

Linh Ngo

**INTEGRATING DIGITAL GAME-BASED  
LEARNING INTO ENGLISH LANGUAGE  
TEACHING: PERCEPTIONS OF VIETNAMESE  
SECONDARY SCHOOL TEACHERS**

Faculty of Education and Culture  
Master's thesis  
May 2024

# ABSTRACT

Linh Ngo: Integrating Digital Game-Based Learning Into English Language Teaching: Perceptions Of Vietnamese Secondary School Teachers  
Master's thesis  
Tampere University  
Teaching, Learning and Media Education  
May 2024

---

This research investigates teachers' perceptions of integrating Digital Game-Based Learning (DGBL) into English Language Teaching (ELT) for Vietnamese secondary school students, aiming to contribute to understanding the role of DGBL in ELT contexts. Digital game-based language learning has emerged as a dynamic approach to language education, blending entertainment with pedagogical strategies to enhance student engagement and learning outcomes. Recognizing the significance of English proficiency in Vietnam's economy, the study explores DGBL's potential in enhancing ELT methodologies. The research draws on qualitative data from interviews with five Vietnamese English teachers, employing thematic analysis to identify key patterns and insights.

The findings reveal a recognition of DGBL's benefits for engagement, motivation, and the creation of authentic language environments. Teachers noted that DGBL promotes active learning, making language acquisition more interactive and enjoyable for students. However, the study also highlights significant challenges, including the resource-intensive nature of DGBL implementation and the potential to exacerbate student inequality due to varying access to technology. Additionally, inadequate resources and training for teachers, along with conservative attitudes within traditional education systems, present barriers to the effective integration of DGBL.

This study contributes to understanding teachers' perceptions of DGBL in ELT contexts, offering recommendations for curriculum development and resource allocation in Vietnamese secondary schools. By addressing both the benefits and challenges of DGBL, the research provides a balanced view that can inform future educational strategies and policy decisions, aiming to enhance English language learning outcomes in Vietnam.

Keywords: digital game-based learning, teachers' perceptions, English language teaching, Vietnamese secondary school students, engagement, motivation.

The originality of this thesis has been checked using the Turnitin OriginalityCheck service.

# USE OF AI TOOLS IN THIS THESIS

The AI tools used in my thesis and the purpose of their use has been described below:

## **ChatGPT (version: GPT-4)**

**Writing the manuscript:** ChatGPT assisted me in the process of formulating ideas, set structures for the given arguments, and improve the clarity and coherence of the texts by refining the language.

**Data analysis:** ChatGPT suggested me ways to present the findings clearly and concisely by providing suggestions in interpreting the given raw materials.

## **Grammarly (version: 1.0.0)**

**Writing the manuscript:** Grammarly checked for the grammatical errors I made and suggested ways to improve the sentence structures.

I am aware that I am totally responsible for the entire content of the thesis, including the parts generated by AI, and accept the responsibility for any violations of the ethical standards of publications.

# CONTENTS

<b>1 INTRODUCTION</b> .....	<b>6</b>
<b>2 TECHNOLOGY ACCEPTANCE MODEL</b> .....	<b>9</b>
<b>3 DIGITAL GAME-BASED LEARNING</b> .....	<b>12</b>
3.1 Learning and Motivational Outcomes of DGBL .....	12
3.2 Digital Game-Based Language Learning .....	13
3.3 Teachers' Perceptions of Digital Game-Based Learning .....	13
3.4 Adoption of DGBL in ELT .....	13
<b>4 METHOD</b> .....	<b>18</b>
4.1 Research questions .....	18
4.2 Participants .....	18
4.3 Epistemological standpoint .....	19
4.4 Data Collection .....	20
4.5 Data analyses .....	22
4.6 Reliability and trustworthiness .....	23
4.7 Ethical issues .....	24
<b>5 FINDINGS</b> .....	<b>26</b>
5.1 Theme One: How Teachers View the Integration of Digital Game-Based Learning into the English Teaching Context in Vietnamese Secondary Education .....	26
5.1.1 <i>Incorporating DGBL into Educational Syllabus</i> .....	26
5.1.2 <i>Variety within the Educational Setting</i> .....	27
5.1.3 <i>The willingness and attitude of the teacher</i> .....	28
5.1.4 <i>Competence of educators and collaboration among peers</i> .....	29
5.1.5 <i>Generation Divide in the Context of DGBL Integration</i> .....	30
5.2 Theme Two: Teachers' Challenges in Integrating Digital Game-Based Learning into English Instruction .....	31
5.2.1 <i>Financial constraints</i> .....	31
5.2.2 <i>Possible downsides that may arise while implementing and learning</i> .....	32
5.3 Theme Three: Teachers' Insights on the Benefits of Digital Game-Based Learning in Secondary English Teaching .....	34
5.3.1 <i>Increased Student Participation and Achievement</i> .....	34
5.3.2 <i>Improvement in Teaching Methods Enhanced by DGBL</i> .....	35
<b>6 DISCUSSION</b> .....	<b>38</b>
6.1 Summary .....	38
6.2 Interpretations .....	39
6.3 Implications .....	40
6.4 Limitations .....	40
6.5 Recommendations .....	41
<b>REFERENCES</b> .....	<b>43</b>
<b>APPENDICES</b> .....	<b>50</b>
Appendix A: Queries for Interviews .....	50
Appendix B: Sample Interview Transcript .....	52
Appendix C: Themes and Codes .....	55

