

The Utilization of Games in Language Teaching – An Empirical Study at A University in Viet Nam

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DOI: 10.29322/IJSRP.13.11.2023.p14316

<https://dx.doi.org/10.29322/IJSRP.13.11.2023.p14316>

Paper Received Date: 18th September 2023

Paper Acceptance Date: 29th October 2023

Paper Publication Date: 6th November 2023

Abstract:

The study employs a quantitative research design to assess the effectiveness of using games as a pedagogical tool in language teaching at a specific university in Vietnam. The secondary purpose of the study is to investigate the level of student engagement in language classes where games are utilized. Finally, the study aims to identify and evaluate any challenges or barriers faced by teachers when incorporating games into language instruction. This can help in improving the implementation process. The study was conducted with 12 teachers of English and 186 students at Dai Nam University. The findings demonstrated that incorporating games into language classes can lead to improved learning outcomes. Students exposed to game-based learning exhibited enhanced language acquisition and retention, reinforcing the efficacy of this approach. The findings indicate that incorporating games into language classes can be a powerful and engaging teaching strategy. The effectiveness for *grammar* was not significant ($M= 2.13$). Other perspectives such as *vocabulary* improvement was significant ($M= 4.12$). The game-based activities also enhanced the *communicative skill* and *critical thinking skill* which were $M=4.08$ and $M=3.81$ respectively. In terms of the engagement level of students, the game-based teaching method outweighs the traditional teaching method which is $M= 3.93$ và $M=1.67$ respectively. When discussing about the challenges of the teachers who conduct games in classes. The finding revealed that mean of challenges was $M=3.34$ on a 5 point Likert scale. It was quite high level of challenge. The most challenge factor was “*Managing diverse student abilities and engagement levels during games*” which ranked $M=3.83$. The “*Lack of appropriate educational games and resources for language teaching*” received least challenge by the teacher, $M= 2.17$.

Key words: Game-base language teaching class, Traditional language teaching class

I. Introduction

1.1. Background and Context

Boring language classes can be a significant impediment to effective language learning. Several reasons can contribute to the dullness of language classes. Understanding these reasons can help educators improve their teaching methods. Among those, students' engagement plays the most important part in making a language class more exciting. When language classes do not actively engage students, they become monotonous. Research by Csikszentmihalyi (1990) emphasizes the importance of engagement in the learning process. If students are not engaged, they are less likely to be interested in the subject matter. In a discussion about approaches and methods in language teaching, Richards & Rodgers (2001) state that language classes that rely solely on traditional teaching methods, such as lectures and grammar drills, can be uninspiring. The use of interactive and innovative teaching methods can improve engagement and motivation. Besides, the use of dull, outdated, or irrelevant materials can contribute to a boring language class. It's important to use diverse and culturally relevant materials to maintain student interest (McDonough & Shaw, 2003). One of the very popular techniques that teachers may employ to make the language lesson more enjoyable and relaxing is using games during the teaching practice. The effectiveness of using games in language acquisition has been a subject of research and interest in the field of education. Several studies and references have explored the impact of games on language learning. Games are known to increase learners' motivation and engagement. When learners are motivated, they tend to be more persistent in their language learning efforts. This is supported by research that suggests that game-based learning can positively affect students' motivation (Gee, 2003). Word games and vocabulary-focused games have been considered to be effective in expanding learners' vocabulary. In a study by Kaewkamnerd and Wongsothorn (2011), it was found that word games significantly improved the vocabulary of Thai EFL learners. In terms of grammar, games can provide an interactive platform for practicing grammar and syntax. A study by Ayres (2002) investigated the effectiveness of using crossword puzzles in ESL classes and found that they were beneficial for improving grammatical knowledge. Moreover, many language learning games provide immediate feedback, which can help learners correct their mistakes and reinforce correct language usage (Thorne & Fischer, 2012).

1.2. Purposes of the Study

The primary purpose of the present paper is to assess the effectiveness of using games as a pedagogical tool in language teaching at a specific university in Vietnam. The study aims to determine whether incorporating games into language classes leads to improved learning outcomes. The secondary purpose of the study is to investigate the level of student engagement in language classes where games are utilized. This purpose explores whether games enhance student motivation and participation in the learning process. Finally, the study aims to identify and evaluate any challenges or barriers faced by teachers when incorporating games into language instruction. This can help in improving the implementation process.

1.3. Research Questions

In order to fulfil the above mentioned purposes, the study would like to answer the following research questions.

