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Prezi in EFL Classrooms: Reading Comprehension Outcomes and Student Perceptions in Indonesian Junior High School

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ABSTRACT

Reading comprehension remains a persistent challenge in Indonesian EFL classrooms, where conventional instruction frequently fails to sustain meaningful student engagement with written texts. This study examined the effectiveness of Prezi, a web-based, zoomable presentation platform, as a digital teaching medium for improving eighth-grade students' reading comprehension, and explored student perceptions toward its use. A quasi-experimental design with a non-equivalent control group was employed, involving 48 students from two intact classes at SMP Negeri Mapilli, West Sulawesi, assigned to either Prezi-based instruction or conventional teaching across four treatment sessions. Data were collected through pre- and post-tests measuring literal, inferential, and critical reading comprehension, and a validated 14-item Likert-scale perception questionnaire. An independent sample t-test revealed a statistically significant between-group difference ($t(46) = 6.311$, $p = .000$), with the experimental group achieving a mean post-test score of 75.83 compared to 57.71 in the control group. The N-Gain score of 60.66% indicated sufficiently effective learning gains attributable to Prezi-based instruction. Student perceptions were strongly positive, yielding an overall score of 81.07%, classified as Very Successful. These findings suggest that Prezi holds meaningful pedagogical value as an engaging multimodal medium for EFL reading instruction in Indonesian junior high school contexts.

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INTRODUCTION

English has established itself as the dominant medium of global communication, making proficiency in the language an essential academic and professional competency for learners across the world (Crystal, 2003; Isma et al., 2023). Within the four core language skills, reading comprehension occupies a particularly critical position, as it serves as the primary vehicle through which students access subject-matter knowledge, develop vocabulary, and build broader linguistic competence (Grabe & Stoller, 2019). Reading comprehension is broadly defined as a complex cognitive process through which readers simultaneously construct meaning from and interact with written text, drawing on prior knowledge, linguistic resources, and inferential reasoning (Isma & Nur, 2023; Snow, 2002). Despite its centrality to academic success, reading comprehension continues to be one of the most persistently underperforming skills among EFL learners in Indonesia, where many students demonstrate limited engagement with reading tasks and consistently fail to meet minimum competency thresholds (Tegmark et al., 2022). A key contributing factor to this underperformance is the continued reliance on conventional, teacher-centered instructional methods that prioritize rote information delivery over active meaning-making, leaving students disengaged and insufficiently stimulated to develop higher-order reading skills (Haryati & Cahyaningrum, 2019).

The rapid integration of digital technology into educational settings has opened new pedagogical possibilities for addressing these longstanding challenges. Among the digital tools gaining traction in language classrooms is Prezi, a web-based presentation platform first released in 2009, distinguished by its non-linear, zoomable canvas interface that departs markedly from conventional slide-based tools such as PowerPoint (Spernjak, 2014). Unlike static presentation formats, Prezi enables the dynamic spatial arrangement of

multimodal content, combining text, images, and audio, in ways that align with dual-coding and multimedia learning principles, potentially enhancing both comprehension and retention (Mayer, 2009; Akgun et al., 2016). Several studies have investigated Prezi's educational potential across different subject areas and instructional contexts. Rizkia and Simorangkir (2018) found that Prezi integrated with a Problem-Based Learning (PBL) model produced significantly better learning outcomes than PowerPoint-based instruction among high school students. Restuti et al. (2021) similarly reported that PBL supported by Prezi improved students' critical thinking and conceptual understanding in a quasi-experimental setting. Santiwi et al. (2022) extended this line of inquiry to elementary social studies, confirming Prezi's effectiveness in enhancing fifth-grade students' critical thinking when used within a PBL framework. Beyond PBL contexts, Sanchez et al. (2020) argued that Prezi's affordances for innovation and communication support the development of meaningful learning by bridging conventional and technology-mediated instructional practices. Sari et al. (2019) offered one of the few studies directly linking Prezi to English language learning outcomes, demonstrating through classroom action research that Prezi use improved students' understanding of English material at the tertiary level.

