule.

4. After completing the instructional activities, a post-test was administered using the same format as the pre-test to measure students' reading skills after the intervention. The post-test scores were then compared with the pre-test scores to determine the effectiveness of the digital reading platform in improving students' reading performance.

5. Finally, the students were asked to complete a satisfaction questionnaire to evaluate their opinions toward the use of the digital reading platform and the instructional activities. The data collected from the pre-test, post-test, and questionnaire were then prepared for statistical analysis using appropriate statistical methods

Data Analysis

The collected data was analyzed using appropriate statistical methods. The results of the English reading comprehension test administered before and after the instructional intervention were analyzed by calculating the mean ($\bar{X}$) and standard deviation (S.D.). A dependent samples t-test was used to compare the pre-test and post-test scores in order to determine whether there was a statistically significant difference in students' reading skills after learning through the digital reading platform.

The efficiency of the instructional activities and exercises implemented through the digital reading platform was analyzed using percentage scores, mean ($\bar{X}$), and standard deviation (S.D.) to evaluate students' reading performance during the learning process.

Students' opinions and satisfaction toward the use of the digital reading platform and lesson plans were analyzed using mean ($\bar{X}$) and standard deviation (S.D.). The interpretation of the mean scores followed the criteria proposed by Best and Kahn (1986) as follows:

4.50–5.00 indicated the highest level of agreement.
3.50–4.49 indicated a high level of agreement.
2.50–3.49 indicated a moderate level of agreement.
1.50–2.49 indicated a low level of agreement.
0.50–1.49 indicated the lowest level of agreement.

The analyzed data were presented in tables and interpreted to summarize the effectiveness of the digital reading platform in developing English reading skills among first-year EFL students.

Research Results

Table 1. Students' Information

Details	Number	Percentage
1. Gender	**52**	**100**

1) Male	9	17.3
2) Female	7	13.5
3) Venerable and Novice	36	69.2
2. Age	**52**	**100**
1) Under 18 years	0	0.0
2) 18 years	0	0.0
3) 19 years	4	7.7
4) 20–21 years	10	19.2
5) Over 21 years	38	73.1
3. Experience Using Technology for Learning	**52**	**100**
1) None	17	32.7
2) Little (less than 1 year	10	19.2
3) A lot (more than 3 years	**25**	48.1
Previous English Learning Experience (can select more than one)	**52**	**100**
1) Secondary school	13	-
2) Tutoring / Language Institute	8	-
3) Self-study	31	-

Table 1. Based on the sample population data used in this research, a total of 52 respondents participated in the study. Regarding gender, most respondents were Venerable and Novice students (36 respondents, 69.2%), followed by male students (9 respondents, 17.3%) and female students (7 respondents, 13.5%).

In terms of age, most respondents were over 21 years old (38 respondents, 73.1%), followed by those aged 20–21 years (10 respondents, 19.2%) and 19 years old (4 respondents, 7.7%). No respondents were under 18 years old or exactly 18 years old. Concerning experience using technology for learning, 25 respondents (48.1%) reported having extensive experience (more than three years), while 17 respondents (32.7%)

reported having no experience. In addition, 10 respondents (19.2%) reported having little experience (less than one year).

Regarding previous English learning experience, respondents were allowed to select more than one option. The findings revealed that most respondents had learned English through self-study (31 respondents), followed by secondary school learning (13 respondents) and tutoring or language institutes (8 respondents). These results indicate that respondents possessed diverse English learning backgrounds from both formal and informal learning contexts.

Table 2. Results of the Efficiency Analysis of the Exercises in the Instructional Manual for Developing English Reading Skills by Using Digital Reading Platforms

Exercises	**Full score**	**($\bar{X}$)**	**(S.D.)**	**Percentage**
1. Unit 1 Identifying Main Ideas multiple-choice questions	20	16.83	1.96	84.13%
2. Unit 2 Scanning Find specific information multiple-choice questions	20	16.27	1.70	81.35%
3. Unit 3 For General Understanding Multiple-choice Skimming questions	20	15.87	2.13	79.33%
4. Unit 4 Making Inferences multiple-choice questions	20	16.90	1.91	84.52%
5. Unit 5 Interpreting and Analyzing Content multiple-choice questions.	20	16.88	1.85	84.42%
Total	**100**	**16.55**	**1.91**	**82.75%**

Table 2. presents the efficiency analysis of the exercises in the instructional manual designed to develop English reading skills through digital reading platforms. The results show that the learning exercises in each instructional unit achieved a high level of efficiency.