- 3.1.1. *What are the perceived benefits of using games in language instruction to enhance language learning outcomes?*
- 3.1.2. *How does student engagement in language classes with games compare to traditional language instruction methods?*
- 3.1.3. *What are the common challenges that language teachers encounter when integrating games into their teaching methods?*

1.4. Significance of the Study

The study contributes to the advancement of language education by exploring innovative teaching methods. By examining the use of games in language instruction, it provides insights into a potentially more engaging and effective approach to teaching, which can be used to improve language education in Vietnam and other regions. The findings from this study can be applied directly to language teaching practices in Vietnam. Language educators can use the results to better understand the effectiveness of incorporating games in their classrooms, and potentially adapt their teaching methods accordingly. The study helps in understanding the impact of using games on student engagement, motivation, and learning outcomes. It can guide educators in creating more dynamic and interactive learning environments. The study provides empirical data and insights into the specific challenges and benefits of using games in the Vietnamese context. These insights can guide future research and policy decisions in Vietnam's university education system.

In summary, this study is significant as it addresses a critical aspect of language education in Vietnam and has broader implications for educational practices, student engagement and motivation in language learning. It contributes to the field of language education by offering empirical evidence on the effectiveness of game-based teaching methods and provides a framework for improving language instruction in the university context in Vietnam and potentially beyond.

II. Literature Review

2.1. Engagement and motivation in language learning

Engagement and motivation are interconnected in language learning, and they can create a positive feedback loop. Engagement often leads to increased motivation, and motivation, in turn, can enhance engagement. Engaged learners actively participate in language learning activities, which allows them to experience a sense of achievement and competence. This active participation can lead to increased motivation (Fredricks, Blumenfeld, & Paris, 2004). It has been proved that engagement often leads to a sense of progress and improvement. As learners engage with language tasks and see their language skills developing, they are more likely to be motivated to continue their learning journey (Bandura, 1997). Besides, engaged learners tend to develop a strong interest in the language and culture. This interest can be a source of intrinsic motivation, driving them to explore and learn more about the language. In the backward direction, motivation plays a crucial role in language learning. It influences learners' willingness to engage with the language, their persistence in learning, and the overall effectiveness of language acquisition. Motivated learners tend to perform better, retain more information, and develop greater proficiency in the target language. Several theories and models have been proposed to explain the role of motivation in language learning. Motivation is subdivided into intrinsic motivation which refers to the internal desire to learn a language for personal interest, enjoyment, or fulfillment and extrinsic motivation which is driven by external factors such as grades, rewards, or social recognition (Deci, 1975 & Deci & Ryan, 1985). Motivation and engagement are closely intertwined in language learning. Motivation can be seen as the driving force behind a learner's active involvement and commitment to the language learning process. Engaged learners are motivated to participate fully in learning activities. Motivation sets specific goals and objectives for language learners. When learners are motivated to achieve these goals, they become more actively engaged in the learning process (Locke & Latham, 1990). Motivated learners tend to be more cognitively engaged. They actively process information, seek understanding, and apply problem-solving skills to language tasks (Pintrich, 2003). Motivation influences emotional engagement in language learning. Motivated learners are more likely to experience positive emotions such as curiosity, interest, and satisfaction, which contribute to engagement (Pekrun, et al., 2002).

2.2. Benefits of using games in language acquisition

2.2.1. Vocabulary and grammar development

The use of games in language acquisition, from grammar and vocabulary perspectives, offers numerous benefits. Games make the learning process more engaging, interactive, and enjoyable, which can significantly enhance the language learning experience. Games provide a context in which grammar rules are applied naturally. Learners see how these rules function in real-life situations, enhancing comprehension and retention (Skehan, 1998). Another benefit of using games in language teaching practice is that they can create an unharmed environment for language learners if they make any mistakes. Ellis & Loewen (2005) conclude that games allow learners to make mistakes in a safe and enjoyable environment. Correcting errors in a game is less intimidating, which fosters a more risk-taking attitude toward using grammar. Another benefit of game-based teaching is that many language games offer immediate feedback. Learners receive instant reinforcement, enabling them to recognize and correct

grammatical errors (Anderson et al., 2016). That means in language learning games, when a learner makes a grammatical error, such as using the wrong verb tense or word order, the game provides feedback right away. This feedback could come in various forms, such as visual cues, sounds, or notifications on a digital platform. The feedback helps learners recognize that they've made a grammatical mistake. It points out what went wrong, which is important for error recognition and understanding where the problem lies. In addition to recognizing the error, the feedback often provides guidance on how to correct the mistake. Learners are given the opportunity to revise their response or answer in a way that rectifies the error. Grammar games can be highly motivating. Learners are more likely to engage with challenging grammar concepts when presented in a game format (Dörnyei, 2001). When it is mentioned that learners are more likely to engage with challenging grammar concepts when presented in a game format, it means that using games as a teaching tool can make complex or difficult grammar topics more appealing and accessible to learners. Games, by their nature, are often fun, interactive, and enjoyable. When challenging grammar concepts are integrated into games, learners are more motivated to participate actively in the learning process. Games create a low-pressure and non-threatening environment for learners. The competitive or playful aspect of games can help reduce the anxiety or apprehension that learners may feel when faced with difficult grammar rules. The element of competition, achievement, or the desire to win in a game can serve as a strong motivator for learners. They are more inclined to tackle challenging grammar concepts because they want to progress in the game or achieve a goal. Many language learning games require learners to use problem-solving skills to complete challenges or tasks. This problem-solving aspect can be particularly beneficial for tackling complex grammar topics.

