The Correlation of Short English Videos and AI Summarization on Reading Comprehension at Jareeyatam School Satun, Thailand

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Abstract : This study aimed to examine the correlation between the use of short English videos and AI-based summarization and students' reading comprehension at Jareeyatam School Satun, Thailand. This research employed a quantitative correlational design involving 22 students as the sample. Data were collected using questionnaires and reading comprehension tests. The data were analyzed using descriptive and inferential statistics. The normality test indicated that the data were not normally distributed; therefore, Spearman Rank Correlation was used to examine the relationships between variables. The findings revealed that there was no significant correlation between short English videos and reading comprehension ($r = 0.129$, $p = 0.566$). Similarly, AI-based summarization did not show a significant correlation with reading comprehension ($r = -0.034$, $p = 0.880$). These results indicate that the use of short English videos and AI-based summarization did not significantly influence students' reading comprehension in this context. It is suggested that the integration of digital learning tools should be supported by effective instructional strategies to improve learning outcomes.

Keywords : Short English Videos; AI Summarization; Reading Comprehension; English Foreign Language; Correlation Study

Abstrak : Penelitian ini bertujuan untuk menganalisis korelasi antara penggunaan video pendek berbahasa Inggris dan peringkasan berbasis kecerdasan buatan (AI) terhadap kemampuan membaca siswa di Jareeyatam School Satun, Thailand. Penelitian ini menggunakan desain kuantitatif korelasional dengan melibatkan 22 siswa sebagai sampel. Data dikumpulkan melalui kuesioner dan tes pemahaman membaca. Analisis data dilakukan menggunakan statistik deskriptif dan inferensial. Hasil uji normalitas menunjukkan bahwa data tidak berdistribusi normal, sehingga digunakan uji korelasi Spearman Rank. Hasil penelitian menunjukkan bahwa tidak terdapat hubungan yang signifikan antara penggunaan video pendek berbahasa Inggris dengan kemampuan membaca siswa ($r = 0.129$, $p = 0.566$). Demikian pula, peringkasan berbasis AI tidak menunjukkan hubungan yang signifikan dengan kemampuan membaca ($r = -0.034$, $p = 0.880$). Temuan ini menunjukkan bahwa penggunaan video pendek dan peringkasan AI tidak menunjukkan hubungan yang signifikan terhadap kemampuan membaca dalam konteks penelitian ini. Oleh karena itu, penggunaan teknologi | 1 pembelajaran perlu didukung dengan strategi pedagogis yang efektif untuk meningkatkan hasil belajar siswa.

Kata Kunci : Video Bahasa Inggris Singkat; Ringkasan Berbasis AI; Pemahaman Bacaan; Bahasa Inggris sebagai Bahasa Asing; Studi Korelasi

INTRODUCTION

The rapid development of digital technology has significantly transformed English as a Foreign Language (EFL) learning, particularly in supporting students' reading comprehension. Short instructional videos and Artificial Intelligence (AI)-based summarization are increasingly used as digital learning tools because they present information in an accessible and engaging way. Video-assisted instruction is reported to reduce cognitive load and improve information processing through multimodal input (Hsieh, 2020; Chen and Chen, 2021), while AI-based summarization allows learners to identify key ideas more efficiently (Huang et al., 2026). These developments indicate that digital media has become an inseparable part of EFL reading instruction.

This global trend, however, is not yet fully reflected in EFL classrooms in Thailand, particularly at the secondary school level. During the researcher's International Teaching Practicum (PLP Internasional) at Jareeyatam School Satun, Thailand, preliminary classroom observations and informal discussions with the English teacher reveal that Grade 11 students still experience considerable difficulties in reading English texts. Students generally rely on word-for-word translation, struggle to identify the main ideas of reading passages, and frequently answer reading comprehension questions incorrectly. This condition aligns with Liu et al. (2024), who note that limited vocabulary and unfamiliar grammatical structures remain major obstacles for EFL learners in comprehending English texts. These classroom conditions indicate that reading comprehension remains a considerable challenge for many EFL learners and emphasize the importance of implementing learning strategies that can actively support students throughout the reading process.

In an ideal condition, the use of short English videos and AI-based summarization should help students overcome these reading difficulties. Short videos are expected to reduce communication barriers and attract students' attention during lessons (Wang & Lee 2021), while AI-based summarization is expected to simplify complex information and help students focus on essential ideas during reading activities (Huang et al., 2026). With adequate exposure to these digital tools, students' reading comprehension is expected to improve significantly. This is consistent with Ardiya and Syahfutra (2021), who found that engaging and attention-grabbing teaching methods can significantly increase senior high school students' motivation to learn English, suggesting that attractive digital media such as short videos may similarly support students' engagement during reading activities. Therefore, these theoretical perspectives suggest that meaningful integration of digital learning resources has the potential to create a more engaging reading environment and support students' reading comprehension development.

