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Exploring the Use of *Phoenix Wright: Ace Attorney Trilogy* as a Visual Novel Game to Enhance EFL Learners' Vocabulary and Motivation

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Abstract

This study explores the integration of *Phoenix Wright: Ace Attorney Trilogy*, a visual novel game, into English as a Foreign Language (EFL) learning to enhance students' vocabulary acquisition and motivation. Conducted with 39 ninth-grade students at SMPN 19 South Tangerang, this research employed an explanatory sequential mixed-methods design. Quantitative data were collected through pre-test, post-test and questionnaire. vocabulary assessments and analyzed using the Wilcoxon Signed Ranks Test. Qualitative data were obtained through questionnaires and semi-structured interviews to investigate learners' perceptions and experiences. The findings revealed a statistically significant improvement in vocabulary mastery after the intervention, with mean scores increasing from 43.97 to 86.44 ($p < 0.05$). Qualitative results supported this improvement, indicating that students found vocabulary learning through the game enjoyable, contextual, and memorable. They also expressed higher motivation, self-confidence, and positive attitudes toward learning English. These findings align with Krashen's Input Hypothesis, Constructivist Learning Theory, and Gardner's Instrumental Motivation Theory, suggesting that narrative-driven digital games can effectively enhance both vocabulary acquisition and learner motivation. The study concludes that visual novel games, when integrated purposefully into classroom practice, provide a meaningful and engaging alternative to traditional vocabulary instruction.

Keywords: Game-based learning, Visual novel, Vocabulary acquisition, EFL Learners, Motivation

Abstrak

Penelitian ini mengkaji integrasi *Phoenix Wright: Ace Attorney Trilogy*, sebuah gim *visual novel*, dalam pembelajaran Bahasa Inggris sebagai Bahasa Asing (EFL) untuk meningkatkan pemerolehan kosakata dan motivasi belajar siswa. Penelitian dilakukan pada 39 siswa kelas IX di SMPN 19 Tangerang Selatan dengan menggunakan desain *explanatory sequential mixed-methods*. Data kuantitatif dikumpulkan melalui pre-test, post-test, dan kuesioner, kemudian dianalisis menggunakan Wilcoxon Signed Ranks Test. Data kualitatif diperoleh melalui kuesioner dan wawancara semi-terstruktur untuk menelusuri persepsi serta pengalaman belajar siswa. Hasil penelitian menunjukkan peningkatan yang signifikan secara statistik pada penguasaan kosakata setelah intervensi, dengan rata-rata nilai meningkat dari 43,97 menjadi 86,44 ($p < 0,05$). Temuan kualitatif mendukung hasil tersebut, menunjukkan bahwa siswa merasa pembelajaran kosakata melalui gim tersebut menyenangkan, kontekstual, dan mudah diingat. Mereka juga melaporkan motivasi yang lebih tinggi, kepercayaan diri meningkat, serta sikap positif terhadap pembelajaran bahasa Inggris. Temuan ini sejalan dengan *Input Hypothesis* dari Krashen, *Constructivist Learning Theory*, dan *Instrumental Motivation Theory* dari Gardner, yang mengindikasikan bahwa gim digital berbasis naratif dapat secara efektif meningkatkan pemerolehan kosakata sekaligus motivasi belajar siswa. Penelitian ini menyimpulkan bahwa gim *visual novel*, ketika diintegrasikan secara terencana dalam praktik kelas, mampu menjadi alternatif pembelajaran kosakata yang bermakna dan menarik dibandingkan metode tradisional.

Kata kunci: Pembelajaran berbasis gim, Novel visual, Pemerolehan kosakata, Pembelajar bahasa Inggris sebagai bahasa asing, Motivasi

INTRODUCTION

Comprehending language is essential in today's globalized world, as it serves as the primary means of human communication. Through language, individuals are able to

convey thoughts, goals, and intentions, enabling effective interaction within society. Misinterpretation in communication often leads to misunderstanding; thus, mastering language comprehension plays a vital role in ensuring clear and meaningful exchanges. The ability to use and understand language is an inherent human trait, as emphasized in the Holy Qur'an, Surah Al-Baqarah verse 31, which illustrates that Allah SWT endowed humankind with the capacity to recognize, understand, and name objects, an ability that underpins human knowledge and learning.

Among the many languages used globally, English has become the dominant medium of international communication (Rohana & Syamsuddin, 2020). The mastery of English, particularly its four core skills; speaking, listening, reading, and writing. Relies heavily on vocabulary knowledge (Kiessling & Fabry, 2021). As Schmitt (2008, as cited in Zou et al., 2021) asserts, vocabulary acquisition is a fundamental aspect of mastering a language. Vocabulary enables learners to comprehend meaning in communication and provides the foundation for the development of other language skills. Therefore, vocabulary learning is indispensable for learners of English as a foreign language (EFL).

However, vocabulary learning is often perceived as tedious and demanding. Students frequently struggle with memorization, which results in poor retention and limited progress over time (Ghalebi et al., 2020). Many learners view vocabulary learning as easier than grammar and depend largely on rote memorization, which lacks contextual (Purushtoma, 2005, as cited in Chen & Hsu, 2020). Consequently, their efforts yield unsatisfactory outcomes, reducing motivation and interest in language learning.

Previous studies highlight the significance of explicit learning in improving vocabulary retention. Explicit instruction, emphasizing noticing, recalling, and generative use, enhances long-term memory by requiring cognitive effort beyond implicit exposure (Nation, 2001; as cited in Ebrahimzadeh & Alavi, 2016). Activities that involve retrieval practice and repeated exposure strengthen learners' ability to recall and apply new words in different contexts. Generative use, in particular, promotes deeper processing and facilitates the integration of new vocabulary into the learner's language system.

In addition to cognitive approaches, visual stimuli have been recognized as effective tools in vocabulary instruction. Stephen Seifert, (2024) found that using visual aids to introduce new vocabulary creates a more interactive and engaging learning experience than repetitive memorization. Similarly, contextual learning, rooted in Constructivist Learning Theory, helps students build new knowledge by connecting it with prior experiences in relevant contexts. Presenting vocabulary through contextualized scenarios such as stories or real-life situations strengthens comprehension and memory retention.

Motivation also plays a crucial role in language acquisition. According to Gardner's Instrumental Motivation Theory, learners are more successful when their language learning goals align with tangible benefits, such as academic or career advancement (Gardner, 2007; as cited in Zou et al., 2021). However, intrinsic interest must be supported by engaging instructional design (Kierner et al., 2015). Game-based learning provides one such platform, merging motivation with active engagement. Studies have shown that integrating digital games into classroom practice enhances both vocabulary acquisition and learner motivation (Hung et al., 2015). Video games encourage repeated exposure, active participation, and retrieval practice in enjoyable and meaningful contexts.

Numerous researchers have explored the use of video games as learning tools for vocabulary development (Chen et al., 2023). Games such as Candy Crush and Minecraft expose players to vocabulary in context, helping expand their lexicon (Camacho & Ovalle, 2019). Similarly, Camacho Vásquez & Ovalle, (2019) demonstrated that role-playing games improve vocabulary and grammar while fostering positive attitudes toward learning. Despite these advancements, existing studies primarily focus on highly interactive genres such as puzzle and role-playing games. Limited attention has been given to text-based visual novel games, which offer a rich potential for contextual vocabulary learning through narrative immersion.

This gap highlights the need to investigate visual novel games, particularly *Phoenix Wright: Ace Attorney Trilogy*, as tools for EFL vocabulary learning. Unlike massively multiplayer or action games, *Phoenix Wright* is a text-driven visual novel emphasizing narrative comprehension and decision-making. Its dialogue-rich environment requires players to read, interpret, and analyze language continuously, exposing them to contextualized vocabulary throughout gameplay. This interaction not only supports retention but also fosters deeper understanding through repeated encounters with new words in varied contexts.

Therefore, this study aims to explore the effectiveness of *Phoenix Wright: Ace Attorney Trilogy* as a digital game-based learning tool to enhance EFL learners' vocabulary and motivation. By integrating the principles of contextual learning and motivational engagement through an interactive visual novel format, this research seeks to fill the existing gap in the literature and contribute to the growing body of knowledge on the role of narrative-driven games in foreign language education. The author hopes that the findings of this study will provide valuable insights into how visual novel-based games can serve as innovative, motivating, and effective tools for vocabulary acquisition in EFL contexts.

LITERATURE REVIEW

Vocabulary Learning in EFL Context

Vocabulary is the cornerstone of language acquisition. Without sufficient vocabulary, learners cannot communicate effectively or express their ideas fluently. Vocabulary mastery is a critical element in developing other language skills; listening, speaking, reading, and writing. As stated by Schmitt (2008, as cited in Zou et al., 2021), vocabulary acquisition represents a fundamental component in mastering a language. Alqahtani, (2015) also emphasizes that vocabulary learning in foreign language acquisition plays a vital role because it provides learners with the necessary linguistic tools to comprehend and construct meaning.

However, many EFL learners perceive vocabulary learning as monotonous and difficult. Students often rely on rote memorization, which fails to promote long-term retention or contextual understanding (Purushotma, 2005, as cited in Chen & Hsu, 2020). (Ghalebi et al., 2020) further confirm that learners frequently face difficulties in recalling words, leading to unsatisfactory learning outcomes and loss of motivation. Explicit learning methods such as noticing, retrieval practice, and generative use have been recognized as effective strategies to improve memory retention and deepen understanding (Nation, 2001; as cited in Ebrahimzadeh & Alavi, 2016). These approaches encourage learners to engage cognitively with new vocabulary, reinforcing their ability to retrieve and apply new words across various contexts.

Additionally, contextual learning plays an essential role in vocabulary retention. When learners encounter new vocabulary in meaningful contexts, they are better able to construct and recall meaning (R. Li et al., 2021). This notion aligns with the Constructivist Learning Theory, which posits that learners actively build new knowledge by relating it to prior experiences and real-world situations. Presenting vocabulary within stories, dialogues, or other authentic materials provides a natural learning environment that fosters both comprehension and long-term retention.

Motivation in Language Learning

Motivation is one of the strongest predictors of language learning success. Gardner as cited in Yulfi & Aalayina, (2021) highlights that motivated learners exhibit greater persistence and are more likely to achieve language proficiency. Gardner's Instrumental Motivation Theory explains that learners who perceive tangible benefits, such as academic achievement or career advancement, are more inclined to invest effort in language learning. However, intrinsic interest alone is not always sufficient. As Kierner et al., (2015) argue, teachers must design learning environments that sustain engagement and foster continuous motivation.

Several studies have emphasized the role of motivation in vocabulary acquisition. Students with higher motivation levels demonstrate better retention and willingness to explore unfamiliar vocabulary. Nation (2001; as cited in Zou et al., 2021) asserts that motivation facilitates active learning behaviors such as repeated exposure, creative use of vocabulary, and persistence in the face of linguistic challenges. Therefore, educators should integrate motivational elements, such as games, challenges, and real-life applications—into language instruction to maintain learners' enthusiasm and focus.

Game-Based Learning in EFL Education

Game-based learning has emerged as an innovative pedagogical approach in language education. Games combine entertainment and education, fostering active participation, autonomy, and sustained engagement. Hung et al., (2015) demonstrate that integrating digital games into classroom instruction significantly enhances student motivation and learning outcomes. Similarly, Chen et al., (2023) assert that video games expose learners to contextualized language input, enabling them to acquire new vocabulary in relevant and meaningful contexts.

Games provide immediate feedback, interactive environments, and opportunities for repeated exposure to target language. This combination not only enhances retention but also creates a sense of achievement that reinforces motivation. As Camacho & Ovalle, (2019) observes, playing games such as Candy Crush and Minecraft expands learners' vocabulary through contextual engagement with in-game tasks. Camacho Vásquez & Ovalle, (2019) further report that role-playing games (RPGs) improve both vocabulary and grammar acquisition while maintaining learners' positive attitudes toward English learning.

These findings underscore that game-based learning aligns with the cognitive and affective principles of language acquisition. By promoting retrieval practice,

contextualization, and emotional engagement, digital games provide an immersive learning experience that traditional classroom methods often fail to achieve.

Constructivist Learning Theory and Vocabulary Development

The Constructivist Learning Theory provides a strong foundation for understanding how students acquire and retain vocabulary. According to this theory, learning is an active process in which learners construct meaning based on their experiences and prior knowledge. In language learning, this implies that students comprehend and remember vocabulary more effectively when they encounter it in authentic, meaningful contexts.

Constructivism also supports the integration of multimedia tools, including visual and digital resources, to provide learners with varied sensory experiences that enhance comprehension. As Stephen Seifert, (2024) notes, visual stimuli help bridge the gap between abstract concepts and concrete understanding, making the vocabulary learning process more engaging and effective.

Incorporating constructivist principles into game-based learning allows learners to interact with language naturally. Games present players with tasks, dialogues, and challenges that require comprehension and problem-solving encouraging them to build and apply knowledge dynamically rather than through rote memorization.

***Phoenix Wright: Ace Attorney* as a Visual Novel Game for Vocabulary Learning**

While much of the existing research on game-based language learning focuses on interactive or action-oriented games, few studies have examined text-based visual novel games. This gap highlights a promising area for exploration. Visual novel games, such as *Phoenix Wright: Ace Attorney Trilogy*, emphasize narrative-driven gameplay, requiring players to read extensive dialogues, analyze linguistic cues, and make decisions based on textual comprehension.

Unlike role-playing or simulation games, *Phoenix Wright* offers an environment rich in contextualized language exposure. The game's legal setting presents specialized vocabulary, ranging from formal expressions to idiomatic phrases, embedded within complex dialogues. This continuous engagement promotes vocabulary recognition, comprehension, and retention in context. Furthermore, the game's narrative immersion encourages players to focus on meaning construction, aligning closely with the principles of Constructivist Learning Theory.

Moreover, the motivational component of gameplay supports Gardner's Instrumental Motivation Theory. Players remain engaged because their progress depends on comprehension and problem-solving, creating a sense of achievement that reinforces their commitment to learning. This dual role of *Phoenix Wright*, as both an interactive and text-intensive learning medium, distinguishes it from other video games previously studied for vocabulary learning.

Research Gap and Contribution

Although prior studies have investigated the relationship between digital games and language learning, most have centered on interactive or role-playing genres. Limited research exists on how visual novel games, with their heavy reliance on textual and contextual input, can enhance vocabulary acquisition for EFL learners.

Therefore, the present research aims to address this gap by exploring the use of *Phoenix Wright: Ace Attorney Trilogy* as a visual novel game to enrich learners' English vocabulary and motivation. By integrating Constructivist Learning Theory and Gardner's Instrumental Motivation Theory, this study contributes to the growing discussion on digital game-based learning in EFL contexts. The findings are expected to provide both theoretical and practical implications for educators seeking innovative, motivating, and effective strategies to improve vocabulary mastery among EFL learners.

RESEARCH METHODS

This study employed a mixed-methods approach to comprehensively investigate the effectiveness of *Phoenix Wright: Ace Attorney* as an online game in enhancing EFL learners' English vocabulary. The research design was structured to integrate both quantitative and qualitative data, ensuring a balanced understanding of students' vocabulary improvement and motivational responses after the intervention.

The study was conducted at SMPN 19 Tangerang Selatan. The research activities spanned approximately four months, beginning with a one-month preparation phase dedicated to designing and validating instruments. This was followed by one month of data collection, including the administration of pre-tests, gameplay sessions, observations, post-tests, and motivational questionnaires. The next month was allocated to data analysis, and the final month focused on preparing the research report.

In accordance with the objectives, this research applied a mixed-methods approach, integrating quantitative and qualitative data to provide both numerical and descriptive insights. The quantitative data were obtained from pre-tests and post-tests designed to measure students' vocabulary acquisition before and after using the *Phoenix Wright* game. Additionally, motivational surveys were conducted to measure any changes in students' motivation levels. The qualitative data were derived from open-ended interviews and classroom observations to explore students' learning experiences and perceptions regarding the use of the game in language learning.

The research employed an explanatory sequential design (Georgiou et al., 2021), consisting of two phases conducted in sequence. In the first phase, quantitative data were collected and statistically analyzed to determine whether there was a significant improvement in students' vocabulary acquisition. In the subsequent qualitative phase, data were gathered to provide a deeper understanding of the quantitative results. This integration of data offered a holistic perspective on the influence of *Phoenix Wright: Ace Attorney* on students' vocabulary development and motivation.

In defining the variables, this research distinguished between independent and dependent variables. According to Zuriel van Belle, (2022), the independent variable refers to the variable manipulated by the researcher to observe its effect on the dependent variable, while the dependent variable is the variable that changes in response to the independent variable. In this study, the independent variable was the use of *Phoenix*

Wright as an online game-based learning tool (Variable X), and the dependent variable was the students' vocabulary acquisition (Variable Y), which represented the measurable learning outcome of the intervention.

The population of the study comprised eighth-grade students of SMPN 19 Tangerang Selatan. A convenience sampling technique was employed, as recommended by Peterson & Merunka, (2014) for its practicality and efficiency in educational settings where time, accessibility, and resources are limited. The sample consisted of 39 students divided into two sessions: the first session included 19 students and the second 20 students. The choice of this sampling method was influenced by the availability of 19 functional computers in the school's computer laboratory. Despite the reduced generalizability, convenience sampling allowed for effective data collection and ensured that each student could participate directly in the game-based learning experience. This sample size was considered adequate, as involving a larger number of participants enhances external validity and provides more robust statistical analysis (Rahi, 2017). Moreover, these students had already been introduced to basic English grammar structures such as the simple present and simple past tenses, which are frequently used in *Phoenix Wright: Ace Attorney* and are vital for understanding the game's narrative.

Data collection utilized several instruments and procedures. The quantitative data were gathered through pre-tests and post-tests designed to assess students' vocabulary knowledge. The pre-test was administered before the intervention to measure baseline vocabulary understanding, while the post-test evaluated vocabulary gains after playing the *Phoenix Wright* game. During the intervention, students were given a vocabulary note sheet to record unfamiliar words encountered in the game. This activity not only enhanced vocabulary retention but also served as preparation for a post-test discussion, where students reflected on the vocabulary they learned and shared their gameplay experiences. Additionally, motivational questionnaires were distributed before and after the intervention to gauge shifts in students' enthusiasm and engagement in learning English.

For the qualitative data, semi-structured interviews and classroom observations were conducted to capture students' perceptions and attitudes toward learning vocabulary through digital games. The interviews provided insights into students' feelings of enjoyment, challenges, and perceived benefits of the game-based approach. Meanwhile, classroom observations allowed the researcher to document students' behavior, participation, and interaction during gameplay sessions.

The data analysis involved both quantitative and qualitative techniques. Quantitative data were analyzed statistically using SPSS. Prior to hypothesis testing, normality was examined through the Kolmogorov-Smirnov and Shapiro-Wilk tests. If the data were normally distributed ($p > 0.05$), a parametric test, specifically the Paired Sample T-Test, was employed to determine the significance of differences between pre-test and post-test scores. In cases where the data were not normally distributed ($p < 0.05$), a non-parametric Wilcoxon Signed-Rank Test was used as an alternative to measure differences in students' vocabulary performance.

The qualitative data were analyzed using thematic analysis, which involved identifying recurring patterns and key themes emerging from interviews and observations. Three major indicators were used to guide the analysis: (1) students' experiences while playing the game, (2) the vocabulary learning process, and (3) students' motivation and interest in learning English. This qualitative insight helped explain the statistical findings and provided a comprehensive understanding of the effectiveness of *Phoenix Wright* as a digital learning medium.

Overall, the methodological design of this study ensured that the data collected from multiple sources could be triangulated to enhance validity and reliability. By integrating quantitative improvement measures with qualitative perceptions, the research aimed to produce a well-rounded interpretation of how interactive game-based learning can influence EFL learners' vocabulary acquisition and motivation.

FINDINGS AND DISCUSSION

To address the first research question, “How significantly does the use of *Phoenix Wright: Ace Attorney Trilogy* as a visual novel game contribute to the enrichment of EFL learners' English vocabulary?”, quantitative data were collected through pre-test and post-test assessments. These instruments measured the participants' vocabulary acquisition before and after engaging with the game-based learning treatment.

Table 1. Descriptive Statistics of Pre-test and Post-test Scores

Descriptive Statistics	N	Minimum	Maximum	Mean	Std. Deviation
PRE TEST	39	20.00	80.00	43.9744	17.01004
POST TEST	39	20.00	100.00	86.4359	14.85154
Valid N (listwise)	39				

Table 2. Students' Motivation Questionnaire Results

The descriptive results indicate a substantial improvement in students' vocabulary achievement following the intervention. The mean pre-test score was 43.97, which increased to 86.44 in the post-test, demonstrating a gain of 42.47 points. The increase in maximum score from 80 to 100 suggests that several students achieved perfect scores after the treatment. Additionally, the decrease in the standard deviation indicates greater consistency among participants' performances.

These findings suggest that the use of the *Phoenix Wright* visual novel game significantly enhanced vocabulary retention and comprehension among EFL learners. The contextual and interactive nature of the game exposed students to vocabulary in meaningful settings, reinforcing their learning through repetition and problem-solving tasks.

Overall, more than 85% of the students agreed or strongly agreed that learning

Questions	SA	A	N	D	SD
1. I learn English because it is important for my future.	58.97	35.90	2.56	2.56	0.00
2. I want to increase my English vocabulary.	61.54	28.21	7.69	2.56	0.00
3. I think English is a useful language.	71.79	25.64	2.56	0.00	0.00
4. I enjoy learning English through games.	56.41	33.33	5.13	5.13	0.00
5. The game makes learning English more interesting.	58.97	30.77	7.69	2.56	0.00
6. Playing <i>Phoenix Wright</i> helps me remember vocabulary better.	48.72	38.46	5.13	7.69	0.00
7. I feel motivated to learn English after playing the game.	46.15	38.46	10.26	5.13	0.00
8. I am more confident in using English after playing the game.	38.46	35.90	12.82	10.26	2.56
9. The game encourages me to understand English contextually.	51.28	33.33	7.69	5.13	2.56
10. I am willing to continue learning English through games.	56.41	30.77	7.69	5.13	0.00

through *Phoenix Wright* was enjoyable and interesting. Approximately 82% of the participants reported an increase in motivation to learn English, and 87% acknowledged that the game helped them remember vocabulary more effectively. This demonstrates that game-based learning can positively influence both affective and cognitive aspects of vocabulary acquisition.

The qualitative results from interviews and observations further supported these findings. Most students described the game as intellectually engaging, motivating, and contextually rich. They reported that vocabulary encountered during gameplay was easier to recall and apply than words learned through conventional memorization. The narrative structure, courtroom settings, and problem-solving mechanics stimulated curiosity and sustained learners' attention throughout the process.

Discussion

The findings of this study reveal a clear improvement in EFL learners' vocabulary mastery and motivation after being exposed to the visual novel game *Phoenix Wright*:

Ace Attorney Trilogy. These results are consistent with and extend the findings of previous studies on game-based learning and vocabulary acquisition.

First, the quantitative improvement aligns with Constructivist Learning Theory, which asserts that learning is most effective when students actively construct knowledge through experience (H. Li & Zhang, 2025). The *Phoenix Wright* game provided learners with meaningful input through interactive dialogues, visual storytelling, and contextual problem-solving. As students advanced in the game, they were required to understand legal terminology and narrative language to progress, resulting in natural vocabulary exposure and retention. This is in line with Stephen Seifert, (2024), who highlighted that visual stimuli enhance learning engagement and support deeper comprehension.

The results also corroborate Krashen's Input Hypothesis (1989), which posits that language acquisition occurs when learners are exposed to "comprehensible input" slightly beyond their current proficiency level ($i + 1$) (KRASHEN, 1989). The dialogues and texts in *Phoenix Wright* offered a range of vocabulary within contextual clues, making the input both challenging and understandable. This type of contextual exposure promotes incidental vocabulary acquisition as learners absorb new words naturally through comprehension rather than memorization. The positive affective responses from students (enjoyment, curiosity, and confidence) further reduce the "affective filter," supporting Krashen's theory that emotional engagement facilitates language learning.

Moreover, the motivational outcomes observed in this study strongly support Gardner's Instrumental Motivation Theory (Yulfi & Aalayina, 2021). Many students recognized the academic and practical value of learning English through the game, particularly for improving their vocabulary and performance in school-related contexts. This finding is consistent with Hung et al., (2015), who found that integrating digital games in language learning increased both motivation and vocabulary retention. Similarly, Chen et al., (2023) and Camacho Vásquez & Ovalle, (2019) confirmed that interactive digital environments foster higher engagement and positive learning attitudes. However, this study extends their work by focusing on visual novel games, which rely heavily on textual and contextual input rather than fast-paced interaction or audiovisual elements. This distinction demonstrates that text-heavy games can be equally effective for vocabulary learning, particularly in developing reading comprehension and contextual interpretation. These results are in line with previous research Hasyim & Hasyim, (2021) which states that audio visuals can improve students' learning or academic achievement. More than half of the students scored 8.5, and 13 students achieved a mid-range score of 8. This comparison indicates that the use of Audio-Visual methods can effectively improve students' learning performance. When examining the initial scores, Cycle I, and Cycle II, a significant improvement is evident: the average initial score of 4.5 increased to 6.3 in Cycle I and further rose to 7.9 in Cycle II.

The findings also address a notable gap identified in previous research. While most prior studies explored action-oriented or role-playing games, few examined narrative-driven visual novels. The results of this study indicate that *Phoenix Wright: Ace Attorney* offers unique pedagogical advantages it provides structured, language-rich dialogue that demands comprehension, reasoning, and vocabulary application. The consistency of improvement across students suggests that such games may serve as an effective complement to formal classroom instruction, especially for learners who struggle with motivation or contextual understanding.

From the qualitative perspective, interviews revealed that students perceived the game as both entertaining and educational. Similar to finding Sabiri, (2025), learners reported that gameplay involving problem-solving and decision-making enhanced their focus and vocabulary recall. In this study, students demonstrated strategic learning behaviors such as note-taking, translation, and contextual guessing, showing how game-based learning encourages learner autonomy and self-regulation.

Furthermore, the game's narrative immersion fostered intrinsic motivation, while the sense of achievement gained through progress in the story promoted extrinsic motivation. This dual motivational effect aligns with (Kierner et al., 2015), who argued that meaningful, goal-oriented tasks sustain student engagement and reduce cognitive fatigue. Thus, *Phoenix Wright* not only supported vocabulary growth but also nurtured students' overall interest and persistence in English learning.

In summary, the convergence of quantitative and qualitative findings demonstrates that *Phoenix Wright: Ace Attorney Trilogy* effectively enhances vocabulary acquisition and motivation among EFL learners. The integration of constructivist, motivational, and input-based theories provides a comprehensive explanation for its success: learners actively constructed meaning from contextual input, experienced emotional engagement that facilitated memory retention, and perceived the practical relevance of their learning.

The results contribute to the broader discourse on digital game-based learning by showing that visual novel games, which emphasize reading and comprehension rather than physical interaction, can serve as powerful tools for vocabulary instruction. This approach not only bridges the gap between entertainment and education but also promotes sustainable and enjoyable language learning experiences for EFL students. The results of this study are also in line with previous research Tsanawiyah & Mtsn, (2016) that implemented the ARCS motivational strategy in a classroom setting, particularly in learning activities related to understanding the intrinsic elements of novels. The earlier study demonstrated that ARCS effectively increased student activity, improved learning outcomes, and generated highly positive student responses, with averages reaching above 90%. Similarly, the integration of *Phoenix Wright: Ace Attorney* in the present research reflects the same motivational mechanisms outlined in the ARCS model. The game successfully captures attention through its interactive and investigative gameplay, ensures relevance by providing authentic and meaningful vocabulary use, builds confidence as students progress through challenging cases, and enhances satisfaction through immediate feedback and narrative rewards. These parallels indicate that both studies support the effectiveness of ARCS-based learning environments. While the previous research applied ARCS within traditional listening activities, this study extends its applicability to digital game-based learning, reinforcing the conclusion that ARCS-driven instructional strategies can significantly enhance student engagement, vocabulary acquisition, and overall learning motivation.

The Discussion section is the author's interpretation of the research findings that can answer the limitations/research gaps of previous research and not repeat the research findings. The Discussion section includes how the research results related to the research objectives (what)? Do the authors provide a scientific interpretation of each finding presented (why)? Moreover, are the research results consistent or contradictory to the research results from other

researchers (what else)? Sizes and styles of page setup are shown below. The example of table and figure also shown in this below.

CONCLUSION

This study examined the effectiveness of *Phoenix Wright: Ace Attorney Trilogy* as a visual novel game in enhancing EFL learners' vocabulary acquisition and motivation. The mixed-method findings confirmed that the integration of this narrative-driven game led to a statistically significant improvement in students' vocabulary mastery, as evidenced by the Wilcoxon Signed Ranks Test results ($p < 0.05$). Qualitative data further revealed that students found learning through gameplay to be more enjoyable, memorable, and meaningful than traditional methods. The contextualized language, courtroom dialogues, and problem-solving features in the game effectively fostered both explicit and incidental vocabulary learning while simultaneously increasing students' engagement and instrumental motivation toward English.

The findings contribute to the growing evidence that game-based learning, particularly through text-heavy visual novel games, offers substantial pedagogical value in EFL contexts. However, the study's scope was limited to a single school and a short-term implementation period. Future research could expand this work by investigating long-term vocabulary retention, comparing game-based and conventional methods, and exploring the impact of similar games on other language skills such as reading comprehension and speaking fluency. Further exploration of diverse game genres and larger, more varied populations would also enhance understanding of how digital games can sustainably support vocabulary learning and learner motivation across different educational settings.

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OPTIMIZATION OF BIOLOGY LEARNING MEDIA IN IMPROVING LEARNING EFFECTIVENESS BASED ON STUDENTS' LEARNING STYLES

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ABSTRAK

Penelitian ini bertujuan untuk menganalisis optimalisasi media pembelajaran Biologi untuk meningkatkan efektivitas belajar berdasarkan gaya belajar siswa. Penelitian dilakukan di MAN 1 Medan pada bulan September 2025 dengan satu guru Biologi sebagai responden utama, yang dipilih karena aktif menggunakan berbagai media pembelajaran dan menyesuaikan strategi mengajar dengan karakteristik siswa. Data dikumpulkan melalui kuesioner tertutup dan wawancara semi-terstruktur untuk menggali jenis, efektivitas, dan kesesuaian media pembelajaran dengan gaya belajar visual, auditori, dan kinestetik siswa. Hasil penelitian menunjukkan bahwa guru telah menerapkan berbagai media, termasuk media visual, digital, dan alat praktikum untuk meningkatkan pemahaman konsep. Media visual dan kegiatan praktikum ditemukan sebagai yang paling efektif, dengan tingkat kesepakatan masing-masing 95% dan 90%, sementara keterbatasan infrastruktur dan kompetensi digital guru masih menjadi tantangan utama. Penelitian ini menekankan bahwa optimalisasi media pembelajaran membutuhkan fasilitas yang memadai, keterampilan teknologi, dan kesadaran akan keberagaman gaya belajar. Pemilihan media yang selaras dengan gaya belajar siswa dapat meningkatkan motivasi, keterlibatan, dan hasil belajar, sehingga mendukung pengembangan strategi pembelajaran Biologi yang adaptif dan berpusat pada siswa.

Kata Kunci: Pembelajaran Biologi, media pembelajaran, gaya belajar, efektivitas, pembelajaran digital

ABSTRACT

This study aims to analyze the optimization of Biology learning media to improve learning effectiveness based on students' learning styles. The research was conducted at MAN 1 Medan in September 2025 with one Biology teacher as the main respondent, chosen because of active use of various instructional media and adaptation of teaching strategies to student characteristics. Data were collected through a closed-ended questionnaire and semi-structured interviews to explore the types, effectiveness, and compatibility of learning media with students' visual, auditory, and kinesthetic styles. The findings show that teachers have implemented various media, including visual, digital, and practical tools, to enhance conceptual understanding. Visual media and practicum activities were found most effective, with agreement levels of 95% and 90%, respectively, while limited infrastructure and teachers' digital competence remain key challenges. The study highlights that optimizing learning media requires adequate facilities, technological skills, and awareness of learning style diversity. Aligning media selection with students' learning styles increases motivation, engagement, and learning outcomes, supporting the development of adaptive and student-centered Biology learning strategies.