**TABLES**

**TABLE 1. INFORMATION OF PARTICIPANTS ..... 19**

**FIGURES**

**FIGURE 1. TECHNOLOGY ACCEPTANCE MODEL .....9**

**FIGURE 2. CONCEPTUAL FRAMEWORK ..... 16**

**FIGURE 3. STEPS INVOLVED IN GATHERING DATA .....21**

# 1 INTRODUCTION

The emergence of digital technologies brings forth innovative learning opportunities that challenge traditional educational systems and educators (Collins & Halverson, 2018; Avidov-Ungar & Hanin-Yitzhak, 2019). This shift necessitates educational systems worldwide to adapt their school environments and teaching methods to equip students with skills and tools relevant to the 21st century (Mioduser et al., 2003; Schmidt & Tang, 2020). One particular challenge in education is the implementation of digital game-based learning (DGBL) (De Freitas & Maharg, 2011; Denham, 2018; Joyce et al., 2009). Educational systems globally have opted to incorporate programs integrating DGBL into teaching as part of their embrace of technological advancement (Joyce et al., 2009; Koh et al., 2012).

Acknowledging the potential of DGBL in English education, the Vietnamese government has initiated substantial efforts to integrate DGBL comprehensively across all levels of English education as part of a national strategy, as recognized by the Ministry of Education and Training (MOET). However, despite governmental support and perceived academic benefits, the uptake of DGBL in Vietnam remains limited due to entrenched traditional teaching methodologies (Le & Vo, 2014; Ngo, 2017). Moreover, challenges persist in the Vietnamese educational system concerning the adoption and effectiveness of DGBL, as highlighted by Dang (2013) and supported by Vu and Burns (2014).

In the context of Vietnamese secondary schools, where the integration of technology into education is increasingly emphasized, DGBL presents a promising avenue to engage and motivate adolescents in learning English. Nevertheless, the realization of its potential faces obstacles, including the prevalence of traditional teaching methods and disparities between policy initiatives and practical implementation. Recognizing the imperative to address

these challenges and capitalize on the potential benefits of DGBL, this study seeks to explore secondary school teachers' perceptions and preferences towards DGBL adoption through the lens of the Technology Acceptance Model (TAM). Employing qualitative research methods, this investigation aims to provide a profound understanding of the perceived advantages, challenges, and requirements for DGBL integration within Vietnamese secondary schools.

As a secondary school teacher myself, I recognize the pivotal role that middle school teachers play in shaping students' educational experiences and attitudes towards learning (Darling-Hammond, 2010). Middle school is a critical transitional period where students undergo significant cognitive and socio-emotional development (Eccles et al., 1993). Therefore, it is an opportune time to introduce innovative teaching methods like DGBL that can enhance student engagement and motivation (Gee, 2003), particularly in subjects such as English language learning. Moreover, middle school teachers often face unique challenges in balancing academic rigor with the need to maintain students' interest and enthusiasm for learning (Dweck, 2012). Integrating DGBL into English language teaching at this level can address these challenges by providing interactive and immersive learning experiences that cater to the diverse needs and learning styles of adolescents (Prensky, 2001). By focusing specifically on middle school teachers' perceptions of DGBL, this study aims to provide targeted insights into the factors influencing the adoption and implementation of this innovative approach within the Vietnamese secondary school context.

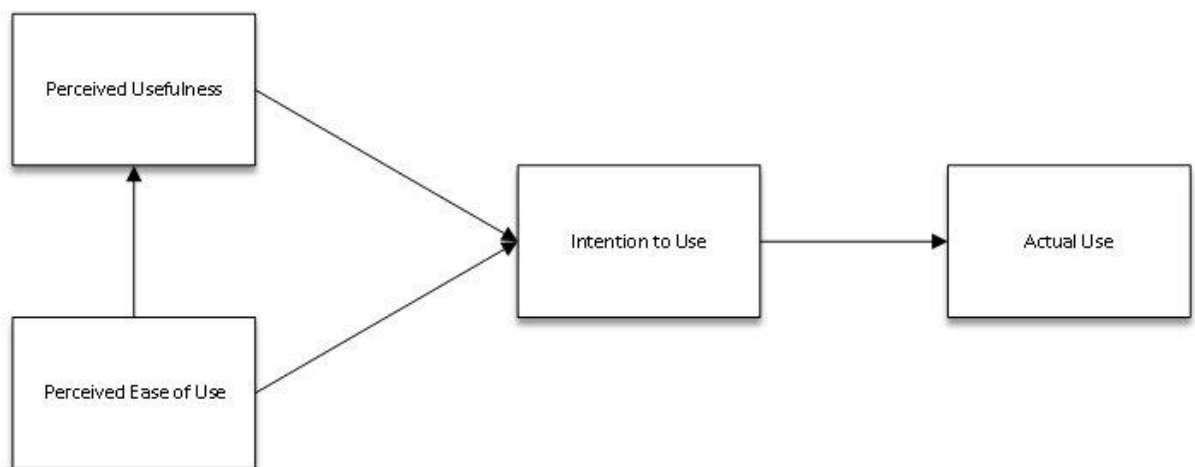
This study holds implications for future research and policy in educational settings, particularly regarding the integration of DGBL. Educators, administrators, and professional development leaders aiming to enhance classroom engagement and motivation may find the findings valuable. Understanding teachers' perspectives on DGBL preferences can inform both pre-service and in-service training, as well as administrative support strategies for its integration. The study contributes to the diffusion of innovation theory by exploring factors influencing teachers' intentions to adopt or reject DGBL, expanding understanding of innovation adoption processes at the individual teacher level within a specific educational context and career stage. In the context of social change, the study addresses the need to diversify classroom

tools and resources. Understanding the factors shaping teachers' preferences towards DGBL adoption can facilitate positive shifts in educational environments for both students and teachers, potentially enhancing learning outcomes and experiences.