The reality at Jareeyatam School Satun shows otherwise. To facilitate classroom instruction, the researcher frequently uses short English videos, and questionnaire results in this study reveal that students are already familiar with watching short English videos and using AI applications, particularly ChatGPT and Gemini, as learning support tools. Despite this familiarity, students' reading comprehension remains low, as reflected in their difficulties identifying main ideas and answering comprehension questions correctly. This gap indicates that students' exposure to digital learning media does not automatically translate into better reading comprehension, and therefore requires further empirical investigation. Therefore, although both technologies offer promising educational benefits, their effectiveness should be evaluated through empirical evidence obtained from actual classroom settings.

Previous studies have generally examined the effects of short English videos and AI-based summarization on reading comprehension separately. Studies integrating both digital tools in relation to students' reading comprehension remain limited, particularly within EFL secondary schools in Thailand (Deng, 2024; Valizadeh, 2025). Although previous studies have demonstrated the potential of each technology in supporting language learning, most investigations have examined short English videos and AI summarization separately rather than simultaneously. As a

result, limited evidence is available regarding how these two digital learning resources collectively relate to students' reading comprehension achievement within authentic EFL classroom contexts. This gap indicates the need for further investigation into how these two digital learning resources relate to students' reading comprehension in authentic classroom settings.

Based on these field conditions and the identified research gap, this study aims to examine the correlation between the use of short English videos and AI-based summarization and students' reading comprehension at Jareeyatam School Satun, Thailand. The findings are expected to contribute to the growing discussion on technology-assisted EFL learning and provide empirical evidence regarding the use of digital learning resources in EFL classrooms. Furthermore, examining these relationships may also enrich current knowledge regarding the integration of digital technologies in EFL reading instruction, particularly within secondary school contexts. In addition, the results may serve as a valuable reference for future researchers who intend to investigate the integration of digital learning technologies in different EFL contexts and educational settings. Overall, this study is expected to provide both theoretical and practical contributions to the effective integration of digital technologies in EFL reading instruction.

RESEARCH METHOD

This study employed a quantitative correlational research design to examine the relationship between the use of short English videos and AI summarization and students' reading comprehension achievement. The research was conducted at Jareeyatam School, Satun Province, Thailand, during the 2025 academic year. The population consisted of all Grade 11 students, while the sample comprised 22 students selected through purposive sampling. This sampling technique was employed because the participants met the research criteria, namely students who had experienced English learning activities involving short English videos and AI summarization. In this study, the independent variables were the use of short English videos and AI summarization, whereas the dependent variable was students' reading comprehension achievement.

Data were collected using two research instruments, namely a questionnaire and a reading comprehension test. The questionnaire consisted of 20 statements measured using a five-point Likert scale ranging from *Strongly Disagree* to *Strongly Agree* (Koo & Yang, 2025). It was designed to measure students' perceptions regarding the use of short English videos and AI summarization in English learning. Meanwhile, the reading comprehension test consisted of 25 multiple-choice adapted from the book "Bahasa Inggris Tingkat Lanjut SMA Kelas XI", suitable for their grade. Each correct answer was scored 4 points, resulting in a maximum possible score of 100. The questions designed to assess students' reading comprehension, including identifying the main idea, locating specific information, interpreting vocabulary in context, making inferences, and understanding the overall meaning of a text. These instruments were selected because they enabled the researcher to obtain both students' perceptions and their actual reading comprehension performance, thereby providing comprehensive data for the correlation analysis. Prior to data collection, both instruments were evaluated through expert judgment to ensure their content validity, clarity, and suitability with the research objectives. Necessary revisions were made based on the experts' recommendations before the instruments were administered to the participants. Overall, the use of these validated research instruments ensured that the data collected were appropriate for addressing the research objectives and supporting reliable correlation analysis.

The data collection process was conducted after obtaining permission from the school and coordinating with the English teacher regarding the research schedule. The questionnaire was administered first to obtain data on students' perceptions of the use of short English videos and AI summarization in English learning. Subsequently, the reading comprehension test was conducted to measure students' reading comprehension achievement. Both instruments were administered in a classroom setting under the researcher's supervision. Overall, implementing a standardized data collection procedure helped maintain the consistency and credibility of the research process.