Keywords: Biology learning, learning media, learning styles, effectiveness, digital learning

INTRODUCTION

Biology learning is one of the subjects that requires students to understand various scientific concepts that are abstract and complex, making it difficult for some students to comprehend them (Farahani et al., 2023). The Biology learning process does not only emphasize conceptual mastery but also the development of critical, analytical, and creative thinking skills (Santia & Hidayati, 2024). However, in practice, many students

still experience difficulties in understanding Biology material due to the learning process being less engaging and still dominated by conventional methods. One of the main causes of the low learning effectiveness is the suboptimal use of instructional media that align with students' characteristics and the material being taught.

Using audiovisual learning media, such as videos, animations, and interactive multimedia, is a key approach to attract students' interest and help them understand complex biological concepts (Zai et al., 2024). The use of appropriate media can enhance students' motivation, engagement, and learning outcomes (Munawir et al., 2024). However, according to research conducted by Siregar et al., (2025) most teachers still rely on conventional learning methods using simple media such as laptops, projectors, and textbooks, without incorporating more interactive innovations or adjustments to students' characteristics and learning styles. This finding aligns with Susanti et al., (2024) who stated that the lack of alignment between instructional methods or media and the individual characteristics and needs of students can hinder the effectiveness of the learning process, as each learner has a different way and pace of processing information.

However, recent studies in the Indonesian context reveal that the challenges in optimizing instructional media also stem from inadequate digital literacy among students. For example (Ulfah, 2024) found that although students acknowledged the importance of digital media in learning, many still lacked the experience and responsibility required to use digital platforms effectively. This indicates that the issue lies not only in infrastructure but also in students' readiness and competency in utilizing educational media.

Additionally, a study published in *Media Didaktika* showed that differentiated learning requires media to be tailored to the characteristics and learning styles of students in order to promote deeper engagement and better conceptual understanding. (Ana, 2022) emphasized that differentiated media based learning can only be effective when both teachers and students recognize and respond to diverse learning needs. Therefore, this supports the urgency of analyzing how instructional media in Biology can be aligned with students' learning styles to enhance learning outcomes a gap that this study aims to address.

Several previous studies have discussed the importance of selecting appropriate instructional media to improve Biology learning outcomes. For instance, research by Alwi & Agustia, (2024) found that the use of videos in teaching can significantly enhance students' conceptual understanding and information retention compared to conventional lecture-based methods. Nevertheless, this study did not further analyze the influence of students' different learning styles as a factor that may affect the effectiveness of video-based learning. Moreover, a study by Derici & Susanti, (2023) highlighted that teachers tend to use instructional media without first analyzing students' learning style characteristics. This limitation indicates a research gap regarding how the optimization of instructional media can be aligned with students' learning styles to improve the effectiveness of Biology learning.

This research seeks to fill that gap by analyzing how the optimization of Biology learning media can enhance learning effectiveness based on students' learning styles. It also aims to identify the types of instructional media most suitable for visual, auditory, and kinesthetic learners, and to measure the extent to which the alignment between media and learning styles affects students' learning outcomes. Therefore, the results of this study are expected to make a meaningful contribution to the development of Biology learning strategies that are more adaptive, effective, and student-centered.

LITERATURE REVIEW

Theoretical Framework

Learning media play a crucial role as a medium for delivering instructional messages effectively to achieve learning goals. In Biology education, media serve a particularly strategic function since many biological concepts are abstract and difficult to comprehend without visualization or direct experience. The use of instructional tools such as videos, animations, 3D models, and digital laboratory simulations has been shown to help students connect theoretical knowledge with real-world phenomena they encounter in their surroundings. Research by (Rahma, 2024) found that interactive technology-based learning media can enhance student engagement by up to 35% compared to conventional lecture methods. However, the success of media utilization largely depends on the appropriateness of the media type with student characteristics and the teacher's competence in managing them. In practice, many teachers still face obstacles such as limited facilities and inadequate training in the use of digital media

Learning effectiveness essentially reflects how far the learning process achieves its intended goals. According to (Ihwana et al., 2025) effectiveness can be observed from improvements in learning outcomes, motivation, and student participation. In Biology learning, effectiveness can be enhanced through active learning activities such as observation, experimentation, group discussions, and problem-solving. Studies have shown that interactive media not only improve learning outcomes but also foster higher motivation among students. Nevertheless, when media do not align with student characteristics or are not supported by teacher competence, the expected learning outcomes cannot be fully achieved.

In addition to instructional media, students' learning styles are also an essential factor to consider (Surata, 2020) classifies learning styles into three main types: visual, auditory, and kinesthetic. Visual learners grasp concepts better through images, diagrams, and colors; auditory learners prefer verbal explanations or discussions; while kinesthetic learners learn best through hands-on activities such as experiments. In Biology classes, these styles often coexist, requiring teachers to integrate diverse media types to accommodate all learners. Combining visual and kinesthetic media could increase material retention by up to 40%, emphasizing the need to align media selection with learning style variations.

Further research supports the positive correlation between learning styles and the effectiveness of instructional media. (Rofinaa & Mellisa, 2022) found that video-based and simulation media were more effective for visual and kinesthetic learners, whereas auditory learners benefited more from audio-based media or discussions. (Dindardiya & Supardi, 2024) also highlighted that teachers' ability to identify students' learning styles is a critical determinant of successful media selection. Teachers who understand these variations tend to design learning experiences that are more engaging, efficient, and capable of enhancing Biology learning outcomes significantly.

Previous Studies

Several prior studies have emphasized the importance of instructional media and learning styles in determining the effectiveness of Biology learning. (Simamora & Yogica, 2022) examined the implementation of blended learning in Biology and found

that integrating digital media with laboratory practices improved student learning outcomes by 25%. This finding suggests that combining online learning with hands-on activities can enhance students' engagement and comprehension of biological concepts. However, (Rahayuningsih, 2013) noted that the implementation of digital media still faces challenges such as inadequate infrastructure and lack of teacher training, which may hinder its optimal use.

(Aprilia et al., 2022) also demonstrated that selecting media compatible with students' learning styles significantly affects Biology learning outcomes. Visual and kinesthetic learners achieved higher results when using interactive video and virtual laboratory simulations than auditory learners who relied on audio-based media. This finding supports theory that learning styles influence how students process and understand information. Similarly (Rofinaa & Mellisa, 2022) found that combining visual media with direct practice not only improved comprehension but also strengthened long-term memory retention in Biology subjects.

Furthermore, (Rahma, 2024) investigated the effectiveness of virtual laboratory use in Biology learning and discovered that digital laboratories serve as efficient alternatives when fieldwork is not feasible. (Dindardiya & Supardi, 2024) also reported that technology-based interactive media can simultaneously improve student motivation and achievement. Taken together, these findings suggest that the effectiveness of Biology learning depends not only on the type of media used but also on the alignment between media selection, students' learning styles, and teachers' ability to manage instructional resources. (Wibowo et al., 2022)

Therefore, this study seeks to strengthen previous findings through research conducted at MAN 1 Medan, aiming to identify both challenges and solutions in implementing Biology learning media tailored to students' learning styles. The results are expected to contribute to the development of more effective and contextually relevant teaching strategies, as well as encourage teachers to become more adaptive in integrating educational technology optimally.

RESEARCH METHODS

The research focused on a single Biology teacher as the primary respondent. The teacher was selected due to their active use of diverse learning media in the classroom and their experience in adapting teaching methods to students' learning characteristics.

Data collection was carried out using a closed-ended questionnaire and a semi-structured interview. The questionnaire was specifically designed to collect quantitative data on the teacher's perceptions of the types of learning media used, their effectiveness in supporting students' conceptual understanding, and their compatibility with students' learning styles (visual, auditory, and kinesthetic). Additionally, the questionnaire aimed to identify challenges faced during media implementation and to gather suggestions for improvement. Meanwhile, the semi-structured interview was conducted to obtain more in-depth information on how the teacher selected, applied, and evaluated the effectiveness of the learning media in the classroom.

The questionnaire instrument was developed based on several key indicators. These indicators included: (1) the frequency of using visual, digital, printed, and practical media in Biology learning, (2) the perceived effectiveness of each media type in supporting conceptual understanding, (3) teachers' awareness and consideration of students' learning styles (visual, auditory, and kinesthetic) during media selection, and (4) challenges encountered in implementing media. Additionally, the instrument

contained statements designed to assess teachers' readiness and need for training related to learning media development. The semi-structured interview was guided by questions related to teaching strategies, constraints experienced in using media, and innovations implemented by the teacher to optimize learning.

FINDINGS AND DISCUSSION

The analysis of data obtained through the distribution of questionnaires to Biology teachers indicates a positive tendency toward the implementation of various types of learning media in the educational process. Descriptive results show that most respondents agreed or strongly agreed with statements regarding the use of visual, digital, and practical learning media, as well as students' understanding of their learning styles. This condition reflects teachers' efforts to adapt Biology teaching methods to technological advancements and student diversity.

Overall, the data indicate that the integration of technology-based learning media has gradually been implemented, although it has not yet been fully optimized due to limitations in facilities and teachers' digital competencies. Meanwhile, visual media and practical activities remain the most preferred approaches used by teachers in explaining abstract biological concepts.

Table 1. Recapitulation of Biology Teachers' Questionnaire Results on Learning Media and Students' Learning Styles.

Aspect Measured	Percentage of "Agree" + "Strongly Agree" (%)	Brief Interpretation
Use of technology-based learning media (PowerPoint, videos, interactive apps)	80	Teachers have begun implementing digital media, though not optimally.
Availability of supporting facilities (projectors, internet, laboratories)	60	Facilities are still limited and unevenly distributed.
Effectiveness of visual media (images, diagrams, 3D models)	95	Visual media are considered most effective for understanding concepts.
Use of printed media (textbooks, worksheets)	85	Traditional media remain as complementary tools.
Effectiveness of practical activities	90	Practicum activities are effective for kinesthetic learners.
Limitations of facilities as barriers to innovation	75	Main obstacle in media development and innovation.
Students' enthusiasm for video/animation-based media	95	Students show high engagement when using digital media.
Teachers' need for training in educational	90	Professional development in

technology		digital literacy is highly needed.
Effect of interactive media on student engagement	80	Interactive media enhance classroom participation.
Teachers' understanding of different learning styles (visual, auditory, kinesthetic)	88	Teachers acknowledge learning diversity but struggle to apply it individually.

Based on the table, the highest indicators appeared in the aspects of visual media usage (95%), practicum effectiveness (90%), and students' enthusiasm toward video-based media (95%). This indicates that Biology teachers perceive experience-based and visualized learning approaches as the most effective in enhancing conceptual understanding. In contrast, the aspect of facility availability obtained only 60%, signifying that the main obstacle to optimizing learning media still lies in infrastructure and teachers' technological skills.

The results of the study indicate that Biology teachers have implemented various types of learning media, including digital, visual, and practical media. The high percentage of agreement on the use of visual media and practicum activities shows that teachers consider these two approaches to be the most effective methods for improving students' conceptual understanding of Biology. This finding is consistent with previous research reporting that experiment- or practicum-based media strengthen students' science process skills and conceptual understanding (Sari et al., 2024)

Nevertheless, the utilization of technology-based learning media has not yet reached an optimal level. Limitations in infrastructure such as projectors, internet connectivity, and teachers' ability to operate digital media remain major barriers. This aligns with studies emphasizing that the lack of technological facilities and inadequate teacher training are primary obstacles to the implementation of interactive learning media (Sholikah et al., 2025). Thus, even though innovative media have been introduced, their success still depends on institutional support and teachers' professional competence.

From a theoretical perspective, learning-style research emphasizes that instructional effectiveness is not solely determined by the type of media used, but also by the degree to which the media align with students' learning characteristics. Visual learners tend to understand material better through images and animations, while kinesthetic learners are more engaged during practical activities.

Furthermore, this study confirms that the use of interactive digital media positively affects students' motivation and engagement. Teachers who incorporate videos, animations, or online quizzes report increased student participation in Biology classes. This finding is reinforced by studies demonstrating that interactive digital media enhance both motivation and academic achievement compared to conventional methods (Wicaksono & Wiratama, 2024). Therefore, the development of technology-based learning media should continue to be pursued to support active, innovative, and contextual learning processes.

Overall, optimizing Biology learning media depends on three main aspects: the availability of facilities and infrastructure, teachers' competence in managing media, and their ability to adapt media to students' learning styles. These factors are interrelated and collectively determine instructional effectiveness. Without sufficient support and training, even the best learning media cannot produce optimal outcomes.

The findings of this study underscore the importance of experiential and visually-oriented learning strategies in enhancing students' conceptual understanding in Biology.

The dominance of visual media and practicum based activities aligns with constructivist learning theory, which posits that learners build understanding more deeply through direct experience and multimodal representation. This approach is especially valuable in abstract biological topics, where visualization and hands-on engagement foster a more meaningful conceptual grasp.

Nonetheless, persistent infrastructural limitations reveal that many schools struggle to deploy digital learning media effectively. Limited access to projectors, laboratory facilities, reliable internet connectivity, and ongoing technical support remain significant barriers. Without institutional interventions and equitable resource allocation, the potential of interactive media may continue to be underutilized.

Another key factor is teacher competence. While educators recognize the benefits of educational media, many lack the pedagogical and technological skills necessary to design, implement, and integrate digital tools into their teaching. This suggests that professional development should go beyond simple technical training, incorporating both digital literacy and instructional design principles to maximize media effectiveness.

From a learning-styles perspective, the results highlight the need for media differentiation. Though visual and practicum-based approaches scored highest, students have diverse preferences: some benefit more from kinesthetic, auditory, or reflective learning. Thus, multimodal media development should account for these differences, ensuring inclusive and adaptive learning experiences for all.

These findings collectively emphasize the need for systemic and sustainable support to optimize the use of learning media in Biology education. Schools should invest in ongoing professional development, allocate dedicated budgets for media infrastructure, and establish clear evaluation mechanisms to measure the learning impact of media implementation. A coordinated approach among educators, administrators, and policy-makers is essential to ensure that media-based innovations progress from isolated interventions to long-term pedagogical transformation (Ikhsan, 2023)

CONCLUSION

This study concludes that the optimization of Biology learning media can significantly enhance learning effectiveness when aligned with students' diverse learning styles. Visual and practical media are considered the most effective in improving students' conceptual understanding, while the integration of interactive digital media increases motivation and engagement. However, the limited availability of facilities and teachers' digital competence remains a major barrier to maximizing the use of innovative learning media.

The findings contribute to developing more adaptive, student-centered Biology learning strategies that combine technology with hands on experiences. This study suggests that improving teachers' digital literacy and providing adequate infrastructure are crucial steps toward optimizing learning media use. Future research is recommended to involve a larger number of respondents and to analyze the direct impact of specific media types on learning outcomes across different educational levels.

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DEVELOPING ENGLISH SURVIVORS: A VOCABULARY LEARNING GAME FOR EFL LEARNERS

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ABSTRACT This study outlines the design, implementation, and evaluation of *English Survivors*, an instructional media developed to support EFL learners in intentional vocabulary acquisition using digital gaming principles. The implementation, following the ADDIE model, incorporates quizzes and immediate feedback to enhance vocabulary retention and support learner motivation. An iterative refinement cycle included a pilot study with five learners, succeeded by a controlled classroom implementation involving fifteen participants, and concluded with external validation by experts in educational media and linguistics. Quantitative analysis indicates that 88% of participants considered the vocabulary tasks relevant, 86.67% valued immediate feedback, and 85.34% responded positively to the quiz-based format. A media expert assigned a functionality score of 39 out of a possible 40, with the content expert awarded 40 out of 40. The evidence collectively supports the platform's operational viability and motivational capacity. Statistically significant vocabulary gains, along with trials in authentic instructional settings, support the theory that pedagogical games designed through systematic methods and refined through iterative user and expert evaluation is possible, when integrated into controlled instructional frameworks, significantly improve vocabulary mastery.

Keywords: Game-Based Learning, Vocabulary Mastery, Instructional Design, Educational Technology, EFL Students

INTRODUCTION

A strong vocabulary is the starting point for becoming confident in English, and it also supports success in the four types of language skills: reading, writing, listening, and speaking. Traditional learning methods, such as simple repetition and direct translation, are still the most common in classrooms, even though researchers show that these strategies do not lead to long-term understanding or memory (Li et al., 2022; Tanaka, 2022). As a result, many learners feel detached, especially those who study English in a foreign setting (Sitepu & Mutiarani, 2023). This distance lowers their natural curiosity and prevents them from absorbing words in the rich, real-world context needed for lasting vocabulary improvement.

Research conducted over the past decade has consistently shown that digital and game-based learning (GBL) environments enhance language acquisition outcomes. Game-centered instructional strategies enhance student independence and maintain motivation by integrating new vocabulary into authentic, repetitive, and interactive contexts (Adipat et al., 2021; Alibakhshi et al., 2025; Zhao et al., 2022). Comparisons with traditional pedagogy indicate that game-based learning (GBL) environments often produce greater language acquisition, mainly due to immediate corrective feedback, increased learner agency, and enhanced emotional and cognitive engagement (Krystalli & Arvanitis, 2024; Sharmin & Barmaki, 2024). Researchers have cautioned about the critical necessity to align game mechanics with pedagogical objectives, indicating that a lack of harmonious integration may compromise instructional effectiveness and pedagogical integrity (Hartmann & Gommer, 2021; Sawyer et al., 2017).

Intentional vocabulary acquisition has emerged as an essential aspect of current

instructional design. In contrast to incidental acquisition, intentional vocabulary acquisition occurs through explicit, predetermined objectives, necessitating that learner focus consistently on curricular elements, actively retrieve them, and organize them within memory (Nation, 2022; Webb et al., 2023). The rationale is based on repeated and notably prominent presentations, strategically organized to support learners with restricted vocabularies and to facilitate lexicalization through progressive exposure (Bilgin & Bingol, 2022). Implementing achievement-driven techniques within a game-based learning environment integrates play with purpose, transforming pedagogical imperatives into engaging activities (Ruth & Plass, 2020). This approach transforms curricular objectives into tasks that learners actively and intentionally pursue.

This study examines the existing gap in the design of vocabulary-learning games that effectively integrate motivation, curriculum alignment, and structured instruction. Previous studies have produced games like EnLang4All and Language Learning Game (Alexandre et al., 2023; Ishaq et al., 2022), yet there is a paucity of research that critically assesses the capacity of these tools to systematize vocabulary acquisition in accordance with instructional design frameworks. This study seeks to create and assess *English Survivors*, a game-based platform aimed at intentional vocabulary acquisition, developed according to the ADDIE instructional model. The aim is to evaluate the platform's feasibility, educational effectiveness, and ability to enhance student motivation and vocabulary acquisition among EFL learners in Indonesian secondary education.

LITERATURE REVIEW

1. Vocabulary Acquisition

Mastering a new language means acquiring new words and concepts. New concepts and words can be acquired through either receptive or productive means (Valdehita & Diego, 2021). Receptive vocabulary involves knowing a word's limited meaning and understanding the context in which it can be used. Productive vocabulary includes every possible way a person can express a certain idea in speech or writing, including the correct spelling and pronunciation.

Language proves to be more than the utterance or writing of mere disconnected words, phrases or sentences. There is mastery of eloquence which entails the correct and adequate use of words in speech and writing. For instance, He & Deocampo (2023) accentuate vocabulary knowledge as a determinant element which influences the extent of comprehension a student can have of the texts. According to Lee (2023), it is vocabulary which determines the extent of students' information retention. Further, Sotlikova (2023) emphasizes mastery of vocabulary as the pivotal element of the communicative process. The more advanced a person's vocabulary, the more easily they can access, understand, retain, and communicate the information. Proficiency in a language is influenced by the mastery of vocabulary.

The progress of learners in vocabulary development in the work of Nation (2022) is cited in 2006. Children at the age of six/primary school learners, are said to be ready to learn the first 1000 words and according to lower primary, recently, children are said to learn the first 1000 words at the onset of learning to read. For children 6 years and above, it is claimed that the potential to learn more increases. Learners at the 12,000 word level were said to be late primary and early high school learners, learning words at the claimed ages of 6, 12, 14, and 16. 12 year old, learn 1000 words as the 2, 3 and 4 words paired

with values of 8, 9 and 3 to 5 percent ranges which indicate an increase of 4 to 5 percent of newly learnt words.

Children at the primary and early high school stages have been observed to acquire vocabulary during the span of more complex readings and stories that would presumably be too advanced for them. It was claimed that the tools designed for the 80% level mastery would ignore the 5th set of words and rely solely on the 4th set level for the 3% mastery coverage. The research conducted by Nation in 2006 that employed the 3% coverage mastery documents claimed that the advanced level unsophisticated set was still being used to gain mastery at mid-ages in vocabulary. The difference between documents in which the vocabulary gaps that negatively distort mastery, are lower level documents. The patterns of acquiring new words described above inform the intentional design of custom school games.

In so far as vocabulary acquisition is concerned, the dimension of scope embraces the mastery of the elements of a given language, including the nouns, verbs, adjectives, adverbs, pronouns, prepositions, conjunctions, and interjections. The division of vocabulary into different parts of speech is a rudimentary, basic and fundamental activity for learners who seek to use the vocabulary in meaningful contexts of communication, both oral and written. The mastery of the cited above lexemes, in particular, gravitates students toward the perfection of language usage at the level of grammar and, in turn, language in use as a whole (Hustiana, 2023).

A few theories have emerged trying to explain how vocabulary is learned in detail. Magnussen & Sukying (2021) describe six core factors that must be present simultaneously to gain and learn vocabulary: 1) multiple encounters, 2) deliberate attention, 3) noticing, 4) retrieval, 5) varied use, and 6) elaboration. In addition to other criteria that have to be effective to learn and grasp vocabulary, learning attainment will be stunted too if any of the criteria of effective acquisition are fulfilled. Yao (2020) also focuses on vocabulary acquisition processes and connects these to attention, cognition, and output. Dagnaw (2023) mentions that the vocabulary of a learner is the command a learner has on words which includes: 1) concepts and referents, 2) associations, 3) grammatical functions, 4) collocations, and 5) restrictions on use. In every acquisition and retention of new language, core conditions, every cognitive process and any other relevant aspects of the language have to be set to the optimal level, to facilitate the learning of the language.

2. Incidental and Intentional Vocabulary Learning

As described by Nation (2022), when acquiring vocabulary the learner may engage either in intentional or incidental learning. Stratton (2022) defines ‘intentional learning’ as having and acquiring information which the learner was not actively seeking; in contrast, the meaning of the term ‘vocabulary learning’ entails noting down the words and concentrating on their retention. Sinyashina (2020) asserts that incidental attention is described as the learning processes that occur when learners derive meaning from reading or listening to discourse and attempt to capture the essence of the message, while ignoring many of the words. Lu (2021) captures a purposeful learning incident when the learner in question moves towards achieving a set target and applies specific actions in a goal-orientated and systematic way.

In their research, A. H. Lee & Lloyd (2025) indicated higher rates of incidental exposure improved recognition of non-native speech patterns and thus confirmed the effectiveness of incidental learning within those frequency ranges. However, the exposure

conditions described are particularly sensitive to the structure of the input, suggesting that setting the appropriate conditions is important for obtaining favorable results. The advantages of incidental learning are intended for lower-skilled students, but as indicated by Bilgin & Bingol (2022), its benefits are negligible in the long run. This is because lower level students are required to go through explicit instruction on the multiple dimensions of a word in order to fully acquire it. In a recent publication, Webb et al. (2023) claims that the vocabulary acquired through incidental learning is far less than the vocabulary acquired through direct instruction, thus reinforcing the position that direct instruction is favored.

3. Nation's Vocabulary Knowledge Framework

According to Nation (2022), vocabulary knowledge comprises two parts: receptive knowledge and productive knowledge. As described by Kilic (2019), productive knowledge involves attaching the words to the correct forms when speaking or writing. Receptive knowledge involves knowing or listening to words. Additionally, Nation (2022) attempts to further divide vocabulary knowledge into the form, meaning and use of the vocabulary.

Like any other language, vocabulary knowledge and acquisition involve attention to form, meaning and use, and mastery requires precision on the factors. Nontasee & Sukying (2021) referred to the recognition and identification of a word's phonological and morphological aspects as "its form". A word is a word when it is understood and is an understood word when its form, meaning, concepts, referents to other words, and the relationships between and among the words are grasped. Finally, the use of the word's knowledge is the context in which a given word is collocated and the context in which it is spoken.

4. Game-Based Learning

Educational technologies employ game-based learning and gamification in varied forms. For instance, Duolingo teaches vocabulary and grammar by tailoring lesson flows that partition and progressively advance through language lessons and provide corrective feedback in a gamified form (Smith et al., 2024). Quizlet has interactive flashcards that accompany learning at different levels of retrieval (Ho & Kawaguchi, 2021), and Kahoot! has enabled real-time competitive quizzes (Zhang & Yu, 2021). Wordwall adds a quiz and a matching game to learn vocabulary (Widhiatama & Brameswari, 2024). These tools serve as examples of game-based learning that motivates learners, enhances learning, and provides reflective feedback for improvement.

Game-based learning (GBL) increases levels of enjoyment and engagement through fun, challenges, and rewards (Hartmann & Gommer, 2021). Active learning enhances understanding and retention (Piaget, 1950), and the provision of immediate feedback enhances retention (Dabbous et al., 2022). Still, GBL comes with challenges like distraction, overuse, and lack of technology (Alzahrani & Griffiths, 2024; Dimitra et al., 2020). These challenges obligate the designers of educational materials to strike a balance between engaging game-play and focus on learning (Plass et al, 2020; Sawyer et al, 2017).

The best GBL incorporates instructional goals, scaffolding of game challenges, and prompt feedback loops (Hartmann & Gommer, 2021). Most effective practices suggest that designers encourage student-controlled game-play that promotes mastery and choice (Plass et al., 2015).

5. Constructivist Learning Theory

The learning theories pertaining to game-based learning constructs are by Piaget (1950) and Vygotsky (1978). These theories claim that learners create new knowledge when they are actively engaged in and participate in various activities (Efgivia et al., 2021). Vygotsky advocated social constructivism and ZPD which is when learning is guided by a teacher or other learners (Polly & Byker, 2020). Much like Vygotsky's theory, learning is a process which is gradually dominated by dependent learners to independent learners through scaffolding and assistance.

In her research, Subagia (2020) argues that in learning, new knowledge must be linked and synthesized with pre-existing knowledge and cognitive structures. This is what Rabindran & Madanagopal (2020) calls assimilation, which is the process of adding new information to an existing schema, and accommodation which is the process of restructuring one's schema to include new knowledge. These are the processes that the learning games are intended to help students in modifying and utilizing information.

RESEARCH METHODS

This study utilized a research and development (R&D) design based on the ADDIE instructional model, which includes the interconnected phases of Analysis, Design, Development, Implementation, and Evaluation. The main goal was to design, produce, and empirically evaluate a game-oriented digital application, named *English Survivors*, aimed at improving the selective acquisition of vocabulary in accordance with the standards set by English as a Foreign Language (EFL) program requirements.

The participant group comprises fifteen eleventh-grade students from Muhammadiyah Cipanas High School in West Java, Indonesia. Five learners voluntarily participated in the asynchronous online pilot trial, while the remaining ten including five from pilot group completed the in-person evaluation in a traditional classroom environment, which can be seen in Table 1. A purposive sampling method was utilized to select students demonstrating basic proficiency in English vocabulary who were willing to participate in the instructional game. The assessment employed a triangulated approach, involving simultaneous evaluations by two certified English language teachers and two subject matter experts. These experts provided qualitative feedback and evaluated the instructional design for methodological integrity.

A variety of instruments were employed. A questionnaire is required to identify learner preferences and challenges in vocabulary acquisition. A questionnaire collecting student evaluations evaluated the game's usability, content relevance, and motivational impact following gameplay. Structured interviews were administered to the two teachers prior to and following implementation to obtain their insights on classroom integration. Furthermore, media and content experts conducted validation questionnaires to evaluate functionality, accessibility, and alignment with the curriculum. All instruments utilized established Likert-scale formats and were adapted from appropriate educational measurement sources.

The research followed a predetermined linear protocol as seen in Table 1. During the initial phase, the researcher carried out internal trials from February 28 to July 14 2025, focusing on iterative enhancements of gameplay mechanics and addressing identified technical issues. An online pilot was conducted from May 27 to June 21, 2025, involving five purposively selected students who engaged with the system and provided focused, context-specific feedback. Following the pilot round, a newly formed

experimental group was convened for a 60-minute instructional session on June 27, 2025. In this session, participants engaged in the game, completed a structured questionnaire, and took part in a guided debriefing, resulting in both quantitative and qualitative data collected within a single controlled period.

Table 1: Testing Phases and Procedures

Phase	Testing Method	Participants	Game Access	Time Allocation
Internal Testing	Iterative	The Researcher	Development & Adjustments	February 28th 2025 – July 14th 2025
Pilot Test	Online	5 Students	Early access, provide feedback	May 27th 2025 – June 1st 2025
Evaluation	Classroom	15 Students	Playtest, students' feedback after playtest	June 27 th 2025. 60 min (10 min adaptation, 40 min playtest, 10 min questionnaire)

Table 2: Likert Scale

Quantitative Analysis	Score
SA (Strongly Agree)	5
A (Agree)	4
N (Neutral)	3
D (Disagree)	2
SD (Strongly Disagree)	1

Source: adopted from Gungor et al. (2022)

Descriptive statistics provided the analytical basis for the quantitative data obtained from the administered questionnaires. Responses recorded on a five-point Likert scale (Table 2) were evaluated against established feasibility criteria (Table 3). Averages for each item were calculated and subsequently transformed into percentage values. A predetermined cut-off of 61% signifies acceptable viability, in accordance with Riduwan (2020). To enhance the credibility of the results, a triangulation strategy was employed, in which the quantitative findings from student questionnaires were cross-examined with qualitative corroboration from expert evaluations and observations gathered from structured interviews with teachers.

Table 3: Feasibility Criteria

Average Score	Category
0% - 20%	Highly Infeasible
21% - 40%	Infeasible
41% - 60%	Neutral
61% - 80%	Feasible
81% - 100%	Highly Feasible

Source: adopted from Bungudi (2023)

FINDINGS AND DISCUSSION

1. Findings

The evaluation of the *English Survivors* game integrated three complementary strategies: expert validation, student questionnaires, and educator interviews. In the closing stage, a purposive sample of fifteen secondary students engaged with the game, after which a media specialist and a subject-matter expert undertook a concurrent analysis. Their review centered on three domains: the usability of the user interface, the pedagogical efficacy of the learning activities, and the overall technical reliability of the platform.

a. Student Evaluation

Students' evaluation demonstrated widespread approval across three key dimensions: content relevance, instructional design quality, and engagement impact. Table 4 indicates that 88% of respondents reported that the vocabulary materials significantly contributed to skill development. The provision of formative feedback received an 86.67% approval rate, confirming its effectiveness in clarifying recurring error patterns. A total of 89.3% reported that gameplay significantly enhanced vocabulary acquisition, while 85.34% noted that the inclusion of quiz components increased their enjoyment of the learning experience. Survey results indicated a moderate, yet generally positive, sentiment concerning usability. A total of 72% respondents said the installation process was simple, while only 30% said they occasionally had trouble navigating. In contrast, 76% indicated no recurring technical issues, while 70.67% assessed the overall interface as sufficiently intuitive.

Table 4: Student Evaluation Result

Aspects	Item Statement	Options					Total Score	T(%)
		SD	D	N	A	SA		
Game Content	a. The game content was relevant to improving my English vocabulary	0	0	0	9	6	66	88
	b. The vocabulary quizzes were appropriately challenging	0	0	3	7	5	62	82.67
	c. The feedback provided after quizzes helped me understand my mistakes	0	0	0	10	5	65	86.67
	d. The words and concepts presented in the game were useful for real-life application	0	0	2	11	2	60	80
	e. The game effectively strengthens my vocabulary learning	0	0	1	6	8	67	89.3
Game Design and Functionality	f. The game was easy to install and access	0	1	6	6	2	54	72
	g. The interface and controls were intuitive and user-friendly	0	0	5	8	2	57	76
	h. The game ran smoothly without major technical problem	0	1	6	7	1	53	70.67
	i. The instructions within the game were clear and easy to follow	0	1	1	10	3	60	80
	j. I was able to navigate the game without difficulty	0	0	6	6	3	60	80

Student Engagement and Interactivity	k.	The game kept me engaged and motivated to continue playing	0	0	2	10	3	61	81.3
	l.	The integration of quiz and gameplay made learning more enjoyable	0	0	0	11	4	64	85.34
	m.	The difficulty level adjusted well to my vocabulary skills	0	0	2	10	3	61	81.3
	n.	I felt encouraged to improve my vocabulary through repeated gameplay	0	0	1	10	4	63	84
	o.	I would recommend this game to other students for learning vocabulary	0	0	4	8	3	59	78.6

Source: adopted from Jebb et al. (2021)

$$Ovr(\%) = \frac{T(\%)}{Is} = \frac{1215.25}{15} = 81\%$$

English Survivors has an effectiveness rating of 81%, which qualifies it as an effective instructional tool, although the areas of overall usefulness, ease of installation, and clarity of instructions may be enhanced.

b. Expert Validation

A media expert assigned the platform a score of 39 out of a maximum of 40 points, representing 97.5%, praising its outstanding usability, interactivity, accessibility, and innovative design (Table 5). The single-point deduction resulted from the researcher's explanatory guidelines, which were deemed insufficiently concise for newcomers to use.