## 2 TECHNOLOGY ACCEPTANCE MODEL

The Technology Acceptance Model (TAM) has been widely employed as a theoretical framework to understand and predict user acceptance and usage behavior towards new technologies. Developed by Davis (1989), TAM is an adaptation of the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) and is specifically tailored to model user acceptance of information systems and technologies. TAM illustrates behavior as the result predicted by perceived ease of use, perceived usefulness, and behavioral intention (Figure 1) (Marikyan & Papagiannidis, 2023).



**FIGURE 1.** Technology Acceptance Model

Perceived usefulness refers to the degree to which a person believes that using a particular system would enhance their job performance (Davis, 1989). Perceived ease of use, on the other hand, is defined as the degree to which a person believes that using a particular system would be free of effort (Davis, 1989). According to TAM, both these beliefs are influenced by external

variables, such as system characteristics, user training, and user involvement in the design process (Venkatesh & Davis, 2000).

Numerous studies have validated the TAM's ability to explain and predict user acceptance and adoption of various technologies across diverse contexts, including educational settings (Teo, 2011; Šumak et al., 2011). TAM framework has been employed to examine user acceptance of DGBL systems and environments, identifying additional factors that can influence users' technology acceptance beyond the original TAM constructs of perceived usefulness and perceived ease of use.

Bourgonjon et al. (2013) applied the Technology Acceptance Model (TAM) to examine the acceptance of game-based learning, focusing on teachers' behavioral intention to use video games. This approach was chosen because, in many prior studies on teachers' acceptance of technology, behavioral intention rather than actual use is often used as the dependent variable. Their findings revealed that perceived usefulness and perceived ease of use significantly influenced teachers' intentions to use game-based learning in their classrooms. Furthermore, factors such as school support, professional development opportunities, and compatibility with teaching styles were found to be important determinants of teachers' perceived usefulness and ease of use of DGBL. Similarly, Althunibat (2015) proposed an extended TAM model to investigate factors influencing instructors' acceptance of mobile game-based language learning. In addition to perceived usefulness and ease of use, the model included variables like subjective norm, self-efficacy, attitude, and behavioral intention. Results showed self-efficacy was the strongest predictor of intention to use mobile game-based learning. Al-Emran et al. (2018) extended TAM to investigate factors affecting students' acceptance of gamification in a DGBL environment. Their model incorporated additional variables like perceived enjoyment, objective usability, and social influence. The study found that perceived enjoyment significantly impacted students' behavioral intention to use the gamified system. Moon and Kim (2001) studied motivational factors in the context of playing online games based on an extended TAM. Their model added perceived playfulness as an intrinsic motivator, finding it had a significant influence on the attitude toward using online games in addition to perceived ease of use. Ngai et al. (2007) extended TAM to explore factors affecting

instructors' decisions about web-based course tools like online games and simulations. Technical support quality emerged as an important addition to the basic TAM constructs in influencing perceived usefulness and ease of use.

Based on the existing literature, TAM appears to be a suitable theoretical framework to guide the thesis on integrating DGBL into English language teaching in Vietnamese secondary schools. By examining teachers' perceptions of usefulness and ease of use of DGBL, as well as the factors influencing these perceptions, the study can provide valuable insights into the potential barriers and facilitators of DGBL adoption in the Vietnamese context. Additionally, the study can contribute to the growing body of literature on the application of TAM in educational settings, particularly in the context of DGBL and language teaching.

# 3 DIGITAL GAME-BASED LEARNING

Digital Game-Based Learning (DGBL) integrates educational content with digital games to enhance learning outcomes. According to Plass et al. (2020), DGBL involves the use of computer games with educational purposes, leveraging the engaging nature of games to foster learning through problem-solving, exploration, and experimentation. This approach aims to make learning more interactive, enjoyable, and effective by aligning educational goals with game mechanics and narratives.

## *3.1 Learning and Motivational Outcomes of DGBL*

Systematic literature reviews and meta-analyses have extensively investigated the impact of DGBL on learning and motivation. Wouters et al. (2013) conducted a meta-analysis that revealed significant cognitive and motivational benefits of serious games, demonstrating improvements in knowledge acquisition, retention, and motivation compared to traditional instructional methods. Similarly, Clark et al. (2016) found that digital games can enhance learning outcomes across various domains, particularly when the games are well-designed to align with educational objectives and when they incorporate elements that support active learning and feedback.

A scoping review by Hung et al. (2018) focused on digital game-based language learning (DGBLL), highlighting that DGBLL can effectively improve language skills, particularly in vocabulary and grammar. The interactive and immersive nature of games helps learners engage more deeply with the language content, facilitating better retention and application of language skills.

### *3.2 Digital Game-Based Language Learning*

Digital game-based language learning (DGBLL) is a subset of DGBL that specifically targets language acquisition through digital games. Xu et al. (2019) conducted a systematic review of DGBLL technologies for English language learning, noting that these technologies can significantly enhance language proficiency, particularly in younger learners. The review highlighted that games designed for language learning often incorporate elements such as storytelling, role-playing, and interaction with virtual environments, which can make language learning more contextual and meaningful.

Yang et al. (2024) reviewed research trends in game-based language learning (GBLL) in K-12 education, finding that GBLL is increasingly being recognized for its potential to engage students in authentic language use and provide immediate feedback, which are crucial for language acquisition. Their review emphasized the importance of well-structured game environments that promote communication, collaboration, and critical thinking, which are essential components of effective language learning.