For Unit 1 (Identifying Main Ideas), the average performance was 84.13%, indicating a very high level of achievement. Unit 2 (Scanning for Specific Information) obtained an average score of 81.35%, which also reflects a very high level of efficiency. Unit 3 (Skimming for General Understanding) recorded an average score of 79.33%, which was classified as a high level.

For higher-level reading skills, Unit 4 (Making Inferences) achieved the highest average score of 84.52%, while Unit 5 (Interpreting and Analyzing Content) obtained 84.42%, both indicating very high levels of performance.

Overall, the combined efficiency of the five instructional units was 82.75%, which exceeded the established efficiency criterion. This result indicates that the instructional manual using digital reading platforms was effective in supporting the development of students' English reading skills.

Table 3. Comparison of Students' Reading Skill Development Before and After Using Digital Reading Platforms

Reading Skills Development	Full Score	Mean ($\bar{X}$)	S.D.	t-test	P
Pre-test	100	68.44	8.11		
Post-test	100	77.60	7.63	22.80	< .001

Table 3. presents the comparison of students' reading skill development before and after using digital reading platforms. The results showed that students' post-test scores were significantly higher than their pre-test scores. The mean score of the post-test ($\bar{X}$ = 77.60, S.D. = 7.63) was higher than that of the pre-test ($\bar{X}$ = 68.44, S.D. = 8.11), indicating an improvement of 9.16 points.

A paired-samples t-test revealed that the difference between the pre-test and post-test scores was statistically significant, $t(51) = 22.80$, $p < .001$. This indicates that

the use of digital reading platforms significantly improved students' reading skills at the .05 level of significance.

Table 4. Platform Usage in the Process of Developing Reading Skills

Aspect	($\bar{X}$)	S.D.	Level
Digital Reading Platform	3.38	1.27	Moderate
Platform Usage	3.37	1.04	Moderate
Support and Guidance	3.33	1.02	Moderate
Overall Average	**3.36**	**1.11**	**Moderate**

Table 4 presents students' opinions regarding the use of the digital reading platform in developing their reading skills. The overall results indicated that students' perceptions were at a moderate level, with an overall mean score of $\bar{X}$ = 3.36 (S.D. = 1.11). This suggests that students generally had moderately positive experiences when using the digital reading platform for reading skill development.

Considering each aspect, Digital Reading Platform had the highest mean score ($\bar{X}$ = 3.38, S.D. = 1.27), followed by Platform Usage ($\bar{X}$ = 3.37, S.D. = 1.04), while Support and Guidance had the lowest mean score ($\bar{X}$ = 3.33, S.D. = 1.02). All three aspects were interpreted at a moderate level, indicating that the digital reading platform reasonably supports reading development. However, improvements in instructional support and guidance may further enhance students' learning experiences.

Further analysis of the individual items revealed that within the Platform Usage aspect, the highest-rated items included reading activities that develop various skills ($\bar{X}$ = 3.46, S.D. = 1.02), improved management of reading time ($\bar{X}$ = 3.42, S.D. = 1.04), and sufficient time for learning and practice ($\bar{X}$ = 3.35, S.D. = 0.90). For the Digital Reading Platform aspect, the highest mean scores were related to platform stability and ease of use ($\bar{X}$ = 3.75, S.D. = 1.22), the variety of content formats ($\bar{X}$ = 3.49, S.D. = 1.28), and improved comprehension of reading materials ($\bar{X}$ = 3.42, S.D. = 1.29).

Regarding Support and Guidance, the highest-rated items included additional guidance when encountering problems ($\bar{X}$ = 3.38, S.D. = 1.02), system-generated suggestions ($\bar{X}$ = 3.34, S.D. = 0.98), and feedback that helps users correct mistakes ($\bar{X}$

= 3.32, S.D. = 1.03). Nevertheless, instructor support and continuous guidance were still perceived as moderate.

Overall, the findings indicate that students experienced moderately positive satisfaction with the digital reading platform. While the platform provides useful features and interactive learning activities, stronger instructional guidance and support systems may further improve students' engagement and reading skill development.