Table 5: Media Expert Evaluation

Item Statement	Score					Total
	1	2	3	4	5	
Clarity of the program instruction				√		4
Effectiveness of the learning media					√	5
Compatibility in smartphones and web					√	5
The ease of application management					√	5
Utilization of interactive design					√	5
Sound clarity					√	5
Creativity of design					√	5
Appropriate selection of application or software or tool types for development					√	5
Total Score						39/40

Source: adopted from Suardana (2023)

$$Ps = \frac{S}{N} \times 100\% = \frac{39}{40} \times 100\% = 97.5\%$$

A content expert, familiar with the curriculum's lexical objectives, awarded a perfect score of 40 out of 40, thereby confirming complete alignment with the designated vocabulary acquisition goals (Table 6).

Table 6: Content Expert Evaluation

Item Statement	Score					Total
	1	2	3	4	5	

The learning objective stated clearly	√	5
Interactivity in design	√	5
The scope and depth of learning objectives	√	5
Contextuality between learning objectives and games	√	5
Compatibility of learning strategies	√	5
Ease to understanding	√	5
The accuracy and consistency of the games	√	5
Consistency of the games with learning objectives	√	5
Total Score		40/40

Source: adopted from Suardana (2023)

$$Ps = \frac{S}{N} \times 100\% = \frac{40}{40} \times 100\% = 100\%$$

c. Teacher Interview

Both teachers affirmed that the content within the gaming platform met the required curricular objectives while also aligning learner engagement with the necessary cognitive challenge for meaningful academic results. Complete documentation revealed significant advancements in vocabulary retention, increased learner motivation, and prolonged instances of concentrated, critical thinking throughout the instructional sessions. Teacher A emphasized the importance of aligning high cognitive demands with intrinsic enjoyment, whereas Teacher B stressed the need for targeted tutorial scaffolding designed to support novice learners.

“In the game, there is a feature, the main one being the quiz. Then there is the game itself. When the game is played, it involves searching, and there is a reward to find. Additionally, when trying to open a door, a question appears... These features in the game really encourage (participation).” (Teacher A, personal communication, June 11, 2025)

“Maybe a suggestion for the tutorial would be to add more details, as it currently only includes instructions on how to attack, move, and so on. When playing the game, after attacking the enemy, there is a quiz for the next level. It would be helpful if the tutorial also explained how to navigate or handle transitions between different game stages, like moving from attacking to answering the quiz.” (Teacher B, personal communication, June 11, 2025)

2. Discussion

The results validate the feasibility and educational advantages of utilizing game-mediated vocabulary instruction in English-as-a-foreign-language (EFL) settings. Both quantitative and qualitative analyses indicate that participation in the game supports effective vocabulary retention and simultaneously increases student engagement, thereby contributing to the existing literature on the effectiveness of game-based instruction (Alibakhshi et al., 2025; Zhao et al., 2022). The instructional design integrates immediate feedback and advancing interactive challenges, aligning with Nation’s (2022) assertion that intentional vocabulary acquisition is best facilitated by distributed retrieval and repeated exposure.

The statistical significance of the expert reviews underscores the necessity for strict compliance with instructional design standards, as outlined in the ADDIE model (Branch, 2010). The presence of well-defined learning objectives and a coherent learner pathway, coupled with a systematic analysis and design of formative and summative evaluative data, are critical determinants of the overall effectiveness of the learning application. Previous research has included prototype vocabulary-expansion iterations, notably the significant study by Ishaq et al. (2022) and the recent analysis by Alexandre

et al. (2023).

However, earlier empirical studies have generally relied on implicit instructional theories, lacking comprehensive analytic reviews and systematically demanded learner feedback. The current experiment, referred to as *English Survivors*, utilizes on-demand pedagogical analytic frameworks through the integration of real-time performance scoring, optional practice parts, and immediate feedback. The iteratively embedded design options, validated by the evaluative framework of Sharmin & Barmaki (2024), significantly enhance learner engagement. Real-time feedback and intentional revisit cycles strengthen cognitive self-regulation and support ongoing formative self-assessment.

The study obtains its most definitive validation through systematic triangulation of empirical evidence sourced from three interrelated participants: students, teachers, and expert specialists. This interrelated approach significantly improves internal and external validity, while also uncovering and organizing refined practices that integrate pedagogical, technical, and evaluative domains. The study utilizes a successive-refinement design, allowing for the ongoing integration of evidence and judgments provided by participants into prototype workflows. This approach facilitates a recursive evaluative cycle that adapts strategically to emerging patterns of use and meaning.

However, there were three main limitations noted. The sample size was limited and focused on a specific geographic area; thus, the applicability of the findings to larger populations is uncertain. A minority of participants reported challenges with navigation and the clarity of instructional content. This suggests that future iterations of the intervention could benefit from a more comprehensive initial introduction segment, along with mechanisms for delivering real-time adaptive hints. Third, the intervention lacked pre-test and post-test assessments of vocabulary acquisition, preventing the collection of direct quantitative metrics that could support the assertion of pedagogical efficacy.

Analysis indicates that vocabulary growth is significantly enhanced when educational content is delivered through systematic game design, particularly when game mechanics are adjusted based on student feedback and subsequently evaluated by subject matter experts. This inquiry establishes a procedural framework for future research, including the development of an educational-specific evaluation group, the progressive relationship of related linguistic sub-skills, and the design of durability measures implemented over extended time periods.

CONCLUSION

This study presents the development and initial evaluation of *English Survivors*, an interactive platform designed to support intentional vocabulary acquisition for adolescents engaged in English as a Foreign Language (EFL) instruction. Utilizing the ADDIE model, the design team incorporated interactive quizzes, immediate feedback systems, and a user-focused graphical interface to improve learner engagement and strengthen vocabulary retention. Analysis of quantitative and qualitative sources gathered from students, teachers, and experts reveal consistently favourable opinions. Student survey responses revealed increased motivation and satisfaction, with 88% considering the vocabulary relevant and 86.67% recognizing the effectiveness of the feedback provided. Expert evaluations confirmed these findings, as a multimedia expert assigned a score of 97.5% and a language-content analyst awarded a perfect 100%.

Evidence indicates that the instructional application achieved a balance between situational engagement hints and defined teaching objectives, effectively serving as a

controlled mechanism for the assimilation of instrumental vocabulary. Complementary technical analyses identified deficiencies in visual clarity and user-centered navigational coherence. These drawbacks highlight the need for iterative improvement, which includes, among other things, creating more complex lesson plans, calibrating the trajectory of increasing task demands, and offering improved instructional dashboards that let teachers see the long-term trends in student performance.

The findings confirm that well-structured game-based environments serve as effective supplementary tools for vocabulary acquisition. Future research should broaden demographic diversity and evaluate long-term learning outcomes, particularly the retention and transfer of vocabulary content. The integration of related linguistic abilities, personalized learning pathways, and collaborative gaming features may enhance instructional impact and the platform's scalability for broader implementation.

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PENGEMBANGAN MODUL PEMBELAJARAN BERBASIS *PROJECT BASED LEARNING* UNTUK MENINGKATKAN KETERAMPILAN PROSES SAINS DAN BERPIKIR KRITIS SISWA

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ABSTRAK, Penelitian ini mengembangkan modul pembelajaran berbasis *Project Based Learning* (PjBL) yang valid, praktis, dan efektif untuk meningkatkan keterampilan proses sains serta kemampuan berpikir kritis siswa. Jenis penelitian ini adalah penelitian pengembangan dengan menggunakan model *Analysis, Design, Development, Implementation Evaluation* (ADDIE). Uji Validasi modul ini dinilai oleh dua ahli materi, media, dan bahasa, sedangkan uji kepraktisan dilakukan melalui observasi pembelajaran dengan modul di kelas dan kuesioner guru serta siswa. Selain dari pada itu uji keefektifan modul ini dinilai dengan menggunakan perhitungan N-gain dan kuesioner guru serta siswa. Modul ini diujicobakan pada kelas 7G SMP Negeri 3 Sugio, Kabupaten Lamongan, yang terdiri dari 24 siswa. Hasil menunjukkan bahwa modul ini: (1) memiliki tingkat validitas tinggi dengan skor 4,4 (kategori “sangat baik”); (2) dinilai praktis dalam pembelajaran IPA (Biologi), dengan skor kuesioner 4,3 (“sangat baik”) dan hasil observasi 4,1 (“baik”); dan (3) terbukti efektif dengan peningkatan N-gain sebesar 0,4 (kategori “sedang”) serta skor angket 4,1 (“baik”). Berdasarkan hasil uji kevalidan, kepraktisan dan keefektifan dapat ditarik kesimpulan bahwa modul pembelajaran berbasis PjBL ini layak diterapkan karena telah memenuhi aspek validitas, kepraktisan, dan efektivitas dalam mendukung peningkatan keterampilan proses sains dan kemampuan berpikir kritis siswa pada pembelajaran IPA (Biologi).

Kata Kunci: Modul Pembelajaran, PjBL, Keterampilan Proses Sains Dan Berpikir Kritis

ABSTRACT, This research designs a valid, practical, and effective Project Based Learning learning module to improve students' science process skills and critical thinking. The type of this research is Research and Development (R&D). The method used in this research is Analysis, Design, Development, Implementation, Evaluation (ADDIE). The validity test was conducted by 2 experts. The practicality test included classroom observation, and teacher and student response questionnaires. The effectiveness test included the N-gain test and teacher and student response questionnaires. The testing of this module was carried out at SMP Negeri 3 Sugio, Lamongan in class 7 G that consists of 24 students. The results of this study stated that (1) this module is valid by experts with a score of 4.4 with the criteria of "very good"; (2) this modul is practical for teaching Science (Biology) from the results of teacher and student responses got a score of 4.3 with the criteria of "very good", from the results of observations got a score of 4.1 with the criteria of "Good"; (3) this module is effective for the teaching from the result of N-gain calculation obtained score 0.4 with the criteria of "moderate". Meanwhile, from the results of the teacher and student response questionnaire got score 4.1 with the criteria of "Good". Thus, it can be concluded that the development of this PjBL-based learning module is feasible in terms of validity, practicality and effectiveness in improving students' scientific process skills and critical thinking in science learning (Biology).

Keywords: Learning Module, PjBL, Science Process Skills and Critical Thinking

PENDAHULUAN

Pendidikan di era modern menghadapi tantangan yang semakin beragam dan dinamis. Tujuan utama dari pendidikan saat ini adalah menyiapkan siswa agar mampu beradaptasi

dengan perubahan sosial, perkembangan teknologi, serta tuntutan dunia kerja yang menekankan keterampilan berpikir kritis, bekerja sama, dan berkreasi sebagai bagian dari kompetensi abad ke-21 (Lubis dkk., 2023). Menurut Sari dkk. (2019), Keterampilan Proses Sain (KPS) mencakup kemampuan melakukan penelitian, mengomunikasikan hasil, serta memiliki sikap ilmiah. Keterampilan tersebut menjadi aspek penting yang membantu siswa menyesuaikan diri dengan perkembangan zaman sekaligus menjadi dasar dalam pemecahan masalah. Oleh karena itu, keterampilan ini perlu ditanamkan sejak dini melalui berbagai strategi pembelajaran yang tepat.

Laporan Programme for International Student Assessment (PISA) mengungkapkan bahwasanya dari tahun ke tahun Indonesia masih termasuk dalam kategori capaian rendah (Goodstat, 2024). Kondisi ini mengindikasikan bahwa siswa Indonesia mempunyai kompetensi di bawah rata-rata internasional. Salah satu faktor penyebabnya adalah lemahnya kemampuan berpikir kritis yang berpengaruh terhadap perkembangan kognitif dan keterampilan adaptasi siswa.

Adapun beberapa faktor yang mempengaruhi keterampilan berpikir kritis siswa; penggunaan model pembelajaran yang tidak kompatibel merupakan salah satunya. Hasil studi menunjukkan bahwa pembelajaran biologi di sekolah masih menggunakan pendekatan konvensional yang berpusat pada guru dan menekankan hafalan. KPS dan keterampilan berpikir kritis siswa SMP masih rendah karena materi ajar yang kurang memadai untuk mengajarkan KPS, serta metode ceramah yang lebih berfokus pada penguasaan teori daripada keterlibatan siswa dalam kegiatan investigasi (Jumanir dkk., 2024).

Sejumlah penelitian membuktikan bahwa implementasi model pembelajaran berbasis PjBL mampu meningkatkan prestasi belajar siswa karena mereka menemukan cara belajar secara mandiri melalui kerja sama dalam konteks nyata (Surya dkk., 2018; Made dkk., 2022; Azhari dkk., 2022). Penelitian pengembangan juga membuktikan bahwa modul pembelajaran berbasis proyek dapat berkontribusi positif terhadap peningkatan hasil belajar siswa (Novianto dkk., 2018; Agung dkk., 2022; Rindy Dwita Ayu Lestari dkk., 2024). Dengan demikian, penggunaan modul biologi yang dipadukan dengan PjBL diharapkan menjadi alternatif yang efektif untuk mengatasi tantangan pembelajaran IPA, khususnya pada bidang biologi.

Dengan demikian, peneliti ingin meningkatkan KPS siswa dan kemampuan berpikir kritis dengan membuat modul pembelajaran berbasis PjBL yang dapat dievaluasi dari segi kevalidan, kepraktisan, dan keefektifan.

KAJIAN TEORI

Keterampilan proses sains merupakan kecakapan yang didapatkan oleh siswa dari kegiatan belajar mengajar, yang mencakup kecakapan melakukan penyelidikan ilmiah, mengomunikasikan temuan, serta menampilkan sikap ilmiah. Keterampilan ini melibatkan tiga dimensi utama, yaitu keterampilan kognitif (berpikir dan bernalar), keterampilan manual (menggunakan alat dan bahan, melakukan pengukuran, serta merakit peralatan), dan keterampilan sosial (bekerja sama serta berkomunikasi dalam kelompok).

Menurut B. Widodi dkk. (2023), efektivitas pembelajaran dan keterampilan proses sains siswa tidak hanya dipengaruhi oleh potensi awal berupa pengalaman atau pengetahuan sebelumnya, tetapi juga sangat ditentukan oleh kualitas lingkungan belajar, khususnya

profesionalisme guru. Pendidik yang profesional dapat merencanakan dan mengawasi proses pembelajaran secara efektif untuk membantu siswa mengembangkan pengetahuan, sikap, dan kemampuan ilmiah mereka. Keterampilan proses dapat dianggap sebagai tujuan pembelajaran. Sesuai dengan taksonomi yang dikembangkan oleh Benjamin S. Bloom pembelajaran melibatkan domain pengetahuan, sikap, dan keterampilan, yang ketiganya saling terhubung untuk pengembangan kemampuan proses ilmiah.

Menurut Rahayu & Miterianifa (2023), berpikir kritis merupakan kemampuan berpikir reflektif dan rasional dalam menilai bukti serta argumen. Sementara itu, Parameswari & Kurniyati (2020) menjelaskan bahwa berpikir kritis melibatkan proses analisis sistematis, evaluasi informasi secara tepat, dan pengambilan keputusan yang logis untuk memecahkan masalah.

Dalam mengambil keputusan yang baik dan benar, siswa dianggap perlu untuk meningkatkan kemampuan dalam berpikir kritis dalam kehidupan sehari-hari di lingkungan sekolah ataupun diluar lingkungan sekolah. Kemampuan ini tidak hanya memperluas pengetahuan dan membantu memahami permasalahan secara mendalam, tetapi juga memungkinkan seseorang menyampaikan pendapat dengan keyakinan yang didukung bukti serta alasan yang kuat, dan mencapai kesimpulan melalui pertimbangan logis.

Modul pembelajaran adalah jenis sumber daya instruksional yang terstruktur dan mencakup sejumlah aktivitas pembelajaran yang telah direncanakan sebelumnya untuk memfasilitasi peserta didik meraih tujuan pembelajaran yang telah ditentukan. (Aceng Lukman dan Shidqon Famulaqih, 2024). Selain memiliki strategi yang berguna, petunjuk, deskripsi materi, dan metode untuk mengevaluasi kemajuan belajar, modul juga menunjukkan desain pembelajaran yang memungkinkan siswa belajar secara mandiri dengan arahan guru (Daryus dkk., 2021).

Pembelajaran menggunakan modul tidak hanya menekankan pada penguasaan teori, tetapi juga dikembangkan dengan mempertimbangkan konteks lingkungan sekitar. Modul berperan sebagai instrumen pembelajaran yang mencakup materi, metode, kriteria penilaian, dan evaluasi untuk mencapai tujuan belajar yang ditetapkan. Selain itu, modul merupakan bahan ajar dengan isi yang spesifik dan relatif ringkas, dirancang agar siswa dapat mencapai kompetensi tertentu (Zega dkk., 2024).

Thomas J.W. (dalam Uum Murfiah, 2017, dikutip oleh Siswanto, 2023) PjBL digambarkan sebagai suatu model pembelajaran yang menempatkan peserta didik sebagai pusat kegiatan belajar dengan cara melibatkan siswa dalam pelaksanaan sebuah proyek. Dalam model ini, siswa belajar secara mandiri sekaligus menghasilkan produk nyata sebagai bentuk capaian pembelajaran. PjBL memiliki berbagai keunggulan, antara lain melatih keterampilan berpikir, kemampuan memecahkan masalah, dan kreativitas. Selain itu, model ini juga efektif dalam membantu siswa mengatur diri serta meningkatkan rasa percaya diri.

Tahapan dalam model PjBL meliputi: (1) merumuskan pertanyaan utama, (2) merancang desain proyek, (3) menyusun jadwal bersama antara guru dan siswa, (4) melakukan pemantauan terhadap pelaksanaan proyek, (5) melakukan penilaian atas hasil proyek, serta (6) melaksanakan refleksi dan evaluasi pembelajaran bersama guru dan siswa.

Banyak penelitian menunjukkan betapa efektifnya PjBL dalam meningkatkan kemampuan KPS dan berfikir kritis siswa. Misalnya, modul biologi berbasis keterampilan berpikir kritis yang dikembangkan oleh Husna dkk. (2021) menunjukkan validitas yang

tinggi karena integrasi yang sukses dari indikator berpikir kritis seperti interpretasi, analisis, evaluasi, dan inferensi. Temuan ini menyoroti betapa pentingnya menyediakan bahan ajar yang secara khusus mengembangkan kemampuan berpikir tingkat tinggi.

METODE PENELITIAN

Penelitian ini diklasifikasikan sebagai penelitian pengembangan karena penelitian ini ditujukan untuk mengembangkan produk baru atau meningkatkan produk yang sudah ada sambil mengevaluasi efektivitas produk tersebut. (Hermina dkk., 2024; Sugiyono, 2019). Model pengembangan *Analysis, Design, Development, Implemenation, Evaluation* (ADDIE) karya Dick dan Carry adalah model pengembangan yang digunakan. (Hanida & dkk., 2023).

Selama fase *analysis*, kebutuhan telah diidentifikasi, kurikulum telah dievaluasi, dan karakteristik siswa telah diteliti. Selama fase *design*, fokus utama adalah mengembangkan modul pembelajaran biologi dan sains yang menerapkan paradigma Pembelajaran Berbasis *Project Based Learning*. Langkah selanjutnya dalam proses *development* adalah melibatkan ahli materi pelajaran, media, dan bahasa untuk memvalidasi modul pembelajaran tersebut. Peneliti mengevaluasi kegunaan dan efektivitas modul selama fase *implementation*. *Evaluation* adalah fase terakhir, di mana peneliti melakukan revisi pada modul PjBL berdasarkan umpan balik dari survei tanggapan guru dan siswa.

Uji validitas modul dilaksanakan oleh dua orang ahli materi, media, dan bahasa yaitu dari dosen dan guru senior. Uji validitas ini menggunakan instrumen berbentuk ceklis yang disesuaikan dari instrumen yang dikembangkan oleh Badan Standar Nasional Pendidikan (BSNP, 2014). Instrumen tersebut mencakup aspek kelayakan isi dan penyajian, kelayakan kegrafikan, serta kelayakan bahasa.

Desain modul pembelajaran berbasis PjBL diuji coba secara terbatas pada kelas 7G SMP Negeri 3 Sugio yang melibatkan 24 siswa sebagai subjek penelitian. Kepraktisan modul dinilai melalui angket respon guru dan siswa, serta lembar observasi proses pembelajaran di kelas yang diamati oleh dua observer. Sementara itu, uji keefektifan modul dilaksanakan dengan membandingkan hasil tes awal dan tes akhir untuk mengetahui peningkatan keterampilan proses sains dan kemampuan berpikir kritis. Selain itu, kuesioner guru dan siswa juga digunakan untuk menilai tingkat efektivitas modul yang dikembangkan.

Data yang didapat selanjutnya ditabulasi dan dianalisis. Data dari angket dan observasi ditabulasi dan selanjutnya dihitung nilai rata-ratanya. Nilai rata-rata yang diperoleh selanjutnya dibandingkan dengan kriteria yang telah dirumuskan, sebagaimana ditunjukkan pada tabel 1 sebagai berikut:

Tabel 1. Pedoman Kriteria Nilai Rata-Rata

Interval Rata-rata Skor	Kriteria
$X > 4,2$	Sangat Baik
$3,4 < X \leq 4,2$	Baik
$2,6 < X \leq 3,4$	Cukup
$1,8 < X \leq 2,6$	Kurang
$X \leq 1,8$	Sangat Kurang

Untuk membandingkan nilai tes awal dan tes akhir peneliti mengaplikasikan rumusan *N-gain*. Setelah nilai *N-gain* didapatkan kemudian peneliti membandingkan dengan kriteria *N-gain* sebagaimana Tabel 2 berikut ini:

Tabel 2. Kriteria *N-gain*

No	N-gain (g)	Kriteria
1	$g < 0,3$	Rendah
2	$0,3 \leq g < 0,7$	Sedang
3	$0,7 \leq g \leq 1$	Tinggi

HASIL PENELITIAN DAN PEMBAHASAN

Modul Pembelajaran Berbasis PjBL terdiri dari beberapa komponen penting. Bagian **pendahuluan** mencakup halaman sampul, kata pengantar, tujuan pembelajaran, dan petunjuk penggunaan modul. Bagian **kegiatan belajar** menyajikan materi secara sistematis, dilengkapi dengan ilustrasi, soal latihan, dan langkah-langkah pengalaman belajar yang sesuai dengan sintak pembelajaran PjBL: merumuskan pertanyaan dasar, merancang proyek, penjadwalan, memantau implementasi, melakukan penilaian, dan melakukan refleksi atau evaluasi. Bagian **rangkuman** mencakup konten esensial dari setiap aktivitas pembelajaran. Bagian **evaluasi** mencakup soal latihan atau penilaian untuk mengukur pemahaman siswa terhadap topik. Bagian **glosarium** merupakan kumpulan istilah-istilah sulit beserta definisinya. Bagian **daftar pustaka** mencakup rujukan dalam penyusunan modul. Komponen-komponen ini sesuai dengan struktur modul yang diusulkan oleh Rusman (2023).

Selain itu, modul pembelajaran berkualitas harus memenuhi acuan yang dikembangkan oleh Badan Standar Nasional Pendidikan (BSNP, 2014), meliputi kesesuaian konten dan penyajian, relevansi grafis, serta kesesuaian bahasa. Hasil penilaian validitas untuk modul pembelajaran berbasis PjBL ditampilkan dalam Tabel 3 di bawah ini.

Tabel 3. *Rekap Hasil Validasi Ahli Materi, Media, dan Bahasa Terhadap Modul Berbasis PjBL*

No	Kriteria	Validasi Ahli		
		Ahli 1	Ahli 2	Rata rata
1	Validasi Ahli Materi	4,3	4,3	4,3
2	Validasi Ahli Media	4,4	4,6	4,5
3	Validasi Ahli Bahasa	4,3	4,4	4,4
Rata-rata				4,4

Berdasarkan hasil validasi aspek materi, media, dan bahasa, diperoleh skor rata-rata sebesar 4,4. Nilai ini kemudian dibandingkan dengan kriteria penilaian kualitas modul pembelajaran pada Tabel 1. Skor 4,4 termasuk dalam interval 4,2–5,0 dengan kategori “sangat baik”. Temuan ini mengindikasikan bahwa modul yang dikembangkan sudah selaras dengan tahapan pembelajaran berbasis PjBL serta layak diterapkan dalam pembelajaran IPA (Biologi) guna meningkatkan KPS dan kemampuan berpikir kritis siswa.

Hasil uji kepraktisan yang diperoleh dari respon kuesioner guru dan siswa SMP Negeri 3 Sugio disajikan pada Tabel 4 berikut ini.

Tabel 4. *Rekap Hasil Respons Guru dan Siswa Terhadap Modul Pembelajaran Berbasis PjBL*

No	Angket Response Guru dan Siswa	Nilai Rata-rata
1	Angket Respon Guru	3,9
2	Angket respons Siswa	4,7
Rata-rata		4,3

Rata-rata skor respon guru adalah 3,9, sementara respon siswa mencapai 4,7, menurut hasil angket. Secara keseluruhan, skor rata-rata yang dicapai adalah 4,3. Dibandingkan dengan

kriteria praktis untuk modul pembelajaran dalam Tabel 1, skor 4,3 diklasifikasikan sebagai “sangat baik” dalam rentang 4,2–5,0. Tabel 5 di bawah ini menampilkan temuan observasi mengenai implementasi modul pembelajaran berbasis PjBL di dalam kelas.

Tabel 5. *Rekap Hasil Observasi Terhadap Pembelajaran Dengan Modul berbasis PjBL*

No	Observer	Nilai Rata-rata
1	Observer 1	4,2
2	Observer 2	4,1
	Rata-rata	4,2

Berdasarkan hasil observasi saat proses pembelajaran, rata-rata skor *observer* 1 adalah 4,2, sedangkan rata-rata skor *observer* 2 adalah 4,1, sehingga rata-rata keseluruhan adalah 4,2. Jika dibandingkan dengan kriteria penilaian dalam Tabel 1, skor 4,2 diklasifikasikan sebagai “baik” dalam rentang 3,4–4,2. Dengan demikian dapat disimpulkan bahwa modul ini cocok digunakan dalam kegiatan pembelajaran.

Kepraktisan modul didukung oleh penyusunan materi yang relevan dengan contoh-contoh dalam kehidupan sehari-hari. Penyajiannya mengikuti urutan dari mudah ke sulit serta dari hal-hal konkret menuju abstrak. Selain itu, modul ini membantu siswa mengembangkan keterampilan berpikir kritis mereka, mendorong mereka untuk mencari solusi melalui aktivitas diskusi, dan memberikan kesempatan bagi mereka untuk mengembangkan rasa ingin tahu alami mereka. Karena menggunakan terminologi yang sederhana, jelas, dan mudah dipahami, modul ini dianggap cocok untuk penerapan praktis.

Uji efektivitas modul berbasis PjBL dievaluasi melalui tes awal dan tes akhir, yang menunjukkan peningkatan hasil belajar siswa setelah implementasi modul. Perhitungan *N-gain* menghasilkan skor 0,4. Dibandingkan dengan persyaratan *N-gain* dalam Tabel 2, angka ini berada dalam rentang 0,3–0,7, yang dikategorikan sebagai “sedang”. Hasil tersebut mengindikasikan bahwa peningkatan hasil belajar siswa dari penilaian awal hingga penilaian akhir bersifat sedang.

Hasil uji keefektifan juga diperoleh melalui kuesioner guru dan siswa, yang disajikan pada Tabel 6 berikut.

Tabel 6. *Rekap Hasil Respon Guru dan Siswa Terhadap Modul Berbasis PjBL*

No	Angket Response Guru dan Siswa	Nilai Rata-rata
1	Angket Respon Guru	4,0
2	Angket respons Siswa	4,1
	Rata-rata	4,1

Berdasarkan hasil angket, respon guru menunjukkan rata-rata 4,0, sedangkan respon siswa memperoleh rata-rata 4,1. Secara keseluruhan, nilai rata-rata respon guru dan siswa adalah 4,1. Jika dibandingkan dengan kriteria keefektifan pada Tabel 1, maka skor tersebut berada pada rentang 3,4 – 4,2 dengan kategori “baik”.

Modul ini dikembangkan menggunakan model pembelajaran PjBL yang terbukti efektif dalam meningkatkan keterampilan proses sains dan kemampuan berpikir kritis siswa

oleh beberapa penelitian, termasuk penelitian yang menyatakan bahwa Project Based Learning (PjBL) menjadi salah satu solusi yang sesuai dengan karakteristik pembelajaran abad ke-21 (Shaumuristi, 2025). Modul ini menawarkan pertanyaan kontekstual dan terbuka yang mendorong praktik mandiri dan mengembangkan keterampilan belajar mandiri pada siswa. Modul ini mencakup lembar kerja dengan tugas yang dirancang untuk kerja kelompok di kelas.

Adapun Hasanah dkk. (2018) melakukan penelitian yang menunjukkan bahwa modul berbasis PjBL tentang suhu dan kalor secara signifikan meningkatkan KPS dan kemampuan berpikir kritis siswa. Hal ini dibuktikan dengan skor *N-gain* yang tinggi pada indikator berpikir kritis, yaitu pengamatan, prediksi, evaluasi, dan sintesis.

Hasil implementasi di lapangan menunjukkan bahwa pada tahap awal penggunaan modul masih diperlukan proses adaptasi. Sebagian siswa belum membaca petunjuk atau aturan di bagian awal modul, sehingga kebingungan mengenai langkah yang harus dikerjakan dan lebih memilih bertanya langsung kepada guru. Selain itu, ditemukan bahwa guru masih mengalami kesulitan dalam memberikan penilaian PjBL karena belum tersedia petunjuk penilaian yang jelas dan rubrik penilaian yang lengkap, sehingga penilaian cenderung kurang akurat.

Berdasarkan hasil temuan, peneliti memandang perlu adanya pengembangan lebih lanjut terhadap modul ini agar mampu memberikan dampak yang lebih optimal dalam meningkatkan hasil belajar siswa. Keberhasilan proses pembelajaran juga sangat dipengaruhi oleh kesesuaian modul dengan kebutuhan siswa. Oleh karena itu, hasil penilaian akhir menunjukkan bahwa modul pembelajaran berbasis PjBL cocok untuk diterapkan dalam mata pelajaran IPA (Biologi) guna meningkatkan KPS dan kemampuan berpikir kritis siswa.

KESIMPULAN

Modul pembelajaran berbasis PjBL yang dirancang telah dievaluasi oleh dua ahli dan dinyatakan valid dengan peringkat “sangat baik.” Modul tersebut kemudian dievaluasi untuk menentukan kegunaannya dan efektivitasnya. Hasil evaluasi kelayakan, yang diperoleh dari umpan balik guru dan siswa, menunjukkan peringkat “sangat baik,” sementara temuan dari pengamatan pembelajaran menghasilkan peringkat “baik.” Uji efektivitas menunjukkan bahwa peningkatan hasil belajar siswa, yang ditentukan melalui perhitungan *N-gain*, masuk dalam kategori “sedang,” namun respon dari guru dan siswa mengenai efektivitas modul diklasifikasikan sebagai “baik.”

Dengan demikian, dapat ditarik kesimpulan bahwa modul pembelajaran berbasis PjBL ini layak diterapkan, karena telah memenuhi kriteria validitas, kepraktisan, dan efektivitas dalam meningkatkan keterampilan proses sains dan kemampuan berpikir kritis siswa dalam pembelajaran IPA (Biologi.)