### *3.3 Teachers' Perceptions of Digital Game-Based Learning*

Teachers' perceptions of DGBL play a critical role in its adoption and implementation in educational settings. Research indicates that while many teachers recognize the potential benefits of DGBL, they also face challenges related to its integration into the curriculum. According to a study by Wouters and van Oostendorp (2017), teachers appreciate the motivational aspects of digital games but often lack the training and resources needed to effectively implement DGBL in their classrooms. Moreover, teachers express concerns about aligning game content with educational standards and ensuring that games are used to complement, rather than replace, traditional teaching methods.

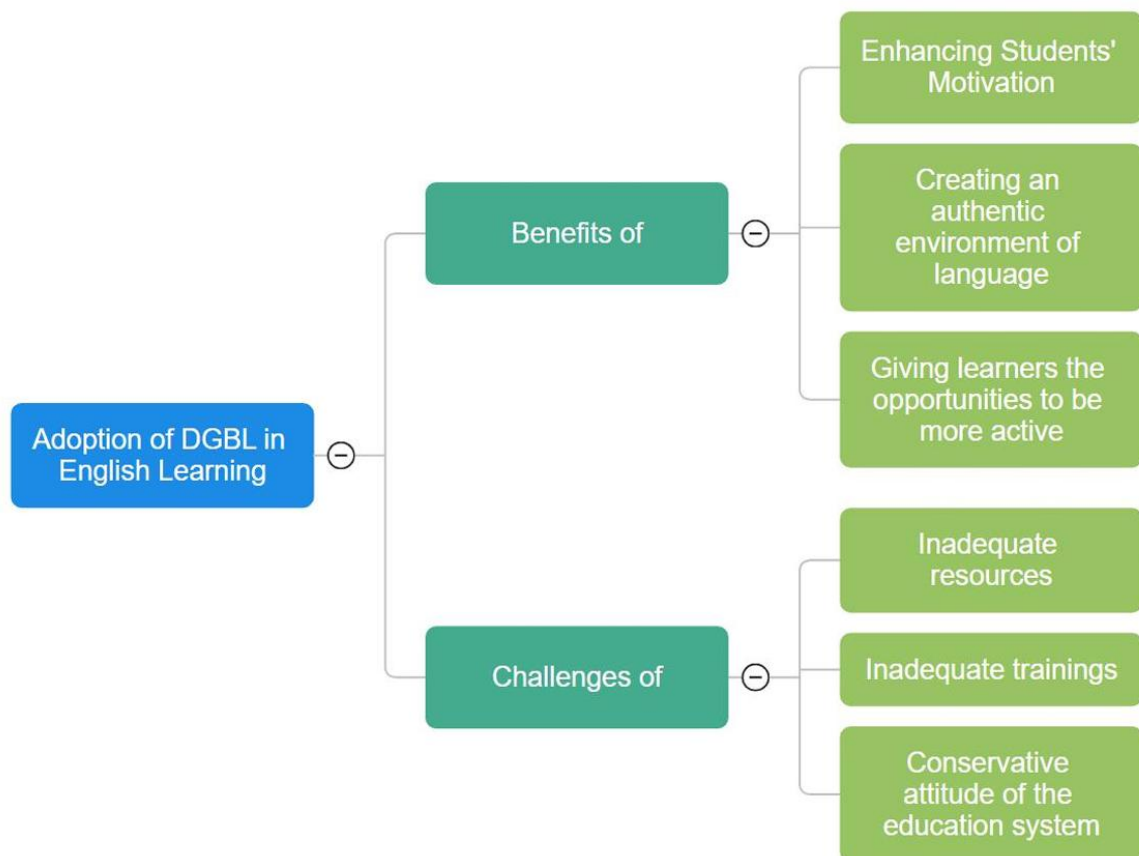
### *3.4 Adoption of DGBL in ELT*

In building a conceptual framework for examining the adoption of DGBL in English language teaching, I drew upon several prior studies that highlighted

potential benefits such as enhancing student motivation (Reiser et al. 1977; Jacobs & Baum, 1987; Garris et al., 2002), creating authentic language environments (Liestøl 2003, Kiili 2005), and promoting active learning (Randel et al. 1992; Kiili 2005). On the other hand, studies also revealed key challenges like inadequate resources and training for teachers (Baek, 2008; Klopfer et al., 2009) and conservative attitudes within traditional education systems that resist innovative approaches like DGBL (Baek & Choi, 2014; Papadakis, 2018). Reiser et al. (1977) conducted pioneering research into using games for instructional purposes. They developed and evaluated several computer-based games aimed at teaching elementary students basic math and logic skills. The study found that students who learned through these instructional games demonstrated higher motivation and knowledge retention compared to traditional teaching methods. This work provided foundational evidence of the potential benefits of integrating games into educational settings. Building on these early findings, Baker et al. (1981) likely further examined how games could boost student motivation and achievement through engaging gameplay and immediate feedback. While specifics are not provided, their study likely contributed valuable insights into the emerging field of game-based learning. Jacobs and Baum (1987) added to the growing body of evidence supporting educational games. Their work emphasized how games can improve motivation and learning by providing immediate feedback, fostering engagement, and enabling active participation in the experience. Shubik (1989) highlighted the critical importance of aligning game design closely with specific learning objectives. This study highlighted the need for pedagogically sound educational games that create authentic, effective learning environments in line with instructional goals. Randel et al. (1992) expanded on this focus, further exploring the relationship between intentional game design and desired pedagogical outcomes. Their work emphasized crafting engaging games that also facilitate meaningful educational experiences aligned with objectives. As digital technologies advanced, researchers like Garris et al. (2002) shifted attention to digital game-based learning specifically. Their studies explored motivation, design aspects, and immersive flow experiences enabled by digital games in educational contexts. Liestøl (2003) examined how digital games promote active learning engagement among students through their interactive,

