



CANVA-BASED INTERACTIVE WEB MEDIA IN ELT: A PRE-EXPERIMENTAL STUDY OF LEARNING OUTCOMES AND STUDENT PERCEPTIONS

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Abstract

This study aims to examine English learning achievement after the introduction of an interactive web-based learning medium developed using Canva, and students' perceptions of the medium, in Grade XI. The study employed a quantitative approach with a pre-experimental one-group design that compared Semester 1 report scores (before the medium) with Semester 2 report scores (after the medium was introduced). The participants were 60 students selected randomly from a population of 122 Grade XI students at SMA Islam Al Azhar 5 Cirebon. All 60 students also completed the questionnaire. The learning medium was independently developed by the English teacher and combined reading texts, grammar materials, and exercises in a single interactive web platform. Data were collected from students' English learning achievement in Semester 1 and Semester 2 and a 25-item Likert-scale learning interest questionnaire. The results showed a higher mean learning achievement in Semester 2 (90.17) than in Semester 1 (88.83), a modest difference of 1.33 points. The Wilcoxon Signed-Rank Test indicated a statistically significant difference between the two measurement periods ($Z = 5.15$, $p < 0.001$). The effect size was large by conventional benchmarks ($r = 0.66$), but the practical difference was modest, Semester 1 scores had already met the minimum mastery criterion (KKM) overall, and the absence of a control group means the difference cannot be attributed to the medium alone. Students also reported positive perceptions of the medium (measured once, after implementation), with 81.67% reporting enthusiasm for learning and 83.33% considering the visual presentation attractive and helpful for maintaining focus. Furthermore, 90.00% stated that they needed to learn grammar further to support their reading. These preliminary findings suggest that an interactive Canva-based web medium developed by a teacher may serve as a contextual and engaging alternative for English language learning, although they do not establish its effectiveness.

Keywords: interactive web, Canva, English learning, reading, grammar, student perceptions

INTRODUCTION

Technological tools have certain advantages in English classes, such as appealing to different learning styles, promoting independent learning, and allowing collaboration (Khan & Tas, 2020; Küçük, 2023) in (Celik & Kara, 2024). English language learning, particularly

reading, is often perceived by students as boring when instruction relies heavily on static texts and less interactive activities (Rowa & Syahrurah, 2023). This condition has become one of the concerns in English language learning among Grade XI students at SMA Islam Al-Azhar 5 Cirebon. Based on the initial data, students' English learning achievement in Semester 1 ranged from 83 to 93. Although students' overall achievement had met the Minimum Mastery Criterion (KKM), there was still a need to strengthen their understanding of reading and grammar. In addition, the results of the initial questionnaire indicated that students perceived an understanding of sentence structure (grammar) as important for supporting reading comprehension, but grammar instruction tended to be separated from the context of the texts. This condition indicates the need for learning media that can present reading materials in a more interactive manner while combining text comprehension with linguistic elements that support the reading comprehension process.

The development of digital technology provides opportunities to develop more interactive and engaging learning media for English language learning (Ordóñez Procel et al., 2024). Various digital platforms can be utilized to develop instructional materials that combine texts, images, links, exercises, and interactive elements within a single learning medium. One such platform is Canva, which allows teachers to develop visually oriented and web-based learning media relatively easily and adapt them to classroom learning needs. In the context of English language learning, the use of interactive digital media can support the presentation of learning materials in a more structured manner while providing students with a more engaging learning experience (Zhao, 2023). Therefore, the development of web-based media specifically designed to address the learning needs of reading and grammar represents a relevant alternative for supporting English language learning.