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STRATEGI GURU DALAM PEMBELAJARAN BERCERITA SISWA KELAS 4 DI SD NEGERI 2 SUMITA

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ABSTRACT This study aims to analyze the types of strategies and challenges encountered in storytelling instruction for fourth-grade students at SD Negeri 2 Sumita. This research uses a qualitative approach. The data collection methods and instruments used were observation and interviews. The study was conducted at SD Negeri 2 Sumita, with the research subjects being fourth-grade students and their classroom teacher. The results of the study show that: (1) the teacher implemented various storytelling strategies that were communicative, participatory, and interactive. The strategies included the use of visual media such as picture series and videos, small group discussions, practice sessions for storytelling in front of the class, and the provision of direct feedback on students' performances. Each lesson began with a clear explanation of the learning objectives, continued with core activities that actively involved students, and concluded with reinforcement and relevant follow-up assignments. These strategies proved effective in enhancing student participation, creativity, and confidence in oral storytelling; (2) the main challenges faced by the teacher included differences in students' abilities to construct and deliver stories, lack of self-confidence among some students when speaking in front of the class, limited instructional time, and the lack of varied teaching media. Although strategies and media had been used optimally, these obstacles still hindered equitable learning outcomes. To address these issues, the teacher began to apply a gradual approach through small groups and planned to integrate more engaging digital learning technologies to better accommodate students' needs in a flexible and inclusive manner.

Keywords: Teaching Strategies, Storytelling, Elementary School

PENDAHULUAN

Pembelajaran bercerita memiliki peranan yang sangat penting dalam pengembangan keterampilan berbahasa dan sosial siswa di tingkat sekolah dasar. Kemampuan untuk berkomunikasi secara lisan, terutama dalam bentuk bercerita, merupakan salah satu keterampilan fundamental yang perlu dikuasai oleh siswa, karena keterampilan ini berkaitan erat dengan berbagai aspek kehidupan, baik dalam pendidikan, sosial, maupun dunia kerja. Pada tingkat pendidikan dasar, khususnya bagi siswa kelas 4, mereka sudah berada pada fase perkembangan yang cukup matang untuk mulai mengorganisir ide dan informasi secara sistematis serta menyampaikannya dengan jelas di hadapan orang lain. Oleh karena itu, pembelajaran bercerita dapat menjadi alat yang efektif untuk mencapai tujuan tersebut (Suyanto, 2017).

Pembelajaran bercerita masih menghadapi berbagai tantangan, terutama di sekolah-sekolah dasar. Di SD Negeri 2 Sumita, contohnya, banyak siswa yang mengalami kesulitan dalam mengungkapkan ide secara lisan dengan percaya diri. Selain itu, banyak di antara mereka yang tidak menunjukkan minat atau merasa tidak nyaman saat diminta untuk berbicara di depan kelas. Beberapa faktor yang mungkin menjadi penyebab utama fenomena ini meliputi metode pembelajaran yang kurang bervariasi, minimnya penggunaan media yang menarik, serta kurangnya perhatian terhadap kebutuhan belajar individu siswa. Berdasarkan penelitian yang dilakukan oleh Suryani (2018), rendahnya minat siswa dalam pembelajaran lisan seringkali disebabkan oleh kurangnya variasi dalam metode pengajaran dan penggunaan media yang tidak mendukung.

Hal di atas menegaskan pentingnya strategi pembelajaran yang mampu menarik perhatian siswa dan mendorong mereka untuk berpartisipasi secara aktif dalam proses

belajar. Dalam konteks ini, pemilihan metode dan media yang tepat sangatlah penting untuk membantu siswa mengembangkan keterampilan bercerita mereka. Sebagai contoh, penggunaan media visual atau teknologi digital, seperti video, gambar, dan aplikasi interaktif, dapat membantu siswa memahami konsep cerita serta meningkatkan imajinasi dan kreativitas mereka dalam bercerita (Susanto, 2019).

Konteks sosial dan budaya juga berperan dalam perkembangan kemampuan berbahasa siswa. Di Indonesia, khususnya di daerah pedesaan, siswa tidak terbiasa bercerita secara lisan dalam kehidupan sehari-hari. Situasi ini tentu memengaruhi pandangan mereka terhadap pentingnya keterampilan bercerita di sekolah. Oleh karena itu, diperlukan upaya yang lebih besar dari para guru untuk menciptakan lingkungan pembelajaran yang mendukung dan memberikan kesempatan bagi siswa untuk melatih keterampilan berbicara mereka. Mengingat bahwa pembelajaran bercerita memiliki dampak positif terhadap perkembangan sosial dan emosional siswa, seperti meningkatkan rasa percaya diri dan kemampuan sosial, hal ini menjadi alasan yang cukup kuat untuk memperhatikan dan mengembangkan pembelajaran bercerita di kelas 4 SD.

Pembelajaran bercerita dapat dipahami melalui perspektif teori konstruktivisme yang diusulkan oleh Piaget (1983) dan Vygotsky (1978). Menurut teori ini, siswa lebih mampu memahami dan mengingat informasi ketika mereka terlibat secara aktif dalam proses pembelajaran. Dalam konteks ini, bercerita merupakan bentuk pembelajaran aktif yang melibatkan siswa secara langsung, baik dalam menyusun cerita maupun dalam menyampaikannya kepada orang lain. Selain itu, teori sosial budaya yang dikembangkan oleh Vygotsky menekankan pentingnya interaksi sosial dalam proses pembelajaran. Pembelajaran bercerita memberikan kesempatan bagi siswa untuk berinteraksi dengan teman sebaya dan guru, yang pada gilirannya dapat memperkaya pengalaman belajar mereka.

Penelitian yang dilakukan oleh Mulyana dan Darlis (2020) mengungkapkan bahwa sekitar 60% siswa di Indonesia mengalami kesulitan dalam berbicara di depan umum. Temuan ini menunjukkan betapa pentingnya perhatian terhadap pengembangan keterampilan berbicara siswa di tingkat sekolah dasar. Pembelajaran bercerita yang efektif tidak hanya membantu siswa menguasai keterampilan berbicara, tetapi juga memperkuat kemampuan berpikir kritis dan kreativitas mereka. Dengan demikian, meskipun banyak tantangan yang dihadapi, pembelajaran bercerita di SD Negeri 2 Sumita harus menjadi prioritas dalam upaya meningkatkan keterampilan berbahasa siswa. Penting bagi guru untuk mencari strategi yang efektif dalam mengatasi masalah ini, agar siswa dapat mengembangkan kemampuan bercerita mereka secara optimal.

Siswa di SD Negeri 2 Sumita, Bali, menghadapi kesulitan dalam mengembangkan keterampilan berbicara, khususnya dalam bercerita di depan umum. Hal ini tercermin dalam data yang dikeluarkan oleh Dinas Pendidikan Provinsi Bali pada tahun 2021, yang menunjukkan bahwa sekitar 50% siswa SD di Bali kesulitan menyampaikan cerita secara terstruktur dan percaya diri. Masalah ini menjadi lebih mendalam ketika dilihat dari aspek sosial dan akademik siswa. Kemampuan berbicara yang baik sangat diperlukan, tidak hanya untuk presentasi akademik tetapi juga untuk berinteraksi dengan teman sebaya dan guru dalam situasi sosial. Jika keterampilan ini tidak dikembangkan sejak dini, akan mempengaruhi perkembangan komunikasi siswa di masa depan.

Pembelajaran bercerita di tingkat sekolah dasar sangatlah penting, karena ini adalah fase di mana siswa mulai mengembangkan keterampilan berbahasa dengan cara yang lebih terstruktur dan komunikatif. Melalui pembelajaran bercerita, siswa diajarkan untuk mengorganisir pemikiran mereka, menyusun kalimat, dan menyampaikan ide

secara sistematis. Menurut Rahayu (2020), bercerita juga berkontribusi dalam mengembangkan keterampilan mendengarkan yang baik, yang sangat penting dalam komunikasi sehari-hari. Dalam konteks ini, bercerita tidak hanya berkaitan dengan kemampuan berbicara, tetapi juga mencakup kemampuan untuk mendengarkan, memahami, dan memberikan umpan balik yang konstruktif. Keterampilan ini akan bermanfaat bagi siswa tidak hanya di sekolah, tetapi juga dalam kehidupan sosial mereka.

Namun, sebagian besar siswa di Bali, khususnya di SD Negeri 2 Sumita, menghadapi tantangan besar dalam mengikuti pembelajaran bercerita. Salah satu penyebab utama masalah ini adalah metode pembelajaran yang kurang bervariasi. Purnama (2022) menyatakan bahwa banyak guru di Bali masih mengandalkan metode ceramah yang tidak melibatkan siswa secara aktif dalam proses belajar. Akibatnya, siswa merasa bosan dan kurang tertarik untuk berpartisipasi. Padahal, untuk mengembangkan keterampilan berbicara, siswa perlu diberikan kesempatan untuk berlatih secara langsung dan aktif dalam suasana yang mendukung. Oleh karena itu, diperlukan pembelajaran yang lebih interaktif dan kreatif untuk mengatasi masalah ini.

Teori konstruktivisme yang diusulkan oleh Piaget (1983) dan Vygotsky (1978) memberikan landasan yang kuat untuk mendukung pembelajaran bercerita. Piaget menekankan pentingnya pengalaman langsung dalam proses belajar, di mana siswa tidak hanya menerima informasi secara pasif, tetapi juga aktif terlibat dalam membangun pengetahuan mereka sendiri. Sementara itu, Vygotsky menekankan bahwa interaksi sosial sangat penting dalam perkembangan kognitif. Bercerita merupakan salah satu bentuk interaksi sosial yang dapat merangsang perkembangan bahasa siswa. Melalui bercerita, siswa tidak hanya belajar mengorganisir ide, tetapi juga berkomunikasi dengan lebih efektif melalui umpan balik dari teman dan guru.

Siswa yang terlibat aktif dalam pembelajaran bercerita cenderung lebih percaya diri, karena mereka memiliki kesempatan untuk berbicara di depan teman-teman mereka, yang membantu membangun rasa percaya diri. Dewi dan Santosa (2021) menjelaskan bahwa pembelajaran berbasis proyek dapat meningkatkan keterlibatan siswa. Dalam pembelajaran berbasis proyek, siswa bekerja dalam kelompok untuk menciptakan cerita mereka sendiri, yang kemudian dipresentasikan di depan kelas. Proses ini tidak hanya membantu siswa mengembangkan keterampilan berbicara, tetapi juga meningkatkan keterampilan kerja sama, kreativitas, dan kemampuan presentasi mereka.

Penggunaan media digital dalam pembelajaran bercerita juga terbukti efektif dalam meningkatkan keterampilan berbicara siswa. Di Bali, perkembangan teknologi semakin pesat, dan banyak siswa yang lebih tertarik pada pembelajaran berbasis media digital. Aplikasi seperti Canva, Adobe Spark, atau aplikasi pembuat video lainnya memungkinkan siswa untuk membuat cerita dalam bentuk teks, gambar, dan video yang lebih interaktif. Kusuma dan Gunawan (2022) menemukan bahwa penggunaan media digital dalam pembelajaran bercerita membantu siswa lebih memahami materi, lebih tertarik pada pelajaran, dan lebih kreatif dalam menyampaikan ide mereka. Media digital memberikan siswa kebebasan untuk berkreasi, sehingga mereka merasa lebih nyaman dan bersemangat dalam bercerita.

Pembelajaran berbasis teknologi dan penggunaan aplikasi pembuat cerita dapat membantu siswa menyusun ide dengan lebih jelas dan kreatif. Teknologi tidak hanya memfasilitasi siswa dalam mengekspresikan ide, tetapi juga memperkaya pengalaman belajar mereka dengan cara yang menyenangkan. Pembelajaran yang menggunakan aplikasi atau media digital dapat meningkatkan daya tarik dan motivasi siswa dalam mengikuti pelajaran, yang pada gilirannya akan meningkatkan keterampilan berbahasa

mereka secara keseluruhan.

Dalam meningkatkan keterampilan bercerita di SD Negeri 2 Sumita, Bali, diperlukan pendekatan yang lebih inovatif dan mendukung pembelajaran yang interaktif. Guru perlu mengadopsi metode yang memungkinkan siswa lebih terlibat dalam proses pembelajaran, seperti pembelajaran berbasis proyek atau penggunaan teknologi yang menarik. Pendekatan ini diharapkan dapat mendorong siswa untuk lebih percaya diri dan terampil dalam bercerita. Dengan pendekatan yang tepat, siswa akan lebih mudah mengembangkan keterampilan berbicara mereka, yang penting untuk perkembangan akademik dan sosial mereka.

Berdasarkan penjelasan di atas, rendahnya keterampilan bercerita siswa di SD Negeri 2 Sumita, Bali, menunjukkan adanya kebutuhan mendesak untuk menerapkan strategi pembelajaran yang lebih efektif dan variatif. Tantangan utama yang dihadapi adalah metode pembelajaran yang kurang interaktif dan minimnya penggunaan media yang menarik, yang menyebabkan siswa merasa kurang terlibat dan tidak termotivasi dalam proses pembelajaran. Oleh karena itu, penting bagi guru untuk mengadopsi pendekatan yang lebih inovatif, seperti pembelajaran berbasis proyek atau penggunaan media digital, untuk meningkatkan keterampilan bercerita siswa.

Salah satu alasan penting untuk membahas masalah ini adalah karena keterampilan berbahasa, khususnya berbicara, memiliki peran krusial dalam kehidupan siswa di masa depan. Kemampuan untuk mengungkapkan ide secara lisan dengan jelas dan percaya diri akan sangat bermanfaat dalam berbagai aspek kehidupan, baik dalam pendidikan, pekerjaan, maupun kehidupan sosial mereka. Keterampilan bercerita dapat meningkatkan rasa percaya diri siswa, memperkaya kemampuan komunikasi mereka, dan memperbaiki hubungan sosial dengan teman dan guru. Hal ini menjadikan pembelajaran bercerita penting tidak hanya dalam konteks akademik, tetapi juga dalam pengembangan keterampilan sosial yang sangat diperlukan dalam kehidupan sehari-hari.

Penelitian ini diharapkan dapat memberikan wawasan dan panduan bagi pengembangan pembelajaran bercerita di SD Negeri 2 Sumita, Bali, serta di sekolah-sekolah lain secara umum. Dengan mengimplementasikan metode yang lebih efektif dan sesuai dengan kebutuhan siswa, diharapkan keterampilan berbahasa siswa dapat meningkat secara signifikan. Pembelajaran yang kreatif, interaktif, dan berbasis teknologi akan menciptakan pengalaman belajar yang menyenangkan dan mendorong siswa untuk mengasah keterampilan bercerita mereka dengan lebih percaya diri.

METODE PENELITIAN

Jenis penelitian ini adalah kualitatif dengan pendekatan deskriptif kualitatif. Pendekatan kualitatif dipilih karena tujuan penelitian ini adalah untuk memahami dan menggambarkan fenomena yang terjadi dalam pembelajaran bercerita di kelas 4 SD Negeri 2 Sumita. Penelitian deskriptif digunakan untuk menjelaskan dan menganalisis strategi yang diterapkan oleh guru dalam proses pembelajaran bercerita serta dampaknya terhadap pemahaman siswa. Penelitian ini dilakukan di SD Negeri 2 Sumita, yang terletak di Br. Mulung, Desa Sumita, Kecamatan Gianyar, Kabupaten Gianyar, Provinsi Bali. Subjek penelitian ini adalah siswa dan guru wali kelas 4 di SD Negeri 2 Sumita.

Metode pengumpulan data dalam penelitian ini, yaitu observasi dan wawancara. Instrumen penelitian yang digunakan, yaitu lembar observasi dan lembar wawancara. Dalam penelitian ini, data yang diperoleh dari wawancara, observasi, akan dianalisis menggunakan pendekatan analisis data kualitatif. Teknik analisis data ini bertujuan untuk mengidentifikasi dan menggambarkan secara sistematis strategi yang diterapkan oleh

guru dalam pembelajaran bercerita di kelas 4 SD Negeri 2 Sumita.

HASIL DAN PEMBAHASAN

Hasil dan pembahasan menguraikan strategi yang diterapkan oleh guru dalam pembelajaran bercerita, serta berbagai kendala yang muncul selama proses pelaksanaan di kelas 4 SD Negeri 2 Sumita.

Hasil Penelitian

Penelitian ini menghasilkan temuan mengenai strategi yang digunakan guru dalam mengajarkan bercerita, serta berbagai kendala yang dihadapi selama proses pembelajaran di kelas 4 SD Negeri 2 Sumita.

Jenis Strategi Yang Digunakan Guru Dalam Pembelajaran Bercerita Siswa kelas 4 SD Negeri 2 Sumita

Pembelajaran bercerita di sekolah dasar merupakan salah satu bentuk kegiatan literasi yang mampu mengasah kemampuan berbahasa, daya imajinasi, dan kepercayaan diri siswa. Guru memiliki peran sentral dalam merancang strategi yang tepat agar proses bercerita tidak hanya menjadi aktivitas rutin, tetapi juga sebagai sarana membangun kompetensi berbahasa yang menyenangkan dan bermakna. Oleh karena itu, pemilihan strategi yang sesuai sangat memengaruhi keberhasilan pembelajaran, terutama pada siswa kelas 4 yang berada pada tahap perkembangan operasional konkret menuju formal, di mana kebutuhan akan metode yang komunikatif, kreatif, dan interaktif semakin meningkat.

Penelitian ini bertujuan untuk mengungkap jenis strategi yang diterapkan guru dalam pembelajaran bercerita di kelas 4 SD Negeri 2 Sumita. Berdasarkan hasil observasi, ditemukan bahwa guru tidak hanya mengandalkan metode ceramah, tetapi juga mengombinasikan berbagai strategi seperti penggunaan media gambar seri, teknik bermain peran, dan diskusi kelompok kecil. Strategi-strategi ini dirancang untuk mendorong partisipasi aktif siswa, membantu mereka memahami alur cerita, serta menumbuhkan rasa percaya diri saat menyampaikan cerita di depan kelas. Temuan ini memberikan gambaran nyata tentang pendekatan pembelajaran yang adaptif dan sesuai dengan karakteristik perkembangan siswa sekolah dasar. Hasil ini dijabarkan pada table berikut.

Tabel 1. Hasil Observasi

No.	Indikator Observasi	Ya	Tidak
1	Guru memulai pembelajaran dengan menjelaskan tujuan pembelajaran bercerita kepada siswa.	√	
2	Guru menggunakan media pembelajaran untuk mendukung kegiatan bercerita.	√	
3	Guru melibatkan siswa dalam diskusi kelompok untuk merencanakan cerita yang akan diceritakan.	√	
4	Siswa diberikan kesempatan untuk berbagi cerita di depan kelas.	√	
5	Guru memberikan umpan balik atau masukan terhadap cerita yang disampaikan siswa.	√	
6	Guru memberikan kesempatan kepada siswa untuk menilai atau memberi komentar terhadap cerita teman.	√	
7	Siswa menunjukkan kemampuan dalam menyusun cerita dengan struktur yang jelas.	√	
8	Siswa memperlihatkan minat dan perhatian yang tinggi dalam kegiatan bercerita.	√	

9	Guru mengakhiri pembelajaran dengan memberikan rangkuman atau penguatan terhadap materi yang diajarkan.	√
10	Guru memberikan tugas lanjutan atau pekerjaan rumah yang relevan dengan topik pembelajaran bercerita.	√

Berdasarkan hasil observasi terhadap pelaksanaan pembelajaran bercerita di kelas 4 SD Negeri 2 Sumita, dapat disimpulkan bahwa guru telah menerapkan berbagai strategi yang mendukung terciptanya proses pembelajaran yang aktif dan bermakna. Seluruh indikator yang diamati menunjukkan hasil "Ya", yang berarti setiap langkah strategis dalam pembelajaran bercerita telah dilaksanakan dengan baik. Guru memulai pembelajaran dengan menjelaskan tujuan, menggunakan media pembelajaran sebagai alat bantu, serta melibatkan siswa secara aktif dalam diskusi kelompok untuk merancang cerita. Kegiatan bercerita juga tidak hanya bersifat satu arah, melainkan memberikan ruang bagi siswa untuk tampil dan menyampaikan cerita secara lisan di depan kelas.

Lebih lanjut, guru juga memberikan umpan balik atas cerita yang disampaikan siswa, serta mendorong keterlibatan teman sekelas untuk memberikan komentar atau apresiasi terhadap cerita yang disampaikan. Hal ini menunjukkan bahwa strategi yang diterapkan bersifat partisipatif dan reflektif, mendorong siswa untuk berpikir kritis dan menghargai karya teman. Indikator lain seperti kemampuan siswa dalam menyusun cerita dengan struktur yang jelas serta minat yang tinggi dalam kegiatan bercerita menunjukkan bahwa strategi pembelajaran yang diterapkan telah efektif meningkatkan keterampilan berbahasa siswa. Guru pun menutup pembelajaran dengan memberikan penguatan serta tugas lanjutan yang relevan, yang menandakan adanya kesinambungan dalam proses belajar mengajar.

Kendala yang Dihadapi Guru Dalam Menerapkan Strategi Pembelajaran Bercerita di Kelas 4 SD Negeri 2 Sumita

Dalam pelaksanaan pembelajaran bercerita, guru tidak hanya dituntut untuk mampu merancang strategi yang menarik dan sesuai kebutuhan siswa, tetapi juga harus siap menghadapi berbagai kendala yang muncul selama proses pembelajaran berlangsung. Kendala-kendala ini bisa berasal dari faktor internal seperti kesiapan siswa, motivasi belajar, dan keterampilan bahasa, maupun faktor eksternal seperti keterbatasan sarana pendukung dan waktu pembelajaran yang terbatas. Oleh karena itu, penting untuk mengidentifikasi berbagai hambatan yang dihadapi guru agar strategi pembelajaran dapat disesuaikan dan ditingkatkan secara berkelanjutan.

Hasil penelitian di kelas 4 SD Negeri 2 Sumita menunjukkan bahwa meskipun guru telah menerapkan strategi pembelajaran bercerita dengan cukup baik, terdapat beberapa kendala yang menghambat efektivitas pelaksanaannya. Guru mengungkapkan adanya perbedaan kemampuan siswa dalam menyusun dan menyampaikan cerita, keterbatasan waktu untuk membimbing secara individu, serta kurangnya ketersediaan media pembelajaran yang variatif. Selain itu, beberapa siswa masih menunjukkan rasa malu atau tidak percaya diri saat harus tampil di depan kelas, yang menghambat partisipasi aktif mereka dalam kegiatan bercerita. Kendala-kendala ini menjadi perhatian penting dalam upaya pengembangan strategi pembelajaran yang lebih responsif terhadap kebutuhan siswa. Hasil ini dijabarkan pada table berikut.

Tabel 2. Hasil Wawancara Guru Kelas 4

No.	Pertanyaan	Hasil
1	Bagaimana Anda merencanakan pembelajaran bercerita di kelas 4?	Guru merencanakan pembelajaran bercerita dengan menetapkan tujuan pembelajaran, memilih materi cerita yang sesuai dengan tingkat perkembangan siswa, serta menyusun langkah-langkah kegiatan yang melibatkan partisipasi aktif siswa.
2	Apa metode atau strategi yang paling efektif yang Anda gunakan untuk mengajarkan bercerita kepada siswa kelas 4?	Strategi yang dianggap paling efektif meliputi penggunaan gambar seri, diskusi kelompok, dan latihan tampil di depan kelas yang dirancang untuk membangun keberanian dan kreativitas siswa dalam bercerita.
3	Bagaimana Anda mengajak siswa agar tertarik dan aktif dalam pembelajaran bercerita?	Guru mengajak siswa terlibat aktif dengan memberi kesempatan memilih cerita yang disukai, menggunakan pendekatan bermain peran, serta menciptakan suasana pembelajaran yang menyenangkan dan tidak menekan.
4	Apakah Anda menggunakan media tertentu dalam pembelajaran bercerita? Jika iya, media apa yang Anda gunakan dan bagaimana pengaruhnya terhadap proses pembelajaran?	Media yang digunakan antara lain gambar seri, video pendek, dan buku cerita bergambar. Penggunaan media ini membantu siswa memahami alur cerita secara visual dan memperkaya imajinasi dalam menyusun cerita.
5	Bagaimana cara Anda membantu siswa memahami struktur cerita yang baik, seperti pembukaan, isi cerita, dan penutupan?	Guru memberikan penjelasan melalui contoh konkret dan panduan peta alur cerita sederhana yang memudahkan siswa dalam memahami dan menyusun struktur cerita secara runtut.
6	Adakah kegiatan kelompok atau diskusi yang Anda lakukan untuk mendukung proses pembuatan cerita siswa? Jika ada, bagaimana kegiatan tersebut membantu siswa?	Diskusi kelompok sering digunakan untuk membantu siswa mengembangkan ide cerita secara kolaboratif, berbagi gagasan, serta menyusun cerita secara bersama-sama sebelum dipresentasikan.
7	Apa tantangan terbesar yang Anda hadapi saat mengajarkan keterampilan bercerita kepada siswa kelas 4? Bagaimana Anda mengatasi tantangan tersebut?	Tantangan terbesar meliputi perbedaan kemampuan siswa dalam menyusun cerita dan rasa malu saat tampil di depan kelas. Untuk mengatasi hal ini, guru

		menggunakan pendekatan bertahap serta membagi siswa dalam kelompok kecil untuk membangun kepercayaan diri.
8	Bagaimana Anda mengukur atau menilai perkembangan keterampilan bercerita siswa?	Penilaian dilakukan melalui pengamatan terhadap struktur cerita, kejelasan isi, kemampuan berbicara di depan umum, serta ekspresi dan intonasi saat bercerita.
9	Apa harapan Anda terhadap kemampuan bercerita siswa setelah mengikuti pembelajaran ini?	Harapan guru adalah agar siswa mampu menyampaikan cerita secara runtut, menarik, serta menunjukkan keberanian dan kemampuan berbahasa yang baik dan benar.
10	Apakah Anda merencanakan perubahan atau penyesuaian dalam metode pembelajaran bercerita untuk masa depan? Jika iya, perubahan apa yang ingin Anda lakukan?	Guru berencana untuk memanfaatkan media digital dan teknologi pembelajaran interaktif, serta memberi ruang lebih luas bagi kreativitas siswa dalam menciptakan cerita secara mandiri.

Berdasarkan hasil wawancara, guru menghadapi beberapa kendala dalam menerapkan strategi pembelajaran bercerita di kelas 4 SD Negeri 2 Sumita. Kendala utama yang muncul adalah perbedaan kemampuan siswa dalam menyusun cerita serta rasa malu saat tampil di depan kelas. Meskipun media pembelajaran seperti gambar seri dan video telah digunakan, sebagian siswa masih kurang termotivasi dan tidak semua dapat mengikuti alur pembelajaran dengan baik. Selain itu, keterbatasan waktu membuat guru kesulitan memberi bimbingan secara menyeluruh kepada setiap siswa.

Dalam mengatasi kendala tersebut, guru dapat menerapkan pendekatan bertahap, seperti latihan bercerita dalam kelompok kecil sebelum tampil di depan umum. Penggunaan media digital yang lebih interaktif juga dapat menjadi alternatif untuk meningkatkan minat dan keberanian siswa. Selain itu, penyesuaian strategi pembelajaran yang lebih fleksibel dan responsif terhadap kebutuhan siswa menjadi penting agar proses bercerita berjalan lebih efektif dan merata.

Pembahasan

Hasil observasi menunjukkan bahwa guru telah menerapkan strategi pembelajaran bercerita secara komprehensif, mulai dari tahap awal hingga penutup. Pembelajaran dimulai dengan penyampaian tujuan yang jelas, yang berfungsi untuk mengarahkan fokus siswa pada kegiatan yang akan dilakukan. Penggunaan media pembelajaran seperti gambar seri dan bahan visual lainnya terbukti membantu siswa dalam memahami alur cerita secara lebih konkret. Strategi ini sesuai dengan pandangan Piaget bahwa anak usia sekolah dasar berada pada tahap operasional konkret, di mana pembelajaran visual sangat efektif untuk mendukung pemahaman konsep. Temuan ini sejalan dengan penelitian oleh Dewi & Santosa (2021) yang menyatakan bahwa media visual dalam pembelajaran bahasa di tingkat dasar dapat meningkatkan pemahaman dan daya ingat siswa terhadap struktur cerita secara signifikan.

Pembelajaran bercerita tidak hanya bersifat instruksional, tetapi juga dialogis dan partisipatif. Guru memberikan kesempatan kepada siswa untuk menyampaikan cerita di

depan kelas, serta mengembangkan atmosfer apresiatif dengan memberi ruang bagi siswa lain untuk memberikan tanggapan. Hal ini mendukung pendekatan konstruktivistik dalam pembelajaran bahasa, di mana siswa menjadi subjek aktif yang membangun pengetahuan melalui pengalaman langsung. Pemberian umpan balik dari guru terhadap penyampaian siswa juga memperkuat proses refleksi diri, membimbing siswa dalam menyempurnakan struktur dan isi cerita mereka. Pendekatan ini diperkuat oleh penelitian Kusuma & Gunawan (2022), yang menunjukkan bahwa praktik bercerita dengan melibatkan umpan balik peer dan guru dapat meningkatkan kemampuan berpikir kritis serta keterampilan menyusun gagasan lisan secara logis pada siswa sekolah dasar.

Keseluruhan strategi yang diterapkan menunjukkan kesinambungan dan kesesuaian dengan karakteristik perkembangan siswa sekolah dasar. Minat dan perhatian tinggi yang ditunjukkan siswa selama kegiatan berlangsung mengindikasikan bahwa strategi yang digunakan berhasil menciptakan suasana belajar yang menyenangkan dan mendorong keterlibatan aktif. Penugasan lanjutan yang diberikan guru di akhir pembelajaran juga mencerminkan keberlanjutan proses belajar, yang tidak berhenti di kelas tetapi dilanjutkan melalui aktivitas mandiri. Hal ini sejalan dengan temuan penelitian oleh Suyanto (2022), yang menjelaskan bahwa keberhasilan pembelajaran bahasa ditentukan oleh kesinambungan strategi antara kegiatan di kelas dan penguatan tugas individu yang relevan, sehingga pembelajaran tidak hanya bersifat sesaat tetapi berdampak jangka panjang pada keterampilan berbahasa siswa.

Pelaksanaan strategi pembelajaran bercerita di kelas 4 SD Negeri 2 Sumita tidak terlepas dari berbagai tantangan yang dihadapi guru. Meskipun strategi pembelajaran telah dirancang dengan mempertimbangkan karakteristik siswa, realitas di lapangan menunjukkan adanya hambatan yang cukup signifikan. Salah satu kendala utama adalah perbedaan kemampuan siswa dalam menyusun dan menyampaikan cerita. Beberapa siswa memiliki kemampuan bahasa yang terbatas, sementara yang lain kurang mampu mengembangkan alur cerita secara runtut. Hal ini berdampak pada kesulitan guru dalam menciptakan pembelajaran yang seimbang dan merata bagi seluruh siswa. Menurut penelitian oleh Liswina dkk. (2023), perbedaan kemampuan bahasa siswa dalam kelas rendah hingga menengah dapat memengaruhi keberhasilan strategi berbasis komunikasi aktif seperti bercerita, sehingga diperlukan pendekatan yang lebih individual.

Selain itu, keterbatasan waktu menjadi kendala yang sering ditemui. Guru kesulitan memberikan bimbingan secara individu karena waktu pembelajaran yang terbatas dan jumlah siswa yang cukup banyak. Kendala lainnya adalah kurangnya kepercayaan diri siswa untuk tampil di depan kelas. Meskipun pembelajaran telah dilengkapi dengan media seperti gambar seri dan video, belum semua siswa menunjukkan antusiasme yang tinggi. Hal ini menunjukkan bahwa media yang digunakan belum sepenuhnya mampu menumbuhkan minat belajar dan keberanian siswa dalam berbicara di depan umum. Penelitian oleh Prasetyo (2021) menegaskan bahwa keberhasilan pembelajaran berbasis presentasi sangat dipengaruhi oleh tingkat kepercayaan diri siswa, yang perlu dibangun secara konsisten melalui latihan berjenjang dan lingkungan belajar yang suportif.

Dalam mengatasi kendala yang dihadapi, guru perlu menerapkan strategi yang lebih fleksibel dan adaptif. Salah satunya adalah melalui pendekatan bertahap, dengan membiasakan siswa bercerita dalam kelompok kecil sebelum tampil di depan kelas secara penuh. Pendekatan ini dapat membantu membangun rasa percaya diri secara perlahan. Selain itu, pemanfaatan media digital yang lebih interaktif, seperti aplikasi bercerita atau animasi sederhana, dapat meningkatkan motivasi siswa dan menciptakan

suasana pembelajaran yang lebih menarik. Guru juga disarankan untuk melakukan penyesuaian waktu dan memberikan perhatian tambahan bagi siswa yang mengalami kesulitan, sehingga proses bercerita dapat berjalan lebih efektif dan menyeluruh. Hal ini sejalan dengan studi oleh Rahayu (2020) yang menunjukkan bahwa integrasi media digital interaktif dalam pembelajaran bahasa dapat meningkatkan partisipasi siswa dan mempercepat perkembangan keterampilan berbicara mereka secara signifikan.