immersive qualities. This explored the underlying mechanisms that allow digital games to be effectively integrated into teaching. Kiili (2005) built on this by investigating how digital educational games impact motivation and learning outcomes, including examining the role of flow state experiences fostered by digital gameplay. On the other hand, Baek (2008) studied the challenges faced by Korean teachers regarding the adoption of DGBL, explored the perspectives of teachers regarding the integration of digital games into their teaching practices. The study identified inadequate resources and training as significant barriers hindering the adoption of DGBL. Baek and Choi (2014) research the attitudes of teachers towards the potential use of social network games for teaching and learning purposes. By surveying or interviewing teachers, the researchers explored educators' beliefs and perceptions regarding the educational value of social network games. Despite acknowledging the potential benefits of these games, such as fostering collaboration and engagement among students, teachers faced challenges stemming from the conservative attitude of the education system. This conservatism may have manifested as resistance to adopting innovative teaching methods or incorporating non-traditional resources into the curriculum. Baek and Choi (2014) highlighted the need for educational institutions to embrace innovation and provide support for teachers seeking to integrate new technologies, such as social network games, into their instructional practices.

Drawing from this literature, a conceptual framework shown in Figure 2 was developed viewing DGBL integration through the lenses of benefits (enhancing motivation of students, creating authentic language environments, promoting active learning) and challenges (inadequate resources and training, conservative attitude of education system).



**FIGURE 2.** Conceptual framework

Several studies have explored teacher perceptions of DGBL in various contexts. Proctor and Marks (2013) investigated the attitudes of in-service teachers in the United States and found that while they recognized the potential benefits of DGBL, they also expressed concerns about classroom management and the potential for distraction. In a study conducted in Taiwan, Hsu et al. (2013) reported that teachers held positive attitudes towards DGBL but faced challenges in integrating games into their teaching due to time constraints and a lack of technical support. However, most existing studies have been conducted in Western or East Asian contexts, and the findings may not be directly applicable to the Vietnamese context. Cultural factors, educational policies, and available resources could shape teacher perceptions and attitudes differently. In the context of Vietnam, research on teacher perceptions of DGBL in ELT is limited. Nguyen (2018) explored the attitudes of Vietnamese English language teachers towards the use of digital games and found that while they acknowledged the potential benefits, they also expressed concerns about the



availability of appropriate resources and the alignment of games with the curriculum. Nevertheless, this study focused on teachers in higher education settings, and the perceptions of secondary school teachers remain unexplored. While existing literature has provided insights into the potential benefits and challenges of DGBL in ELT, as well as teacher perceptions in various contexts, there is a notable gap in research focused specifically on the perceptions of Vietnamese secondary school teachers. Given the unique cultural and educational context of Vietnam, as well as the specific challenges faced in secondary education settings, it is essential to investigate the perceptions and attitudes of teachers at this level. By exploring the perceptions of Vietnamese secondary school teachers, this study aims to contribute to a deeper understanding of the challenges and opportunities associated with integrating DGBL into ELT in a specific cultural and educational context.

# 4 METHOD

## *4.1 Research questions*

The literature review reveals a scarcity of studies focusing specifically on middle school teachers and the factors influencing their decisions regarding DGBL integration. By examining teachers' perceptions through the lens of TAM and considering additional external factors, this study aims to investigate middle school teachers' perspectives on the facilitators and barriers to incorporating DGBL in their classrooms. Employing a qualitative approach, the study aims to provide insights into the unique challenges and opportunities faced by middle school educators in Vietnam regarding DGBL integration.

To achieve the stated study objectives, the following research questions were formulated:

Research Question 1: What elements do middle school teachers in Vietnam perceive as beneficial in influencing their choices to incorporate DGBL into their classrooms?

Research Question 2: What factors do middle school teachers in Vietnam perceive as detrimental in influencing their decisions to integrate DGBL into their classrooms?

## *4.2 Participants*

The study encompassed middle school educators who willingly participated, understanding they could withdraw at any point, and their privacy would be safeguarded. During the interview process, they were provided with a consent form to sign. Among the five participants, all of them has more than three years of experience with DGBL. The gender distribution is three females and two males, with two participants originating from rural areas and three from urban

ones. Their teaching experience ranges from 5 to 9 years. Additionally, two participants are working in private schools, while the other three are teaching in public schools. Further details regarding the participants' characteristics can be found in Table 1.

**TABLE 1.** Information of participants

	Years of teaching	Years of using DGBL	Area	Type of school
Participant 1	5	4	urban area	public
Participant 2	6	3	rural area	private
Participant 3	8	5	urban area	public
Participant 4	3	3	urban area	private
Participant 5	9	2	rural area	public

### *4.3 Epistemological standpoint*

I have a special awareness of and interest in educational topics, thus I tend to gravitate toward intellectual challenges. As a result, the educational subject is heavily stressed in this research, which should provide me with the chance to learn more about the application of DGBL in education generally and English learning specifically. I am excited to find out more about the potential and challenges of implementing DGBL in English instruction. To be more precise, I choose methodological choices that are narrative, idiomatic, unique, and truly descriptive. According to my epistemological stance, a qualitative small-scale approach to research technique so arises.

A study paradigm known as interpretivism looks to participants' subjective perspectives, experiences, and backgrounds to provide light on reality (Yanow & Schwartz-Shea, 2011). This study intends to investigate secondary school English teachers' perceptions through their teaching methods in order to determine the benefits and obstacles they encountered when integrating DGBL into their ELT. Qualitative case studies, according to Baxter and Jack (2008), are ideal for analyzing a phenomena in its environment. As a result, the interpretative paradigm of the qualitative case study approach guided this

research, allowing the investigator to delve into the experiences that study participants had with using DGBL to teach English.