Apart from enhancing grammar, vocabulary enrichment could be obtained from playing games. Vocabulary games encourage active participation. Learners are motivated to actively seek and remember new words (Nation, 2013). Several factors contribute to the effectiveness of vocabulary games in promoting active engagement and vocabulary acquisition. Vocabulary games often tap into learners' intrinsic motivation by making the learning process enjoyable and personally relevant. Intrinsic motivation, driven by an individual's natural interest and curiosity, encourages active participation (Deci & Ryan, 1985). Theories of game-based learning insist that games emphasize the importance of active participation. They are designed to be interactive and require learners to actively engage with the content. This interaction promotes deeper learning (Prensky, 2001). Another positive side of games is that they involve repetition and retrieval which enhance memory retention of new vocabulary (Roediger & Karpicke, 2006). In addition, games cater to different learning styles, accommodating visual, auditory, kinesthetic, and tactile learners. The notion that games cater to different learning styles highlights the versatility of games as a pedagogical tool. Games often include visual elements, such as graphics, images, and videos. Visual learners benefit from these elements as they rely on seeing information to understand and remember it (Felder & Soloman, 1994). For auditory learners, games may incorporate audio components, including spoken instructions, dialogues, or music. Auditory learners engage effectively with these elements as they learn best through listening (Felder & Soloman, 1994). Many games involve physical actions or interactions with the game environment. Kinesthetic learners, who learn through movement and physical engagement, find these activities appealing (Honey & Mumford, 1986). Also, some games utilize touch-based interactions, such as touchscreen devices or physical manipulatives. Tactile learners, who prefer hands-on experiences, benefit from these interactive components (Honey & Mumford, 1986).

2.2.2. *Communication and fluency development*

Using games in language acquisition can offer several benefits from the perspectives of communication and fluency development. Games provide learners with opportunities to practice and reinforce their language skills in a dynamic and interactive manner, which can have a positive impact on their ability to communicate effectively and develop fluency. In the first place, language games often require learners to communicate with others, whether fellow learners or virtual characters. This interactive aspect promotes real communication and encourages learners to use the language actively (Jones & Brown, 2007). In terms of conversational skills, many language games simulate conversations, encouraging learners to engage in dialogues or role-plays. This practice helps develop conversational skills and promotes effective communication (Gee, 2003). One of the most fascinating aspects of playing games is that games often involve problem-solving activities that require learners to use language to find solutions. This challenges learners to communicate effectively to achieve in-game objectives (Prensky, 2001).

On the other hand, games encourage learners to respond quickly and spontaneously, which is essential for fluency development. Learners become less focused on grammar accuracy and more on effective communication (Bygate, 1996). It means that during language learning games, learners are encouraged to react swiftly and naturally, without overthinking or getting overly concerned about perfect grammar accuracy. This approach is crucial for the development of fluency in a second language. In many language learning games, there is a time constraint or a need to respond rapidly to in-game situations or challenges. This requirement prompts learners to provide answers or engage in conversations without long pauses or excessive contemplation. The emphasis in language games is on effective communication rather than on grammatical correctness. Learners are encouraged to convey their ideas, thoughts, and messages in a manner that can be understood by others, even if it means occasional grammatical errors. Many language games that involve spoken interaction, such as dialogues, role-plays, or pronunciation challenges, are particularly effective in enhancing oral fluency. These activities require learners to produce language in real-time, contributing to fluency development (Willis & Willis, 2007). Too much focusing on grammar accuracy can be mentally taxing and slow down the natural flow of conversation. Games shift the focus away from grammar, reducing cognitive load and allowing learners to engage more naturally in language production (Skehan, 1998). As learners become less preoccupied with grammar correctness, they gain confidence in their ability to communicate in the target language. This increased confidence further supports the development of fluency (Dörnyei & Ushioda, 2009).

In short, language learning games encourage learners to respond quickly and spontaneously, fostering a more natural and fluent use of the language. This approach is instrumental in fluency development, as it shifts the focus from grammar accuracy to effective communication and encourages learners to engage in real-time, meaningful language use.