Notwithstanding these contributions, a critical gap remains in the existing literature. The overwhelming majority of Prezi-related studies have examined general subject comprehension, higher-order thinking skills, or broad conceptual understanding, none has specifically investigated Prezi's effectiveness in developing EFL reading comprehension as a discrete, multi-dimensional skill. Moreover, most prior studies were conducted at the tertiary or elementary level, leaving the junior high school context, where foundational reading skills are most urgently consolidated, largely unexamined. The absence of quasi-experimental evidence specifically targeting EFL reading comprehension at this level, particularly within the Indonesian educational context, represents a significant gap that the present study seeks to address. This study therefore aims to investigate the effectiveness of Prezi as a digital-based teaching medium in improving eighth-grade EFL students' reading comprehension, and to examine student perceptions toward its instructional use. Addressing this gap is theoretically important because reading comprehension in EFL contexts involves layered cognitive processes from literal word recognition to inferential and critical text evaluation that may respond differently to visually dynamic, multimodal presentation formats (Vaughn et al., 2024). It is also practically urgent: as Burden (2004) and Clark and Mayer (2023) have consistently argued, the pedagogical value of any instructional medium ultimately rests on both its effectiveness in facilitating learning outcomes and its accessibility and usability for learners. Accordingly, this study is guided by the following research questions: (1) Is Prezi as a digital-based teaching medium effective in improving students' reading comprehension? (2) What are students' perceptions toward the use of Prezi as a digital-based teaching medium in EFL reading instruction?

METHODS

Research Design

This study employed a quasi-experimental design with a non-equivalent control group, in which two pre-existing intact classes were assigned to experimental and control conditions respectively. This design is widely regarded as appropriate for educational research conducted in naturalistic school settings where true random assignment of individual participants is logistically or ethically impractical (Creswell & Creswell, 2018; Shadish et al., 2002). The experimental group received Prezi-based reading instruction, while the control group was taught through conventional whiteboard-based methods. Both groups were administered pre- and post-tests to measure reading comprehension gains, and the experimental group additionally completed a perception questionnaire following the post-test.

Participants and Setting

The study was conducted at SMP Negeri Mapilli, a state junior high school located in Polewali Mandar Regency, West Sulawesi, Indonesia. Participants consisted of 48 eighth-grade students drawn from two intact classes: Class VIII-A served as the experimental group (n = 24) and Class VIII-B served as the control group (n = 24). Class assignment to conditions followed the school's existing class roster structure; simple random sampling was applied at the class level to determine which class received the experimental treatment. Both classes were taught by the same researcher-instructor across all sessions to minimize teacher variability as a confounding factor. Participants ranged in age from 13 to 14 years and had received a minimum of two years of formal EFL instruction prior to the study.

Instruments

Two instruments were used for data collection: a reading comprehension test and a student perception questionnaire. The reading comprehension test consisted of 20 multiple-choice items constructed around narrative texts appropriate for the eighth-grade curriculum level. Items were designed to measure three taxonomic levels of reading comprehension based on Barrett's (1968, as cited in Brassell & Rasinski, 2008) taxonomy: literal comprehension (identifying word meaning and contextual meaning), inferential comprehension (identifying the main idea and textual relationships), and critical comprehension (analyzing the text's argumentative or narrative process). The test was administered as both a pre-test and a post-test, with identical items used across both administrations to enable direct score comparison. Before deployment, the instrument was subjected to expert content validation by two experienced EFL instructors, and item discrimination and difficulty indices were calculated from a pilot administration with a comparable student group outside the study sample. Items with a discrimination index below 0.20 were revised or replaced. The instrument demonstrated acceptable internal consistency (Cronbach's $\alpha = 0.78$).

The student perception questionnaire comprised 14 Likert-scale items (five response options ranging from Strongly Disagree to Strongly Agree), operationalized across two theoretical dimensions: (1) the effectiveness of Prezi in supporting reading comprehension processes, measured through seven items addressing word meaning identification, main idea recognition, textual relationship analysis, and in-depth text analysis; and (2) the accessibility and ease of use of Prezi as an instructional platform, measured through seven items addressing device compatibility, interface usability, and connectivity constraints. Seven items were positively worded and seven were negatively worded to minimize acquiescence bias. Negative items were reverse-scored during data processing. The questionnaire was administered only to the experimental group following the post-test. Cronbach's alpha for the questionnaire was 0.81, indicating good internal reliability.