Table 5. Levels of Students' Opinions Toward Using Digital Reading Platforms for Developing English Reading Skills Classified by Student Group

Aspect	($\bar{X}$)	S.D.	Level
Comprehension	3.39	1.07	Moderate
Main Idea Identification	3.36	1.08	Moderate
Interpretation	3.34	1.03	Moderate
Summarization	3.38	1.09	Moderate
Reading Strategies Use	3.37	1.04	Moderate
Overall Average	**3.37**	**1.06**	**Moderate**

Table 5 presents the results of students' opinions regarding the development of English reading skills through the use of a digital reading platform. The overall mean score was $\bar{X}$ = 3.37 (S.D. = 1.06), which falls within the moderate level (2.61–3.40) according to the interpretation criteria. This result indicates that students generally held moderately positive opinions toward the development of their reading skills through the digital reading platform.

Regarding reading strategy use, the highest-ranked strategy was taking notes or summarizing while reading to support comprehension ($\bar{X}$ = 3.40, S.D. = 1.07). This was followed by scanning to locate specific information ($\bar{X}$ = 3.38, S.D. = 1.07) and skimming to identify the main idea ($\bar{X}$ = 3.37, S.D. = 1.05). These results suggest that students moderately applied reading strategies during the learning process.

For reading comprehension, the highest mean score was related to understanding the overall meaning of the text ($\bar{X}$ = 3.45, S.D. = 1.08), followed by understanding important details and the sequence of events ($\bar{X}$ = 3.42, S.D. = 1.10). These findings

indicate that students demonstrated relatively stronger abilities in basic comprehension skills.

In terms of main idea identification, students showed moderate ability in distinguishing facts from opinions ($\bar{X}$ = 3.48, S.D. = 1.09) and recognizing main ideas and supporting details ($\bar{X}$ = 3.38, S.D. = 1.35). For interpretation skills, students moderately demonstrated the ability to interpret visual information such as illustrations or graphs ($\bar{X}$ = 3.40, S.D. = 1.14) and understand contextual meanings ($\bar{X}$ = 3.35, S.D. = 0.99).

Regarding summarization, students showed moderate ability in extracting and summarizing key ideas from texts ($\bar{X}$ = 3.44, S.D. = 1.14) and summarizing multi-topic articles ($\bar{X}$ = 3.42, S.D. = 1.13).

Overall, the results indicate that students' reading skill development was at a moderate level. While students demonstrated relatively stronger abilities in comprehension and summarization, further instructional support is needed to enhance higher-order reading skills, particularly interpretation, critical analysis, and synthesis of information.

Table 6. Satisfaction and Opinions Toward the Lesson Plan

Details	($\bar{X}$)	(S.D.)	Level	Rank
Satisfaction Level and Opinions Toward the Lesson Plan				
1. The objectives of the lesson plan are clear.	3.37	1.07	Moderate	10
2. The content of the lesson plan is well-sequenced.	3.38	1.12	Moderate	7
3. Learning activities are varied and interesting.	3.38	1.11	Moderate	7
4. The lesson plan appropriately connects content to students' daily lives.	3.62	1.19	High	3
5. The lesson plan promotes analytical thinking and questioning.	3.35	1.10	Moderate	11
6. Students participate appropriately in the learning process.	3.33	1.08	Moderate	12
7. The teacher uses digital media or technology to enhance learning.	3.38	0.97	Moderate	7
8. The use of reading platforms aligns with the classroom content.	3.46	1.04	High	6
9. The lesson plan supports students' self-directed learning skills.	3.50	1.16	High	5

Details	($\bar{X}$)	(S.D.)	Level	Rank
10. Organizing reading activities in class stimulates students' interest.	3.58	1.00	High	4
11. Students can apply the knowledge gained to other subjects.	3.63	1.16	High	2
12. Students are satisfied with the learning process of integrating a digital reading platform.	3.67	1.12	High	1
Overall Average	**3.47**	**1.09**	**High**	

Table 6 presents students' satisfaction and opinions toward the lesson plan integrating the digital reading platform. The results show that the overall mean score was $\bar{X}$ = 3.47 (S.D. = 1.09), which indicates a high level of satisfaction. This finding suggests that students generally had positive attitudes toward the instructional design and the integration of digital reading platforms in the learning process.