2.3. Challenges and considerations of using game-based methods

Although games bring engagement and motivation for language classes and language learners, they do have presented challenges that educators should be aware of. Pivec & Dziabenko (2003) show anxiety as selecting games that are age-appropriate, culturally sensitive, and aligned with the language learning goals can be difficult. Another problem is the integration of games into the formal curriculum can be challenging. Teachers may struggle to find the right balance between games and traditional language teaching methods (Steinkuehler & Duncan, 2008). Also, the assessment of language proficiency and learning outcomes from game-based activities can be less straightforward than traditional assessments (Chinn & Malhotra, 2002). Many educators also claim the technical constraints that technical issues, such as a lack of access to appropriate technology or reliable internet connections, can hinder the use of digital language learning games (Hsu & Lee, 2010). The lack of access to appropriate technology and reliable internet connections can be a significant barrier to the effective use of digital language learning games. This challenge affects both educators and students, and it can affect the integration of technology-driven language learning methods. In many regions, especially in rural or underdeveloped areas, there may be inadequate or unreliable internet connectivity. The insufficient internet infrastructure can hinder real-time interactions, content downloads, and online gameplay, limiting the feasibility of online language learning games. The next prevalent challenge is that teachers may not clearly define the language learning objectives when using games, which can lead to haphazard use and limited effectiveness (De Haan, 2005). When language learning games are not aligned with specific curriculum goals or learning outcomes, they may not contribute meaningfully to students' language proficiency. This misalignment can lead to wasted classroom time and resources, as well as frustration among students who may not see the relevance of the games to their overall language learning. Besides, games can cover a wide range of language skills, including vocabulary, grammar, pronunciation, and communication. Without clear objectives, teachers may not focus on the most relevant language skills for their students. The consequences are that students may miss essential language learning opportunities if the games do not address their specific needs. The learning process may lack direction and coherence. Moreover, without well-defined objectives, teachers may struggle to track students' progress and adapt the game-based activities accordingly. While games can be highly motivating, maintaining student engagement over an extended period can be a challenge (Deterding et al., (2011). This issue is important to address as it influences the long-term effectiveness of game-based language learning. Many games are initially engaging because they are novel and exciting. However, the novelty can wear off over time. Some language learning games may involve repetitive tasks, such as vocabulary drills or grammar exercises, which can become monotonous. In terms of accessing online language learning games that can consume significant data, which can be expensive for students and their families. High data costs may discourage students from engaging in online language learning activities, even if they have the necessary devices and connectivity. Finally, technical issues with devices or internet connections can disrupt the learning process.

Addressing these challenges in the context of language teaching can help educators harness the potential benefits of using games while minimizing potential drawbacks. It is essential for educational institutions, policymakers, and technology developers to work together to make digital language learning games more accessible and inclusive. This may involve initiatives to provide devices and internet access to underserved communities, ensuring compatibility with a wide range of devices, creating offline alternatives, and providing training and support for educators and students. Additionally, efforts to reduce data costs and address privacy concerns can further enhance the accessibility of digital language learning games.

III. Methodology

3.1. Research Design

To investigate the perceived benefits of using games in language instruction, compare student engagement in language classes with games to traditional methods, and explore common challenges encountered by language teachers when integrating games, a quantitative research design was employed.

3.2. Participants

The participants of the study consist of 12 English language teachers who are currently working at the Faculty of English language, Dai Nam University. These teachers were quite experienced in language teaching for both majored and non-majored students of English. The students (186) who participate in the study were of variety of faculties such as Business Administration, Finance and Banking, Multimedia Communication, Medical Care and Nursing. These students were varied in English learning time. Some of them were first year students. Some of them were second and third year of studying English. The data were collected by classes that the teacher who participated in the study taught.

3.3. Data Collection

In order to collect quantitative data for the study, the researcher administered questionnaires to obtain the students' perception on the benefits of using games in language teaching (See appendix 1). In order to compare the effectiveness between game-based teaching activities and the traditional teaching method, a survey was employed (See appendix 2). Along with the students' perceptions toward game-based teaching practice, A questionnaire for teachers were conducted to figure out challenges that facing these teachers in conducting game-based activities. Use a 5-point Likert scale, where 1 = *Not at all Challenge*, 2 = *Minor Challenge*, 3 = *Moderate Challenge*, 4 = *Major Challenge*, and 5 = *Very Significant Challenge* (See appendix 3).

3.4. Data Analysis

Statistical Package for the Social Sciences (SPSS) version 22 was utilized to analyse the data collected by questionnaires and survey. Qualitative analysis of teacher responses was used to analyse challenges which comes from teachers. These findings can be used to triangulate what quantitative phase reveals.