Several studies have demonstrated the potential of digital media to support English language learning. Sari et al. found that the use of Canva can create an enjoyable learning environment, engage students in the learning process, and assist teachers in implementing technology-based instruction (Sari et al., 2024). Hasanah and Qamariah also found that the interactive use of YouTube and Canva can increase students' participation and learning motivation while supporting vocabulary mastery and comprehension. These findings indicate that digital media, particularly Canva, can be used not only to present learning materials but also to support student engagement in the learning process (Rizki Hasanah & Zaitun Qamariah, 2024). Evidence from Indonesian secondary schools is also emerging: Hardiana et al. (2024) developed local culture-based Canva narratives that improved junior high school students' engagement and reading comprehension, and Verawati et al. (2026) reported higher reading comprehension scores among vocational high school students taught with Canva than among a comparison class. Canva has likewise been used to develop learning media for creativity and learning outcomes (Gurning et al., 2024) and has been examined in relation to vocabulary mastery (Widiarti et al., 2024) and L2 writing (Le et al., 2023).

The use of web-based and other interactive media has also been investigated in English language learning. Ardianti reported that the use of interactive web-based learning media through the SimDif application could improve students' interest, motivation, and participation in English learning (Ardianti, 2025). Meanwhile, Erlin et al. found that the implementation of an inquiry-based learning model assisted by Quizizz could improve students' English reading skills and engagement in learning (Erlin et al., 2026). In the area of grammar, Uswar et al. (2026) showed that the use of Grammar Smash English as an interactive learning medium could help improve students' grammar mastery. These findings indicate that interactive digital media have the potential to support students' interest,

engagement, reading skills, and grammar mastery in English language learning. At a broader level, a meta-analysis of educational technology for Chinese K-12 learners of English reported a modest positive effect on reading outcomes (Ni et al., 2022), and a systematic review of technology-assisted grammar learning documented both its affordances and its challenges (Bahari & Gholami, 2022). For grammar, Web 2.0 tool-oriented instruction has also been associated with higher grammatical competence, intrinsic motivation, and self-confidence among university EFL learners in Iraq (Celik & Kara, 2024).

Nevertheless, previous studies have addressed different focuses. Studies on Canva have mainly examined student engagement, motivation, vocabulary, or comprehension, whereas studies involving web-based and other interactive applications have focused separately on learning interest, reading skills, or grammar mastery. Few studies have specifically examined an interactive Canva-based web medium that combines reading texts, grammar materials, and exercises in a single platform. However, an understanding of sentence structure can support students in comprehending the meaning of the texts they read (Niculescu & Dragomir, 2023). Therefore, there remains a need to investigate learning media that not only present information but also combine reading texts, grammar materials, and exercises in a single interactive platform.

Unlike previous studies that have generally examined the use of existing applications or digital learning media, the present study employs an interactive Canva-based web medium independently developed by an English teacher according to classroom learning needs. The teacher does not merely use Canva as a tool for presenting materials but independently designs the web structure, learning sequence, reading materials, grammar materials, and exercises combined in a single platform. Therefore, the novelty of this study lies in the development and use of an interactive Canva-based web medium independently designed by the teacher to combine reading texts, grammar materials, and exercises in one platform.

Based on this research gap, this study employs an interactive Canva-based web medium independently developed by an English teacher to support the learning of Grade XI students. The medium combines reading texts, grammar materials and exercises, and learning activities within a structured sequence. Its visual presentation, navigation, and interactive activities are designed to support students' learning experiences. These characteristics provide the basis for examining English learning achievement and students' perceptions in relation to the interactive Canva-based web medium.

Based on the foregoing discussion, this study aims to examine English learning achievement among Grade XI students after the introduction of an interactive Canva-based web learning medium and to describe students' perceptions of learning through the medium. Learning achievement is examined by comparing students' report scores in Semester 1 (before the medium was used) and Semester 2 (after it was introduced), while perceptions are examined through a questionnaire administered once, after the implementation. This study is expected to provide preliminary, descriptive evidence regarding the use of a teacher-developed interactive Canva-based web medium as an alternative for English language learning, particularly learning focused on reading and grammar.

METHOD

This study employed a quantitative approach with a pre-experimental one-group design (Loi Nhat Minh, 2026). The design was used to compare students' learning achievement before (Semester 1) and after (Semester 2) the introduction of an interactive Canva-based web learning medium. Because Semester 1 and Semester 2 scores come from different

assessments, content, and times of the school year, they are not a true pretest and posttest, and the comparison is descriptive rather than causal (Dyer, 2026). The study did not employ a control group for comparison. The condition before the implementation of the medium was represented by students' English learning achievement in Semester 1, when the interactive Canva-based web medium had not yet been used, whereas the condition after its implementation was represented by students' learning achievement in Semester 2, when the medium was used in most of the learning process. English instruction in both semesters focused on reading and grammar; therefore, the comparison of students' achievement was conducted within broadly similar subject areas (reading and grammar), although the specific content and assessments differed between semesters.