The highest-rated item was students' satisfaction with the learning process integrating the digital reading platform ($\bar{X}$ = 3.67), followed by the ability to apply knowledge to other subjects ($\bar{X}$ = 3.63) and the connection between lesson content and students' daily lives ($\bar{X}$ = 3.62). These results indicate that the lesson plan effectively supported meaningful learning and encouraged the practical application of knowledge.

However, several aspects, including student participation, the promotion of analytical thinking, and the clarity of lesson objectives, were rated at a moderate level. This suggests that further improvement in instructional strategies and the diversity of learning activities may help enhance students' engagement and critical thinking skills.

Discussions

Based on the findings of the study entitled "Development of Reading Skills by Using Digital Reading Platforms for 1 st Year Undergraduate (EFL) Students in the Faculty of Education at Mahachulalongkornrajavidyalaya University," the discussion of results is presented according to the research objectives.

Problems Related to Students' Reading Skills; The first objective of this study was to investigate the problems related to English reading skills among first-year EFL students. The demographic analysis revealed that the participants consisted of 5 2 students with diverse educational backgrounds and varying levels of experience in using technology for learning. Although a considerable proportion of students reported previous experience using digital technology, differences in learning backgrounds and technological familiarity suggest that students possessed varied levels of reading proficiency and learning needs.

The results also showed that students were able to engage positively with the digital reading platform during the instructional process. The efficiency of the instructional exercises reached 82.75%, exceeding the established criterion of 75%, which indicates that the digital

learning activities effectively supported the development of students' reading skills. The structured activities focusing on identifying main ideas, scanning, skimming, making inferences, and interpreting content helped students practice multiple reading strategies.

These findings are consistent with previous studies suggesting that digital reading platforms enhance learner engagement and reading comprehension. Vijayakumar et al. (2019) reported that media-based instructional materials can improve language proficiency by increasing motivation and exposure to authentic language input. Similarly, Ismail (2013) found that technology-supported learning environments enable learners to interact with language content more effectively, which contributes to improved comprehension and learner motivation. The results of the present study support these findings, demonstrating that digital reading platforms can facilitate effective reading instruction when activities are well structured and aligned with learning objectives.

Development of Reading Skills through Digital Reading Platforms; The second objective aimed to develop students' English reading skills using a digital reading platform. The comparison between pre-test and post-test results demonstrated a significant improvement in students' reading performance. The mean post-test score ($\bar{X} = 77.60$, S.D. = 7.63) was higher than the mean pre-test score ($\bar{X} = 68.44$, S.D. = 8.11), and the difference was statistically significant at the .05 level ($t = 22.80$, $p < .05$). This result indicates that the instructional activities implemented through the digital reading platform effectively improved students' reading skills.

These findings are consistent with previous studies that highlight the benefits of technology-enhanced language learning. Faqe (2017) reported that learners who used technology-supported instructional media achieved better language performance compared to those using traditional methods. Similarly, Abidi et al. (2018) found that multimedia-based instructional tools increase students' motivation and engagement in the learning process.

In the present study, students showed increased interest and motivation when learning through digital reading platforms. The structured learning design, which included manageable reading tasks, clear learning objectives, and progressive levels of difficulty, helped students improve their reading comprehension and confidence in reading English texts. These findings support the view that digital learning environments can facilitate effective language learning when instructional activities are appropriately designed.

Effectiveness of the Digital Reading Platform; The third objective of this study was to evaluate the effectiveness of the digital reading platform in developing students' reading skills. The results revealed that students' overall opinions toward reading skill development were at a moderate level ($\bar{X} = 3.37$, S.D. = 1.06). The mean score for platform usage was 3.36 (S.D. = 1.11), while students' opinions toward the digital reading platform recorded a mean score of 3.37 (S.D. = 1.06). These results indicate that students perceived the digital reading platform as moderately effective in supporting their reading development.

Among the evaluated aspects, comprehension and summarization skills showed relatively higher mean scores, while interpretation and main idea identification demonstrated comparatively lower scores. This suggests that the digital reading platform was particularly effective in supporting basic comprehension and information extraction, while higher-order reading skills such as critical interpretation and analytical thinking require further instructional emphasis.