IV. Findings

4.1. Cronbach's Alpha

A Cronbach alpha coefficient was calculated for the Grammar Perspective (GP) scale, consisting of GP1, GP2, GP3, GP4, and GP5. The items for Grammar Perspective had a Cronbach's alpha coefficient of .83, indicating good reliability. Table 1 presents the results of the reliability analysis.

Scale	No. of Items	α	Lower Bound	Upper Bound
Grammar Perspective	5	.83	.80	.86

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

Table 1: Reliability Table for Grammar Perspective

A Cronbach alpha coefficient was calculated for the Vocabulary Perspective (VP) scale, consisting of VP1, VP2, VP3, VP4, and VP5. The items for Vocabulary Perspective had a Cronbach's alpha coefficient of .91, indicating excellent reliability. Table 2 presents the results of the reliability analysis.

Scale	No. of Items	α	Lower Bound	Upper Bound
Vocabulary Perspective	5	.91	.89	.92

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

Table 2: Reliability Table for Vocabulary Perspective

A Cronbach alpha coefficient was calculated for the Communicative Skill (CS) scale, consisting of CS1, CS2, CS3, CS4, and CS5. The items for Communicative Skill had a Cronbach's alpha coefficient of .77, indicating acceptable reliability. Table 3 presents the results of the reliability analysis.

Scale	No. of Items	α	Lower Bound	Upper Bound
Communicative Skill	5	.77	.72	.81

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

Table 3: Reliability Table for Communicative Skill

A Cronbach alpha coefficient was calculated for the Critical Thinking Skill (CTS) scale, consisting of CTS1, CTS2, CTS4, CTS5, and CTS3. The items for Critical Thinking Skill had a Cronbach's alpha coefficient of .91, indicating excellent reliability. Table 4 presents the results of the reliability analysis.

Scale	No. of Items	α	Lower Bound	Upper Bound
Critical Thinking Skill	5	.91	.89	.93

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

Table 4: Reliability Table for Critical Thinking Skill

4.2. Research question 1

4.1.1. Means of Grammar Perspective

The observations for Grammar Perspective had an average of 2.13 ($SD = 0.85$, $SE_M = 0.06$, $Min = 1.00$, $Max = 4.20$, $Skewness = 0.31$, $Kurtosis = -0.66$). When the skewness is greater than 2 in absolute value, the variable is considered to be asymmetrical about its mean. When the kurtosis is greater than or equal to 3, then the variable's distribution is markedly different than a normal distribution in its tendency to produce outliers (Westfall & Henning, 2013). The summary statistics can be found in Table 5.

Variable	M	SD	n	SE_M	Min	Max	Skewness	Kurtosis
Grammar Perspective	2.13	0.85	186	0.06	1.00	4.20	0.31	-0.66

Note. '!' indicates the statistic is undefined due to constant data or an insufficient sample size.

Table 5: Summary Statistics Table for Interval and Ratio Variables

4.1.2. Means of Vocabulary Perspective

The observations for Vocabulary Perspective had an average of 4.12 ($SD = 0.81$, $SE_M = 0.06$, $Min = 2.00$, $Max = 5.00$, $Skewness = -0.65$, $Kurtosis = -0.56$). When the skewness is greater than 2 in absolute value, the variable is considered to be asymmetrical about its mean. When the kurtosis is greater than or equal to 3, then the variable's distribution is markedly different than a normal distribution in its tendency to produce outliers (Westfall & Henning, 2013). The summary statistics can be found in Table 6.

Variable	<i>M</i>	<i>SD</i>	<i>n</i>	<i>SE_M</i>	Min	Max	Skewness	Kurtosis
Vocabulary Perspective	4.12	0.81	186	0.06	2.00	5.00	-0.65	-0.56

Note. '-' indicates the statistic is undefined due to constant data or an insufficient sample size.

Table 6: Summary Statistics Table for Interval and Ratio Variables

4.1.3. Means of Communicative Skill

The observations for Communicative Skill had an average of 4.04 ($SD = 0.58$, $SE_M = 0.04$, $Min = 2.00$, $Max = 5.00$, $Skewness = -0.99$, $Kurtosis = 1.11$). When the skewness is greater than 2 in absolute value, the variable is considered to be asymmetrical about its mean. When the kurtosis is greater than or equal to 3, then the variable's distribution is markedly different than a normal distribution in its tendency to produce outliers (Westfall & Henning, 2013). The summary statistics can be found in Table 7.

Variable	<i>M</i>	<i>SD</i>	<i>n</i>	<i>SE_M</i>	Min	Max	Skewness	Kurtosis
Communicative Skill	4.04	0.58	186	0.04	2.00	5.00	-0.99	1.11

Note. '-' indicates the statistic is undefined due to constant data or an insufficient sample size.