The collected data were analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics were first employed to summarize the characteristics of the data. The Shapiro-Wilk test was then conducted to examine the normality of the data distribution. Since the data were not normally distributed, the Spearman Rank Correlation test was employed to determine the

relationship between the use of short English videos and AI summarization and students' reading comprehension achievement. These statistical procedures were selected to ensure that the analysis was appropriate for the characteristics of the collected data and capable of answering the research questions accurately. Statistical significance was determined at the 0.05 level. According to Schober et al. (2018), the correlation coefficient (r) was interpreted as negligible (0.00-0.10), weak (0.10-0.39), moderate (0.40-0.69), strong (0.70-0.89) or very strong (0.90-1.00). The value of r can be either positive or negative. The closer it is to 0, the lower the correlation. The closer it is to -1 or 1, the stronger the correlation. Negative values indicate an inverse relationship, while positive values indicate a direct relationship (Akbar et al. 2023). Overall, the selected analytical procedures provided a systematic basis for interpreting the relationships among the research variables.

RESULT AND DISCUSSION

Result

Descriptive Statistics

Descriptive statistics were conducted to provide a general overview of the data distribution across all variables. The results are presented in Table 1. Descriptive statistics provide an initial overview of the characteristics of each research variable before further inferential analyses are conducted. The values of the mean, minimum, maximum, and standard deviation help illustrate the distribution and variation of students' responses and reading comprehension scores. Overall, these descriptive results provide a general understanding of the data and serve as the basis for subsequent statistical analyses.

Table 1. Descriptive Statistics of Variables

	N	Minimum	Maximum	Mean	Std. Deviation
x1	22	53.00	93.00	70.0909	8.98098
x2	22	26.00	78.00	68.8636	10.94269
y	22	4.00	68.00	32.1818	16.85692
Valid N (listwise)	22				

The results indicated that students' exposure to short English videos (M = 70.09) and AI-based summarization (M = 68.86) were relatively high. This suggested that students were actively engaged with both forms of digital learning tools. These variations indicate that students demonstrated different levels of perceptions toward the digital learning tools as well as different levels of reading comprehension achievement. However, in contrast to these relatively high scores, students' reading comprehension performance was considerably lower (M = 32.18). Overall, the descriptive statistics suggest that the collected data adequately represent the characteristics of the research participants and are appropriate for further analysis.

Furthermore, the standard deviation for reading comprehension (SD = 16.86) was notably higher compared to the other variables. This indicated a wide dispersion of scores, meaning that students' reading abilities varied significantly. Some students performed relatively well, while others demonstrated very low comprehension levels. This variation suggested that the students did not have a uniform level of reading proficiency, which may influence the relationship between the independent and dependent variables. Overall, these descriptive statistics provide an initial overview of the characteristics of each research variable and serve as the foundation for the subsequent inferential analyses.

Normality Test

Assessing data normality is an important preliminary step because it determines the suitability of the statistical technique used in the correlation analysis. A normality test was conducted using the Shapiro-Wilk test to determine whether the data met the assumptions required for parametric statistical analysis. The Shapiro-Wilk test was selected because it is recommended for studies involving relatively small sample sizes. The results revealed that AI-based summarization did not follow a normal distribution (p=0,000), while Short English Video and Reading test were normally distributed (p=0,375 and p=0,597). The results of this test were used as the basis for selecting the most appropriate inferential statistical procedure.

Table 2. Normality Tests

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
x1	.156	22	.176	.954	22	.375
x2	.215	22	.009	.680	22	.000
y	.143	22	.200*	.965	22	.597

Since the assumption of normality was not fully met, parametric tests such as Pearson correlation were not considered appropriate. Therefore, a non-parametric statistical approach was adopted to ensure the validity of the analysis. Specifically, Spearman Rank Correlation was used to examine the relationships among variables. Therefore, the findings of the normality test justified the use of a non-parametric statistical analysis in this study.

Correlation Analysis

Spearman Rank Correlation analysis was conducted to determine the relationship between short English videos, AI-based summarization, and students' reading comprehension. This analysis was conducted to identify both the direction and the strength of the relationships between the independent variables and students' reading comprehension achievement. The correlation coefficients also indicate whether the relationships are positive or negative as well as their level of significance. The results of the Spearman Rank Correlation analysis are presented in Table 3.