The population consisted of all Grade XI students at SMA Islam Al Azhar 5 Cirebon, comprising 122 students distributed across four classes: XI IPA 1, XI IPA 2, XI IPS 1, and XI IPS 2. All Grade XI students received English instruction from the same teacher. The teacher independently developed the interactive Canva-based web medium and used it as one of the learning media during Semester 2. From this population, 60 students were selected as the research sample using simple random sampling (Shagofah Noor et al., 2022). The same 60 students also completed the learning interest questionnaire.

The study used an interactive Canva-based web medium, learning achievement data, and a learning interest questionnaire as sources of research data. The interactive web medium was independently developed by the English teacher and used as one of the main learning media during Semester 2. The medium focused on reading and grammar, with materials and exercises organized thematically through visual presentation, navigation, and interactive activities. Learning achievement data were obtained from students' English report card scores in Semester 1 as an indicator of achievement before the implementation of the medium and Semester 2 as an indicator of achievement after its implementation. The scores included learning assessment components, including assignment scores, while attitude scores were excluded from the analysis. Learning assignments included, among others, reading text analysis activities combined with grammar comprehension.

The medium is an interactive website titled "Bahasa Inggris Kelas 11" (SMA Islam Al-Azhar 5 Cirebon Learning Platform), designed for the even semester of the Kurikulum Merdeka and published as a Canva site at <https://smalzha5.my.canva.site/kisibing>. The teacher developed the website in Canva by writing text prompts that generate the underlying code, and the generated code was published as an interactive website. A top menu leads to three areas: Home, Materials, and Exercises (Figure 1a). The Materials area contains four topics: two text types, hortatory exposition and procedure text, and two grammar topics, reported speech and passive voice. Each topic has its own tab, with explanations in Indonesian and examples in English. For the text types, a page presents the definition, the generic structure (thesis, arguments, and recommendation for hortatory exposition; goal, materials, and steps for procedure text), language features, complete example texts, and writing tips. For example, hortatory exposition includes the texts "Waste Management at School" and "Why Students Should Join Sports", and procedure text includes "How to Make Chocolate Chip Cookies" (Figure 1b). The grammar pages present the rules in tables and examples: tense changes, pronoun and time or place changes, and reporting verbs for reported speech; and the passive forms of seven tenses and modals, the situations in which the passive is used, and active-to-passive conversions for passive voice (Figure 1c).

The Exercises area consists of 50 multiple-choice questions with five options (A–E). Students enter their name and class and then answer one question per screen, with a progress indicator and a topic label, and can move forward and backward (Figure 1d). The questions are labeled by topic (for example, hortatory exposition, reading comprehension, and reported speech), and the reading-comprehension items are based on a passage displayed on the same screen, such as a question on the main thesis of “Waste Management at School”. At the end of the exercise, students can see their score, and their results are recorded automatically in a Canva Sheet.



Figure 1a (Home Page)

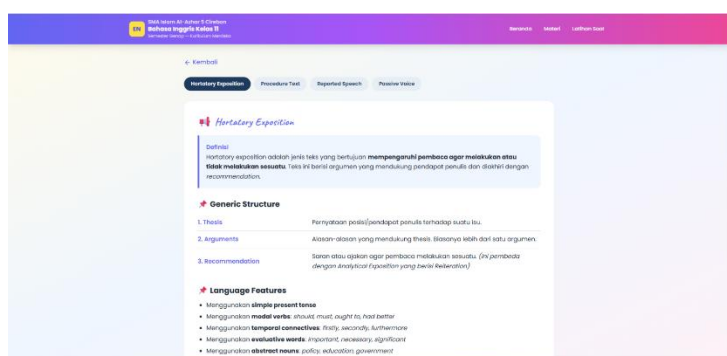


Figure 1b (a text-type page)