Table 7: Summary Statistics Table for Interval and Ratio Variables

4.1.4. Means of Critical Thinking Skill

The observations for Critical Thinking Skill had an average of 2.81 ($SD = 0.52$, $SE_M = 0.04$, $Min = 1.53$, $Max = 3.20$, $Skewness = -0.90$, $Kurtosis = -0.68$). When the skewness is greater than 2 in absolute value, the variable is considered to be asymmetrical about its mean. When the kurtosis is greater than or equal to 3, then the variable's distribution is markedly different than a normal distribution in its tendency to produce outliers (Westfall & Henning, 2013). The summary statistics can be found in Table 8.

Variable	<i>M</i>	<i>SD</i>	<i>n</i>	<i>SE_M</i>	Min	Max	Skewness	Kurtosis
Critical Thinking Skill	3.81	0.52	186	0.04	1.53	3.20	-0.90	-0.68

Note. '-' indicates the statistic is undefined due to constant data or an insufficient sample size.

Table 8: Summary Statistics Table for Interval and Ratio Variables

4.1.5. Summary of language learning outcomes

Variable	<i>M</i>	<i>SD</i>	<i>n</i>	<i>SE_M</i>	Min	Max	Skewness	Kurtosis
Grammar Perspective	2.13	0.85	186	0.06	1.00	4.20	0.31	-0.66
Vocabulary Perspective	4.12	0.81	186	0.06	2.00	5.00	-0.65	-0.56
Communicative Skill	4.04	0.58	186	0.04	2.00	5.00	-0.99	1.11
Critical Thinking Skill	3.81	0.52	186	0.04	1.53	3.20	-0.90	-0.68

Note. '-' indicates the statistic is undefined due to constant data or an insufficient sample size.

Table 9: Summary Statistics Table for Interval and Ratio Variables

4.3. Research question 2

A comparison between game-based classrooms and traditional classroom was conducted to measure students' engagement between these two instruction methods.

A two-tailed paired samples *t*-test was conducted to examine whether the mean difference of Game based class and Traditional class was significantly different from zero.

A Shapiro-Wilk test was conducted to determine whether the differences in Game based class and Traditional class could have been produced by a normal distribution (Razali & Wah, 2011). The results of the Shapiro-Wilk test were significant based on an

alpha value of .05, $W = 0.86$, $p < .001$. This result suggests the differences in Game based class and Traditional class are unlikely to have been produced by a normal distribution, indicating the normality assumption is violated.

The result of the two-tailed paired samples t -test was significant based on an alpha value of .05, $t(185) = 35.98$, $p < .001$, indicating the null hypothesis can be rejected. This finding suggests the difference in the mean of Game based class and the mean of Traditional class was significantly different from zero. The mean of Game based class was significantly higher than the mean of Traditional class. The results are presented in Table 10. A bar plot of the means is presented in Figure 1.

Game-based language class		Traditional language class		t	p	d
M	SD	M	SD			
3.93	0.73	1.67	0.66	35.98	< .001	2.64

Note. $N = 186$. Degrees of Freedom for the t -statistic = 185. d represents Cohen's d .

Table 10: The Difference between game based class and Traditional class

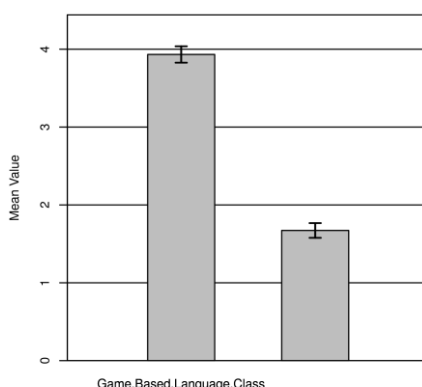


Figure 1: The means of Game based class and Traditional class with 95.00% CI Error Bars

4.4. Research question 3

In order to investigate the challenges that teachers encounter during the game-based class teaching, the researcher conducted a survey with 12 teachers currently working at the Faculty of English, Dai Nam University.

The observations for Challenges had an average of 3.34 ($SD = 0.51$, $SE_M = 0.15$, $Min = 2.67$, $Max = 4.22$, $Skewness = 0.23$, $Kurtosis = -1.13$). When the skewness is greater than 2 in absolute value, the variable is considered to be asymmetrical about its mean. When the kurtosis is greater than or equal to 3, then the variable's distribution is markedly different than a normal distribution in its tendency to produce outliers (Westfall & Henning, 2013). The summary statistics can be found in Table 11.

Variable	M	SD	n	SE_M	Min	Max	Skewness	Kurtosis
Challenges	3.34	0.51	12	0.15	2.67	4.22	0.23	-1.13

Note. '-' indicates the statistic is undefined due to constant data or an insufficient sample size.