Table 3. Correlation Analysis

			x1	x2	y
Spearman's rho	x1	Correlation Coefficient	1.000	.269	.129
		Sig. (2-tailed)	.	.227	.566
		N	22	22	22
	x2	Correlation Coefficient	.269	1.000	-.034
		Sig. (2-tailed)	.227	.	.880
		N	22	22	22
	y	Correlation Coefficient	.129	-.034	1.000
		Sig. (2-tailed)	.566	.880	.
		N	22	22	22

The analysis showed that there was no statistically significant relationship between short English videos and students' reading comprehension ($r = 0.129$, $p = 0.566$). The correlation coefficient indicated a weak correlation and suggested that the use of short English videos had minimal influence on students' comprehension performance. Overall, these findings indicate that students' perceptions of short English videos were not significantly associated with their reading comprehension achievement in this study.

Similarly, the relationship between AI-based summarization and reading comprehension was found to be negative ($r = -0.034$, $p = 0.880$), and not statistically significant. According to Akbar et al. (2023), the negative coefficient implied that higher usage of AI-based summarization tools was associated with slightly lower reading comprehension scores. However, since the relationship was not statistically significant, this trend could not be generalized and might have occurred by chance. Overall, the findings also indicate that students' perceptions of AI-based summarization were not significantly related to their reading comprehension achievement. Taken together, the correlation analysis indicates that neither of the investigated digital learning variables showed a statistically significant relationship with students' reading comprehension achievement in the present study.

Discussion

The findings of this study indicate that neither short English videos nor AI-based summarization demonstrated a significant relationship with students' reading comprehension. These findings differ from several previous studies that reported positive impacts of multimedia learning and AI-assisted technologies on language learning outcomes. This discrepancy suggests

that the effectiveness of digital learning technologies may vary depending on the learning context, students' characteristics, and the way these technologies are implemented during instruction. Although digital tools provide valuable learning opportunities, their successful integration requires appropriate instructional support to facilitate students' active engagement in reading activities. Overall, these findings highlight that the educational benefits of digital technologies cannot be generalized across different EFL contexts and should be interpreted in relation to the specific characteristics of the learning environment.

Previous research has emphasized the effectiveness of multimedia integration in supporting reading comprehension. Wang and Lee (2021) explained that multimedia learning environments help learners construct meaning through the integration of visual and textual information. Similarly, Chen et al. (2022) found that video-assisted instruction enhances comprehension by providing multimodal input that supports learners' understanding. However, the present study did not find a significant relationship between short English videos and reading comprehension. This suggests that the effectiveness of video-based learning may depend not only on the presence of videos themselves, but also on how they are implemented in classroom instruction.

One possible explanation is related to students' level of engagement during the learning process. Hsieh (2020) found that video captioning can reduce cognitive load and improve comprehension, particularly when learners actively process the information presented. In the context of this study, students may have watched the videos passively without engaging in deeper comprehension activities such as discussion, questioning, or reflection. Consequently, the instructional benefits commonly associated with video-based learning may not have been fully achieved. Overall, these findings suggest that students' active participation plays a crucial role in determining whether short English videos can effectively support reading comprehension.

In addition, the findings of this study may indicate that short English videos function more effectively as supplementary learning media rather than as direct determinants of reading comprehension achievement. Liu et al. (2024) argued that video-based contextual support helps EFL learners understand unfamiliar vocabulary and language structures by connecting language input to meaningful contexts. Nevertheless, if students' basic reading skills remain limited, contextual support alone may not significantly improve overall comprehension performance. Therefore, short English videos should be integrated with instructional activities that strengthen students' fundamental reading skills to maximize their educational benefits. Overall, these findings reinforce that the effectiveness of short English videos depends on their pedagogical integration rather than on the technology itself.

The results concerning AI-based summarization also contrast with several earlier studies. Huang et al. (2026) reported that AI-supported summarization improves reading efficiency and helps learners focus on important information. Likewise, Hwang et al. (2019) demonstrated that summarization strategies positively influence students' learning performance. However, this study found that AI summarization showed a very weak and non-significant relationship with reading comprehension. Overall, these contrasting findings indicate that the effectiveness of AI-based summarization may vary depending on how the technology is implemented and utilized in different learning contexts.

This difference may be caused by the way students interact with AI-generated summaries. Although AI tools can simplify information, excessive dependence on summaries may reduce opportunities for learners to engage in deeper reading processes. Dargham & Rasha (2024) emphasized that summarization strategies improve comprehension when students actively identify and reorganize main ideas themselves. In contrast, AI-generated summaries may encourage students to rely on automatically condensed information without fully processing the original text. As a result, students may understand only surface-level information rather than developing deeper comprehension skills. Overall, these findings suggest that AI-generated summaries are most beneficial when they support, rather than replace, students' active engagement in the reading process.