Students' satisfaction with the lesson plan integrating the digital reading platform was at a high level ($\bar{X} = 3.47$, S.D. = 1.09). The highest-rated aspects included satisfaction with the learning process, the ability to apply knowledge to other subjects, and the connection between lesson content and students' daily lives. These findings indicate that students perceived the instructional design as meaningful and relevant to their learning experience.

These findings are consistent with the constructivist learning perspective, which emphasizes active learning and interaction with instructional materials. Ye and Liu (2019) suggested that digital media can support language development by providing authentic learning materials and interactive learning opportunities. Similarly, Miščin and Miščin (2018) reported that the integration of multimedia resources in language instruction enhances learners' motivation, concentration, and learning attitudes.

Overall, the findings confirm that the integration of digital reading platforms in EFL instruction can effectively support students' reading skill development while fostering positive attitudes toward learning. The high level of student satisfaction further indicates that digital reading platforms can be successfully integrated into English language teaching in higher education contexts.

Knowledge from Research

This research provides empirical evidence that the use of a digital reading platform can significantly improve the reading skills of first-year EFL students. The findings indicate that students demonstrated improvement in several key reading skills, including identifying main ideas, skimming, scanning for specific information, making inferences, and interpreting textual content.

The results also show that the structured integration of digital reading platforms, combined with well-designed instructional procedures, can enhance students' reading achievements and promote higher levels of learner engagement and satisfaction. Furthermore, the study highlights the importance of incorporating technology-supported learning environments in English language instruction.

Overall, this research contributes both theoretical and practical knowledge to the field of technology-enhanced language learning. The findings provide useful insights for educators and curriculum designers in developing effective instructional strategies to improve EFL reading skills at the university level.

Suggestions

This section presents recommendations derived from the findings of the study entitled "Development of Reading Skills by Using Digital Reading Platforms for 1 st Year Undergraduate (EFL) Students in the Faculty of Education at Mahachulalongkornraja-vidyalaya University." The recommendations are divided into two categories: recommendations for implementation and recommendations for future research.

1. Recommendations for Implementation; The findings of this study indicated that the use of a digital reading platform significantly improved students' reading skills and resulted in high levels of learner satisfaction. Based on these results, the following recommendations are proposed for teachers and educational institutions wishing to implement digital reading platforms in English language instruction.

2 . Preparation of Appropriate Digital Content; Teachers should carefully select or design digital reading materials that match students' proficiency levels and learning backgrounds. The reading content should be organized progressively from simple to more complex texts. In addition, digital materials should include vocabulary support, comprehension questions, and interactive reading activities to facilitate deeper understanding. The use of leveled texts and pre-reading activities may also help students build confidence and improve comprehension.

3 . Integration of Interactive and Collaborative Activities; To enhance student engagement, teachers should integrate interactive learning activities within the digital reading platform. Activities such as online discussions, paired reading tasks, group activities, and

reflective exercises can encourage students to exchange ideas, practice reading strategies collaboratively, and develop deeper comprehension through peer interaction.

4. Provision of Technical and Learning Support; Before implementing digital reading instruction, teachers should ensure that the necessary technical infrastructure, such as stable internet connectivity and appropriate devices, is available. Teachers should also provide clear instructions and demonstrations on how to use the digital platform effectively. Continuous monitoring of students' progress and regular feedback from instructors are important to support students' learning development.

Recommendations for Future Research

Although this study demonstrated the effectiveness of digital reading platforms in developing reading skills, further research is recommended to expand knowledge in this area. Long-Term Study of Reading Development; Future studies should investigate the long-term effects of digital reading platforms on students' reading skills over extended periods, such as one academic year. This would help determine whether improvements in reading comprehension and fluency can be sustained over time.

1 . Expansion of Sample Size and Contexts; Future research should include larger sample groups from different universities or educational contexts to enhance the generalizability of the findings. Comparative studies between different instructional methods or platforms may also provide deeper insights into effective reading instruction.

2 . Integration of Advanced Technologies; Further studies should explore the integration of emerging technologies such as artificial intelligence, adaptive learning systems, or learning analytics within digital reading platforms. These technologies may provide personalized feedback, adaptive reading materials, and automated assessment to further enhance reading skill development.

References (Example)

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