The aim of the qualitative technique is to present some distinct insights from a particular exploratory case study, instead than extrapolating the state of English education throughout the country (Hancock, 2021). As per investigations conducted by Yazan (2015), this preliminary case study examines the potential benefits of integrating DGBL into English teaching. Primarily, qualitative interviews will serve as the primary means of data collection.

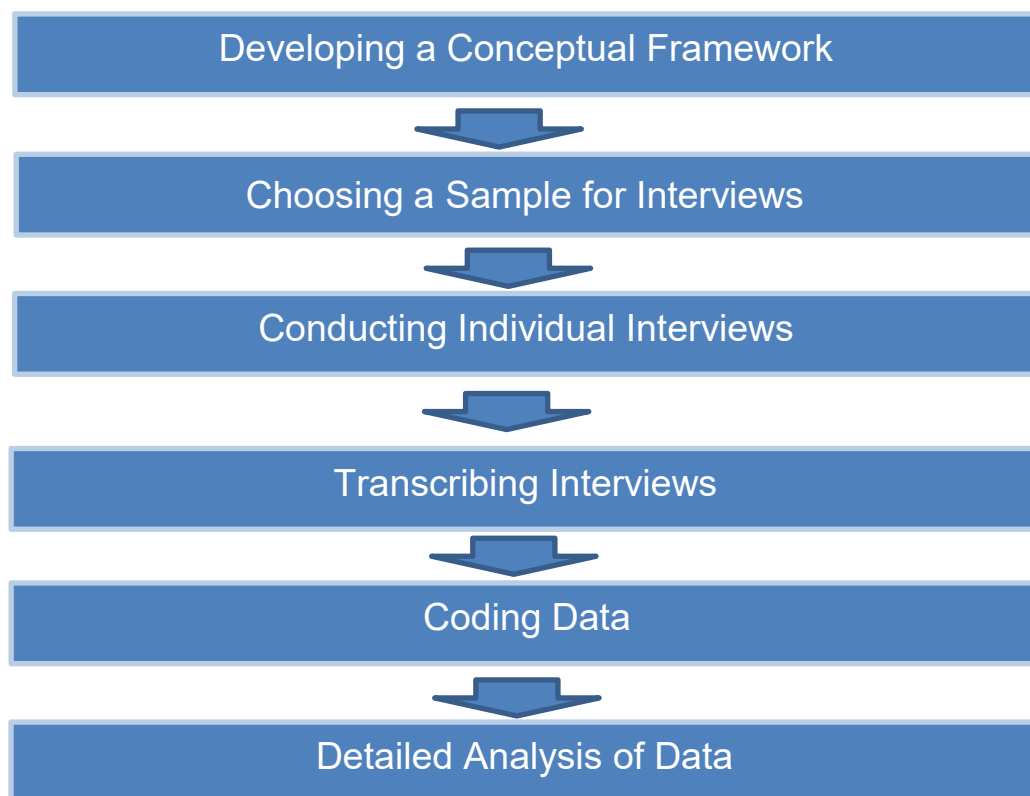
#### *4.4 Data Collection*

My study centered on understanding the positive and negative influences guiding teachers' decisions to incorporate DGBL into their teaching practices. Maxwell (2013) underscores the significance of aligning research objectives with the chosen methodology. Thus, recognizing the need to explore teachers' perceptions, particularly those not readily observable, I opted for an interview-based approach. Through semis-structured interviews, I aim to explore participants' usage of DGBL and their perceptions of the factors driving their adoption of this teaching method. Interviews offer researchers the advantage of directly gathering data from participants, which serves as a valuable resource for qualitative research. Additionally, interviews can be easily recorded and stored, facilitating data analysis and coding. This is particularly beneficial in semi-structured interviews, where questions can be adjusted as needed. The flexibility of such interviews allows for a more in-depth collection of data, as respondents feel more at ease and are therefore more likely to disclose information. To further explore the emotional aspects of respondents' answers, interviewers may observe their thoughts, feelings, and ideas throughout the semi-structured interview process. (Creswell, 2007; Alamri, 2019; Dunwoodie et al., 2023; Elhami & Khoshnevisan, 2022; Polit & Beck, 2010).

The main benefit of interviews is their flexibility in allowing researchers to gather data directly from participants for use as a database for qualitative research. They can also be easily stored and taped, which makes it easier to code and analyze the data Creswell (2007), particularly in semi-structured

interviews where questions can be changed or adjusted at any point (Alamri, 2019). More in-depth data was collected since the semi-structured interview allowed the respondents a great deal of flexibility and provided a more comfortable environment in which to disclose themselves (Dunwoodie et al., 2023). In order to get the emotions underlying the replies, the interviewers might watch the thoughts, feelings, and ideas of respondents during the semi-structured interview process (Elhami & Khoshnevisan, 2022; Polit & Beck, 2010).

The data for this study were gathered using a six-principle qualitative technique illustrated by Figure 3. I began by creating the conceptual framework, then I conducted the individual interviews using the chosen interview sample. The results of the in-person interviews were then transcribed, combined, and coded to provide the findings. This was followed by a thorough data analysis.



**FIGURE 3.** Steps involved in gathering data

#### *4.5 Data analyses*

Reflexive Thematic Analysis is a versatile approach to thematic coding that facilitates the interpretation of qualitative data, simplifying the process of identifying emerging themes or patterns within the dataset. This method was employed in my qualitative analysis to address my research questions. Researchers were better able to transfer and support data sources since this strategy produced a primary organizing idea around which all codes could converge around a single, established structure of the main topic (Braun et al., 2016). To mitigate the deficiencies of the human analyst, the recordings were carefully transcribed to ensure a more precise and genuine retrieval of information (Alvesson, 2011), capturing every crucial detail (Robson, 2011). This approach allowed me to thoroughly engage with the data and analyze it logically and coherently. Additionally, Byrne (2022) underscored the potential of Reflexive Thematic Analysis to delve into richer details and interpretations of meaning.