Treatment Procedures

The instructional treatment was implemented over four sessions of approximately 80 minutes each, conducted across two weeks. The experimental group received reading instruction delivered through Prezi presentations projected via LCD projector, while the control group received equivalent content delivered through conventional whiteboard-based instruction. Both groups used the same narrative texts and addressed the same reading comprehension indicators across all sessions. Table 1 provides a structured overview of the treatment sequence for both groups.

Table 1. Treatment Sequence for Experimental and Control Groups

Session	Experimental Group (Prezi-Based)	Control Group (Conventional)
1	Introduction to reading comprehension; overview of Prezi as a learning medium; Q&A and feedback	Introduction to reading comprehension; Q&A and feedback
2	Narrative text paragraphs displayed via Prezi with zooming animation; modeled identification of word meaning, main idea, textual relationships, and text analysis process; guided practice	Same narrative text written on whiteboard; modeled identification of all comprehension indicators; guided individual practice
3	Continuation of narrative text via Prezi; independent practice without modeled examples; random oral reading; discussion and feedback	Continuation of narrative text on whiteboard; independent practice; random group oral reading; discussion and feedback
4	Complete narrative text displayed via Prezi; independent assignment based on all prior indicators; grading; feedback and closure	Complete narrative text on whiteboard; independent assignment; correction and rediscussion; grading; feedback and closure

The researcher served as the sole instructor across both groups throughout the intervention period to ensure content equivalence. Lesson plans were prepared in advance for all sessions and reviewed by a senior colleague prior to implementation as a measure of treatment fidelity.

Data Analysis

Data from the reading comprehension test were analyzed using SPSS version 25. Descriptive statistics, including means, standard deviations, minimum and maximum scores, and score distribution frequencies were

computed for both groups at pre-test and post-test. Student scores were calculated using the formula: Score = (correct answers ÷ total items) × 100, and classified according to a six-category rubric ranging from Very Poor (0–25) to Excellent (91–100), as adapted from Akhmad and Munawir (2022).

Prior to inferential testing, the assumptions of normality and homogeneity of variance were verified. Normality was assessed using the Shapiro-Wilk test, which is considered more appropriate than the Kolmogorov-Smirnov test for sample sizes below 50 (Razali & Wah, 2011). Homogeneity of variance was assessed using Levene's test. Both assumptions were confirmed: Shapiro-Wilk significance values exceeded 0.05 for both groups (experimental: p = .915; control: p = .140), and Levene's test yielded a non-significant result (p = .253), indicating equivalent variances across groups.

The primary hypothesis test was conducted using an independent sample t-test on N-Gain scores rather than raw post-test scores, to control for pre-existing between-group differences in baseline reading comprehension. The N-Gain score was calculated using the formula proposed by Hake (1998, as cited in Triyono et al., 2024):

$$N\_Gain = {(Post\ test\ score - Pre\ test\ score)}/{Ideal\ score - Pre\ test\ score}$$

N-Gain values were interpreted according to the effectiveness categories established by Triyono et al. (2024): below 40% = Ineffective; 40–55% = Less Effective; 56–75% = Effective Enough; above 76% = Effective.

Questionnaire data were analyzed descriptively. Total option scores for each item were calculated, converted to percentage scores, and classified according to a five-category success scale: below 21% = Very Unsuccessful; 21–40% = Unsuccessful; 41–60% = Quite Successful; 61–80% = Successful; 81–100% = Very Successful (Rahmania, 2023). Negatively worded items were reverse-scored prior to percentage computation to ensure directional consistency across all items.

FINDINGS

This section presents the results of data analysis in four sequential parts: descriptive statistics for both groups at pre-test and post-test, prerequisite assumption tests, hypothesis testing, and questionnaire results. All quantitative analyses were conducted using SPSS version 25.

Descriptive Statistics

Pre-Test Results

Prior to the intervention, both groups completed a 20-item reading comprehension test to establish baseline performance levels. Table 2 presents the descriptive statistics for both groups at pre-test.