Furthermore, Chen et al. (2025) highlighted that AI-generated summaries sometimes fail to capture contextual nuances accurately. This limitation may also explain why AI summarization did

not significantly contribute to students' reading comprehension in this study. Although AI tools provide convenience and efficiency, they cannot fully replace learners' active cognitive engagement during reading activities. Therefore, teachers should encourage students to use AI-generated summaries as complementary learning resources while continuing to engage directly with the original reading texts. Taken together, these findings reinforce that the educational value of AI-based summarization depends on how it is integrated into meaningful reading instruction rather than on the technology alone.

Another important finding in this study is the high variability in students' reading comprehension scores. The relatively large standard deviation indicates that students had diverse levels of reading proficiency. This condition may weaken the correlation between the variables because students with stronger language backgrounds may benefit differently from technological tools compared to students with lower proficiency levels. Reading comprehension itself is influenced by multiple factors, including vocabulary mastery, grammatical understanding, prior knowledge, and reading strategies. Therefore, the contribution of digital tools may become less visible when these foundational language skills vary significantly among students.

The absence of significant correlations in this study does not necessarily indicate that short English videos and AI-based summarization are ineffective. Instead, the findings suggest that technology integration alone is insufficient to improve reading comprehension outcomes. Effective instructional guidance remains essential. This finding aligns with Urunbaeva (2025), who argued that technology-enhanced learning requires pedagogical support to maximize learner engagement and comprehension. Similarly, Daiu & Spaho (2025) emphasized that digital learning tools become more effective when integrated with structured instructional strategies and active learner participation.

Another possible factor influencing the findings is the relatively small sample size (N = 22). With limited participants, the statistical power of the analysis becomes lower, making it more difficult to identify significant relationships. In addition, a small sample may not adequately represent the diversity of students' learning experiences and responses to digital learning technologies. Future studies are therefore recommended to involve larger samples and more structured classroom interventions to obtain more comprehensive findings regarding the relationship between digital learning tools and reading comprehension. Overall, increasing the sample size and strengthening the research design may provide more robust evidence regarding the effectiveness of digital learning technologies in EFL reading instruction.

Overall, the findings of this study contribute to the growing discussion on technology integration in EFL learning, particularly within the Thai educational context. While previous studies have generally reported positive impacts of multimedia learning and AI technologies, this study demonstrates that their effectiveness may vary depending on contextual, instructional, and learner-related factors. These findings suggest that technology alone cannot guarantee improvements in students' reading comprehension without appropriate pedagogical support. Therefore, educators should focus not only on adopting technological tools but also on designing meaningful learning activities that encourage active engagement, critical thinking, and deeper comprehension processes. Taken together, this study highlights the importance of integrating digital technologies with effective instructional practices to maximize their potential in supporting EFL reading comprehension.

CONCLUSION

This study aimed to examine the correlation between the use of short English videos and AI-based summarization and students' reading comprehension at Jareeyatam School Satun, Thailand. The findings revealed that neither short English videos nor AI-based summarization showed a statistically significant relationship with students' reading comprehension. The correlation coefficients indicated very weak relationships, suggesting that these variables did not meaningfully influence students' comprehension performance in this context. These findings indicate that the presence of digital learning technologies alone does not necessarily lead to improved reading achievement among EFL learners. Overall, this study provides empirical evidence that the

effectiveness of digital learning tools should be interpreted within the specific instructional context in which they are implemented.

These results imply that the use of digital learning tools alone is not sufficient to improve reading comprehension. The effectiveness of such tools depends on how they are integrated into the learning process, including the presence of instructional guidance, student engagement, and supporting language skills. Therefore, educators should not only focus on the adoption of technology but also emphasize appropriate pedagogical strategies to enhance learning outcomes. In addition, teachers are encouraged to combine digital learning tools with interactive reading activities that actively involve students in constructing meaning from texts. Taken together, the successful integration of digital technologies requires thoughtful instructional planning to maximize students' reading comprehension development.

Future research is recommended to involve larger sample sizes and more structured instructional designs (for example mixed method) to better understand the potential impact of short videos and AI-based summarization on reading comprehension. Expanding the scope of participants from different schools or educational levels may also provide more comprehensive evidence regarding the effectiveness of these digital learning tools. Furthermore, future studies may explore additional variables, such as students' motivation, digital literacy, and reading strategies, which could influence reading comprehension outcomes. Such investigations are expected to provide a broader understanding of how digital technologies interact with learner-related and instructional factors. Overall, continued research is needed to support the effective integration of digital technologies into EFL reading instruction across diverse educational contexts.

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