In conducting the Reflexive Thematic Analysis, I systematically coded the data and identified key themes relevant to integrating DGBL into English teaching within Vietnamese secondary education. The first theme, how teachers view the integration of digital game-based learning into the English teaching context in Vietnamese secondary education, includes sub-themes such as incorporating DGBL into educational syllabus, which captures the strategies and methods used to integrate digital games into the existing curriculum, and variety within the educational setting, which explores the diversity in approaches to implementing DGBL across different schools and classrooms, considering factors such as resource availability and teacher creativity. Sub-themes here also include the willingness and attitude of the teacher, which examines teachers' readiness and openness to adopting DGBL, including their perceptions of its effectiveness and potential challenges, competence of educators and collaboration among peers, which addresses the skill levels of teachers in using digital tools and the importance of peer support and professional development, and generation divide in the context of DGBL integration, which reflects generational differences in attitudes and

competencies towards digital game-based learning, noting how younger and older teachers may vary in their approach.

The second theme, obstacles to integrating digital game-based learning into English instruction, focuses on challenges faced in implementing DGBL. Sub-themes include financial constraints, discussing the economic challenges schools face in acquiring and maintaining the necessary technology, and possible downsides that may arise while implementing and learning, considering potential negative aspects of DGBL, such as screen time concerns, distraction, and the need for balanced instructional strategies.

The third theme, benefits of DGBL in secondary English teaching, highlights the positive impacts of DGBL. Sub-themes include increased student participation and achievement, which highlights how DGBL can enhance student engagement and improve learning outcomes in English language education, and improvement in teaching methods enhanced by DGBL, which explores how digital games can innovate and enrich traditional teaching practices, offering new ways to deliver content and assess student progress.

Each theme was meticulously formed by grouping similar codes and identifying patterns that emerged during the analysis. This thematic framework provided a comprehensive understanding of the complexities involved in integrating DGBL into secondary English teaching in Vietnam, as detailed in the table found in appendix C.

#### ***4.6 Reliability and trustworthiness***

Lincoln and Guba (1985) advocated for utilizing credibility, transferability, dependability, and confirmability in qualitative research to ensure validity and reliability. I enhanced credibility by employing data triangulation, collecting data from multiple subjects with diverse experiences in DGBL. Member checking was another method used, where participants provided feedback on the accuracy of findings. Detailed descriptions were crafted to aid in transferability, allowing readers to understand how findings could be applied to different contexts or groups. Similar to reliability in quantitative studies, dependability focused on the consistency of findings. An audit trail was maintained for third-party review, and a code-recode strategy was employed to ensure consistency

in data interpretation. Confirmability ensured research was free from bias. A reflexive journal was kept throughout the study, allowing for systematic reflection and identification of any potential biases.

According to Cohen et al. (2018), bias was defined as the information provider's manipulation of the questioner's replies. Using interviews as the primary method of data collecting might lead to biased results. I admit that my prejudice as an English instructor and my expectations for the interviewee's answers may have influenced the data I analyzed during the interview process.

I situate myself in this part to see how much my positionality shaped my assertions and the information I learned from the interviews (Savin-Baden & Major, 2023; Holmes, 2020). After reading the interview transcript and analyzing the results, my viewpoint as a female instructor could change. Therefore, I reasoned that this need to be regarded as a crucial step in the study procedure.

#### *4.7 Ethical issues*

For this study conducted within my professional field, I meticulously adhered to ethical practices throughout the planning, implementation, and documentation phases in strict accordance with the guidelines for academic ethics and procedures for handling allegations of misconduct at Tampere University.

In the interview stage, I ensured participants had a comprehensive understanding of their roles and how the information they provided would contribute to the research objectives. This entailed providing detailed explanations regarding the study's purpose, procedures, and potential impacts, enabling participants to make informed decisions about their involvement, as emphasized by Denscombe (2002). Prior to conducting the interviews, I obtained explicit consent from all participants, ensuring they were fully aware of their rights, including the ability to withdraw their participation at any stage without consequences.

To safeguard participants' rights, I sought their consent to record the interviews for transcription purposes, while simultaneously taking measures to protect their identities. Clear communication was established regarding anonymity, ensuring that participants' expectations were respected. This involved discussing and reaching an agreement on the extent of personal



information disclosure, as recommended by Wiles et al. (2008). Stringent security measures were implemented to uphold privacy rights, with all interview data securely stored and password-protected to prevent unauthorized access, as suggested by Kaiser (2009).

Furthermore, participants were provided access to their interview transcripts to verify the accuracy of the information and ensure that their opinions were correctly represented. This step was crucial in maintaining transparency and trust between the researcher and participants, thereby reinforcing the ethical integrity of the study, as highlighted by Creswell and Poth (2018).

By adhering to these ethical guidelines and procedures, I aimed to conduct methodologically rigorous research that was not only respectful but also protective of all participants' rights and well-being.

# 5 FINDINGS

In analyzing the data, three primary themes were identified, each highlighting different aspects of integrating DGBL into English teaching in Vietnamese secondary schools from teachers' perspectives. These themes, detailed in Appendix C, encompass the following: (1) How teachers view the integration of DGBL into the English teaching context in Vietnamese secondary education, (2) Teachers' obstacles in integrating DGBL into English instruction, and (3) Teachers' insights on the benefits of DGBL in secondary English teaching. Each theme reveals critical insights into the challenges and opportunities associated with adopting DGBL in this educational context.