Table 2. Pre-Test Descriptive Statistics for Control and Experimental Groups

Statistic	Control Group	Experimental Group
N	24	24
Mean	40.00	37.92
Median	37.50	35.00
Mode	35	35
Standard Deviation	12.25	11.60
Minimum	20	15
Maximum	65	65

As shown in Table 2, both groups demonstrated comparably low reading comprehension at baseline. The control group recorded a mean pre-test score of 40.00 (SD = 12.25), while the experimental group recorded a slightly lower mean of 37.92 (SD = 11.60). Score distributions for both groups were heavily concentrated in the Poor category (scores 26–50), with the majority of students in both classes yet to achieve the minimum competency threshold. Specifically, 70% of control group students and 79.2% of experimental group students fell within the Poor category, while 8.3% and 12.6% respectively were classified as Very Poor. These results confirm that both groups entered the intervention at equivalent and suboptimal levels of reading comprehension, providing a comparable baseline for subsequent between-group analysis.

Post-Test Results

Following the four-session instructional treatment, both groups completed the same reading comprehension test as a post-test. Table 3 presents a comparative overview of pre-test and post-test performance across both groups.

Table 3. Comparative Pre-Test and Post-Test Descriptive Statistics

Statistic	Control Pre-Test	Control Post-Test	Experimental Pre-Test	Experimental Post-Test
N	24	24	24	24
Mean	40.00	57.71	37.92	75.83
Standard Deviation	12.25	16.35	11.60	9.29
Minimum	20	25	15	60
Maximum	65	85	65	90

Both groups demonstrated improvement from pre-test to post-test; however, the magnitude of gain differed substantially between conditions. The control group's mean score increased from 40.00 to 57.71, representing a raw gain of 17.71 points. While this improvement is modest, it suggests that conventional instruction did produce some learning effect. By contrast, the experimental group's mean score increased from 37.92 to 75.83, representing a raw gain of 37.91 points — more than double the gain observed in the control group. Notably, the experimental group's post-test score distribution shifted dramatically: 41.7% of students achieved scores in the Very Good category (76–90), and 50% fell within the Good category (61–75), with only 8.3% remaining in the Fair category. No students in the experimental group scored in the Poor or Very Poor range at post-test. The control group, by contrast, retained a more dispersed distribution, with 37.5% of students remaining in the Poor category and only 16.6% achieving Very Good scores. These distributional patterns are summarized in Table 4.

Table 4. Post-Test Score Category Distribution by Group

Category	Score Range	Control Group f (%)	Experimental Group f (%)
Very Good	76–90	4 (16.6%)	10 (41.7%)
Good	61–75	4 (16.6%)	12 (50.0%)
Fair	51–60	6 (25.0%)	2 (8.3%)
Poor	26–50	9 (37.5%)	0 (0.0%)
Very Poor	0–25	1 (4.2%)	0 (0.0%)
Total		24 (100%)	24 (100%)

Prerequisite Assumption Tests

Before conducting inferential analysis, the normality and homogeneity of variance assumptions were verified to ensure the appropriateness of parametric testing.

Normality Test

The Shapiro-Wilk test was applied to the N-Gain scores of both groups, given its superior sensitivity for small samples ($n < 50$) relative to the Kolmogorov-Smirnov test (Razali & Wah, 2011). Results are presented in Table 5.

Table 5. Shapiro-Wilk Normality Test Results for N-Gain Scores

Group	Statistic	df	Sig.
Experimental	.981	24	.915
Control	.937	24	.140

Both groups yielded Shapiro-Wilk significance values substantially exceeding the 0.05 threshold (experimental: $p = .915$; control: $p = .140$), confirming that the N-Gain score distributions for both groups were approximately normal. The assumption of normality was therefore satisfied, supporting the use of parametric inferential tests.

Homogeneity of Variance Test

Levene's test for equality of variances was applied to the N-Gain scores across both groups. Results indicated that the assumption of homogeneous variances was met ($F = 1.339$, $p = .253 > .05$), confirming that the two groups did not differ significantly in the spread of their score distributions. These findings collectively validated the use of an independent sample t-test as the primary hypothesis test.

Hypothesis Testing

Independent Sample T-Test

The central hypothesis of this study posited that Prezi-based instruction would produce significantly greater reading comprehension gains than conventional instruction. The null hypothesis (H_0) stated that no significant difference would exist between groups, while the alternative hypothesis (H_1) predicted a significant between-group difference in N-Gain scores. Results of the independent sample t-test are presented in Table 6.

