

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: Ace Attorney Trilogy* 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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