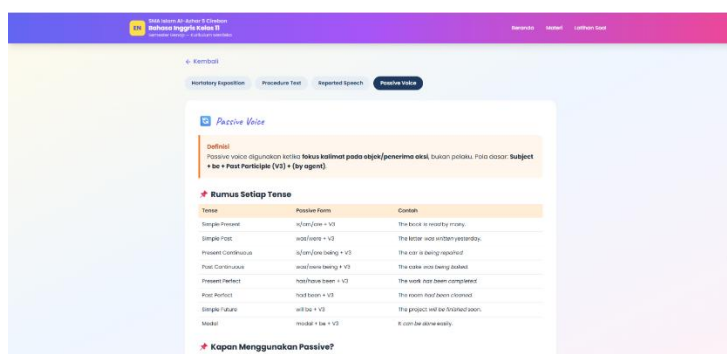


Figure 1c (a grammar page)

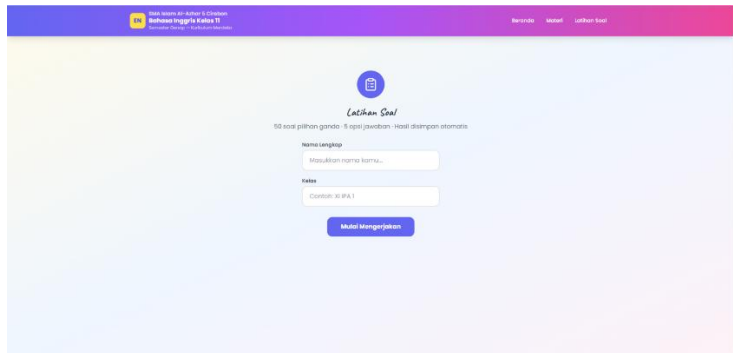


Figure 1d (an exercise questions)

The teacher used the medium to explain the material in class, and students accessed it on their mobile devices. English lessons were held twice a week, in one session of 2×45 minutes and one session of 1×45 minutes, and the medium was used in these lessons during Semester 2.

Students' learning interest was measured using a 25-item Likert-scale questionnaire. The questionnaire was administered after the implementation of the medium through the SurveyHeart platform to obtain information regarding students' learning interest and responses to learning using the interactive Canva-based web medium. The 25 statements covered four areas: interest and motivation in reading (statements 1–6), reading engagement and perceived comprehension (7–15), grammar (16–20), and the interactive web medium and learning process (21–25). Each statement was rated on a five-point scale (strongly agree = 5 to strongly disagree = 1). The questionnaire was administered once, on 17–18 June 2026, after the implementation of the medium, so no baseline measure of learning interest is available and the results describe students' perceptions rather than change over time. Agreement was calculated as the number of "agree" and "strongly agree" responses divided by the 60 respondents. Because the form allowed more than one option per statement, 50 of the 1,500 answers (from 17 students) contained two options; such an answer was counted as agreement only if both options were "agree" or "strongly agree", and for mean scores it was scored as the mean of the two options. Internal consistency was high (Cronbach's alpha = 0.95 for all 25 statements and 0.79–0.91 for the four areas), and corrected item–total correlations ranged from 0.45 to 0.81. The instrument was developed by the teacher and was not subjected to a separate validity test (for example, expert judgment) before use; this is acknowledged as a limitation.

Data were collected through documentation of learning achievement and administration of the learning interest questionnaire. Learning achievement data were obtained by documenting English report card scores from Semester 1 as an indicator of achievement before the implementation of the medium and Semester 2 as an indicator of achievement after its implementation. The scores included learning assessment components, including assignments related to reading text analysis and grammar, while the attitude component was excluded from the analysis.

RESULTS AND DISCUSSIONS

RESULTS

Changes in English Learning Outcomes

Descriptive analysis showed higher English learning outcomes in Semester 2, after the introduction of the Canva-based interactive web learning media. The mean score increased from 88.83 (SD = 2.46) in Semester 1 to 90.17 (SD = 2.04) in Semester 2, representing an average difference of 1.33 points. The median score increased from 89.00 to 90.50. The minimum score increased from 83 to 86, while the maximum score increased from 93 to 94. The learning outcome data covered students' achievement in English, including assignments involving reading text analysis and grammar.