Table 6. Independent Sample T-Test Results on N-Gain Scores

	Levene's Test		t-Test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Equal variances assumed	1.339	.253	6.311	46	.000	29.459	4.668
Equal variances not assumed			6.311	43.314	.000	29.459	4.668

The independent sample t-test yielded a statistically significant result ($t(46) = 6.311$, $p = .000 < .05$). As the assumption of equal variances was confirmed by Levene's test, the equal variances assumed row was used for interpretation. The mean N-Gain difference between the experimental and control groups was 29.459 points (SE = 4.668), indicating that the experimental group demonstrated substantially greater relative learning gains than the control group. Accordingly, the null hypothesis was rejected and the alternative hypothesis was accepted: Prezi-based instruction produced a statistically significant improvement in students' reading comprehension compared to conventional instruction.

N-Gain Score Analysis

To determine the practical magnitude and effectiveness category of the observed learning gains, N-Gain scores were calculated for each group using Hake's (1998, as cited in Triyono et al., 2024) formula and interpreted against established effectiveness benchmarks. Results are presented in Table 7.

Table 7. N-Gain Score Descriptive Statistics by Group

Statistic	Experimental Group	Control Group
Mean N-Gain (%)	60.66	31.20
Standard Deviation	14.01	18.07
Minimum (%)	33.33	6.25
Maximum (%)	85.71	71.43
Effectiveness Category	Effective Enough	Ineffective

The experimental group achieved a mean N-Gain score of 60.66%, placing it within the Effective Enough category (56–75%) according to the classification framework of Triyono et al. (2024). The control group, by contrast, recorded a mean N-Gain of 31.20%, falling below the 40% threshold and thus classified as Ineffective. The gap of approximately 29.46 percentage points between the two groups further corroborates the inferential test finding that Prezi-based instruction generated meaningfully greater learning gains than conventional delivery. Nonetheless, the experimental group's N-Gain falling short of the Effective threshold (>76%) suggests that while Prezi is a valuable pedagogical tool, additional instructional scaffolding or extended treatment duration may be required to maximize its impact on reading comprehension outcomes.

Student Perception Questionnaire Results

Following the post-test, the 24 students in the experimental group completed a 14-item Likert-scale questionnaire assessing their perceptions of Prezi across two dimensions: instructional effectiveness and accessibility. Negatively worded items (items 2, 4, 6, 8, 10, 12, and 14) were reverse-scored prior to analysis to ensure directional consistency. Table 8 presents the full item-level results.

Table 8. Student Perception Questionnaire Results (N = 24)

No.	Statement	Score	%	Category
1	Prezi helped me understand the meaning of new words through its visualizations.	100	83.3%	Very Successful
2*	Prezi was not effective in helping me understand new word meanings. (R)	73	60.8%	Quite Successful
3	Prezi made it easier for me to remember and understand word meanings.	106	88.3%	Very Successful
4*	I found it difficult to understand word meanings when using Prezi. (R)	67	55.8%	Quite Successful
5	Prezi helped me identify the main idea of the text more easily.	108	90.0%	Very Successful
6*	Prezi did not help me find the main idea of the text. (R)	53	44.2%	Quite Successful
7	Prezi made it easier to see relationships between ideas in the text.	98	81.6%	Very Successful
8*	Prezi made it difficult to understand relationships between parts of the text. (R)	52	43.3%	Quite Successful
9	Prezi made it easier for me to analyze the text in greater depth.	81	67.5%	Successful
10*	I felt that Prezi did not help me in the text analysis process. (R)	76	63.3%	Successful
11	Prezi is easy to use and does not require much time to learn.	87	72.5%	Successful
12*	I had difficulty using Prezi to read and understand text. (R)	71	59.2%	Quite Successful
13	Prezi is easily accessible on various devices.	98	81.6%	Very Successful
14*	Learning was sometimes delayed due to poor internet access when using Prezi. (R)	65	54.2%	Quite Successful
	Overall Average	1,135	81.07%	Very Successful

Note. Items marked (R) were reverse-scored prior to percentage computation. Percentage scores are calculated as: (Total item score ÷ Ideal maximum score) × 100.