KESIMPULAN

Berdasarkan hasil penelitian dan pembahasan di atas, maka didapatkan kesimpulan bahwa (1) Guru menerapkan berbagai strategi pembelajaran bercerita yang bersifat komunikatif, partisipatif, dan interaktif. Strategi yang digunakan meliputi penggunaan media visual seperti gambar seri dan video, pembelajaran berbasis diskusi kelompok kecil, latihan tampil bercerita di depan kelas, serta pemberian umpan balik langsung terhadap cerita yang disampaikan siswa. Seluruh langkah pembelajaran diawali dengan penjelasan tujuan, diikuti kegiatan inti yang melibatkan siswa secara aktif, dan diakhiri dengan penguatan serta penugasan lanjutan yang relevan. Strategi ini terbukti mampu meningkatkan partisipasi, kreativitas, serta kepercayaan diri siswa dalam menyampaikan cerita secara lisan. (2) Beberapa kendala utama yang dihadapi guru antara lain perbedaan kemampuan siswa dalam menyusun dan menyampaikan cerita, kurangnya kepercayaan diri siswa saat tampil di depan kelas, terbatasnya waktu pembelajaran, serta minimnya variasi media pembelajaran yang tersedia. Meskipun strategi dan media telah digunakan secara maksimal, kendala-kendala ini masih menghambat pemerataan hasil pembelajaran. Untuk mengatasinya, guru mulai menerapkan pendekatan bertahap melalui kelompok kecil, serta berencana mengintegrasikan teknologi pembelajaran digital yang lebih menarik untuk menyesuaikan pembelajaran dengan kebutuhan siswa secara lebih fleksibel dan inklusif.

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AN ANALYSIS OF ELEVENTH-GRADE STUDENTS' ABILITY TO WRITE SHORT STORIES BASED ON PERSONAL EXPERIENCE

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Abstract: This study examined eleventh-grade students' ability to write short stories based on personal experience at SMAN 2 Kefamenanu. The main focus of this research was to analyze five aspects of writing short stories, namely content, organization, grammar, mechanics, and vocabulary, as well as the level of ability and difficulty of the students in writing short stories. It applied a qualitative and quantitative approach with tests and interviews as the instrument. The results showed that students had a "good" level of writing ability, with an average score of 81.31. However, some students still encountered difficulties in several aspects of writing, namely grammar, vocabulary, mechanics, and content. These difficulties occurred because students could not combine good sentences, lacked vocabulary, could not place punctuation marks and capital letters correctly, and could not explain the meaning of the topic they had determined. Therefore, errors occurred in their writing. The study provided advice for teachers to improve their teaching methods.

Keywords: personal experience, short stories, writing

INTRODUCTION

Writing is an essential skill that allows individuals to express their ideas, thoughts, and experiences in written form. "It is a productive skill that focuses on how to produce language than receive" (Al Hadad, et al., 2024). One popular genre of writing is the short story, which falls under the broader category of creative writing. Creative writing, as described by Sastrawacana (in Adeani, 2020), encourages students to move beyond the constraints of academic or professional writing and explore new ways to communicate their personal thoughts and emotions. However, many students face challenges when writing short stories, particularly in areas such as theme selection, vocabulary development, and the use of imagination.

Several studies have explored students' abilities and difficulties in writing short stories. For example, Adeani (2020) conducted research at Galuh Ciamis University, where students showed limited engagement with short story literature and tended to read popular short stories rather than critically analyzing the craft itself. Similarly, Wikanengsih and Ningrum (2021) focused on improving students' short story writing skills by using Adobe Flash in a quasi-experimental study. Their findings suggested that the discovery learning method, aided by technology, enhanced both students' motivation and their ability to write compelling short stories.

In a different context, Nuryatin and Irawati (2018) examined the needs of students and teachers regarding short story writing models that incorporate humanism and morality. Their research found that elementary schools had limited opportunities for short story writing due to the lack of literature lessons, leading to a gap in students'

exposure to creative writing. Furthermore, Nazila, Adisaputera, and Saragih (2020) developed teaching materials designed to help students write short stories based on personal experiences. This approach was found to be more effective than traditional student handbooks for 7th-grade students at Junior High School 2 Kejuruan Muda.

While these studies have provided valuable insights into different aspects of short story writing, including teaching methods, motivation, and materials, few have specifically focused on analyzing students' abilities and difficulties in writing short stories based on personal experience. Personal experience, as a subject of writing, allows students to create more authentic and meaningful stories that are both engaging and reflective of their lives.

This study aims to bridge the gap by investigating the specific challenges students face when writing short stories based on their personal experiences. By encouraging students to draw from their own lives, this research seeks to foster creativity, enhance writing skills, and help students better express themselves. Writing based on personal experience not only makes the writing process more accessible but also provides an opportunity for students to explore themes, emotions, and lessons that are both meaningful to them and relatable to their readers. Through this approach, students will gain the skills necessary to improve their writing, choose the most effective vocabulary, and develop their sentences in ways that capture their thoughts and experiences.

METHOD

This study employed a mixed-method approach, combining both quantitative and qualitative methods. The quantitative method was used to answer the research question regarding the extent of eleventh-grade students' ability to write short stories based on personal experiences. In contrast, the qualitative method was used to explore the difficulties students encountered when writing short stories.

The sample was selected through purposive sampling, and the eleventh-grade science class at High School 2 Kefamenanu was chosen, consisting of 22 students. To collect data, two instruments were used: a writing test and interviews.

Before administering the writing test to assess students' ability to write, the researcher provided an example text entitled *Vacation to Grandmother's House*. This text, based on a personal experience, was explained to the students to clarify the topic and content. Following the explanation, students were given 90 minutes to write their own short stories about a personal vacation experience.

After the writing test, the researcher conducted interviews with eight randomly selected students, due to time constraints. The interviews were conducted in Indonesian, and seven interview questions were prepared in advance to guide the discussion.

For the analysis of the writing test data, the researcher utilized a scoring rubric developed by C. Terrible, which evaluates content, organization, grammar, mechanics, and vocabulary. Based on the results of the rubric, students' writing abilities were classified into four levels (as shown in Table 1). The interview data were analyzed descriptively, capturing the students' responses and experiences.

Table 1. Four Level Classifications

No	Classification	Score
1	Excellent	86-100
2	Good	71-85
3	Fair	56-70
4	Very poor	41-55

Adopted from Wildayati's (2021)

RESULTS AND DISCUSSION

Results

The researchers provided a sample vacation story entitled *Vacation to Grandmother's House* to help determine students' ability to write short stories. After reading the example, students were asked to write about their own personal vacation experiences. The task was designed to assess their ability to compose a holiday-themed story. The text consisted of two paragraphs: an introduction and a description. Students used this sample as a guide to write their own stories, reflecting on their vacation experiences. The sample text helped students focus on describing the activities they engaged in during their holidays, encouraging them to use their own words and ideas while staying connected to the theme and title of the vacation story. Students' writing abilities were evaluated based on five indicators: content, organization, grammar, mechanics, and vocabulary. The results of the students' writing assessments are presented below.

Table 2. Students Individuals Score of Writing Vacation Story

Students	Aspect of Writing					Score
	C	O	G	M	V	
S1	30	17	21	4	16	88
S2	26	15	18	5	14	78
S3	26	16	18	4	10	74
S4	22	14	19	3	13	71
S5	22	14	19	4	17	76
S6	30	18	22	3	17	90
S7	29	14	20	4	15	82
S8	29	18	24	3	16	90
S9	22	17	18	3	10	70
S10	30	17	21	4	16	88
S11	26	15	18	4	10	73
S12	21	14	21	3	13	72
S13	29	18	23	4	13	87

S14	21	18	20	3	14	76
S15	23	15	18	4	12	71
S16	18	16	19	4	11	69
S17	25	20	18	3	16	82
S18	28	19	23	4	17	91
S19	30	20	21	4	14	89
S20	29	18	22	4	17	90
S21	30	20	24	3	16	93
S22	28	19	21	4	17	89
Total	574	372	448	81	314	1.789
Average	26.1	17.00	20.36	3.6	14.27	81.31

C= Content O= Organization G= Grammar M= Mechanics V= Vocabulary

The total score for all students was 1,589, with an average score of 81.31, placing the students in the "good" category. However, based on the five indicators of writing ability, students faced difficulties in organization, mechanics, and vocabulary. The average scores for these areas were as follows: Organization (17.00), Mechanics (3.6), and Vocabulary (14.24).

Out of the 22 students in the class, only 20 met the completion criteria based on the scoring rubric. The following students achieved the highest scores: S21 (93, excellent), S18 (91, excellent), S20 (90, excellent), S6 (90, excellent), S8 (90, excellent), S19 (89, excellent), S22 (89, excellent), S1 (88, excellent), S10 (88, excellent), S13 (87, excellent), and S7 (82, good). Additionally, S17 (82, good), S2 (78, good), S5 (76, good), S14 (76, good), S3 (73, good), S11 (73, good), S12 (72, good), S4 (71, good), and S15 (71, good) all received scores in the "good" category, although their scores varied.

Two students scored in the "fair" category: S9 (70, fair) and S16 (69, fair), with scores falling between 56 and 70. Therefore, the highest score achieved was 93, while the lowest score was 69. Overall, students' ability to write short stories in grade eleven was considered to be "good." A detailed breakdown of students' writing skills by category is presented in Table 3.

Tabel 3 .The Students Skor in Writing Short Stories

No	Score Range	Category	Frequency	Percentage
1	86-100	Excellent	10	45%
2	71-85	Good	10	45%
3	56-70	Fair	2	10%
4	41-55	Very poor	-	-
Total			22	100%

Of the 22 students who took the writing test, 10 students (45%) scored between 86-100, categorized as "excellent"; 10 students (45%) scored between 71-85, categorized

as "good"; and 2 students (10%) scored between 56-70, categorized as "fair." Based on these results, the researchers concluded that the students' writing skills were generally at a good level. However, a few students were still at a fair level. This was primarily due to some students' ability to combine words into coherent stories, while others struggled to string sentences together. The difficulties students faced included a lack of vocabulary, improper use of punctuation and capital letters, and challenges in selecting the right connecting words. As a result, many students need to improve their ability to use punctuation and capitalization correctly, as well as connect words effectively, to make their stories more engaging and easier for readers to understand.

The researcher also conducted interviews with students to identify the difficulties they encountered while writing vacation stories. Seven interview questions were prepared, and the findings revealed the following:

First, students had difficulty forming sentences and combining words, which was reflected in their grammar. Of the 22 students, 9 scored below 19 out of 25 points in this area. Second, many students lacked sufficient vocabulary and struggled to combine Indonesian and English words appropriately, which impacted their vocabulary score. Eleven out of 22 students scored below 14 out of 20 points. Third, students had trouble correctly using punctuation and capitalizing words at the start of sentences, which was reflected in the mechanics aspect. Eight out of 22 students scored below 3 out of 5 points in this area. Last, while students were able to select a topic, they struggled to create meaningful content that aligned with the topic. Seven out of 22 students scored below 23 out of 30 points for content.

From the interviews, the researcher identified four key elements of difficulty in writing personal experience stories. The students reported that they faced challenges due to a lack of vocabulary, difficulty with sentence structure and punctuation, and struggles with word combination. Additionally, many students had trouble writing coherent sentences that matched the topics they had chosen. As a result, these issues led to errors in the vacation stories they wrote.

Discussion

Writing is the process of expressing information, ideas, opinions, or thoughts and feelings in written form (Tarigan, 2008). It involves several components that must be considered when students write, including content, rhetoric, vocabulary, grammatical structure, and writing mechanics, such as punctuation and capitalization (Anggraini, 2019). When students are asked to write based on their personal experiences, only some students are able to achieve good results. In this study, the researcher provided a vacation experience text as a reference to guide students in creating their own vacation stories. A total of 22 vacation story texts were analyzed, and an assessment rubric was used to evaluate students' writing abilities based on various writing indicators. According to Brown (2001), an analytical scoring rubric for writing includes five aspects: organization,

logical development of ideas (content), grammar, punctuation and spelling mechanics, and style or vocabulary.

First, the researcher evaluated the students' ability to write content. Content refers to how well students explain their vacation stories, ensuring they adhere to the topic and present a clear explanation so that readers can easily understand the meaning. The researcher found that half of the students demonstrated good writing skills, particularly in terms of content. Similar findings by Musyawir et al. (2020) suggest that when students connect their personal experiences to writing, they are more likely to produce engaging and meaningful content that resonates with readers.

The next aspect examined was organization. Organization involves the arrangement of sentences or paragraphs in a logical and coherent order. In this area, the researcher found that some students struggled with linking words together and using appropriate connecting words. This made it difficult for readers to understand the meaning of the stories. Research by Hinkel (2004) has emphasized that organizational skills are essential for students to produce cohesive writing. Without effective organization, students' writing may lack clarity, making it challenging for the reader to follow the narrative. To improve, students need more practice in connecting words and sentences to enhance the flow and coherence of their writing.

The researcher also assessed the students' grammar usage. Grammar is a crucial aspect of writing because errors can make the text unclear or alter its meaning. While some students were able to use grammar correctly without changing the meaning of their sentences, others made errors that led to confusion for the reader. According to Ly (2020), grammatical accuracy is a key factor in academic writing, as errors can obscure the writer's intended meaning. As a result, additional practice in grammar is necessary to ensure students can write clear and accurate sentences.

Next, the researcher evaluated the mechanical aspect of writing, which includes spelling, punctuation, and capitalization (Jacob, 2004). Correct mechanics help students effectively communicate their ideas and ensure that readers can easily follow the text. In this study, some students struggled with placing punctuation marks and capital letters correctly. As noted by Chandler (2003), poor mechanical skills can undermine the readability of writing, making it harder for readers to comprehend the intended message. Therefore, additional practice is required to help students improve their punctuation and capitalization skills.

Finally, the vocabulary aspect was assessed. A good vocabulary is essential for effective writing because it helps readers understand the meaning of the text. In this study, the researcher observed that many students had difficulty selecting appropriate vocabulary, which often left the reader confused about the meaning of the text. Research by Nation (2001) indicates that a limited vocabulary can hinder a student's ability to express ideas clearly in writing. To address this issue, students need more practice in vocabulary development to improve their ability to express themselves clearly in writing.

In conclusion, this study highlights the critical aspects of writing—content, organization, grammar, mechanics, and vocabulary—and emphasizes the need for targeted practice in these areas to improve students' overall writing skills. By addressing these challenges, students can enhance their ability to write coherent and meaningful stories, particularly those based on personal experiences.

CONCLUSION

The conclusion was inferred from the research. First, among the 22 students who completed the holiday story writing test, some were able to write stories well, while others struggled due to difficulty in writing. The researcher used an assessment rubric and interviews to evaluate students' ability to write holiday stories. Based on the five indicators of the rubric, the average score for all students was 81.31, indicating that their writing ability in holiday stories falls within the "good" category.

Second, some students had difficulty writing experience-based stories. Of the five aspects evaluated, four posed significant challenges for the students: grammar, vocabulary, mechanics, and content. These difficulties arose because students struggled with combining sentences effectively, lacked a strong vocabulary, were unable to apply punctuation marks and capitalization correctly, and found it challenging to clearly explain the meaning of their chosen topics. As a result, errors appeared in their writing.

The research suggests that eleventh-grade English teachers should focus on improving students' writing skills, particularly in crafting experiential stories. This could help students enhance their critical thinking skills, express their ideas more effectively in writing, and develop their ability to construct coherent narratives based on their imagination.

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THE EFFECTIVENESS OF THINK PAIR SHARE (TPS) TECHNIQUE TO IMPROVE READING COMPREHENSION OF DESCRIPTIVE TEXT FOR THE SEVENTH GRADERS OF SMP NEGERI NUNPO

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Abstract: This research aimed to determine the significant effect of using the Think Pair Share (TPS) technique to improve reading comprehension of descriptive texts for seventh-graders of SMP Negeri Nunpo. This research was pre-experimental. The population of this study was the seventh-grader students of class at SMP Negeri Nunpo, with a total of 53 students. Through cluster random sampling, 25 students were taken as samples. The research instrument was a reading comprehension test for descriptive texts consisting of 25 multiple-choice items. The researcher applied the TPS technique for two meetings. The researcher analyzed students' pre-test and post-test scores on descriptive texts, which consisted of main idea questions, stated detail questions, vocabulary in context questions, reference questions, and purpose questions. The results of this study showed that there was a significant difference between the average pre-test score of 51.04 and the average post-test score of 80.64. Based on the above results, the researcher concludes that the use of the TPS technique significantly improved reading comprehension of descriptive texts for seventh-grader students of class A at SMP Negeri Nunpo.

Keywords: descriptive text, reading comprehension, TPS

INTRODUCTION

Reading comprehension is crucial to language acquisition, particularly in English as a Foreign Language (EFL) settings. It enables students to decode text, understand meaning, interpret ideas, and critically engage with written content (Grabe & Stoller, 2011). In junior high school, especially at the seventh-grade level, reading comprehension is a vital skill that supports both academic achievement and language development.

At SMP Negeri Nunpo, many students struggle to comprehend English texts, particularly descriptive texts that require attention to detail and specific vocabulary. According to Nation (2009), students must develop both lower-level reading skills, such as word recognition, and higher-level skills, including inference-making and summarization. These higher-level skills are often underdeveloped in early-stage EFL learners.

Descriptive texts are a key component of Indonesia's English curriculum and are designed to help students describe people, places, and things using appropriate language features (Kemendikbud, 2016). These texts support students' ability to structure and communicate information clearly. However, students at SMP Negeri Nunpo frequently face difficulties in identifying main ideas, understanding specific details, and interpreting meaning through context clues. These challenges are often linked to limited vocabulary, low motivation, and traditional teacher-centered methods—such as lecturing and reading aloud—that do not actively involve learners (Richards & Renandya, 2002; Hamra & Syatriana, 2012; Hakim, 2023). As a result, students' reading performance remains below expectations, which negatively affects their confidence and interest in learning English.

To address these challenges, student-centered approaches are essential. One such approach is the Think-Pair-Share (TPS) technique, a cooperative learning strategy introduced by Lyman (1981). TPS involves students first thinking individually about a question or topic, then discussing their ideas in pairs, and finally sharing their thoughts

with the larger group. This strategy promotes active participation, collaborative learning, and deeper information-processing factors that can significantly enhance reading comprehension.

Several studies have demonstrated the effectiveness of TPS in improving students' reading skills. Zuhriyah (2017) found that TPS improved students' understanding of narrative texts by boosting participation and reducing anxiety. Similarly, Rahmawati and Hermayawati (2018) reported significant gains in reading scores after applying TPS in a junior high school context. Al-Sobhi and Preece (2018) also emphasized that cooperative learning strategies like TPS promote meaningful peer interactions and improved comprehension. Astuti (2020), in a classroom action study conducted in a rural Indonesian school, found that TPS not only enhanced reading comprehension but also improved classroom communication and student motivation.

Despite growing evidence of TPS's benefits, limited research has specifically examined its application in teaching descriptive texts to seventh-grade students in rural Indonesian schools. Therefore, this study aims to investigate the effectiveness of the Think-Pair-Share technique in improving the reading comprehension of descriptive texts among the seventh graders of SMP Negeri Nunpo. The findings are expected to offer practical insights for English teachers working in similar educational contexts.

METHOD

Research Design

This study employed a pre-experimental research design. According to Sugiyono (2014), a pre-experimental design is a research model that involves only one group or class, which is given both a pre-test and a post-test. The researcher selected one class to participate in this study. The type of design used was the one-group pre-test and post-test design, which aims to determine the effectiveness of the Think-Pair-Share (TPS) technique in improving students' reading comprehension.

The procedures for this pre-experimental design were as follows:

1. Administering a pre-test to measure the reading comprehension of descriptive texts among seventh-grade students at SMP Negeri Nunpo.
2. Applying the experimental treatment (the TPS technique) to the subjects (Class VII A).
3. Administering a post-test to assess the students' reading comprehension after the treatment.

Subject of the Study

In this study, the researcher collected data from the seventh-grade students of SMP Negeri Nunpo. The total population consisted of 53 students from two classes: Class A with 25 students and Class B with 28 students. The researcher used cluster random sampling to select one class as the sample for this research. The selected class was Class VII A, consisting of 25 students.

Instruments of the Study

To collect the data, the researcher used a multiple-choice test consisting of 25 items. Each item provided four answer choices, with only one correct answer. A correct answer was scored as 1, and an incorrect answer was scored as 0. The total score was then

multiplied by 4 to obtain a maximum score of 100. If all answers were incorrect, the score remained 0. The same test was used for both the pre-test and post-test.

Procedure of Data Collection

Before the treatment, students were given a pre-test to assess their initial reading comprehension. The test covered various aspects of reading skills, including main ideas, stated details, vocabulary in context, reference, and purpose questions. Following the pre-test, the researcher conducted teaching sessions using descriptive texts and implemented the Think-Pair-Share technique as the instructional method. After the treatment period, students took a post-test. Students who answered all questions correctly received a score of 100. The purpose of the post-test was to determine the improvement in students' reading comprehension after the implementation of the TPS technique.

Techniques of Data Analysis

The researcher analyzed the data by using quantitative analysis. The formula used by the researcher to search the students' scores was:

1. Classifying the score of the students' reading into the following:

$$\text{score} = \frac{\text{correct answer}}{\text{total number of item}} \times 100$$

Table 1. Level of Mastery

No	Score	Level of mastery
1	86-100	Excellent
2	61-85	Good
3	47-60	Fair
4	0-46	Very poor

2. Calculating the rate percentage of the students' score using the following formula:

$$p = \frac{F}{N} \times 100\%$$

Where: P = percentage
F = Frequency
N = Total number of sampel

3. The formula of the mean score as follow:

$$X = \frac{\sum X}{N}$$

Where: X = Mean score
 $\sum X$ = The sum of the all score
N = Total number of sample

4. Calculating the standard deviation by using the following formula:

$$SD = \sqrt{\frac{\sum X^2 - \frac{(\sum X)^2}{N}}{N-1}}$$

Where: SD =Standard Deviation
 $\sum X$ =The sum all square
 N =The total number of students
 $(\sum x)^2$ =The sum square of the sum of square

5. To know the difficulties faced by the students' the research analysed based on the following

Table 2. Difficulties in reading comprehension of Descriptive text

No	Reading ability to answer	Items	Total
1	Main Idea Questions	9,14,20,22	4
2	Stated Detail Questions	1,2,7,8,10,11,19,21,25	9
3	Vocabulary in Content Questions	3,5,12,13,16,18,24	7
4	Reference Questions	4,17,23	3
5	Purpose Questions	6,15	2

RESULTS AND DISCUSSION

Results

The researcher found that the Think-Pair-Share technique in teaching descriptive texts can significantly improve students' reading comprehension. This improvement was evident in the student's ability to identify main idea questions, stated detail questions, vocabulary in context questions, reference questions, and purpose questions.

Table 3. The analysis of pre-test

Descriptive text												Total	Level of mastery
Students	Main idea questions		Stated detail questions		Vocabulary in content questions		Reference questions		Purpose questions				
	Score	%	Score	%	Score	%	Score	%	Score	%	Score	%	
1.	1	4	3	12	5	20	2	8	1	4	12	48	Fair
2.	4	16	5	20	2	8	3	12	0	0	14	56	Fair
3.	2	8	4	16	4	16	2	8	0	0	12	48	Fair
4.	1	4	4	16	2	8	2	8	1	4	10	40	Very Poor
5.	3	12	6	24	3	12	2	8	1	4	15	60	Fair
6.	0	0	4	16	6	24	2	8	1	4	13	52	Fair
7.	1	4	2	8	4	16	2	8	1	4	10	40	Fair
8.	2	8	8	32	2	8	2	8	0	0	14	56	Fair
9.	2	8	5	20	4	16	0	0	1	4	12	48	Fair

10.	1	4	5	20	4	16	2	8	0	0	12	48	Fair
11.	3	12	6	24	3	12	1	4	2	8	15	60	Fair
12.	0	0	7	28	5	20	2	8	1	4	15	60	Fair
13.	2	8	4	16	5	20	1	4	1	4	13	52	Fair
14.	2	8	6	24	1	4	2	8	2	8	13	52	Fair
15.	2	8	4	16	5	20	1	4	1	4	13	52	Fair
16.	1	4	3	12	4	16	2	8	1	4	11	44	Very Poor
17.	3	12	3	12	4	16	1	4	1	4	12	48	Fair
18.	3	12	5	20	4	16	0	0	1	4	13	52	Fair
19.	4	16	5	20	3	12	2	8	2	8	16	64	Good
20.	3	12	4	16	2	8	2	8	1	4	12	48	Fair
21.	1	4	6	24	1	4	3	12	0	0	11	44	Very Poor
22.	3	12	3	12	1	4	3	12	0	0	10	40	Very Poor
23.	3	12	5	20	5	20	1	4	0	0	14	56	Fair
24.	3	12	6	24	3	12	2	8	1	4	15	60	Fair
25.	0	0	4	16	5	20	2	8	1	4	12	48	Fair
TOTAL	50	200	116	468	89	348	44	176	21	84	319	1.276	
AVERAGE	2	8	4,75	18,72	3,48	13,92	1,76	7,04	0,84	3,36	12,76	51,04	Fair

Based on the table above, one student scored 40 (3 students), 44 (2 students), 48 (7 students), 52 (5 students), 56 (3 students), 60 (4 students), and 64 (1 student). In total, four students were classified as *very poor*, 20 students as *fair*, and only one student as *good*. However, none of the students reached the *excellent* category. The total mean score of the pre-test was 51.04 (equivalent to a raw score of 1.276), indicating that students' understanding of descriptive texts can be generally categorized as *fair*.

Furthermore, students' difficulties in reading comprehension were evident from the types of questions they answered incorrectly. These included questions related to the main idea, stated details, vocabulary in context, reference, and purpose of the text.

- For the main idea questions, fifteen students answered incorrectly. Specifically, three students answered all questions incorrectly, six students answered only one question correctly, and another six students answered two questions correctly.
- For stated detail questions, twelve students answered incorrectly: one student answered two questions correctly, four students answered three questions correctly, and seven students answered four questions correctly.
- For vocabulary in context questions, eleven students answered incorrectly: three students answered one question correctly, four students answered two questions correctly, and four students answered three questions correctly.
- For reference questions, seven students answered incorrectly; two students answered all questions incorrectly, while five students answered one question correctly.
- For purpose questions, seven students answered all questions incorrectly, indicating a complete lack of understanding in this area.

These results suggest that students faced the most difficulty with purpose and main idea questions, reflecting challenges in both literal and inferential comprehension.

Table 4. The analysis of post-test

Table 7. The analysis of post test														
Students	Descriptive text										Total	Level of mastery		
	Main idea questions		Stated detail questions		Vocabulary in content questions		Reference questions		Purpose questins					
	Score	%	Score	%	Score	%	Score	%	Score	%	Score		%	
1.	3	12	8	32	5	20	2	8	2	8	20	80	Good	

2.	4	16	8	32	5	20	1	4	2	8	20	80	Good
3.	3	12	7	28	6	24	3	12	1	4	20	80	Good
4.	2	8	6	24	6	24	2	8	2	8	18	72	Good
5.	4	16	6	24	7	28	3	12	1	4	21	84	Good
6.	2	8	6	24	6	24	2	8	2	8	18	72	Good
7.	3	12	6	24	6	24	3	12	2	8	20	80	Good
8.	4	16	8	32	6	24	3	12	2	8	23	92	Excellent
9.	3	12	8	32	6	24	3	12	2	8	22	88	Excellent
10.	3	12	8	32	7	28	2	8	1	4	21	84	Good
11.	3	12	8	32	4	16	2	8	2	8	19	74	Good
12.	3	12	9	36	6	24	2	8	2	8	22	88	Excellent
13.	4	16	7	28	6	24	3	12	1	4	21	84	Good
14.	4	16	9	36	4	16	3	12	2	8	22	88	Excellent
15.	4	16	6	24	7	28	2	8	1	4	20	80	Good
16.	3	12	6	24	5	20	3	12	2	8	19	76	Good
17.	3	12	6	24	4	16	2	8	2	8	17	68	Good
18.	2	8	8	32	6	24	3	12	2	8	21	84	Good
19.	4	16	9	36	6	24	3	12	2	8	24	96	Excellent
20.	4	16	9	36	6	24	3	12	1	4	23	92	Excellent
21.	2	8	7	28	5	20	3	12	1	4	18	72	Good
22.	2	8	8	32	5	20	2	8	2	8	19	76	Good
23.	4	16	7	28	4	16	2	8	2	8	19	76	Good
24.	2	8	6	24	6	24	2	8	2	8	18	72	Good
25.	3	12	7	28	4	16	3	12	2	8	19	76	Good
TOTAL	78	312	183	732	138	551	62	248	43	172	504	2,016	
AVERAGE	3,12	12,48	7,32	29,28	5,52	22,04	2,48	9,92	1,72	6,88	20,16	80,64	GOOD

After the implementation of the Think-Pair-Share (TPS) technique, a post-test was conducted to evaluate students' progress in reading comprehension of descriptive texts. The results showed significant improvement compared to the pre-test. The students' scores ranged from 68 to 96. Specifically, one student scored 68, 4 students scored 72, 5 students scored 76, 5 students scored 80, 4 students scored 84, 3 students scored 88, 2 students scored 92, and 1 student scored 96. Based on the classification, 19 students were categorized as *good* and six students as *excellent*. Notably, no student fell into the *fair* or *very poor* categories. The mean post-test score was 80.64 (equivalent to a raw score of 2.016), indicating a substantial improvement in students' reading comprehension. According to the scoring criteria, the student's performance can now be categorized as *good*.

A detailed analysis of students' responses also revealed a marked reduction in the number of incorrect answers across all question types. The most significant progress was observed in stated detail, vocabulary in context, and purpose questions, where no incorrect answers were recorded. This suggests that students were able to grasp literal meanings and the overall purpose of the texts more effectively after the intervention. However, minor challenges remained. In the main idea questions, six students still provided incorrect responses. All of them answered two questions correctly, indicating partial understanding but a need for further development in summarizing or synthesizing key information. In reference questions, only one student provided an incorrect answer, suggesting a great improvement in identifying pronoun or referent relationships in the text. Overall, the post-test results demonstrate that the TPS technique had a positive impact on students' reading comprehension, especially in helping them master both literal and inferential components of descriptive texts.

Based on the data above, the researcher also calculated the standard deviation of the pre-test and post-test. The standard deviation in the pre-test was 52.66 with a mean score of 51.04, while in the post-test, the standard deviation increased to 83.49 with a

mean score of 80.64. This indicates a significant improvement in the average score following the treatment. The substantial increase in both the mean and standard deviation suggests that the Think-Pair-Share technique was effective in enhancing students' reading comprehension. However, it is important to note that the relatively high standard deviation in both tests reflects considerable variation in students' performance, indicating differences in individual learning outcomes.

Discussion

The pre-test results revealed that the overall reading comprehension of seventh-grade students at SMP Negeri Nunpo was at a *fair* level, with an average score of 51.04. The majority of students were clustered in the fair category, with only one student reaching the good level and none achieving an excellent performance. This outcome highlights a significant need for improvement in students' understanding of descriptive texts.

A closer analysis of the results revealed specific areas of difficulty, particularly in answering questions related to the main idea and purpose of the text. These question types require higher-order thinking skills, such as making inferences, synthesizing information, and identifying the author's intent—skills that are often underdeveloped in early-stage EFL learners (Nation, 2009). The findings are consistent with Grabe and Stoller's (2011) view that reading comprehension involves both lower-level decoding and higher-level interpretation, both of which need to be taught explicitly in EFL contexts.

The results also align with previous research by Hamra and Syatriana (2012), who observed that Indonesian students, particularly in rural settings, often lack vocabulary mastery and struggle with inferential comprehension due to teacher-centered instructional methods. At SMP Negeri Nunpo, traditional strategies such as lecturing or reading aloud may not adequately support the development of these essential skills. Moreover, the complete failure of 7 students to answer purpose questions correctly is particularly concerning, as it reflects a deeper issue with global text understanding and engagement. This finding reinforces the need for teaching strategies that not only focus on literal comprehension but also encourage students to think critically and interact meaningfully with the text.