Table 1. Analysis of English Learning Outcomes Before (Semester 1) and After (Semester 2) the Introduction of Canva-Based Interactive Web Media (N = 60)

Measurement	Mean	SD	Median	Min–Max
Semester 1	88.83	2.46	89.00	83–93
Semester 2	90.17	2.04	90.50	86–94
Difference (Semester 2 – Semester 1)	1.33	1.65	1.00	–2–8

Table 2. Wilcoxon Signed-Rank Test Results for Semester 1 and Semester 2 English Learning Outcomes

Statistic test	Z	p	Effect size (r)	95% CI difference
Wilcoxon Signed-Rank	5.15	<0.001	0.66	0.91–1.76

The results of the Wilcoxon Signed-Rank test indicated a statistically significant difference in students' English learning outcomes between Semester 1 and Semester 2 ($Z = 5.15$; $p < 0.001$). The effect size was $r = 0.66$, which is large by conventional benchmarks. However, the practical difference was modest: the mean difference was 1.33 points (95% CI 0.91–1.76), and students' Semester 1 scores (range 83–93) had already met the minimum mastery criterion (KKM) overall, leaving little room for improvement.

Students' Perceptions of the Media

The questionnaire results from 60 students showed a positive response to the use of the Canva-based interactive web media. A total of 81.67% (49 of 60) of students agreed or strongly agreed that they felt happy and enthusiastic about participating in the learning activities. In terms of visual aspects, 83.33% (50 of 60) of students perceived the interactive web interface as attractive and helpful in maintaining their focus during learning. In addition, 90.00% (54 of 60) of students stated that they needed to learn grammar further to support their reading ability. Table 3 presents the results for all 25 statements: agreement ranged from 48.33% (asking about unfamiliar words or sentences) to 95.00% (trying to understand the meaning of a text rather than memorizing it), and the overall mean score was 4.00 on the five-point scale (SD = 0.48). Because the questionnaire was administered only once, after the implementation, these results describe students' perceptions and do not show a change in learning interest.

Table 3. Students' Agreement with the 25 Questionnaire Statements (n = 60)

No.	Statement	Agree, n (%)	Mean (SD)
A. Interest and motivation in reading (statements 1–6; area mean = 3.89)			

No.	Statement	Agree, n (%)	Mean (SD)
1	I feel happy and enthusiastic about taking part in reading lessons in class.	49 (81.67%)	4.07 (0.66)
2	I do not feel bored when doing reading exercises.	40 (66.67%)	3.83 (0.78)
3	I am motivated to understand reading texts more deeply.	47 (78.33%)	4.05 (0.68)
4	I am more enthusiastic about learning reading than before.	39 (65.00%)	3.86 (0.70)
5	I want to keep practicing reading outside class hours.	41 (68.33%)	3.95 (0.75)
6	I actively ask when there is vocabulary or a sentence I do not understand.	29 (48.33%)	3.57 (0.79)
B. Reading engagement and perceived comprehension (statements 7–15; area mean = 3.98)			
7	I try to understand the meaning of a text rather than just memorizing it.	57 (95.00%)	4.36 (0.58)
8	I find the reading materials given by the teacher easy to understand.	39 (65.00%)	3.91 (0.78)
9	I actively do the exercises provided.	45 (75.00%)	4.01 (0.67)
10	I can follow the flow of the lesson well.	53 (88.33%)	4.17 (0.62)
11	I can understand the main idea of a text.	48 (80.00%)	3.99 (0.68)
12	I can find specific information in a text well.	48 (80.00%)	3.97 (0.64)
13	I can understand the meaning of difficult words from the sentence context.	32 (53.33%)	3.60 (0.85)
14	I feel my reading ability has improved after this learning.	45 (75.00%)	3.97 (0.80)
15	I find it easier to answer questions about the content of a text than before.	42 (70.00%)	3.86 (0.70)
C. Grammar (statements 16–20; area mean = 4.08)			
16	Understanding grammar helps me understand sentences in a text.	44 (73.33%)	3.98 (0.69)
17	The grammar exercises are related to the reading texts studied.	44 (73.33%)	3.94 (0.68)
18	I understand texts more easily after studying sentence structure.	47 (78.33%)	3.98 (0.62)
19	Learning grammar makes me more confident in reading English texts.	47 (78.33%)	4.08 (0.69)
20	I need to learn more grammar to improve my reading.	54 (90.00%)	4.41 (0.67)
D. The interactive web medium and learning process (statements 21–25; area mean = 4.08)			
21	The interactive web learning material is clear and easy to access.	49 (81.67%)	4.14 (0.73)
22	The appearance of the web material is attractive and helps me focus.	50 (83.33%)	4.12 (0.66)
23	The exercises in the web material match my ability level.	46 (76.67%)	4.08 (0.73)
24	The learning process is structured and well-directed.	44 (73.33%)	4.05 (0.77)
25	This learning helps me be better prepared for the reading test.	47 (78.33%)	4.01 (0.76)