Table 11: Summary Statistics Table for Interval and Ratio Variables

Table 12 shows descriptive statistics of challenge in individual (Ch1-Ch9)

The observations for Ch1 had an average of 2.17 ($SD = 0.58$, $SEM = 0.17$, $Min = 1.00$, $Max = 3.00$). The observations for Ch2 had an average of 3.17 ($SD = 0.72$, $SEM = 0.21$, $Min = 2.00$, $Max = 4.00$). The observations for Ch3 had an average of 3.58 ($SD = 0.67$, $SEM = 0.19$, $Min = 2.00$, $Max = 4.00$). The observations for Ch4 had an average of 3.25 ($SD = 0.87$, $SEM = 0.25$, $Min = 2.00$, $Max = 5.00$). The observations for Ch5 had an average of 3.08 ($SD = 0.90$, $SEM = 0.26$, $Min = 2.00$, $Max = 4$). The observations for Ch6 had an average of 3.92 ($SD = 0.90$, $SEM = 0.26$, $Min = 2.00$, $Max = 5.00$). The observations for Ch7 had an average of 3.50 ($SD = 1.00$, $SEM = 0.29$, $Min = 2.00$, $Max = 5.00$). The observations for Ch8 had an average of 3.58 ($SD = 1.16$, $SEM = 0.34$, $Min = 2.00$, $Max = 5.00$). The observations for Ch9 had an average of 3.83 ($SD = 1.03$, $SEM = 0.30$, $Min = 2.00$, $Max = 5.00$).

Descriptive Statistics					
	N	Min	Max	Mean	Std. Dev

Ch1	Lack of appropriate educational games and resources for language teaching.	12	1	3	2.17	.577
Ch2	Difficulty in aligning games with language curriculum and learning objectives.	12	2	4	3.17	.718
Ch3	Limited access to technology or equipment for digital language games.	12	2	4	3.58	.669
Ch4	Concerns about classroom management and maintaining discipline during game-based lessons.	12	2	5	3.25	.866
Ch5	Challenges in assessing and evaluating student performance in game-based activities.	12	2	4	3.08	.900
Ch6	Resistance or scepticism from students or colleagues toward game-based learning.	12	2	5	3.92	.900
Ch7	Lack of training and professional development opportunities for game-based language teaching.	12	2	5	3.50	1.000
Ch8	Balancing game-based instruction with traditional language teaching methods.	12	2	5	3.58	1.165
Ch9	Managing diverse student abilities and engagement levels during games.	12	2	5	3.83	1.030
	Valid N (listwise)	12				

Table 12 shows descriptive statistics of challenge in individual

V. Discussion & conclusion

The research conducted on "The Utilization of Games in Language Teaching – An Empirical Study at a University in Vietnam" has provided valuable insights into the effectiveness of incorporating games as a pedagogical tool in language teaching. The study achieved its primary objectives: The research effectively assessed the effectiveness of using games as a pedagogical tool in language teaching at a specific university in Vietnam. The study demonstrated that incorporating games into language classes can lead to improved learning outcomes. Students exposed to game-based learning exhibited enhanced language acquisition and retention, reinforcing the efficacy of this approach. The findings indicate that incorporating games into language classes can be a powerful and engaging teaching strategy. The effectiveness for *grammar* was not significant ($M= 2.13$). Other perspectives such as *vocabulary* improvement was significant ($M= 4.12$). The game-based activities also enhanced the *communicative skill* and *critical thinking skill* which were $M=4.08$ and $M=3.81$ respectively. In terms of the engagement level of students, the game-based teaching method outweighs the traditional teaching method which is $M= 3.93$ và $M=1.67$ respectively. When discussing about the challenges of the teachers who conduct games in classes. The finding revealed that mean of challenges was $M=3.34$ on a 5 point Likert scale. It was quite high level of challenge. The most challenge factor was "Managing diverse student abilities and engagement levels during games" which ranked $M=3.83$. The "Lack of appropriate educational games and resources for language teaching" received least challenge by the teacher, $M= 2.17$.

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APPENDIX 1: A Questionnaire on the perceived benefits of using games in language teaching.

Instructions: Please indicate the extent to which you agree or disagree with each statement by circling the appropriate number on the scale.

1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree.