Across all 14 items, the overall mean perception score was 81.07%, placing student perceptions firmly within the Very Successful category. Analysis by dimension revealed that the effectiveness dimension (items 1–10) yielded an aggregate score of 81.40%, also classified as Very Successful, with students responding most positively to items related to main idea identification (item 5: 90.0%) and word meaning comprehension (item 3: 88.3%). The accessibility dimension (items 11–14) yielded an aggregate score of 80.25%, likewise classified as Very Successful, indicating that students generally found Prezi accessible and manageable across multiple devices. The comparatively lower scores on negatively worded items, particularly those related to main idea identification (item 6: 44.2%) and textual relationship analysis (item 8: 43.3%), reflect appropriate response variance and suggest that while most students perceived Prezi positively, a subset remained less convinced of its benefits for higher-order comprehension tasks. These patterns are consistent with the reading comprehension test results, which similarly showed stronger gains at the literal level than at the critical comprehension level.

DISCUSSION

The present study investigated two interconnected questions: whether Prezi-based instruction significantly improves EFL reading comprehension among eighth-grade students compared to conventional methods, and how students perceive Prezi as a digital teaching medium. The findings, as reported in the preceding section, provide affirmative and empirically grounded answers to both questions. The following discussion situates these results within the broader literature, examines the theoretical mechanisms underpinning the observed outcomes, and reflects critically on the study's implications and limitations.

Effectiveness of Prezi-Based Instruction on Reading Comprehension

The first and most central finding of this study is that Prezi-based instruction produced statistically significant gains in reading comprehension relative to conventional whiteboard-based teaching. The experimental group's mean post-test score of 75.83 markedly exceeded that of the control group (57.71), and the independent sample t-test confirmed that this difference was statistically significant ($t(46) = 6.311$, $p = .000$). The N-Gain analysis further revealed that the experimental group achieved a mean learning gain of 60.66%, classified as Effective Enough, compared to the control group's 31.20%, classified as Ineffective. Taken together, these results indicate that the integration of Prezi into reading instruction generated meaningful and measurable learning advantages that conventional methods alone did not produce.

These findings are consistent with and extend a growing body of research on Prezi's educational effectiveness. Sari et al. (2019) reported comparable improvements in English material comprehension at the tertiary level following Prezi implementation, while Restuti et al. (2021) demonstrated that Prezi-assisted PBL enhanced both conceptual understanding and critical thinking in quasi-experimental conditions. The present study advances this line of inquiry by providing the first quasi-experimental evidence specifically targeting EFL reading comprehension at the junior high school level in Indonesia, a context and skill domain not previously examined in the Prezi literature. The observed gains are theoretically explicable through Mayer's (2009) cognitive theory of multimedia learning, which posits that learning is deepened when verbal and visual information are presented simultaneously through complementary channels. Prezi's zoomable, spatially organized canvas interface facilitates precisely this kind of dual-channel processing, enabling students to perceive relationships between textual elements visually while simultaneously engaging with written content, a multimodal experience that static whiteboard instruction cannot replicate. Furthermore, the dynamic zooming and non-linear navigation features of Prezi likely sustained student attention and curiosity across sessions, addressing the motivational deficit that Tegmark et al. (2022) identified as a primary obstacle to reading engagement in conventional EFL classrooms.

It is important, however, to interpret the N-Gain result of 60.66% with appropriate nuance. While this figure confirms Prezi's instructional value, it falls short of the Effective threshold (>76%), suggesting that Prezi alone, implemented across only four sessions, is insufficient to produce maximal reading comprehension gains. This finding implies that Prezi functions most powerfully as a facilitative medium rather than a transformative one, and that its effectiveness is likely moderated by factors such as treatment duration, instructional scaffolding quality, and learners' prior digital literacy. Future implementations might consider pairing Prezi with structured reading strategies such as SQ3R or KWL as demonstrated in the studies of Puri et al. (2024) and Rahman (2019), both of which reported stronger comprehension outcomes when Prezi was combined with explicit metacognitive reading techniques.

Student Perceptions Toward Prezi

The second research question concerned students' perceptions of Prezi as a digital teaching medium. The questionnaire results revealed an overall perception score of 81.07%, classified as Very Successful, indicating that the experimental group held strongly positive views toward Prezi across both instructional dimensions examined. Within the effectiveness dimension, students responded most favorably to items related to main idea identification (90.0%) and word meaning comprehension (88.3%), suggesting that Prezi's visual scaffolding was perceived as particularly helpful for these foundational comprehension tasks. The accessibility dimension similarly yielded a high aggregate score of 80.25%, reflecting students' confidence in navigating Prezi across multiple devices and their general ease with its interface.