Note. Agree = “agree” + “strongly agree”. An answer with two options counted as agreement only if both options were “agree” or “strongly agree”. Mean (SD) is on a five-point scale (5 = strongly agree); an answer with two options was scored as the mean of the two. Statements are translated from Indonesian.

DISCUSSIONS

Learning Outcomes after the Introduction of Canva-Based Interactive Web Media

The results showed higher English learning outcomes in Semester 2, after the Canva-based interactive web media was introduced, than in Semester 1. The mean score increased from

88.83 in Semester 1 to 90.17 in Semester 2, and the Wilcoxon test results indicated a statistically significant difference. These findings indicate that outcomes were higher after the medium was introduced; however, the difference was modest (1.33 points), occurred in a range limited by high baseline scores, and cannot be attributed to the medium alone. The modest size of the gain is in line with meta-analytic evidence that educational technology has a modest positive effect on English reading outcomes (Ni et al., 2022; see also Li, 2022, on mobile-assisted learning and reading comprehension). Larger effects have been reported in a vocational high school study with a comparison class (Verawati et al., 2026) and in a pre-post study with Indonesian senior high school students using mobile applications (Pratiwi & Firdaus, 2025), but those studies used different tests, designs, and baselines and are not directly comparable. Because conventional effect-size benchmarks should be read together with the raw difference and the context of the data (Fritz et al., 2012), the $r = 0.66$ reported here is best understood alongside the 1.33-point gain and the high baseline scores.

These findings are consistent with the study by Erlin et al. (2026), which showed that the use of interactive Quizizz media in English learning could support improvements in reading skills as well as student engagement. The similarity between the two studies lies in the use of digital media that provides more interactive learning activities than conventional instruction based primarily on material presentation. However, Erlin et al. used Quizizz combined with an inquiry learning model for elementary school students, whereas the present study used Canva-based interactive web media for Grade XI senior high school students, with learning materials focusing on reading and grammar.

The findings of this study also extend those of Sari et al. (2024) and Hasanah and Qamariah (2024) concerning the use of Canva in English learning. Previous studies have shown that Canva can create an enjoyable learning environment and support student engagement and understanding. The present study illustrates how Canva can be further developed into an interactive web-based medium that organizes learning materials, reading texts, and exercises within a single learning sequence.

Nevertheless, the improvement in learning outcomes in this study should be interpreted with caution. The research design did not include a control group; therefore, the changes in scores between Semester 1 and Semester 2 cannot be attributed entirely to the use of the media. Other factors during the Semester 2 learning process may also have contributed to the improvement in students' outcomes. Such factors include differences in content and assessments between the two semesters, students' maturation over the school year, and the fact that the teacher who developed the medium also taught the classes, which may have influenced assessment. In addition, because Semester 1 scores had already met the minimum mastery criterion, there was little room for improvement, and the difference of 1.33 points should be regarded as modest. Therefore, these findings are more appropriately interpreted as an increase in learning outcomes during the period following the implementation of the media rather than as conclusive evidence of a causal relationship.