The data suggest that an interactive and student-centered approach—such as the Think-Pair-Share (TPS) technique—could be beneficial in this context. As supported by Astuti (2020) and Rahmawati & Hermayawati (2018), TPS fosters discussion, peer learning, and active engagement, all of which are crucial for improving both literal and inferential comprehension skills. Therefore, the findings from the pre-test highlight the necessity of implementing more engaging, cooperative methods to support students in overcoming their specific reading challenges. These insights provide a foundation for applying the TPS technique as an intervention aimed at enhancing students' comprehension of descriptive texts in the following cycle of this study.

The post-test results revealed a significant improvement in students' reading comprehension after the implementation of the Think-Pair-Share (TPS) technique. The mean score increased from 51.04 in the pre-test to 80.64 in the post-test, shifting the overall performance classification from *fair* to *good*. This improvement suggests that TPS had a strong positive impact on students' ability to comprehend descriptive texts.

The distribution of scores further supports this finding. While no students were classified as *excellent* in the pre-test, six students achieved this level in the post-test. Additionally, 19 students were categorized as *good*, and notably, no student fell into the

fair or *very poor* categories. This sharp contrast indicates that the TPS strategy not only enhanced general comprehension skills but also helped low-performing students make substantial progress.

One of the most remarkable findings was the complete elimination of incorrect answers in stated detail, vocabulary in context, and purpose questions. This result suggests that TPS successfully supported students in retrieving explicit information, understanding word meaning within context, and grasping the overall purpose of a text—skills that are often difficult for early EFL learners (Nation, 2009; Grabe & Stoller, 2011).

The improvements align with previous studies, such as those by Zuhriyah (2017) and Rahmawati and Hermayawati (2018), which highlight how TPS increases student engagement, encourages peer interaction, and reduces reading anxiety. Through its three-step structure—think, pair, and share—TPS provided students at SMP Negeri Nunpo with the opportunity to process information individually, discuss it collaboratively, and then articulate their understanding with confidence. This process appears to have deepened their comprehension and facilitated learning.

Despite the overall progress, some minor challenges remained. In the main idea questions, six students continued to struggle, managing to answer only two out of several questions correctly. This suggests that although students improved in literal comprehension, some still needed more practice synthesizing information to determine the main idea—a higher-order skill that requires inference and abstraction. A single student also answered a reference question incorrectly, indicating that occasional misunderstandings in tracking referents still occurred.

In conclusion, the post-test findings affirm that the Think-Pair-Share technique significantly improved students' reading comprehension of descriptive texts. It not only raised overall performance but also addressed specific reading sub-skills that were problematic in the pre-test. The few remaining challenges can inform future instructional focus, particularly in reinforcing skills like identifying the main idea and resolving textual references.

CONCLUSION

The findings of this study indicate that seventh-grade students at SMP Negeri Nunpo initially demonstrated fair reading comprehension skills, with particular difficulties in higher-order thinking areas such as identifying main ideas and understanding the author's purpose. After implementing the Think-Pair-Share (TPS) technique, students showed significant improvement, with average scores rising from 51.04 to 80.64 and many students moving into good and excellent performance categories. TPS effectively enhanced students' abilities in both literal and inferential comprehension, supporting the retrieval of explicit information, vocabulary interpretation, and understanding of text purpose. Although some challenges remained, particularly in synthesizing main ideas, the overall success of TPS highlights its effectiveness as a student-centered strategy for improving reading comprehension in early EFL learning contexts. It is suggested that future instruction continues to integrate interactive techniques like TPS while placing greater emphasis on developing student's ability to identify main ideas and make inferences to achieve even higher levels of comprehension.

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BLENDLED LEARNING STRATEGIES TO ENHANCE ACADEMIC WRITING SKILLS IN UNDERGRADUATE STUDENTS

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ABSTRACT Blended learning in Malaysia has become a popular educational approach as it integrates online and face-to-face learning to provide students with a more flexible and engaging experience. Many higher education institutions have adopted this approach to meet the needs of digitally savvy students while maintaining quality education. Using the UBI20402 Academic Reading and Writing course as a case study, the paper evaluates the integration of digital tools, multimodal resources, and structured teaching methodologies to achieve CEFR B2-level learning outcomes. A mixed-methods methodology was employed, comprising the analysis of student performance metrics, surveys to capture student feedback, and instructor observations. The results highlighted that blended learning significantly enhanced students' understanding of academic writing structures and processes. These include students who found the integration of digital tools and multimodal resources highly engaging and helpful for understanding complex academic texts, whilst instructor observations revealed that structured teaching methodologies increased classroom participation, collaboration, and students' critical thinking and analytical skills when combined with digital tools. In conclusion, blended learning strategies offer a solid foundation for teaching academic writing while effectively meeting the needs of a wide range of students. Future research could explore mobile-friendly platforms and examine the long-term impact of blended learning on students' academic achievement.

Keywords: blended writing, academic writing, synchronous, asynchronous

INTRODUCTION

In Malaysia, where higher education institutions aim to give students a flexible and interesting learning experience, blended learning has become an innovative approach to education. By combining online and in-person instruction, this educational approach enables students to take advantage of technological innovations while preserving crucial classroom interactions (Jassni et al., 2024). Blended learning presents a chance to meet students' changing needs while maintaining the provision of high-quality education in a time when they are depending more and more on technology for communication and learning. Hence, it is critical to assess how well institutions are accomplishing the desired learning outcomes as they integrate digital tools, multimodal resources, and structured teaching methodologies. The UBI20402 Academic Reading and Writing course provides a valuable case study for exploring how blended learning influences students' performance in academic writing, specifically aligned with the CEFR B2 proficiency level.

Blended learning has become increasingly popular in Malaysian universities, with many institutions leveraging technological advancements to improve teaching and learning processes (Ramalingam et al. 2021; Chan et al. 2023). While the concept of blended learning was introduced in Malaysia as early as 2015 (Rahman et al., 2015), its implementation became more prevalent during the COVID-19 pandemic (Seong et al.,

2022). The crisis accelerated the transition toward digital and hybrid education, with higher education institutions integrating online platforms and remote learning tools into their curricula. As the country moved into the post-pandemic recovery phase, universities continued to embrace blended learning as a long-term strategy to improve accessibility and learning flexibility. Ramasamy et al., (2021) noted that both public and private universities in Malaysia have increasingly adopted blended learning as their primary teaching and learning approach. It was said that the shift to blended learning is consistent with global educational trends which recognised the need for pedagogical approaches that help students develop digital literacy and independent learning skills. Furthermore, in the context of language education, particularly academic writing, blended learning makes it easier to access a wide range of resources including interactive learning platforms, online discussion forums, and automated feedback systems. These elements help students to analyse and write well-structured academic essays, which is an important skill for higher education success. Several recent research studies have been conducted specifically to outline blended learning practices in a variety of settings, as well as their advantages and disadvantages (Seong et al., 2022); however, research on its effectiveness in achieving academic writing proficiency is limited. By addressing this gap, the current study examines the use of blended learning strategies such as digital tools and structured teaching methodologies in the UBI20402 course to determine their impact on students' learning outcomes.

Problem statement

While previous research has focused on blended learning in language acquisition, little attention has been paid to its specific application in academic writing courses. In this course, many students struggle to understand the main ideas of complex texts, academic writing structures, critical analysis, and argumentation, all of which are required for CEFR B2 proficiency. Furthermore, the efficacy of digital tools and multimodal resources in increasing engagement and comprehension also remains a source of concern. Thus, the purpose of this study is to determine whether blended learning strategies help students in developing their academic writing skills and meet the required proficiency levels.

Research Questions

This study aims to answer the following research questions:

1. What are students' perceptions of blended learning in the context of academic writing instruction?
2. How do structured teaching methodologies within blended learning influence classroom participation, collaboration, and critical thinking?
3. How does the integration of digital tools and multimodal resources in a blended learning environment impact students' academic writing skills?

Significance of the Research

This study adds to the growing body of research on blended learning by providing empirical evidence about its impact on academic writing instruction. The findings will help instructors, curriculum developers, and policymakers to improve blended learning strategies for language courses. This study also offers useful insights into effective

pedagogical practices by emphasising the importance of digital tools, multimodal resources, and structured teaching methodologies. Furthermore, it also paves the way for future research on mobile-friendly learning platforms and the long-term effects of blended learning on students' academic success, especially in language courses.

LITERATURE REVIEW

Blended learning which combines traditional face-to-face instruction with online educational technologies has become increasingly prevalent in higher education worldwide, including Malaysia. This literature review investigates the evolution of blended learning in Malaysian higher education, its impact on English as a Second Language (ESL) learners' writing skills, and the challenges and opportunities that come with its implementation.

The Integration of Blended Learning in Malaysian Higher Education

Over the last decade, Malaysian higher education has seen a significant shift towards blended learning, which combines traditional face-to-face instruction with online educational technologies. This was driven by national policy initiatives and pedagogical reforms starting from 2011. During the year, the Malaysian government introduced the National e-Learning Policy (Dasar e-Pembelajaran Negara, or DePAN) which encouraged higher education institutions to build both infrastructure and e-content (Hamid et al., 2021). The policy was updated to DePAN 2.0 in 2015 to emphasise innovation, lifelong learning, and the role of structured digital pedagogies. Initially, the integration of blended learning was gradual, with institutions testing various methodologies such as Massive Open Online Courses (MOOCs), Learning Management Systems (LMS) and other web-based technologies to improve pedagogical effectiveness (Ramasamy et al., 2021) to improve pedagogical effectiveness. More recently, the onset of the COVID-19 pandemic in 2020 served as a catalyst, which hastening the integration of digital tools and online platforms into traditional education in universities.

Mahsum et al. (2021) stated that many higher education institutions have increasingly adopted information and communication technology (ICT)-based alternatives such as blended learning to ensure the continuity of teaching and learning outside of the traditional classroom setting. In recent years, the use of blended learning in higher education has grown significantly as several Malaysian universities have been at the forefront of using blended learning strategies (Drysdale et al., 2013; Maroco et al., 2016; Adams et al., 2020; Fisher et al., 2021). In addition to this, research into the effectiveness of blended learning in Malaysian higher education has produced encouraging results. Jassni et al. (2024) examined the use of web-based technologies in blended learning environments for English as a Second Language (ESL) students. According to the findings, such integration not only improved students' language proficiency but also helped them develop critical thinking and communication skills for the twenty-first century. Moreover, Thang et al. (2013) and Rahman et al. (2020) also discovered that blended learning in English language education greatly improved students' learning experiences while also meeting their linguistic and behavioural needs. In their studies, students reported that this approach provided a more flexible and supportive learning environment which helped them improve their writing skills. Overall, these findings

underscore the growing importance of blended learning in Malaysian higher education, demonstrating its effectiveness in enhancing students' language proficiency, critical thinking, and overall academic performance while providing a more flexible and engaging learning environment.

Impact of Blended Learning on ESL Learners' Writing Skills

Several studies have looked into the effectiveness of blended learning in improving ESL learners' writing proficiency in Malaysia. Hassan et al. (2021) have carried out a quasi-experimental study with 60 ESL students at a Malaysian polytechnic. Their study found that students who were exposed to blended learning performed significantly better in writing than those who received traditional instruction. The study attributed this improvement to the interactive and adaptable nature of blended learning which encourages active participation and provides access to a wide range of learning materials. Similarly, Abdul Rahman et al. (2020) used focus group interviews to investigate university students' attitudes towards blended learning in writing courses. Participants reported that the blended approach improved their writing skills while also increasing their self-confidence and interest in learning English. The combination of online resources and in-person interactions was thought to help students gain a better understanding of writing conventions and structures. Moreover, Kaur and Sandaran (2022) also conducted additional research into the impact of blended learning on young ESL learners' sentence writing skills. Using a mixed-method design, the researchers discovered that the blended approach significantly improved students' writing abilities and motivation. The combination of digital tools and traditional teaching methods resulted in an engaging learning environment that emphasised active participation and practice. Zamri and Narasuman (2023) similarly found that blended learning improved ESL students' self-efficacy and overall English ability, including writing performance. To conclude, these studies demonstrate the positive impact of blended learning on ESL learners' writing proficiency in Malaysia.

Beyond the Malaysian context, international study also confirms these benefits. In an experimental study with Pakistani ESL students, Mahmood, Sharif, and Aleem (2024) found that the blended learning group significantly outperformed the traditional instruction group in paragraph writing. These improvements were observed in vocabulary use, grammatical accuracy, and reflective thinking. In a different context, Ismael, Abu Bakar, and Latif (2016) looked at a collaborative blended-learning writing environment with EFL (which is closely connected to ESL) students and showed that blended learning enhanced writing performance and decreased writing anxiety. In a similar vein, Othman, Rahmat, and Ahmad (2019) emphasised that teacher preparedness and digital competency continue to be obstacles in blended ESL writing classes since teachers' lack of technology expertise might demotivate students and obstruct the advantages of blended learning.

In sum, research from within Malaysia and international sources shows that blended learning generally improves ESL/EFL students' writing abilities, particularly in terms of motivation, engagement, self-efficacy, and writing performance. However, real-world issues with teacher preparation and students' flexibility need careful execution and continuous assistance.

Challenges and Opportunities for Implementing Blended Learning

While the advantages of blended learning are obvious, its implementation in Malaysia faces numerous challenges. Significant challenges have been identified, including inconsistent internet connectivity, limited access to technological resources, and the need for comprehensive educator training programs. Sareen & Mandal (2024) identified barriers such as inconsistent internet connectivity, inadequate technological infrastructure, and insufficient training for educators to effectively use digital tools. These challenges are especially acute in rural and underserved areas, where access to high-speed internet and advanced educational technologies is limited. Additionally, in one study, Sabre et al. (2022) found that insufficient infrastructure and technical support impede effective blended learning implementation in Malaysian higher education institutions, whilst Zulkflee et al. (2022) discovered that primary school teachers face challenges due to limited technological resources and a lack of professional development opportunities which affects their ability to effectively integrate blended learning into their teaching practices. Similarly, Namyssova et al. (2019) also highlighted additional barriers including insufficient institutional support, large class sizes, and a lack of digital literacy among students, which affected students' performance and learning outcomes in blended learning environments. Furthermore, Al-Ayed and Al-Tit (2021) emphasized that successful blended learning adoption depends not only on technology but also on institutional and student-related factors.

RESEARCH METHODS

This study used a mixed-methods research design to assess how blended learning affects academic writing proficiency in the UBI20402 Academic Reading and Writing course. The methodology combines quantitative and qualitative methods to ensure a thorough understanding of student learning outcomes, engagement, and instructor observations. The study has three main components: (1) student surveys to collect feedback on digital tools, multimodal resources, and structured teaching methodologies, (2) instructor observations to assess classroom participation, collaboration, and critical thinking skills, and (3) analysis of student performance metrics to assess academic writing proficiency.

Data Collection Methods

Data collection consists of multiple instruments:

Table 1: Instruments for Data Collection

RQ	Type of data collection	Descriptions
RQ1	Surveys	Structured questionnaires are administered to students to capture their experiences with blended learning, engagement with digital tools and perceptions of instructional methodologies. This instrument combines Likert-scale items to quantitatively measure student perceptions and open-ended questions to gather qualitative insights for thematic analysis.

RQ2	Instructors' Observations	Instructors document classroom dynamics, participation, and the effectiveness of blended learning strategies in enhancing students' analytical and critical thinking skills.
RQ1	Students Performance Metrics & CLO Achievement Analysis	Students' assessments scores and CLO Achievement Analysis are analysed to measure improvements in academic writing skills.

Sampling

This study included two types of participants: undergraduate students enrolled in Academic Reading and Writing course (UBI20402) and the instructors who delivered the course.

Student Participants: A purposive sampling method was used to target students enrolled in the UBI20402 course. The sample consisted of approximately 557 undergraduate students from a Malaysian university, ensuring a representative mix of learners participating in blended learning. The students involved in the study were those enrolled in the UBI20402 Academic Reading and Writing course during the Semester February 2024/2025. Students' opinions of blended learning and how it affected their writing growth were gathered using a questionnaire that was sent out at the end of the semester. All answers were anonymous and participation was entirely voluntary.

Instructor Participants: Five instructors were also consulted to provide deeper insights into the effectiveness of blended learning strategies in teaching an academic writing course. Their involvement had two purposes: [1] To provide observation data by using a standardised observation checklist designed specifically for this project. Throughout the 14-week semester, the teachers completed the checklist in both face-to-face and online classes, documenting students' involvement, teamwork, and critical thinking skills, and [2] To collect feedback via a separate teacher survey from the student questionnaire. This brief poll featured an open-ended question about instructors' experiences utilising blended learning in academic writing courses.

Overall, the study triangulated impressions and classroom evidence by collecting data from both students and instructors, which strengthened the findings' validity.

Data Analysis

This study used qualitative and quantitative methods to investigate the impact of blended learning strategies on academic writing. Three main methods were used to gather data: student surveys, teacher observations, and student performance evaluations. There were two sources that provided the qualitative data: open-ended survey answers, which revealed how students felt about blended learning, and instructor observations which captured student involvement, participation patterns, and obstacles in both online and in-person sessions. The teacher observations were carried out by members of the research team who also taught the UBI20402 course during the February Semester 2024/2025. As these five instructors were active in both teaching and research, processes were developed to improve the reliability and dependability of the observational data. A standardised observation protocol that was in line with CEFR B2 academic writing descriptors and markers of blended learning engagement (e.g., participation, collaboration, contact with

digital tools) has been created by the research team. This was done to improve dependability since it minimises researcher bias and guarantees consistency among classroom observations (Cohen et al., 2018). In this stage, Braun and Clarke's (2006) six-phase Thematic Analysis Framework was used to evaluate all qualitative data thematically. This paradigm, which is frequently employed in blended learning research, facilitates a thorough and methodical analysis of student feedback and classroom experiences (Nowell et al., 2017).

Meanwhile, the quantitative data consisted of students' scores from four important tests in the UBI20402 Academic Reading and Writing course. For the first assessment, students were given academic papers to complete the Reading for Input Quiz which assessed their comprehension and proficiency in academic reading. Assessment 2 (Reading Matrix) is an analytical activity meant to evaluate students' abilities to detect primary ideas, supporting information, and organisational structure in academic texts. Assessment 3 (Essay Outline) is an assessment of students' abilities to organise academic writing in accordance with CEFR B2 organisational requirement. Lastly, the final Academic Essay (Assessment 4) is a full-length academic essay that assesses coherence, cohesiveness, paragraph development, critical analysis, and linguistic accuracy. Descriptive statistics such as mean scores and standard deviations were used to assess overall student performance and detect accomplishment trends. In addition, CLO (Course Learning Outcome) achievement percentages were also examined to identify areas of strength and progress within the cohort.

Ethical considerations

Prior to the start of data collection, all student participants gave their informed consent. Students were made aware of the study's objectives, confidentiality protocols, and their freedom to leave at any time without facing repercussions for their grades.

FINDINGS AND DISCUSSION

This section presents the findings of this study which investigated the impacts of blended learning strategies on academic writing proficiency in the UBI20402 Academic Reading and Writing course. The discussion connects these findings to the research questions and literature review by providing a thorough analysis of student learning outcomes, engagement, and instructional effectiveness. The findings were divided into three parts as below:

[1] RQ1: Students' Perceptions of Blended Learning in Academic Writing Instruction

The survey results from 557 students show an overall positive perception of blended learning in the academic writing course. A significant 81% of students agreed that the blended approach provided more flexibility in managing their learning schedules, allowing them to balance academic tasks more effectively. Furthermore, 75% believed that combining online and face-to-face instruction improved their learning experience compared to traditional methods. 69% found online discussions and interactive activities to be more interesting, whilst 22% of students mentioned issues such as

inconsistent internet access and technical difficulties which occasionally slowed their learning progress in the course. A summary of these findings is presented in Figure 1.

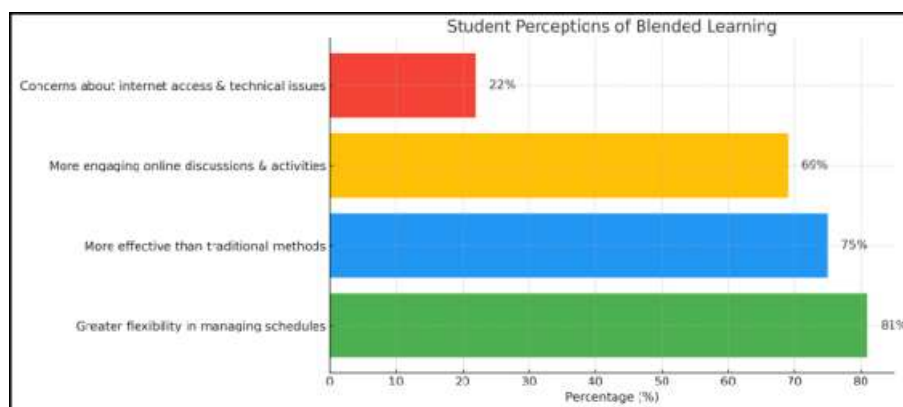


Figure 1: Students Perception of Blended Learning in Academic Writing Instruction

Along with this, thematic analysis of open-ended responses revealed three key themes that highlight students' experiences with blended learning in academic writing as in Table 4.

Table 4: Students' Experiences with Blended Writing in Academic Writing

No	Theme	Descriptions
1	Increase Motivation and Engagement	Students felt more engaged due to interactive digital tools and flexible learning formats.
2	Improve confidence in writing	Many students indicated that blended learning helped them to gain confidence in their writing skills by allowing them to revisit instructional materials online.
3	Challenges with Internet Access and Technical barriers discussion	Some students experienced frustration with unstable internet and connections, particularly during synchronous online discussions.

Based on the table, the analysis showed that many students reported increased motivation and engagement due to the interactive digital tools and adaptable learning formats. Furthermore, the ability to review instructional materials online also increased their confidence in writing, whereas some students encountered difficulties, particularly with internet access and technical barriers which occasionally hampered their learning experience. These findings are consistent with previous research showing that blended learning increases student engagement and confidence in writing skills (Liu, 2013; Banditvilai, 2016).

Besides this, 82% of students felt that structured teaching methodologies such as guided discussions and scaffolded writing tasks improve their classroom participation. In addition, many students valued having structured guidelines or organised formats for discussion. These clear frameworks taught them on how to participate effectively, organise their thoughts, and communicate their ideas more confidently. Moreover, 76% of students also agreed that structured peer and instructor

review activities improved their collaboration skills by increasing their engagement in providing and receiving constructive feedback. In terms of critical thinking, 71% of students said that analytical writing exercises helped them strengthen their arguments and evaluate sources more effectively. However, some students (18%) expressed concern that structured activities hampered creativity because they felt constrained by predefined formats and rules.

RQ2: Influence of Structured Teaching Methodologies on Classroom Participation, Collaboration, and Critical Thinking Skills

Instructor observations supported the survey results as they demonstrate that structured teaching methodologies have significantly improved classroom participation, collaboration, and critical thinking.

Enhanced Classroom Participation

Over the course of a 14-week semester, instructors observed that structured teaching methodologies significantly increased student participation. By providing clear guidelines and structured activities, students felt more confident in contributing to class discussions and engaging with course materials. Instructors also noted that students who were previously hesitant to speak became more active, particularly in guided peer discussions and consultations. Besides, the use of blended learning tools such as discussion forums and interactive writing tasks has further encouraged participation by allowing students to prepare their responses before engaging in live discussions. According to the teachers' weekly observation reports, this preparation led to more significant contributions during in-person conversations.

Improved Collaboration and Peer Interaction

The use of structured methodologies encouraged students to collaborate more effectively. Instructors reported that structured group activities such as peer reviews, guided brainstorming sessions and small-group discussions have improved teamwork and idea sharing. Students were more willing to give constructive feedback to their peers when given clear rubrics and structured review guidelines. Despite this, digital platforms such as Google Docs and the institutional learning management system (LMS) known as eCampus also helped to facilitate collaborative learning by allowing students to interact asynchronously in exchanging ideas and refining their work prior to class discussions. By examining shared papers, keeping track of version histories, and watching in-the-moment exchanges during synchronous online sessions, instructors kept an eye on these cooperative activities. With the help of these monitoring techniques, teachers were able to spot unmistakable signs of better teamwork: students shared ideas more often, offered helpful criticism using the provided rubrics, and showed a greater readiness to edit their work in response to criticism from peers.

Development of Critical Thinking Skills

Instructors also highlighted on how structured methodologies helped students to develop stronger critical thinking skills by breaking down complex academic concepts into manageable steps. This was observed using the structured observation checklist created specifically for this study, where observations were conducted throughout the course of the 14-week semester. Structured approaches such as guided text analysis exercises, class discussions, and scaffolded writing assignments demonstrate how the students to delve deeper into academic arguments. Through guided text analysis exercises, class discussions, and draft reviews, instructors kept an eye on students' analytical processes both in-person and virtually. They did this by looking at students' contributions in LMS discussion boards, Google Docs revision histories, and responses from digital pre-class assignments. These sources of evidence allowed teachers to assess how successfully students deconstructed difficult academic ideas, examined textual data, and developed preliminary arguments. It has been discovered that structured resources like guided inquiry frameworks, scaffolded writing assignments, and step-by-step templates help students to interact more fully with academic information. However, some instructors noted that a few students became overly reliant on structured templates, limiting their ability to develop independent critical thinking skills.

Besides this, a brief survey was given to each of the five teachers participating in the course in order to supplement the observational data and gain a deeper understanding of their viewpoints. Unlike the student survey previously discussed, this instructor survey concentrated solely on instructors' experiences utilising blended learning techniques to teach academic writing. *"How do you feel about conducting academic writing classes using blended learning strategies?"* was one of the survey's open-ended questions. Table 5 displays the condensed answers.

Table 5: Instructors' Perspectives on Teaching Academic Writing with Blended Learning

Instructor	Response Summary
Instructor 1	<i>"Blended learning has improved student engagement, but some students rely too much on structured templates instead of developing their own ideas."</i>
Instructor 2	<i>"The use of digital tools has enhanced participation and writing quality, but students need more guidance on independent critical thinking."</i>
Instructor 3	<i>"I find blended learning effective in fostering collaboration, but striking a balance between structure and independent learning is challenging."</i>
Instructor 4	<i>"Students are more confident in writing tasks and discussions, yet some struggle to transition from guided exercises to self-directed work."</i>
Instructor 5	<i>"Blended learning supports interactive learning, but technical difficulties and varying student adaptability can affect the overall effectiveness."</i>

Overall, the findings show that while instructors generally saw blended learning as beneficial, they also encountered difficulties in balancing structure and fostering independent learning among their students.

RQ3: The integration of digital tools and multimodal resources in a blended learning environment on students' academic writing skills

The response to RQ3 which investigates the impact of digital tools and multimodal resources on academic writing is based on two primary sources: (i) student assessments, and (ii) Course Learning Outcome (CLO) achievement analysis. The assessment data

provide quantitative evidence of student performance improvements where the CLO analysis highlights on specific areas of success and challenges in academic writing.

(i) Student Assessments

The analysis of student assessment marks indicates a positive impact of digital tools and multimodal resources on academic writing proficiency. The findings were derived from the grade distribution and overall score analysis of the final examination for the course in the Semester February 2024/2025 session. The average score of 72 with a standard deviation of 8 suggests that most students performed within a consistent range, demonstrating competency in academic writing skills. However, variations in scores suggest that some students may still require additional support in key writing areas. Overall, these findings also align with the CLO achievements where students effectively structured arguments and analysed specialised texts.

(ii) CLO Achievement Analysis

Table 2: CLO Achievements for UBI 20402 (Academic Reading and Writing)

	Course Learning Outcomes	Score
CLO1	Identify ideas, opinions and the writers' viewpoints or stances in a highly specialised text	2.8 (Good)
CLO2	Write an essay with a systematically developed argument supported by relevant details	2.94 (Good)

The overall CLO1 achievement (2.8/4.0) suggests a strong ability to analyse academic texts but highlights the need for further scaffolding in critical reading skills, whereas the CLO2 achievement (2.94/4.0) indicates that students were generally successful in developing structured academic essays, yet some struggled with integrating evidence effectively. Predominantly, the integration of blended learning tools also likely contributed to this performance by providing interactive learning experiences, real-time feedback, and structured methodologies.

Discussions

The findings of this study are consistent with previous research that supports the use of blended learning strategies in academic writing instruction. Alsalhi et al. (2021) and Barros et al. (2017) found that blended learning improves student engagement and writing proficiency through interactive learning environments (Geta & Olango (2022). These findings can be interpreted using three interconnected mechanisms. First, the course's scaffolding and organised templates reduced cognitive burden during hard activities (for example, essay planning and text analysis), allowing students to focus on higher-order processes like argumentation and revision. When scaffolds are gradually removed, students can apply similar procedures to unguided tasks, which explains the observed improvements in writing organisation and analytical confidence. Second, multimodal resources and digital tools (recorded lectures, interactive forums, and collaborative documents) provided multiple input channels as well as immediate opportunities for

drafting, feedback, and revision, promoting iterative writing practice and assisting students in quickly internalising academic conventions. Third, the blended modality which combined asynchronous preparation and synchronous conversations gave students time to consider and construct responses before speaking where it improves the quality of contributions during live sessions and boosts peer review processes.

These interpretive explanations are supported by previous empirical and review research. For example, Banditvilai (2016) and Alsalhi et al. (2021) found that blended designs boost student autonomy and access to interactive materials, resulting in increased language skills and learning outcomes. The flexibility provided by blended formats has also been noted in systematic reviews where Müller and Mildemberger (2021) describe how shifting parts of instruction online can allow for self-paced study and targeted remediation, whereas De Bruijn-Smoldersm and Prinsen (2024) discovered that online components in blended courses promote self-regulated learning -- an important mediator of improved revision and editing behaviours in writing tasks. Similarly, Owston and colleagues' research on blended course proportions suggests that well-designed blends (with proper alignment of online and face-to-face activities) are likely to result in higher engagement and performance (Owston et al., 2018). Overall, when compared to previous research, the findings of this study emphasise the benefits of blended learning while highlighting areas for improvement.

However, persistent barriers also moderated these benefits. Several students reported connectivity issues and limited access to devices, which constrained their ability to engage fully with online components; this finding mirrors documented digital-divide challenges in blended implementation (Alsalhi et al., 2021). Instructors' reports also indicated that some learners became reliant on structured templates, limiting independent critical thinking on unguided tasks in which it is an effect that suggests scaffolding must be intentionally tapered and complemented with explicit instruction on transfer and self-regulated strategies (Müller & Mildemberger, 2021; De Bruijn-Smoldersm & Prinsen, 2024).

CONCLUSION

This study confirms that blended learning strategies improve academic writing proficiency by increasing student engagement, organisation, and confidence in writing. The findings are also consistent with previous research which found that digital tools and multimodal resources help students in improving their writing skills by allowing them to structure arguments more effectively and engage with complex academic texts. Furthermore, structured teaching methodologies have been shown to enhance students' participation and collaboration, creating an interactive learning environment conducive to academic growth. In relation to this, future research should investigate the long-term effects of blended learning on writing proficiency and critical thinking skills, particularly through longitudinal studies. This is because blended learning has the potential to provide a dynamic and equitable approach to academic writing instruction.

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Dari Scroll ke Berbicara: Studi Kuasi-Eksperimen tentang Pengaruh TikTok dan Instagram Reels terhadap Kepercayaan Diri Siswa dalam Berbicara Bahasa Inggris

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Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh penggunaan video pendek berbasis media sosial, khususnya TikTok dan Instagram Reels, terhadap kepercayaan diri siswa dalam berbicara bahasa Inggris. Latar belakang penelitian ini didasarkan pada meningkatnya penggunaan media sosial oleh remaja dan potensi platform tersebut sebagai sarana pembelajaran berbasis ekspresi diri, keterampilan komunikasi, dan refleksi personal. Penelitian ini menggunakan pendekatan kuantitatif desain quasi-experimental dengan tipe non-equivalent control group design. Penelitian terdiri dari 30 siswa kelas VIII SMP di Turi, Lamongan, yang terbagi dalam dua kelompok: 15 siswa kelompok eksperimen dan 15 siswa kelompok kontrol. Data yang di gunakan, dikumpulkan melalui pre-test dan post-test, baik berupa tugas berbicara monolog maupun angket kepercayaan diri yang menggunakan skala Likert. Uji normalitas, uji homogenitas, statistik deskriptif, paired sample t-test, dan independent sample t-test digunakan untuk menganalisis data. Semua ini dilakukan menggunakan SPSS versi 26. Hasil penelitian menunjukkan bahwa kelompok eksperimen memperoleh skor kepercayaan diri yang signifikan dengan rata-rata 77,13 setelah test, dibandingkan dengan kelompok kontrol yang hanya memperoleh skor 65,20. Dengan nilai signifikansi 0,000 ($<0,05$), uji t-sample independen menunjukkan pengaruh nyata dari perawatan. Temuan ini mendukung kerangka teori Self-Determination Theory (SDT), yang menekankan pentingnya pemenuhan kebutuhan otonomi, kompetensi, dan keterhubungan dalam pembelajaran. Penelitian ini menyarankan agar guru mempertimbangkan penggunaan video pendek sebagai strategi inovatif dalam pengajaran berbicara bahasa Inggris.