These perceptual outcomes align closely with findings reported by Santiana and Fatimah (2017), who found that Prezi's visual dynamism positively influenced classroom atmosphere and student attentiveness, and with Mustaffa et al. (2013), who documented favorable student attitudes toward Prezi in Islamic Religious Education settings at the secondary level. The theoretical grounding for these perceptual outcomes lies in Clark

and Mayer's (2023) contention that instructional media which effectively support information processing are perceived more positively by learners, and in Burden's (2004) argument that technology-based tools that are easily accessible and intuitively usable generate stronger learner buy-in. The present study's questionnaire results substantiate both propositions within an Indonesian EFL junior high school context. Notably, the comparatively lower scores on negatively worded items addressing textual relationship analysis (43.3%) and main idea rejection items (44.2%) suggest that a subset of students remained less certain about Prezi's benefits for higher-order comprehension tasks, a pattern that mirrors the reading test data, where gains at the inferential and critical comprehension levels were less pronounced than at the literal level. This internal consistency between the quantitative test results and the perceptual data strengthens confidence in the overall validity of the study's findings.

Implications and Limitations

The findings of this study carry practical significance for EFL teachers and curriculum developers in Indonesian junior high school settings. Most directly, they suggest that Prezi represents a viable and accessible alternative to conventional presentation tools, capable of enhancing student engagement and reading comprehension outcomes without requiring extensive technical infrastructure beyond a projector and internet connection. Teachers who currently rely exclusively on whiteboard-based instruction may find that even a brief integration of Prezi, as few as four structured sessions, produces measurable comprehension gains and substantially more positive student affect toward reading tasks. At a broader level, these findings contribute to the growing evidence base advocating for the purposeful integration of Web 2.0 multimodal tools into EFL literacy instruction, particularly in under-resourced regional school contexts where innovative yet low-cost digital solutions are most urgently needed.

Several limitations of the present study must be acknowledged. First, the sample was restricted to two classes at a single school in West Sulawesi, constraining the generalizability of the findings to broader Indonesian or international EFL populations. Second, the four-session intervention period, while sufficient to produce significant short-term gains, does not allow conclusions about the durability of comprehension improvements over time; a delayed post-test would have strengthened the study's claims considerably. Third, as the researcher served simultaneously as the instructor for both groups, the possibility of experimenter bias, however carefully managed, cannot be entirely excluded. Fourth, the study did not control for students' prior digital literacy or home internet access, both of which may have moderated the perceived accessibility of Prezi and contributed to variance in learning outcomes. Future research should address these limitations by employing larger, multi-site samples, extending the intervention period, incorporating delayed retention measures, and examining the differential effects of Prezi across varying levels of students' digital competence and reading proficiency.

CONCLUSIONS

This study set out to examine the effectiveness of Prezi as a digital-based teaching medium for improving EFL reading comprehension among eighth-grade students at SMP Negeri Mapilli, West Sulawesi, and to explore student perceptions toward its instructional use. The evidence gathered through a quasi-experimental design consistently supports the conclusion that Prezi-based instruction yields significantly greater reading comprehension gains than conventional whiteboard-based teaching. The experimental group's mean post-test score of 75.83, N-Gain of 60.66% (Effective Enough), and statistically significant t-test result ($p = .000$) collectively affirm that Prezi constitutes a pedagogically valuable digital medium for EFL reading instruction at the junior high school level. Student perceptions further reinforce this conclusion, with an overall questionnaire score of 81.07% confirming that learners found Prezi both instructionally effective and readily accessible across devices. These findings contribute to the growing body of evidence supporting the purposeful integration of multimodal Web 2.0 tools into Indonesian EFL classrooms, particularly for reading instruction in regional school contexts where engaging yet accessible digital solutions remain scarce. Future studies are encouraged to extend the intervention period, employ larger and more diverse samples across multiple school sites, and investigate the combined effect of Prezi with explicit reading strategy instruction to further maximize comprehension outcomes.

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