Interactive Web Media, Student Perceptions, and Engagement

Students' responses to the use of the interactive web media showed a positive tendency. Most students reported feeling happy and enthusiastic about participating in the learning activities and perceived the media interface as attractive and helpful in maintaining their focus. These findings indicate that the visual and interactive aspects of the media were well received by the students.

These findings are consistent with Ardhiyanti (2025), who found that the use of interactive web-based learning media through the SimDif application could increase students' interest,

motivation, and participation in English learning. This similarity suggests that web-based learning environments can serve as an alternative for creating more engaging English learning experiences and encouraging student involvement. The studies by Sari et al. (2024) and Hasanah and Qamariah (2024) also support these findings by demonstrating that the use of Canva and interactive digital media can create an enjoyable learning environment and increase students' participation and motivation. Indonesian senior high school students in a mobile-assisted reading study likewise reported highly positive perceptions, especially of usability and engagement (Pratiwi & Firdaus, 2025).

In this study, the advantages of Canva-based interactive web media lie not only in the use of visual elements but also in the organization of learning materials and activities within a single platform. Students can access the learning materials, read texts, study language structures, and complete exercises through a sequence designed by the teacher. Thus, the media functions not merely as a tool for presenting learning materials but also as a structured digital learning environment.

However, the positive student responses in this study were measured after the implementation of the media. Therefore, these findings reflect students' perceptions and experiences with the media but cannot be used to conclude that students' learning interest increased longitudinally. This distinction is important because determining changes in learning interest from before to after the use of the media requires measurements at both time points. In addition, the questionnaire was developed by the teacher and was not subjected to a separate validity test, and some students selected more than one option for some statements, so the results should be treated as indicative.

Combining Reading and Grammar in Interactive Web Media

One of the main characteristics of the media used in this study is the combination of reading texts, grammar materials, and exercises on a single platform. The questionnaire results showed that most students felt a need to learn grammar further to support their reading ability. This finding supports the design of the media, which positions grammar not as a completely separate subject but as a component that supports the process of understanding texts.

This finding is related to the study by Uswar et al. (2026), which showed that the use of the Grammar Smash English application as an interactive learning medium could support grammar learning and make grammar exercises more engaging for students. However, their study focused on grammar mastery, whereas the present study places grammar within the context of reading instruction. This difference represents one of the characteristics distinguishing the media used in the present study.

This combination allows students to learn sentence structures while simultaneously observing their application within texts. Thus, grammar exercises are not only aimed at recognizing language forms or rules but are also connected to students' understanding of information and meaning in reading texts. This approach is consistent with the needs of English language learning, which should not only emphasize the mastery of linguistic elements separately but also their application in understanding texts.

The Contribution of Canva-Based Interactive Web Media to English Language Learning

Compared with previous studies, the contribution of this study lies in the development of Canva into an interactive web-based medium that specifically combines reading texts, grammar materials, and exercises on one platform. Sari et al. (2024) and Hasanah and

Qamariah (2024) demonstrated the potential of Canva to increase student engagement and motivation, while Ardianti (2025) showed the potential of web-based media to improve students' interest and participation. Erlin et al. (2026) demonstrated that interactive media can support reading skills, whereas Usvar et al. (2026) showed the benefits of interactive digital media for grammar learning. The present study connects these aspects within a single learning medium developed and implemented by the teacher.

Thus, the Canva-based interactive web media in this study is not positioned merely as a visually appealing digital medium, but as a structured learning medium that connects material presentation, reading activities, grammar instruction, and exercises within a single learning environment. This characteristic represents a practical contribution of the study by illustrating that a platform that is relatively accessible for teachers to develop can be utilized to design a more coherent English learning experience. Teacher adaptation of materials to local needs has also been examined in Indonesian secondary schools (Hanifa et al., 2024), and interactive, gamified activities have been studied in relation to EFL reading comprehension (Julita, 2024).