Kata Kunci: kepercayaan diri, video pendek, TikTok, Instagram Reels, pembelajaran berbicara.

Abstract

This study looks at how short-form video platforms—more especially, TikTok and Instagram Reels—have affected students' English language confidence. This study was driven by the growing prevalence of social media among adolescents and its possible role as a medium for expressive, communicative, and reflective learning. A quasi-experimental design of the non-equivalent control group type was used in a quantitative approach. 30 eighth-graders from a junior high school in Turi, Lamongan, participated in the study. They were split into 2 groups: 15 in the experimental group and 15 in the control group. Speaking exercises and a Likert-scale confidence questionnaire were included in the pre-test and post-test used to collect data. Using SPSS version 26, the data was analysed using paired sample t-tests, independent sample t-tests, descriptive statistics, and normality and homogeneity tests. The findings indicated a notable enhancement in the experimental group, which achieved a post-test average of 77.13, in contrast to 65.20 in the control group. The independent sample t-test yielded a significance value of 0.000 (<0.05), demonstrating a statistically significant effect of the treatment. The findings are consistent with Self-Determination Theory (SDT), which highlights the importance of relatedness, competence, and autonomy in promoting learning motivation and self-assurance. Short-form videos are recommended by the research as a new way to boost students' speaking confidence during English language training.

Keywords: speaking confidence, short-form video, TikTok, Instagram Reels, English learning.

Introduction

The rapid advancement of technology has significantly transformed the landscape of education, including language learning. Social media, as part of this digital revolution, has evolved beyond mere entertainment into a valuable tool for innovative teaching. Instagram Reels and TikTok are two of the most popular platforms among today's youth. The stages offer captivating short-form video content and let users engage in a variety of communicative activities that require speaking abilities, such as roleplaying, storytelling, and lip-syncing. (Chuah & Ch'ng, 2023; Sadhasivam et al., 2023). Short-form recordings enhance adaptability and creativity, allowing students to express themselves in English independently, free from the constraints of traditional classroom environments (Herlisya & Wiratno, 2022; Nguyen & Tran, 2024). This tailored and student-focused method aligns with global educational trends that prioritise learner autonomy, digital literacy, and practical communication skills. Despite the increasing popularity of TikTok and Instagram Reels in Indonesia, the actual impact of these platforms on students' speaking confidence—particularly at the junior high school level—has yet to be thoroughly investigated (Nurwinda & Ambarwati, 2024; Rininggayuh et al., 2024).

The expression of certainty is regarded as an important emotional element in verbal communication practices. Confident students are more likely to take risks, speak spontaneously, and engage more frequently in language use. Conversely, individuals with low self-confidence often avoid speaking activities and rely heavily on rote memorisation (A.F & G.M, 2020; Charles & Soekarno, 2024). In order to improve students' speaking confidence both within and outside of the classroom, innovative approaches are crucial.

This study examines the influence of video-based stages on students' mental and behavioural engagement, utilising the Self-Determination Theory (SDT) developed by Deci & Richard (2000). Self-Determination Theory posits that intrinsic motivation arises from the fulfilment of three basic psychological needs: relatedness (a feeling of connection to others), competence (a sense of learning effectiveness), and autonomy (the capacity to control one's own behaviour). In video-based learning, students experience autonomy through content selection and creative expression, competence through repetition and modification, and relatedness through social feedback.

This hypothetical focal point is supported by an emerging body of observational research. Oktavena et al. (2025) reported that students engaged in TikTok-based tasks demonstrated significant improvements in speaking confidence. Cahyono & Perdhani (2023) found that elements such as naming and two-part harmony facilitated risk-taking and reduced speaking anxiety. According to Aprian et al. (2023), the interactive characteristics of Instagram Reels enhanced learners' motivation and performance. Basri & Wahyuni (2024) confirmed that the consistent use of TikTok significantly improved students' speaking abilities in EFL classrooms. The findings demonstrate that social media can convert passive learners into active participants by being in line with Self-Determination Theory's (SDT) motivational tenets.

The purpose of this study is to look into how students' speaking confidence is affected by TikTok and Instagram Reels. This study, which focusses on 30 eighth-grade students from a junior high school in Turi, Lamongan, uses a quantitative methodology and a quasi-experimental design. The Students were divided into a control group that received instruction using conventional methods and an experimental group that watched brief videos. This study aims to offer theoretical insights and practical recommendations for the implementation of social media-based speaking instruction in Indonesian EFL contexts.

Method

Desain, Subjects, and Research Location

This study involved 30 eighth-grade students from a public junior high school in Turi, Lamongan, East Java, Indonesia. The selection of these students was conducted through purposive sampling based on specific predefined criteria, which included their initial speaking ability and access to digital devices, such as smartphones and internet connectivity.

15 students were assigned to the experimental group, and another 15 were assigned to the control group. The experimental group used short-form video platforms, specifically TikTok and Instagram Reels, to practise speaking. The control group participated in conventional speaking exercises within a classroom learning environment.

In order to investigate the effects of an intervention in actual classroom settings without complete randomisation, this study used a quasi-experimental design, more precisely a non-equivalent control group design. The four-week study took place in the second semester of the 2024–2025 school year. Data collection and learning activities were conducted in a manner suited to the students' home learning environments, utilising a combination of online and blended formats.

Instruments

This research primarily employed a speaking performance assessment rubric and a Speaking Confidence Questionnaire as its tools. The questionnaire utilised a 4-point Likert scale, emphasising the components of competence and autonomy, as indicated by SDT indicators (Deci & Richard, 2000; Panadero, 2017). The evaluation used ten items modified from Herlisya & Wiratno (2022) and was administered during the pre-test and post-test stages. The assessment of students' monologue videos utilised a five-component rubric, which included pronunciation, fluency, grammar, vocabulary, and content relevance. This rubric, intended for junior high school students (Yulita & Hertiki, 2023), was adapted from existing models used in English Language Teaching (ELT). This study employed two primary instruments: a Likert-scale questionnaire and a speaking performance evaluation rubric, to assess students' speaking confidence and performance.

The Confidence Questionnaire

The Speaking Confidence Questionnaire, designed with a 4-point Likert scale to eliminate neutral responses, assesses students' self-perceived speaking confidence. The questionnaire comprised ten statements addressing various aspects of speaking confidence, including fluency, pronunciation, apprehension regarding mistakes, and comfort with video platforms such as TikTok and Instagram Reels. The instrument, intended for junior high school students, was employed in both pre-test and post-test settings.

A score between 1 and 4 was assigned to each item.

1 = a strong disagreement.

2 = disagreement.

3 = agreement.

4 = strong agreement.

The maximum total score achievable was 4, while the minimum was 1. A higher score indicated increased speaking confidence. Table 1 enumerates all items utilised in the questionnaire.

Table 1. Speaking Confidence Questionnaire (Likert Scale 1–4)

No.	Statement	1	2	3	4
1	I feel comfortable speaking English in front of my classmates.				
2	I can express my ideas in English fluently.				
3	I don't feel nervous when speaking English on				

	camera.				
4	I am confident in my English pronunciation.				
5	I feel comfortable speaking English through short videos (e.g., TikTok).				
6	I am not afraid to make mistakes while speaking English.				
7	I can speak English without reading a script.				
8	I feel my speaking skills improve after creating English-speaking videos.				
9	I can use facial expressions and body language effectively while speaking English.				
10	I feel more confident after practicing speaking through social media.				

Scoring:

Minimum = 10 | Maximum = 40

Interpretation: 10–19 = Low, 20–29 = Medium, 30–40 = High (based on data distribution)

Speaking Performance Rubric

A Speaking Performance Assessment Rubric was employed to evaluate students' actual speaking abilities, specifically as demonstrated in their recorded videos. The evaluation examined five critical components: pronunciation, fluency, grammar, vocabulary, and content relevance. Each category was assigned a score between 1 (Poor) and 4 (Excellent), resulting in a maximum overall score of 20.

The rubric was employed to evaluate students' video submissions before and after the intervention. This material is designed for junior high school students and aligns with the criteria used in English language teaching (ELT) speaking assessments.

Table 2. Speaking Performance Assessment Rubric

Aspect	4 – Excellent	3 – Good	2 – Fair	1 – Poor
Pronunciation	Very clear, almost no mistakes, easy to understand.	Clear, some mistakes but do not affect understanding.	Unclear at times, some difficult-to-understand words.	Many errors, hard to understand.
Fluency	Smooth flow, no noticeable hesitation or unnecessary repetition.	Fairly smooth, minor hesitation or repetition.	Some long pauses or frequent repetition that affect flow.	Hesitant, disjointed, hard to maintain flow.
Grammar	Mostly accurate and varied sentence structures.	Some grammatical errors, but meaning remains clear.	Many errors that affect comprehension.	Dominated by grammatical errors, hard to understand.
Vocabulary	Wide range and appropriate use of vocabulary.	Basic vocabulary with minor variation.	Limited vocabulary with frequent repetition.	Very limited, frequent incorrect word usage.
Content Relevance	Very relevant, well-structured, and informative content.	Mostly relevant with minor lack of detail.	Lacks focus or partially off-topic.	Unclear, off-topic, and confusing.

Total Score Range: 5–20

Score Interpretation:

17–20 = Excellent
 13–16 = Good
 9–12 = Fair
 5–8 = Poor

Data Collection

Data were collected in three phases: preparation, intervention and monitoring, and final assessment. In the first week, all groups completed a pre-test consisting of a monologue video and a confidence survey. During weeks 2 to 4, the experimental group created short speaking videos using TikTok and Instagram Reels, while the control group engaged in speaking tasks in the classroom. The post-test was administered in the fourth week using the same format.

Initial Preparation Stage (Week 1)

Prior to implementation, the researcher collaborated with the school to secure permission and selected 30 eighth-grade students who fulfilled the participation criteria. Two groups of fifteen students each—one for the experimental group and one for the control group—were purposefully created. In the first week, a pre-test was conducted for all participants. The pre-test consisted of:

- Speaking task: Each student recorded a 1–2 minute English monologue on a simple topic such as My Favorite Hobby, then submitted it via WhatsApp or Google Drive.
- Confidence questionnaire: A 10-item Likert scale questionnaire (4-point scale, 1 = strongly disagree, 4 = strongly agree) was used to measure aspects such as nervousness, comfort level, and self-perception in speaking English.

Tabel 3. Pre-test scores (out of 100):

Participant	Experimental Group	Control Group
Student 1	52	53
Student 2	56	50
Student 3	60	55
Student 4	54	52
Student 5	51	54
Student 6	55	53
Student 7	53	56
Student 8	58	51
Student 9	57	52
Student 10	59	50
Student 11	56	55
Student 12	52	53
Student 13	54	54
Student 14	50	56
Student 15	55	52
Average	54.7	53.1

Treatment and Control Activities (Week 2 to Week 4)

During the following three weeks, learning activities for both groups were conducted using different approaches. In order to compare the effects on speaking confidence, this stage aimed to administer the treatment to the experimental group while the control group continued with traditional learning. Experimental Group (Using TikTok & Instagram Reels)

- The experimental group was given the opportunity Using short-form videos for social media (TikTok and Instagram Reels) as part of their speaking practice. The activities were conducted gradually to keep students engaged and avoid overburdening them.

- Week 2:
 - ✓ Introduction to creating short videos (maximum 60 seconds).
 - ✓ Researcher provided sample videos demonstrating clear pronunciation and confident expression.
 - ✓ Topic: Introduce Yourself.
 - ✓ Students submitted their videos via a dedicated WhatsApp group.
- Week 3:
 - ✓ Researcher gave feedback on the previous videos (intonation, gestures, sentence structure).
 - ✓ Topic: My Favorite Hobby.
 - ✓ Students recorded new videos based on the given feedback.
- Week 4:
 - ✓ Real-life simulation: speaking as if talking to a tourist or foreign teacher.
 - ✓ Topic: My Daily Routine.
 - ✓ All videos were collected to compare with the first week's submissions.

Each week, students also wrote brief reflections or participated in group discussions. The researcher observed changes in facial expressions, body language, and voice volume as indicators of speaking confidence.

- Control Group (Conventional Learning)

The control group received the same topics and learning objectives but without the use of social media or video recording.

- Week 2 (Treatment 1):
 - ✓ Topic: Introduce Yourself.
 - ✓ Teacher demonstrated the task; students practiced directly in class.
- Week 3 (Treatment 2):
 - ✓ Topic: My Favorite Hobby.
 - ✓ Students presented individually with visual aids; the teacher gave real-time feedback.
- Week 4 (Treatment 3):
 - ✓ Topic: My Daily Routine.
 - ✓ Role-play activities were conducted (e.g., acting as a tour guide or foreign friend).

Although the control group participated in speaking practices, their experience did not include reflective technology tools like the experimental group.

Final Evaluation Stage (Week 4)

Using the same format as the pre-test, a post-test was administered at the conclusion of week four. Students recorded a new English monologue with a different but equally challenging topic and completed the same confidence questionnaire.

Tabel 4. Post-test scores (out of 100):

Participant	Experimental Group	Control Group
Student 1	75	56
Student 2	78	54
Student 3	81	57
Student 4	77	58
Student 5	73	55
Student 6	76	57
Student 7	79	58
Student 8	82	56
Student 9	80	54
Student 10	84	59
Student 11	77	55
Student 12	76	56
Student 13	78	54
Student 14	74	56
Student 15	79	55
Average	77.7	56.1

To obtain relevant and valid data in this study, the data collection process is carried out systematically through several stages of activities. Each activity is designed to support the structured experiment implementation stages, starting from the preparation stage to evaluation of the results. The following table provides a detailed description of the series of activities:

Table 5. Data Collection and Activity Flow

Week	Activity	Experimental Group	Control Group
1	Pre-test	Monologue + confidence questionnaire	Monologue + confidence questionnaire
2	Treatment 1	Short video: Introduce Yourself	In-class speaking: self-introduction
3	Treatment 2 + Feedback	Short video: My Favorite Hobby + feedback	In-class speaking: with visual aids
4	Treatment 3 + Post-test	Short video: My Daily Routine + post-test + questionnaire	Role play + post-test + questionnaire

Data Analysis

This study used data analysis to assess how students' confidence in speaking English was affected by short-form videos on social media, particularly TikTok and Instagram Reels. The pre-test and post-test results given to two groups provided the data for analysis: an experimental group exposed to treatment through short-form video, and a control group receiving traditional speaking instruction.

Before performing the comparative analysis, initial statistical assumptions were assessed to confirm the validity of the subsequent tests. To determine if the data followed a normal distribution, a normality test using the Kolmogorov-Smirnov method was performed. The homogeneity of variances between the experimental and control groups was assessed using Levene's Test. After confirming that the data met the required assumptions, a paired sample t-test was used to evaluate any significant differences between pre-test and post-test scores within the same group. The purpose of this test was to assess the significant improvement in speaking confidence following treatment in both the experimental and control groups.

In order to compare the effects of the experimental and control groups, the mean post-test scores were assessed using an independent sample t-test. This analysis enabled the researchers to ascertain if the implementation of short-form videos produced a statistically significant impact in comparison to conventional teaching methods.

Data analysis was conducted using SPSS version 26. Levene's Test evaluated homogeneity, and the Kolmogorov-Smirnov test evaluated data normality. While an independent sample t-test compared post-test scores across groups, a paired sample t-test evaluated differences in pre- and post-test scores

within each group. This method is frequently employed in quantitative experimental research (Schunk & DiBenedetto, 2020).

Result and Discussion

This section displays the quantitative analysis results based on the experimental group's and the control group's pre-test and post-test scores. This analysis aims to determine whether short-form video platforms such as Instagram Reels and TikTok have a significant impact on students' confidence in their ability to speak English. Five primary statistical tests were used to analyse the data: the paired sample t-test, the independent sample t-test, the homogeneity test, the normality test, and descriptive statistics. The Self-Determination Theory (SDT) framework, created by Deci & Richard (2000), which highlights the psychological needs of autonomy, competence, and relatedness, serves as the foundation for the interpretation of the results.

Preliminary Comparison of Pre-Test and Post-Test Scores

The following table compares each participant's pre-test and post-test scores in both groups to give a general idea of the raw data prior to statistical testing. This comparison aids in demonstrating the general upward trend.

Table 6. Comparison of Pre-Test and Post-Test Scores (Out of 100)

Participant	Experimental Group		Control Group	
	Pre-Test	Post-Test	Pre-Test	Post-Test
Student 1	52	75	53	56
Student 2	56	78	50	54
Student 3	60	81	55	57
Student 4	54	77	52	58
Student 5	51	73	54	55
Student 6	55	76	53	57
Student 7	53	79	56	58
Student 8	58	82	51	56
Student 9	57	80	52	54
Student 10	59	84	50	59
Student 11	56	77	55	55
Student 12	52	76	53	56
Student 13	54	78	54	54
Student 14	50	74	56	56
Student 15	55	79	52	55
Average	54.7	77.7	53.1	56.1

Initial Observation:

- The experimental group increased by +23 points on average, whereas the control group only saw a +3 point increase.
- This preliminary comparison indicates a strong trend of improvement in speaking confidence due to the video-based intervention.

Normality Test

The Kolmogorov-Smirnov test was used to determine whether the data from pre-test and post-test scores followed a normal distribution. This step is crucial because parametric statistical tests require normally distributed data.

Table 6. Kolmogorov-Smirnov Normality Test

Group	Test	Statistic	df	Sig. (p)
Experimental	Pre-Test	0.143	15	0.200
Experimental	Post-Test	0.160	15	0.187
Control	Pre-Test	0.148	15	0.200
Control	Post-Test	0.134	15	0.200

Interpretation: All significance values were higher than 0.05, suggesting a normal distribution of the data. This means the assumption for parametric testing was satisfied.

Homogeneity Test

To determine whether both groups had equal variance, a Levene's Test for Equality of Variance was conducted.

Table 7. Levene's Test of Homogeneity

Levene Statistic	df1	df2	Sig. (p)
1.324	1	28	0.259

Interpretation: The p-value of $0.259 > 0.05$ indicates that the variances between the two groups are homogeneous, allowing further comparison using the independent t-test.

Descriptive Statistics

Descriptive statistics provide a general overview of students' speaking confidence scores before and after the treatment.

Table 8. Descriptive Statistics

Group	Test	N	Mean	Std. Deviation
Experimental	Pre-Test	15	61.00	4.47
Experimental	Post-Test	15	77.13	4.64
Control	Pre-Test	15	60.40	4.38
Control	Post-Test	15	65.20	3.81

Interpretation:

- Experimental group showed an increase of 16.13 points from pre-test to post-test.
- Control group showed only a 4.80 point increase. These results demonstrate a considerably stronger effect of the video-based intervention compared to conventional learning.

T-test for Paired Samples

The purpose of this test was to determine whether there were statistically significant differences between each group's pre-test and post-test results.

Table 9. T-test for Paired Samples – Experimental Group

Mean Difference	t	df	Sig. (2-tailed)
16.13	10.94	14	0.000

Table 10. T-test for Paired Samples – Control Group

Mean Difference	t	df	Sig. (2-tailed)
4.80	4.15	14	0.001

Interpretation: Although there was a significant improvement in both groups ($p < 0.05$), the experimental group's increase in speaking confidence was significantly greater than the control group's. This demonstrates how short-form videos can help students feel more confident.

T-test for Independent Samples

The purpose of this test was to compare the two independent groups' post-test results.

Table 11. Post-Test Scores for Independent Sample T-Test

Group	N	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Experimental	15	77.13	4.64	7.50	28	0.000
Control	15	65.20	3.81			

Interpretation: A significant difference between the post-test scores of the experimental and control groups is confirmed by a p-value of $0.000 < 0.05$. The use of TikTok and Instagram Reels had a substantial effect on students' speaking confidence.

Discussion Based on Self-Determination Theory (SDT)

The results of this study strongly support the principles of Self-Determination Theory (SDT) proposed by (Deci & Richard, 2000). The significant improvement in the experimental group can be explained through the fulfillment of three core psychological needs:

- **Autonomy** – Students were given the freedom to choose topics, express themselves creatively, and control the production of their videos. This autonomy contributed to their intrinsic motivation to speak confidently in English.
- **Competence** – Through repeated video practice, self-correction, and weekly feedback, students were able to enhance their language skills and recognize their improvement. This mastery experience reinforced their speaking confidence.
- **Relatedness** – Engagement through digital platforms such as likes, comments, and peer support increased students' sense of belonging and emotional involvement, reducing anxiety and encouraging active participation.

These findings correspond with Nguyen & Tran (2024), who discovered that students exhibited increased confidence when they had autonomy over their video content. Likewise, Oktavena et al. (2025) indicated that TikTok's dubbing and duet functionalities enhanced confidence, whereas Widari (2024) noted that Instagram Reels facilitated vocabulary expansion and elevated speaking proficiency. The utilization of short-form video platforms in the experimental group facilitated a transition from passive classroom learning to the active enhancement of oral skills in an authentic and engaging manner. Through self-recording, students enhanced their pronunciation, fluency, and grammar in a low-pressure setting, which, as per Self-Determination Theory, bolsters competence and self-esteem. Conversely, the control group exhibited only modest improvement, likely affected by traditional classroom methods like direct instruction and oral repetition, which may lack the novelty, autonomy, and digital engagement offered by short-form video platforms.

Conclusion

The analysis and discussion indicate that short-form videos on social media platforms like TikTok and Instagram Reels significantly enhance students' confidence in speaking English. The experimental group's post-test scores significantly increased in comparison to the control group, indicating this. With the experimental group achieving a higher post-test average score (77.13) than the control group (65.20) and a p-value of 0.000, which is less than 0.05, the independent sample t-test revealed a significant difference between the two groups.

These findings suggest that social media serves not only as a source of entertainment but also as a potent educational instrument, particularly in enhancing affective dimensions like speaking confidence. The efficacy of this method is intricately connected to the fundamental tenets of Self-Determination Theory (SDT), which underscores the significance of satisfying psychological needs for autonomy, competence, and relatedness. This method allows students enhanced autonomy in content

creation, facilitates repeated practice, and fosters significant social interaction through feedback, likes, and peer responses. It is recommended that junior high school English teachers integrate short-form video platforms into speaking activities to foster a more authentic, engaging, and empowering learning environment. Future research should incorporate a larger sample size, prolong the intervention duration, and examine additional variables such as speaking anxiety or fluency to enhance the breadth and outcomes of related studies.

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PENGARUH METODE JOYFULL LEARNING BERBASIS ICE BREAKING TERHADAP MINAT BELAJAR SISWA KELAS V MIN 1 TEGAL PADA MATA PELAJARAN IPAS

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ABSTRAK Penelitian ini menguji pengaruh metode *Joyful Learning* berbasis *Ice Breaking* terhadap minat belajar siswa kelas V MIN 1 Tegal pada mata pelajaran IPAS. Penelitian ini dilatarbelakangi oleh rendahnya minat belajar siswa, yang seringkali disebabkan oleh metode pembelajaran konvensional yang minim partisipasi. Menggunakan pendekatan kuantitatif dengan desain kuasi-eksperimen (*posttest-only control group design*), penelitian ini melibatkan kelas V.1 sebagai kelompok eksperimen dan kelas V.3 sebagai kelompok kontrol. Data dikumpulkan menggunakan angket minat belajar yang telah diuji validitas dan reliabilitasnya. Hasilnya menunjukkan adanya perbedaan minat belajar yang signifikan antara kedua kelompok, dengan nilai signifikansi uji-t sebesar 0,000 ($< 0,05$). *Analisis effect size Cohen's d* sebesar 2,06 menunjukkan pengaruh yang sangat besar, dan ketika dikonversi, metode ini berkontribusi pada 51,5% peningkatan minat belajar siswa. Peningkatan ini disebabkan oleh lingkungan belajar yang menyenangkan dan interaktif yang mendorong siswa untuk berpartisipasi aktif. Sebagai kesimpulan, metode ini merupakan alternatif efektif untuk meningkatkan minat belajar siswa pada mata pelajaran IPAS secara signifikan.

Keywords: joyful learning, ice breaking, minat belajar

ABSTRACT This study aimed to test the effect of the *Joyful Learning* method based on *Ice Breaking* on the learning interest of fifth-grade students at MIN 1 Tegal in the IPAS (Natural and Social Sciences) subject. The research was motivated by the low level of student learning interest, which is often caused by conventional teaching methods that involve minimal participation. Employing a quantitative approach with a *posttest-only control group design*, the study involved class V.1 as the experimental group and class V.3 as the control group. Data was collected using a learning interest questionnaire that had been tested for validity and reliability. The results revealed a significant difference in learning interest between the two groups, with a *t*-test significance value of 0.000 (< 0.05). The effect size (*Cohen's d*) was 2.06, indicating a very large influence, and when converted, the method accounted for a 51.5% increase. This enhancement is attributed to the fun and interactive learning environment created by the method, which encouraged students to participate actively. In conclusion, this method is an effective alternative for significantly improving student learning interest in IPAS.

Keywords: joyful learning, ice breaking, learning interest

INTRODUCTION

Pendidikan merupakan fondasi utama untuk mempersiapkan peserta didik agar dapat berperan optimal dalam berbagai bidang kehidupan di masa depan. Untuk mencapai tujuan ini, perbaikan dalam proses pembelajaran menjadi hal yang paling krusial. Pembelajaran yang bermutu dapat memotivasi siswa, memperluas pengetahuan, dan memperdalam pemahaman mereka.

Namun, realitas di lapangan menunjukkan bahwa metode pembelajaran di tingkat sekolah dasar masih banyak bergantung pada pendekatan ceramah, diskusi, dan tanya jawab, sementara penerapan teknik seperti *ice breaking* masih jarang digunakan. Kondisi ini kerap menyebabkan siswa terlibat dalam obrolan yang tidak relevan, mengakibatkan turunnya tingkat konsentrasi dan rendahnya minat belajar mereka, terutama pada mata pelajaran IPAS.

Mengingat peran penting guru sebagai fasilitator, mereka dituntut untuk

menerapkan strategi yang sesuai agar siswa tetap fokus. Salah satu alternatif untuk meningkatkan minat belajar siswa adalah melalui penerapan metode *Joyful Learning* yang dikombinasikan dengan teknik *ice breaking*. Pendekatan ini terbukti mampu memperkuat daya ingat, meningkatkan keterampilan komunikasi, serta membantu siswa kembali fokus, yang pada akhirnya mendorong peningkatan minat belajar.

Pendekatan *Joyful Learning* yang diintegrasikan dengan *ice breaking* menekankan bahwa proses pembelajaran idealnya berlangsung dalam suasana yang bebas dari tekanan, baik secara fisik maupun psikologis. Metode ini melibatkan berbagai teknik dan aktivitas yang dirancang agar pembelajaran menjadi lebih hidup dan interaktif, seperti permainan edukatif dan kegiatan fisik ringan yang sesuai dengan topik pelajaran.

Penelitian mengenai metode pembelajaran yang menyenangkan dan efektif telah banyak dilakukan. Beberapa penelitian terdahulu menunjukkan hasil yang relevan, meskipun dengan fokus dan desain yang bervariasi. Penelitian Muthmainnah dkk. (2022) dan Abdul Hafid dkk. (2024) sama-sama mengkaji pengaruh positif metode *joyful learning* berbasis *ice breaking* terhadap minat belajar siswa pada mata pelajaran IPA dan Bahasa Indonesia. Demikian pula, penelitian Alia Rohani dkk. (2021) menunjukkan bahwa metode *joyful learning* berpengaruh terhadap hasil belajar Ilmu Pengetahuan Sosial pada siswa. Penelitian lain oleh Nur Afif Wahyudin dkk. (2023) juga meneliti upaya peningkatan konsentrasi belajar siswa melalui metode ini.

Kesamaan utama dari semua penelitian ini adalah penggunaan pendekatan kuantitatif eksperimen untuk menciptakan suasana belajar yang aktif dan interaktif, dengan tujuan meningkatkan hasil pembelajaran siswa. Meskipun demikian, terdapat beberapa perbedaan dan kesenjangan yang ingin diisi oleh penelitian ini. Perbedaan utama terletak pada subjek dan desain penelitian. Penelitian Muthmainnah dkk. dilakukan pada kelas III dengan desain *pretest-posttest*, sementara penelitian ini berfokus pada kelas V dengan desain *posttest-only control group design*.

Selain itu, materi yang dikaji dalam penelitian ini lebih spesifik, yaitu pada mata pelajaran IPAS dengan fokus materi sistem pernapasan dan pencernaan manusia. Beberapa penelitian terdahulu juga memiliki fokus yang berbeda, seperti pada motivasi belajar atau menggunakan media pembelajaran tambahan seperti papan pintar perkalian. Dengan memfokuskan pada minat belajar IPAS di kelas V MIN 1 Tegal dan menggunakan desain yang berbeda, penelitian ini bertujuan untuk memberikan kontribusi baru yang spesifik dan melengkapi literatur yang sudah ada.

Berdasarkan latar belakang tersebut, penelitian ini merumuskan beberapa masalah. Pertama, bagaimana penerapan metode *joyful learning* berbasis *ice breaking* pada siswa kelas V di MIN 1 Tegal? Kedua, bagaimana minat belajar siswa di kelas V MIN 1 Tegal? Dan ketiga, bagaimana pengaruh metode *joyful learning* berbasis *ice breaking* terhadap minat belajar siswa kelas V di MIN 1 Tegal? Dengan mengkaji kesenjangan ini, penelitian ini diharapkan dapat memberikan wawasan baru bagi para guru dalam menentukan strategi pembelajaran yang tepat guna meningkatkan minat belajar siswa pada mata pelajaran tersebut.

LITERATURE REVIEW

1. Metode *Joyful Learning*

Metode *Joyful Learning* adalah pendekatan pembelajaran yang bertujuan menciptakan suasana belajar yang menyenangkan dan penuh kegembiraan. Istilah ini berasal dari kata "*enjoy*" (mengasyikkan) dan "*learning*" (belajar), yang dimaknai sebagai proses pembelajaran yang membuat siswa merasa senang dan nyaman. Pendekatan ini

membuat siswa merasa senang, yang pada akhirnya dapat meningkatkan motivasi dan partisipasi aktif mereka. Pembelajaran menjadi lebih optimal dan penuh keceriaan ketika terjalin hubungan yang harmonis antara guru dan siswa, tanpa adanya tekanan.

Ada tiga bentuk kegiatan utama dalam pembelajaran *Joyful Learning*. Pertama, yel-yel yang dimanfaatkan sebagai sarana untuk meningkatkan semangat serta fokus siswa. Yel-yel merupakan rangkaian kata atau kalimat yang disusun secara kolaboratif antara guru dan siswa guna menciptakan atmosfer ceria.

Kedua, senam otak (*Brain Gym*) adalah gerakan sederhana yang melibatkan tubuh untuk membantu proses belajar menjadi lebih mudah dan menyenangkan. Gerakan ini berperan dalam membantu siswa menjadi lebih tenang, mengurangi rasa tegang, serta mempersiapkan pikiran agar lebih siap menerima materi pembelajaran.

Ketiga, humor adalah salah satu kebutuhan mendasar manusia yang memberikan manfaat positif dalam kegiatan belajar. Humor berasal dari daya imajinasi dan kecerdasan otak dalam menciptakan hubungan atau asosiasi baru yang tak terduga. Humor mampu mengangkat siswa dari suasana yang terlalu serius, menghilangkan kejenuhan, dan memberikan energi baru di dalam kelas. Dengan menerapkan humor yang bersifat edukatif, lingkungan belajar menjadi lebih hidup dan menyenangkan, sehingga mampu menumbuhkan semangat serta ketertarikan siswa dalam belajar.