Grammar Perspective

#	Statements	Ratings				
	Language games effectively help me understand and apply grammar rules.	①	②	③	④	⑤
	Playing language games improves my ability to use correct grammar.	①	②	③	④	⑤
	Grammar-focused games make learning and practicing grammar more enjoyable.	①	②	③	④	⑤
	I believe language games enhance my grammar skills.	①	②	③	④	⑤
	Using games for grammar instruction is an effective way to reinforce my understanding of grammar concepts.	①	②	③	④	⑤

Vocabulary Perspective

#	Statements	Ratings				
	Language games effectively help me learn and remember new vocabulary words.	①	②	③	④	⑤

Playing language games makes expanding my vocabulary more enjoyable.	①	②	③	④	⑤
Vocabulary-focused games make it easier for me to understand and use new words.	①	②	③	④	⑤
I believe language games enhance my vocabulary skills.	①	②	③	④	⑤
Using games for vocabulary instruction is an effective way to reinforce my knowledge of new words.	①	②	③	④	⑤

Communicative skill

#	Statements	Ratings				
	Language games help me improve my speaking and listening skills.	①	②	③	④	⑤
	Playing language games enhances my ability to communicate effectively in the language.	①	②	③	④	⑤
	Games encourage me to practice and develop my language communication skills.	①	②	③	④	⑤
	I believe that using games in language instruction improves my overall communication skills.	①	②	③	④	⑤
	Games make it more enjoyable to interact and communicate in the language.	①	②	③	④	⑤

Critical thinking skill

#	Statements	Ratings				
	Language games encourage me to think critically about language and language use.	①	②	③	④	⑤
	Playing language games enhances my problem-solving skills in language-related tasks.	①	②	③	④	⑤
	Games provide opportunities for me to analyze and evaluate language content.	①	②	③	④	⑤
	I believe that using games in language instruction fosters my critical thinking abilities.	①	②	③	④	⑤
	Games make language instruction more engaging and thought-provoking.	①	②	③	④	⑤

APPENDIX 2: Student Engagement in Language Classes: Games-Based vs. Traditional Instruction

Instructions: Please answer the following questions to help us understand your level of engagement in language classes using games compared to traditional language instruction methods. For each question, please select the response that best reflects your experience.

Section 1: Demographics

Gender: Male Female Other

Your age: _____

How many semesters/years have you studied English? _____

Which type of language class are you currently enrolled in? Games-Based Traditional

Section 2: Engagement in Games-Based Language Classes:

Please rate the following statements in relation to your experience in games-based language classes. (Rate each statement on a 5-point Likert scale, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree)

#	Statements	Ratings				
	The use of games in language classes keeps me engaged and interested.	①	②	③	④	⑤
	Games make me actively participate and interact with the language content.	①	②	③	④	⑤
	I look forward to games-based language classes more than traditional classes.	①	②	③	④	⑤
	Games-based instruction helps me learn and remember language concepts	①	②	③	④	⑤

better.

I find games-based language classes to be more enjoyable. ① ② ③ ④ ⑤

Section 3: Engagement in Traditional Language Classes:

Please rate the following statements in relation to your experience in traditional language classes. (Rate each statement on a 5-point Likert scale, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree)

#	Statements	Ratings				
	Traditional language classes keep me engaged and interested.	①	②	③	④	⑤
	Traditional instruction makes me actively participate and interact with the language content.	①	②	③	④	⑤
	I look forward to traditional language classes' as much as games-based classes.	①	②	③	④	⑤
	Traditional instruction helps me learn and remember language concepts better.	①	②	③	④	⑤
	I find traditional language classes to be enjoyable.	①	②	③	④	⑤

APPENDIX 3: Challenges in Integrating Games into Language Teaching: A Teacher Survey

Instructions: We would like to understand the challenges you face when integrating games into your language teaching methods. Please answer the following questions based on your experience and provide any additional comments or suggestions you may have.

Section 1: Demographics:

Name (optional): _____

School/Institution: _____

How many years have you been teaching language? _____

Challenges in Integrating Games:

Please rate the following challenges in terms of their impact on your experience of integrating games into your language teaching. Use a 5-point Likert scale, where 1 = Not a Challenge, 2 = Minor Challenge, 3 = Moderate Challenge, 4 = Major Challenge, and 5 = Very Significant Challenge.

#	Statements	Ratings				
	Lack of appropriate educational games and resources for language teaching.	①	②	③	④	⑤
	Difficulty in aligning games with language curriculum and learning objectives.	①	②	③	④	⑤
	Limited access to technology or equipment for digital language games.	①	②	③	④	⑤
	Concerns about classroom management and maintaining discipline during game-based lessons.	①	②	③	④	⑤
	Challenges in assessing and evaluating student performance in game-based activities.	①	②	③	④	⑤
	Resistance or scepticism from students or colleagues toward game-based learning.	①	②	③	④	⑤
	Lack of training and professional development opportunities for game-based language teaching.	①	②	③	④	⑤
	Balancing game-based instruction with traditional language teaching methods.	①	②	③	④	⑤
	Managing diverse student abilities and engagement levels during games.	①	②	③	④	⑤