However, the findings also indicate that media interactivity does not automatically optimize all aspects of student engagement. The questionnaire results showed that although most students felt enthusiastic (81.67%) and able to follow the lesson (88.33%), only 48.33% (29 of 60) agreed that they actively ask when they do not understand a word or sentence. This indicates that the contribution of the media is still influenced by how teachers combine the media with instructional strategies and classroom interaction.

Synthesis with Previous Studies

Table 4 places the present findings alongside the studies discussed above. The comparison is descriptive: the studies differ in setting, educational level, and design, and the present study cannot show that the medium caused the differences it reports.

Table 4. Synthesis of the Present Findings and Previous Studies

Aspect	Previous studies	Present study	Interpretation
Digital and visual media	Canva and web-based media can support engaging learning and student engagement (Sari et al., 2024; Hasanah & Qamariah, 2024; Ardianti, 2025).	83.33% (50 of 60) found the interface attractive and helpful for focus (statement 22; mean = 4.12).	Visual and interactive elements were well received; these are perceptions measured once, after implementation.
Reading instruction	Interactive media can support reading skills and engagement (Erlin et al., 2026).	Report scores were higher in Semester 2 (M = 90.17) than in Semester 1 (M = 88.83), a modest difference of 1.33 points; 75.00% (45 of 60) felt their reading ability had improved (statement 14).	Scores were higher and students perceived improvement, but the design does not allow the difference to be attributed to the medium.
Grammar instruction	Interactive applications can make grammar practice more engaging and support grammar mastery (Usvar et al., 2026).	73.33% (44 of 60) agreed that grammar helps them understand sentences (statement 16), and 90.00% (54 of 60) felt they needed to learn grammar further (statement 20).	Students see grammar as relevant to reading and want more of it; learning gains in grammar were not measured separately.
Interest and engagement	Interactive digital media can enhance motivation, interest, and participation	81.67% (49 of 60) felt happy and enthusiastic (statement 1), but only 48.33% (29 of 60)	Perceptions were positive, yet active participation stayed

Aspect	Previous studies	Present study	Interpretation
	(Hasanah & Qamariah, 2024; Ardianti, 2025).	agreed that they actively ask about unfamiliar words or sentences (statement 6).	moderate; interactivity does not automatically increase it.

Overall, the findings are consistent with earlier reports that interactive digital media are well received by students and may support reading and grammar learning. The present study adds a description of a teacher-developed Canva-based medium used with senior high school students, together with descriptive evidence on scores and perceptions; testing its effect would require a comparison group and a measure taken before the intervention.

CONCLUSION

This study found that English learning outcomes were higher after Canva-based interactive web learning media was introduced, and that students responded positively to it. These results are preliminary: the media may contribute to English language learning among Grade XI students, particularly in learning activities that incorporate *reading* and *grammar*. The mean score was 88.83 in Semester 1 and 90.17 in Semester 2, a difference that was statistically significant (Wilcoxon test) but modest in practical terms (1.33 points), given that scores were already high at baseline.

In addition to the higher scores, students reported positive perceptions of the media. Most students expressed interest and enthusiasm toward the learning activities and perceived that the visual design and interactivity of the web media helped them engage with the learning process. Because learning interest was measured only once, after the implementation, these responses describe perceptions and do not show that interest increased. Combining reading texts, grammar materials, and exercises on one platform is also a characteristic of the media, which gives students opportunities to learn language structures in the context of the texts they read. Thus, Canva-based interactive web media may serve as an alternative learning medium that supports the presentation of English materials in a more visual, structured, and interactive manner.

Nevertheless, the findings should be interpreted in light of the limitations of the research design, which did not include a control group. Therefore, the difference in learning outcomes cannot be attributed to the use of Canva-based interactive web media: Semester 1 and Semester 2 scores are not a true pretest and posttest, and the modest gain occurred in a range limited by high baseline scores. In addition, the questionnaire was a teacher-developed instrument that was administered once and was not subjected to a separate validity test, so its results should be treated as indicative. Future studies could employ an experimental design with a control group, direct pretest-posttest measurements, and a larger sample to obtain stronger evidence regarding the effects of the media on students' *reading* ability and learning interest, including a baseline measure of interest.

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