Tujuan utama *Joyful Learning* adalah membantu guru mengembangkan potensi siswa melalui proses penyampaian pengetahuan yang tidak memaksakan. Metode ini mendorong siswa untuk berani berpendapat, bertanya, dan mengemukakan gagasan. Kelebihan metode ini adalah menciptakan suasana belajar yang rileks dan menyenangkan, merangsang kreativitas, serta menawarkan beragam strategi. Sementara itu, kelemahannya adalah guru dituntut untuk menguasai berbagai metode dan harus mampu mengendalikan kelas agar tidak menjadi tidak terkendali.

2. *Ice Breaking*

Ice breaking adalah strategi yang ampuh untuk mencairkan suasana dan meredakan ketegangan di kelas. Kesan awal dari guru memiliki peran penting dalam membentuk suasana belajar, dan *ice breaking* berfungsi sebagai daya tarik yang memengaruhi cara siswa menyerap informasi. Secara ilmiah, emosi positif yang timbul dari *ice breaking* memicu pelepasan dopamin, yang membantu meningkatkan motivasi dan konsentrasi belajar. Ketika siswa merasa senang, mereka menjadi peserta aktif, bukan penerima informasi pasif.

Karakteristik *ice breaking* meliputi penggunaan kalimat pembuka yang menarik, aktivitas fisik yang energik, serta pemanfaatan suara atau musik yang merangsang indera pendengaran. Selain itu, cerita lucu atau anekdot ringan sering digunakan untuk memancing tawa. Manfaat *ice breaking* adalah meredakan kelelahan dan kejenuhan, mendorong kreativitas dan kolaborasi, serta meningkatkan rasa percaya diri siswa. Teknik ini dapat diterapkan secara spontan ketika siswa mulai kehilangan fokus atau secara terencana sebagai bagian dari perencanaan pembelajaran.

Dalam pembelajaran, teknik *ice breaking* dapat diterapkan melalui dua pendekatan utama: spontan dan terencana. Teknik spontan biasanya digunakan untuk mengatasi penurunan fokus atau semangat siswa yang terjadi secara tiba-tiba dalam proses pembelajaran. Aktivitas ini mampu menghidupkan kembali suasana kelas, sehingga siswa menjadi lebih siap menerima materi berikutnya. Karena sifatnya yang fleksibel, teknik ini efektif untuk menjaga dinamika kelas tetap aktif, kondusif, dan menarik.

Sementara itu, teknik terencana adalah *ice breaking* yang dirancang secara matang dan diintegrasikan ke dalam perencanaan pembelajaran. Dengan perancangan yang baik, teknik ini dapat menjadi penghubung efektif antara materi pelajaran dan pengalaman siswa, sehingga mempermudah pemahaman konsep rumit dan mendorong partisipasi aktif. Pendekatan ini memungkinkan pendidik untuk menyesuaikan strategi pembelajaran dengan kebutuhan dan preferensi siswa, yang pada akhirnya meningkatkan efisiensi dan hasil belajar secara keseluruhan.

3. Hakikat Pembelajaran IPAS MI

IPAS adalah integrasi dari Ilmu Pengetahuan Alam dan Sosial yang menawarkan metode pembelajaran inovatif dengan menggabungkan prinsip-prinsip dari berbagai bidang studi. Alih-alih terpisah menjadi biologi, fisika, kimia, sejarah, atau sosiologi, IPAS menyatukan elemen-elemen penting dari setiap disiplin ilmu menjadi satu jaringan pengetahuan yang saling berhubungan. Tujuannya adalah untuk memberikan pemahaman yang lebih komprehensif tentang bagaimana alam dan masyarakat berinteraksi. Keunggulan utama IPAS adalah pendekatan interdisipliner, yang memungkinkan siswa melihat suatu fenomena atau masalah secara lebih mendalam dari berbagai sudut pandang.

Pembelajaran IPAS (Ilmu Pengetahuan Alam dan Sosial) adalah proses transformatif yang melibatkan siswa secara aktif dalam membangun pemahaman mendalam tentang dunia di sekitar mereka, baik dari perspektif alamiah maupun sosial. Proses ini melampaui sekadar menghafal fakta dan informasi, melainkan menekankan integrasi konsep dari berbagai disiplin ilmu seperti biologi, fisika, kimia, geografi, dan sosiologi, untuk memberikan gambaran yang holistik. Pembelajaran IPAS menganut prinsip konstruktivisme, di mana siswa dipandang sebagai pembelajar aktif yang membangun pemahaman mereka sendiri melalui pengalaman langsung, observasi, dan interaksi sosial.

Pembelajaran IPAS memiliki beberapa karakteristik khas. Pertama, bersifat integratif, yang menggabungkan konsep ilmu alam dan sosial untuk pemahaman holistik. Kedua, menggunakan pendekatan inkuiri dan berbasis masalah, sehingga mendorong siswa untuk aktif mencari tahu dan memecahkan masalah. Ketiga, IPAS berorientasi pada pengembangan keterampilan abad ke-21, seperti berpikir kritis, kreatif, kolaboratif, dan komunikatif. Keempat, materi IPAS relevan dengan kehidupan siswa, membantu mereka memahami penerapan konsep dalam masalah nyata.

Ruang lingkup pembelajaran IPAS mencakup berbagai topik ilmu alam, seperti makhluk hidup, energi, materi, bumi, dan antariksa. Selain itu, IPAS juga meliputi ilmu sosial, seperti manusia, masyarakat, budaya, sejarah, ekonomi, dan politik. Pembelajaran ini juga mengkaji isu-isu global, seperti perubahan iklim, pelestarian lingkungan, dan keadilan sosial. Melalui karakteristik dan cakupan materinya, IPAS bertujuan membekali siswa dengan pengetahuan, keterampilan, dan sikap yang dibutuhkan untuk menjadi warga negara yang cerdas dan bertanggung jawab

4. Minat Belajar

Minat belajar siswa merupakan konsep kompleks yang mencakup lebih dari sekadar ketertarikan sesaat terhadap materi pelajaran. Konsep ini adalah perpaduan antara dorongan internal dan pengaruh eksternal yang menentukan seberapa besar seorang siswa termotivasi untuk belajar.

Secara internal, minat belajar dipengaruhi oleh motivasi intrinsik, yaitu keinginan

untuk belajar demi kepuasan pribadi dan pengembangan diri. Kebutuhan dan tujuan individu, seperti keinginan untuk mencapai cita-cita atau memperoleh pengetahuan baru, juga memainkan peran penting. Selain itu, kondisi emosional dan psikologis siswa, termasuk tingkat kepercayaan diri dan persepsi terhadap diri sendiri, dapat memengaruhi minat belajar mereka.

Secara eksternal, lingkungan keluarga, sekolah, dan masyarakat memberikan kontribusi signifikan terhadap minat belajar. Dukungan dan dorongan dari orang tua, kualitas pengajaran guru, interaksi dengan teman sebaya, serta relevansi materi pelajaran dengan kehidupan nyata, semuanya memengaruhi minat belajar siswa. Oleh karena itu, memahami dan mengakomodasi faktor-faktor ini sangat penting untuk menciptakan lingkungan belajar yang kondusif dan memotivasi.

Mengingat pentingnya minat belajar dalam mencapai hasil optimal, guru dapat menerapkan strategi pembelajaran yang kreatif dan melibatkan siswa secara aktif. Pemberian apresiasi dan umpan balik yang membangun juga dapat meningkatkan motivasi dan rasa percaya diri siswa. Selain itu, peran orang tua juga sangat penting dalam menumbuhkan minat belajar anak melalui kolaborasi dengan pihak sekolah.

RESEARCH METHODS

1. Jenis dan Pendekatan Penelitian

Penelitian ini menggunakan pendekatan kuantitatif dengan jenis eksperimen. Tujuannya adalah untuk menganalisis pengaruh suatu perlakuan terhadap variabel lain dalam situasi yang dikendalikan. Secara spesifik, penelitian ini menggunakan desain kuasi-eksperimen dengan rancangan *posttest only control group design*.

2. Populasi dan Sampel

Populasi dalam penelitian ini adalah seluruh siswa kelas V di MIN 1 Tegal. Populasi didefinisikan sebagai himpunan objek atau subjek yang memiliki karakteristik tertentu dan menjadi pusat perhatian dalam studi. Karena jumlah populasi yang besar dan keterbatasan peneliti, digunakan teknik pengambilan sampel. Sampel adalah sebagian dari populasi yang mewakili keseluruhan populasi. Metode pengambilan sampel yang digunakan adalah *purposive sampling*, yaitu teknik pemilihan sampel yang didasarkan pada kriteria atau pertimbangan tertentu yang telah ditentukan sebelumnya.

3. Operasional Variabel

Variabel penelitian adalah atribut atau ciri dari suatu objek, individu, atau aktivitas yang ditetapkan oleh peneliti untuk diteliti dan dianalisis. Dalam penelitian ini, terdapat dua variabel utama. Variabel bebas (*independent variable*) adalah penerapan metode *joyful learning* berbasis *ice breaking*, yaitu variabel yang memberikan pengaruh atau menjadi penyebab munculnya variabel lain.

Sebaliknya, variabel terikat (*dependent variable*) adalah minat belajar siswa, yang merupakan variabel yang dipengaruhi atau menjadi dampak dari variabel bebas. Minat belajar ini dapat diukur melalui indikator-indikator seperti tingkat perhatian terhadap pelajaran, antusiasme dalam mengikuti pembelajaran, kegigihan dalam belajar, serta keingintahuan yang tinggi terhadap materi yang dipelajari.

4. Sumber dan Jenis Data

Penelitian ini menggunakan rancangan *posttest-only control group* dalam metode kuasi-eksperimen. Dalam desain ini, siswa dibagi menjadi dua kelompok: kelompok

eksperimen yang menerima perlakuan berupa penerapan metode *joyful learning* berbasis *ice breaking*, dan kelompok kontrol yang tidak diberikan perlakuan khusus. Penilaian hasil belajar dilakukan hanya melalui *posttest* setelah pembelajaran selesai, tanpa didahului oleh *pretest*.

Penelitian ini memanfaatkan dua jenis sumber data, yakni data primer dan data sekunder. Data primer diperoleh melalui hasil *posttest* yang dilakukan setelah siswa menyelesaikan proses pembelajaran. Sementara itu, data sekunder dikumpulkan dari wawancara dengan guru, lembar observasi, dokumen pembelajaran, serta berbagai catatan pendukung lainnya yang berkaitan dengan penerapan model pembelajaran yang digunakan.

5. Teknik Pengumpulan Data

Pengumpulan data dalam penelitian ini dilakukan melalui dua teknik utama, yaitu angket/kuesioner dan dokumentasi. Angket digunakan untuk mengukur minat belajar siswa, di mana instrumen ini disusun berdasarkan indikator minat belajar dan menggunakan skala Likert dengan lima opsi jawaban, yaitu: sangat setuju, setuju, ragu-ragu, tidak setuju, dan sangat tidak setuju. Sementara itu, dokumentasi digunakan untuk mengumpulkan data pelengkap berupa foto-foto kegiatan yang merepresentasikan jalannya proses penelitian.

6. Validitas dan Reliabilitas

Instrumen penelitian harus memenuhi syarat validitas dan reliabilitas sebelum digunakan untuk memastikan kelayakannya. Pengujian awal dilakukan melalui uji validitas untuk menilai sejauh mana kuesioner dapat dianggap sah. Uji ini bertujuan memastikan setiap butir pertanyaan mampu mewakili atau mencerminkan aspek yang hendak diukur. Pengujian validitas dilakukan dengan rumus korelasi *product moment pearson* yang dibantu oleh perangkat lunak SPSS. Berikut hasil uji validitas yang dilakukan pada peserta didik diluar sampel:

Tabel 1: Hasil Uji Validitas Angket

No Angket	<i>r</i> _{hitung}	<i>r</i> _{tabel}	Kriteria
1	0.829	0.413	Valid
2	0.737	0.413	Valid
3	0.467	0.413	Valid
4	0.331	0.413	Tidak Valid
5	0.503	0.413	Valid
6	0.660	0.413	Valid
7	0.645	0.413	Valid
8	0.467	0.413	Valid
9	0.841	0.413	Valid
10	0.569	0.413	Valid
11	0.415	0.413	Valid
12	0.562	0.413	Valid
13	0.462	0.413	Valid
14	0.800	0.413	Valid
15	0.529	0.413	Valid
16	0.731	0.413	Valid
17	0.505	0.413	Valid
18	0.478	0.413	Valid
19	0.780	0.413	Valid

No Angket	<i>r</i> hitung	<i>r</i> tabel	Kriteria
20	0.673	0.413	Valid
21	0.611	0.413	Valid
22	0.749	0.413	Valid
23	0.179	0.413	Tidak Valid
24	0.410	0.413	Tidak Valid
25	0.622	0.413	Valid
26	0.823	0.413	Valid
27	0.573	0.413	Valid
28	0.683	0.413	Valid
29	0.445	0.413	Valid
30	0.519	0.413	Valid

Berdasarkan tabel diatas, dari 30 pertanyaan angket, 27 dinyatakan valid karena nilai *r*-hitung lebih besar dari *r*-tabel. Setelah itu, dilakukan uji reliabilitas yang mengacu pada seberapa konsisten dan stabil instrumen dalam memberikan hasil saat digunakan berulang kali. Tingkat reliabilitas suatu tes mencerminkan seberapa andal dan konsisten alat tersebut dalam menghasilkan data, meskipun pengambilan data dilakukan dalam situasi atau kondisi yang berbeda. Berikut adalah tabel yang menginterpretasikan tingkat reliabilitas:

Tabel 2: Interpretasi Tingkat Reliabilitas

Koefisien Korelasi	Kriteria
$0,80 < r \leq 1,00$	Sangat tinggi
$0,60 < r \leq 0,80$	Tinggi
$0,40 < r \leq 0,60$	Cukup
$0,20 < r \leq 0,40$	Rendah
$0,00 < r \leq 0,20$	Sangat rendah (tidak reliabilitas)

Pengukuran reliabilitas angket dalam penelitian ini menggunakan rumus Cronbach Alpha yang sesuai untuk kuesioner pilihan ganda. Pengujiannya dilakukan dengan *software SPSS windows versi 25*, dengan hasil sebagai berikut:

Tabel 3: Hasil Uji Reliabilitas

Reliability Statistics	
<i>Cronbach's Alpha</i>	<i>N of Items</i>
0.939	27

Hasil pengukuran menunjukkan nilai Cronbach's Alpha sebesar 0.939, yang termasuk dalam kategori "sangat tinggi". Dengan demikian, instrumen penelitian dinyatakan reliabel dan layak untuk digunakan dalam mengumpulkan data.

7. Teknik Analisis Data

Teknik analisis data dilakukan setelah seluruh data terkumpul dan mencakup beberapa tahapan penting. Pertama adalah uji prasyarat analisis, yang terdiri dari uji normalitas dan uji homogenitas. Uji normalitas dilakukan untuk memastikan data dari setiap variabel memiliki distribusi normal, menggunakan metode Shapiro-Wilk dengan bantuan software SPSS. Jika nilai signifikansi (*Sig*) > 0,05, maka distribusi data dianggap normal. Sementara itu, uji homogenitas digunakan untuk menentukan apakah sampel memiliki variansi yang sama. Dengan kriteria jika nilai signifikansi melebihi 0,05,

variansi antar kelompok dianggap seragam.

Setelah uji prasyarat terpenuhi, dilakukan uji hipotesis menggunakan Uji-t (*Independent Sample T-Test*) untuk menguji apakah terdapat perbedaan rata-rata antara kelompok eksperimen dan kelompok kontrol. Hipotesis penelitiannya sebagai berikut:

H₀: Tidak ada pengaruh metode *joyful learning* berbasis *ice breaking* terhadap minat belajar siswa.

H₁: Terdapat pengaruh metode metode *joyful learning* berbasis *ice breaking* terhadap minat belajar siswa.

Untuk melengkapi hasil uji-t, analisis *effect size* (Cohen's *d*) juga dilakukan. Analisis ini memberikan informasi tentang seberapa besar pengaruh metode secara praktis, yang mengukur perbedaan rata-rata antara dua kelompok independen, dengan interpretasi nilai *Cohen's d* sebagai berikut:

Tabel 4: Interpretasi Nilai *Cohen's d*

Nilai d	Interpretasi
0,20	Pengaruh Kecil
0,50	Pengaruh Sedang
0,80	Pengaruh Besar
>1.00	Pengaruh sangat Besar

Setelah mendapatkan nilai *Cohen's d*, besarnya pengaruh dapat dikonversi menjadi persentase untuk kemudahan pemahaman. Langkah pertama adalah mengubah nilai d menjadi nilai korelasi r menggunakan rumus $R^2 = \frac{d^2}{d^2 + 4}$, kemudian persentase pengaruh dihitung dengan rumus Persentase Pengaruh = $r^2 \times 100$.

FINDINGS AND DISCUSSION

1. Deskripsi Data

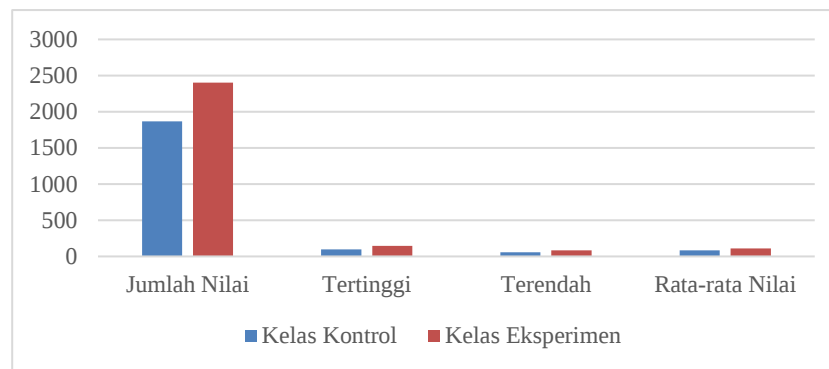
Dengan menggunakan desain *posttest only control group*, penelitian ini melibatkan dua kelas V di MIN 1 Tegal sebagai sampel. Kelas V.1 ditetapkan sebagai kelompok eksperimen yang menerima perlakuan, sementara kelas V.3 sebagai kelompok kontrol yang menggunakan metode pembelajaran konvensional. Data hasil *posttest* minat belajar dari kelas kontrol dan kelas eksperimen disajikan dalam tabel berikut:

Tabel 5: Data Posttest Kelas Kontrol dan Eksperimen

Keterangan	Kelas Kontrol	Kelas Eksperimen
Jumlah Nilai	1869	2402
Tertinggi	98	144
Terendah	58	83
Rata Rata Nilai	84,95	109,18

Berdasarkan hasil *posttest* diatas, rata-rata nilai kelas eksperimen adalah 109,18, lebih tinggi dari rata-rata kelas kontrol yang hanya 84,95. Begitu pula dengan nilai tertinggi, di mana kelas eksperimen mencapai 144, melampaui nilai tertinggi kelas kontrol yang sebesar 98. Perbedaan ini secara deskriptif mengindikasikan bahwa metode *joyful learning* berbasis *ice breaking* memiliki pengaruh terhadap minat belajar siswa. Data tersebut dapat divisualisasikan dalam grafik berikut:

Grafik 1: Data Posttest Kelas Kontrol dan Eksperimen



2. Uji Prasyarat

Sebelum melakukan uji hipotesis, penelitian ini melaksanakan dua uji prasyarat, yaitu uji normalitas dan uji homogenitas. Uji normalitas bertujuan untuk memastikan data sampel berasal dari populasi yang berdistribusi normal. Karena jumlah sampel yang relatif kecil, pengujian ini menggunakan metode Shapiro-Wilk dengan bantuan software IBM SPSS versi 25. Berikut adalah tabel hasil uji normalitas data posttest kedua sampel:

Tabel 6: Hasil Uji Normalitas

Tests of Normality				
Kelas		Shapiro-Wilk		
		Statistic	df	Sig.
Pengaruh Minat Belajar Siswa	Kelas	0.924	2	0.91
	Kontrol		2	
	Kelas	0.968	2	0.67
	Eksperimen		2	4

Berdasarkan hasil uji yang disajikan tabel diatas, nilai signifikansi (Sig) untuk kelas kontrol adalah 0,910, dan untuk kelas eksperimen adalah 0,674. Karena kedua nilai signifikansi tersebut lebih besar dari 0,05, maka data *posttest* dari kedua kelompok dianggap terdistribusi secara normal. Dengan demikian, asumsi normalitas terpenuhi dan data dinyatakan layak untuk uji selanjutnya.

Uji homogenitas dilakukan untuk menentukan apakah kedua kelompok sampel memiliki variansi yang sama atau berbeda. Pengujian ini menggunakan bantuan aplikasi IBM SPSS versi 25. Berikut disajikan hasil uji homogenitas berdasarkan data posttest dari kelas kontrol dan kelas eksperimen.

Tabel 7: Hasil Uji Homogenitas

Test of Homogeneity of Variance					
		Levene statistic	df1	df 2	Sig.
Pengaruh Minat Belajar Siswa	Based on Mean	2.191	1	42	0.146
	Based on Mean	2.160	1	42	0.149
	Based on Medn and With Adjusted df	2.160	1	39.608	0.150
	Based on Trimmed Mean	2.114	1	42	0.153

Berdasarkan hasil uji homogenitas diatas, nilai signifikansi yang diperoleh adalah 0,146. Karena nilai ini berada di atas ambang batas 0,05, dapat disimpulkan bahwa variansi antara kelompok kontrol dan kelompok eksperimen bersifat homogen atau tidak memiliki perbedaan yang signifikan. Dengan terpenuhinya kriteria ini, data dapat

dilanjutkan ke tahap analisis hipotesis.

3. Uji Hipotesis

Untuk menguji hipotesis, digunakan Uji-t (Independent Sample T-Test). Uji hipotesis dilakukan setelah uji prasyarat terpenuhi, yaitu data sudah terdistribusi normal dan memiliki variansi yang homogen. Hipotesis dalam penelitian ini adalah:

H₀: Tidak ada pengaruh metode *joyful learning* berbasis *ice breaking* terhadap minat belajar siswa.

H₁: Terdapat pengaruh metode metode *joyful learning* berbasis *ice breaking* terhadap minat belajar siswa.

Hasil uji independen *sample t-test* pada penelitian ini adalah sebagai berikut:

Tabel 8: Group statistic Uji Independen Sample T-Test

Kelas		N	Mean	Std.Deviation	Std. Error Mean
Pengaruh	<i>Prosttest Kontrol</i>	22	84.95	9.786	2.086
	<i>Posttest Eksperimen</i>	22	109.18	13.433	2.864

Berdasarkan tabel 8, rata-rata nilai *posttest* kelas kontrol adalah 84,95, sedangkan kelas eksperimen mencapai 109,18. Perbedaan ini secara deskriptif menunjukkan bahwa penerapan metode *joyful learning* berbasis *ice breaking* berdampak pada peningkatan minat belajar siswa. Oleh karena itu, hipotesis nol (H₀) ditolak dan hipotesis alternatif (H₁) diterima, karena metode yang diterapkan terbukti memberikan dampak positif dalam pembelajaran. Untuk mengetahui apakah perbedaan rata-rata ini signifikan secara statistik, perlu dilakukan pengujian lebih lanjut. Melalui hasil *output uji independent sample t-test* berikut:

Tabel 9: Output Independent Sampel T-Test

		Levene's Test		t-test for Equality of Means					
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Lower Upper
Pengaruh	Equal variances assumed	2.191	0.146	6.838	42	0.000	24.227	3.543	17.077 31.378
	Equal variances not assumed			6.838	38.391	0.000	24.227	3.543	17.057 31.398

Uji t dilakukan untuk mengetahui apakah terdapat perbedaan yang signifikan antara dua kelompok. Jika nilai signifikansi lebih rendah dari 0,05, varians dianggap berbeda secara signifikan. Namun, jika nilai signifikansi di atas 0,05, maka tidak ada perbedaan varians yang signifikan. Berdasarkan hasil output dari SPSS, nilai *Sig. (2-tailed)* yang diperoleh adalah 0,000. Karena nilai ini lebih rendah dari 0,05, dapat disimpulkan bahwa varians antara kedua kelompok tidak berbeda secara signifikan.

4. Size Effect (Cohen's d)

Untuk mengetahui seberapa besar pengaruh metode *joyfull learning* terhadap minat belajar siswa, digunakan analisis effect size dengan rumus *Cohen's d*. Analisis ini diperlukan untuk melengkapi hasil uji hipotesis. Sebab, meskipun hasil uji-t menunjukkan perbedaan yang signifikan, belum tentu pengaruhnya besar secara praktis. Oleh karena

itu, *effect size* berfungsi sebagai indikator kekuatan pengaruh suatu perlakuan. *Cohen's d* digunakan untuk mengukur perbedaan rata-rata antara dua kelompok independen (kelas eksperimen dan kelas kontrol), dengan rumus sebagai berikut:

$$d = \frac{M_1 - M_2}{SD_{pooled}}$$

Dimana:

M1 = rata – rata (mean) kelas eksperimen

M2 = rata – rata (mean) kelas kontrol

$$SD_{poled} = \sqrt{\frac{SD_1^2 + SD_2^2}{2}}$$

Menghitung Pooled SD

$$SD_{poled} = \sqrt{\frac{SD_1^2 + SD_2^2}{2}}$$

$$SD_{poled} = \sqrt{\frac{9.786_1^2 + 13.433_2^2}{2}}$$

$$SD_{poled} = \sqrt{\frac{95.77_1^2 + 180.45_2^2}{2}} = \sqrt{138.11} = 11.75$$

Setelah menghitung Pooled SD kita menghitung *Cohen's d*

$$d = \frac{M_1 - M_2}{SD_{pooled}}$$

$$d = \frac{109.18 - 84.96}{11.75} = \frac{24.22}{11.75} = 2.06$$

Nilai $d = 2,06$ termasuk dalam kategori "sangat tinggi", yang berarti pengaruh metode Joyfull learning terhadap minat belajar siswa sangat besar. Langkah selanjutnya adalah mengkonversikan ke Persentase (Efek R^2) Untuk mengonversi ke perkiraan persen pengaruh:

$$R^2 = \frac{d^2}{d^2 + 4} = \frac{(2,06)^2}{(2,06)^2 + 4} = \frac{4,24}{8,24} = 0,515$$

Nilai proporsi 0,515 ini kemudian dikonversi ke bentuk persentase dengan mengalikan hasilnya dengan 100: $0,515 \times 100 = 51,5\%$ Artinya, sebesar 51,5% peningkatan minat belajar siswa dapat dijelaskan oleh penggunaan metode *Joyfull Learning* berbasis *Ice breaking*.

5. Pembahasan

a. Penerapan Metode *Joyful Learning* Berbasis *Ice Breaking*

Penelitian ini dilaksanakan di MIN 1 Tegal selama satu bulan, melibatkan kelas V.1 sebagai kelas eksperimen dan V.3 sebagai kelas kontrol. Pembelajaran di kelas eksperimen menggunakan metode Joyful Learning berbasis ice breaking dalam empat pertemuan. Aktivitas ice breaking seperti permainan edukatif dan fisik ringan digunakan di awal atau di tengah pelajaran untuk menciptakan suasana kelas yang dinamis dan membangkitkan semangat siswa.

Hasil observasi menunjukkan bahwa guru menerapkan metode ini dengan sangat baik,

dengan seluruh indikator berada pada kategori "Terlaksana dengan Sangat Baik". Pembelajaran di kelas eksperimen mencerminkan nilai-nilai utama Joyful Learning seperti semangat belajar, kolaborasi, dan keterlibatan emosional siswa. Sementara itu, kelas kontrol mengikuti pembelajaran konvensional dengan pendekatan ceramah dan tanya jawab.

b. Minat Belajar Siswa di MIN 1 Tegal

Minat belajar siswa di MIN 1 Tegal, khususnya pada mata pelajaran IPAS, awalnya tergolong rendah. Hal ini ditandai dengan kurangnya keterlibatan aktif siswa, sikap pasif, serta rendahnya semangat dalam bertanya atau berpendapat. Siswa juga mudah kehilangan konsentrasi dan mengikuti pelajaran hanya sebagai rutinitas tanpa rasa ingin tahu yang kuat.

Melihat kondisi ini, peneliti memilih kelas V.1 sebagai kelompok eksperimen dan kelas V.3 sebagai kelompok kontrol. Pemilihan ini didasarkan pada beberapa pertimbangan penting, yaitu kesetaraan jumlah dan karakteristik akademik siswa. Kedua kelas juga sebelumnya mendapatkan metode pembelajaran yang homogen, yaitu ceramah, sehingga kondisi awal minat belajar mereka berada pada titik yang serupa. Selain itu, kedua kelas diajar oleh guru yang sama, yaitu Ibu Nurlailawati, S.Pd.i., yang dapat mengurangi potensi bias dalam pelaksanaan penelitian.

c. Pengaruh Metode *Joyful Learning* berbasis *Ice Breaking*

Penerapan metode *Joyful Learning* berbasis *ice breaking* pada kelas eksperimen di MIN 1 Tegal terbukti memberikan pengaruh yang signifikan dan kuat terhadap minat belajar siswa, dibandingkan dengan pembelajaran konvensional di kelas kontrol. Hal ini terlihat dari rata-rata skor minat belajar pada kelas eksperimen yang mencapai 109,18, jauh lebih tinggi dari rata-rata kelas kontrol yang hanya 84,96. Perbedaan signifikan ini didukung oleh hasil analisis statistik, yaitu nilai signifikansi Uji-t sebesar 0,000, yang berada di bawah ambang batas 0,05.

Temuan ini mengindikasikan bahwa metode yang diterapkan terbukti memberikan dampak positif dalam proses pembelajaran. Peningkatan minat belajar siswa di kelas eksperimen dapat dijelaskan oleh beberapa faktor. Pertama, kegiatan *ice breaking* di awal atau sela pembelajaran mampu menarik perhatian dan membangkitkan semangat siswa. Permainan edukatif yang digunakan melatih konsentrasi dan menciptakan suasana kelas yang dinamis. Kedua, suasana pembelajaran di kelas eksperimen lebih hidup dan komunikatif karena siswa diberi kesempatan untuk berpartisipasi aktif, seperti bergerak, tertawa, dan terlibat langsung. Ketiga, pembelajaran dirancang agar relevan dan menarik dengan mengaitkan materi sistem pernapasan dan pencernaan manusia dengan kehidupan sehari-hari, serta menggunakan media visual.

Untuk mengukur seberapa besar pengaruh metode ini secara praktis, analisis efektivitas menggunakan rumus Cohen's *d* menunjukkan nilai sebesar 2,06, yang dikategorikan sebagai pengaruh sangat kuat. Nilai ini dikonversi menjadi persentase pengaruh sebesar 51,5%, yang berarti lebih dari separuh peningkatan minat belajar siswa dapat dijelaskan oleh penerapan metode *Joyful Learning* berbasis *ice breaking*.

Hal ini menegaskan bahwa metode ini memiliki dampak yang signifikan dan kuat dalam meningkatkan partisipasi aktif siswa selama proses pembelajaran. Sebaliknya, pembelajaran konvensional yang dominan ceramah dan tanya jawab di kelas kontrol membuat siswa cenderung pasif, mudah kehilangan konsentrasi, dan kurang antusias, sehingga minat belajar mereka tetap rendah.

CONCLUSION

Penelitian ini menyimpulkan bahwa metode *Joyful Learning* berbasis *Ice Breaking* memiliki pengaruh yang signifikan dan sangat besar terhadap minat belajar siswa kelas V MIN 1 Tegal pada mata pelajaran IPAS. Penerapan metode ini terlaksana dengan sangat baik di kelas eksperimen, di mana guru berhasil menciptakan suasana pembelajaran yang menyenangkan, interaktif, dan menarik. Hal ini terbukti dari peningkatan minat belajar yang signifikan, ditunjukkan oleh rata-rata skor kelas eksperimen sebesar 109,18, jauh lebih tinggi dari rata-rata kelas kontrol yang hanya 84,96.

Besarnya pengaruh metode ini juga sangat kuat. Analisis *effect size Cohen's d* sebesar 2,06 menunjukkan pengaruh yang sangat besar, di mana 51,5% peningkatan minat belajar siswa dapat dijelaskan oleh penggunaan metode tersebut. Untuk penelitian selanjutnya, disarankan untuk mengembangkan penelitian serupa dengan memperluas variabel lain, seperti motivasi atau hasil belajar siswa, serta menerapkannya pada jenjang atau mata pelajaran yang berbeda agar hasilnya lebih komprehensif.

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