## *5.1 Theme One: How Teachers View the Integration of Digital Game-Based Learning into the English Teaching Context in Vietnamese Secondary Education*

### 5.1.1 Incorporating DGBL into Educational Syllabus

Examining the records of interviews conducted with English educators invited to engage in this research yielded numerous enlightening findings. Concerning their encounters with incorporating DGBL, every one of the five participants expressed that employing DGBL in English teaching in Vietnam is not a new concept. Participant 1 mentioned:

The incorporation of DGBL into our school's curriculum began two years ago.

It became evident that despite facing distinct obstacles in integrating DGBL into English lessons, each school aims to complete the process within the upcoming five years. Teachers did not have a strong basis for DGBL adoption when they were first obliged to adopt it since there were not enough prerequisites or resources available. Participants 1 and 3's two quotes illustrate this problem:

The principal and the leaders of my team mandated that we integrate DGBL into our teaching approach.

and

I couldn't jump into using a bunch of fancy tech stuff right from the get-go.

Five teachers found the situation exasperating despite being encouraged to adopt DGBL, as they faced pressure from the principal, the existing curriculum, and the challenges associated with DGBL. Participant 1 articulated her worries about this:

During that period, we felt considerable frustration regarding how to address the situation.

However, it was seen that different instructive establishments use assorted techniques and procedures while coordinating DGBL into their showing surroundings, prompting contrasts in the adequacy and results of DGBL implementation. Participant 4, who previously worked at a private school, asserts that teachers have the freedom to integrate DGBL into their instruction in their preferred manner:

The majority of teachers at our school have proficiency in DGBL, but not all employ it regularly.

In contrast, participant 5 from a public school disclosed that teachers were less likely to embrace DGBL frequently:

The frequency was rather minimal; I don't frequently incorporate DGBL extensively into my teaching.

It seems that despite the optimism and strong motivation of most schools and teachers to integrate DGBL-enhanced teaching methods into their classes, there are still obstacles that need to be addressed.

### 5.1.2 Variety within the Educational Setting

Four out of five participants are in complete agreement that the effectiveness of adopting DGBL can be significantly influenced by both the quality of English instruction and the students' environment. Participants emphasized that learners in urban areas have access to a wider range of educational resources

and activities facilitated through online platforms such as educational apps, communication channels, and interactive learning tools compared to those in rural areas. Consequently, learners in urban settings are likely to experience continuous improvement in their academic performance, as noted by Participants 1 and 4:

Students from urban schools are likely to have a stronger foundation in English learning

and

Since our school is situated in the heart of the city, the majority of students exhibit strong skills in DGBL.

Participant 4 highlighted that students from distant areas may face difficulties in adjusting to the demands of DGBL:

People living in rural or mountainous regions frequently encounter a lack of amenities and limited availability of digital game-based learning tools.

### 5.1.3 The willingness and attitude of the teacher

Typically, participants embodying both the current and upcoming generations of teachers in Vietnam exhibited a blend of sentiments towards the implementation of DGBL. Some remarks from the interviews captured this spectrum of emotions. For instance, participant 1 expressed:

I felt a mix of excitement and anxiety, leaning towards being more eager than nervous.

meanwhile participant 2 mentioned:

DGBL plays an incredibly important role within my teaching lessons.

These statements illustrate that there were two distinct mindsets regarding the integration of modern DGBL practices into teaching approaches. Nowadays, educators who possess a deep understanding of DGBL implementation and their teaching environments are inclined to incorporate state-of-the-art technological resources into their lessons. This integration is believed to

significantly enhance the quality of English instruction and education as a whole in Vietnam.

Furthermore, differences in proficiency in DGBL integration may negatively impact teachers' attitudes and willingness to adopt these methods. Participant 5 recognized that many secondary school teachers are hesitant to embrace DGBL due to concerns about adaptability and the teaching context. Indeed, the availability of infrastructure and resources plays a crucial role, with teachers in schools equipped with advanced technology having better access to tools for DGBL. Conversely, educators in remote or under-resourced schools expressed frustration about financial limitations hindering their ability to improve their DGBL skills. Participants 1 and 2 emphasize on this issue by offering their perspectives:

However, due to their circumstances, not all teachers were adequately prepared for those situations.

and

Implementing DGBL might pose challenges for educators, particularly those who lack sufficient time or expertise.

One could propose that in order to address the reluctance and opposition towards adopting new teaching methods in secondary English classrooms, teachers should make preparations in advance. However, not all teachers possess the necessary skills for this. Additionally, this era emphasized the expectation for teachers to become more outgoing, communicative, diligent, and motivational.

#### 5.1.4 Competence of educators and collaboration among peers

When questioned about where they found the material and how they learned to use it in DGBL-equipped classrooms, participants' answers varied in terms of school assistance. Three individuals from public schools confessed to finding these DGBL tools on their own, without clear instructions or a comprehensive implementation plan at the start of the DGBL integration initiative. As a result, they lack the essential skills needed to effectively meet the demands of DGBL. For example, participant 1 revealed:

English teachers must have a broader range of abilities, including interpersonal skills, emotional intelligence, technological proficiency, and effective verbal communication skills, to effectively oversee classroom activities.

suggesting the challenges faced by a regular teacher in a public school without receiving structured support for professional growth.

In the meantime, private schools tend to develop a structured plan to help teachers utilize the features of DGBL more effectively. Specifically, school administrators will provide various forms of support to teachers, including IT support, guidance from experts, and collaboration with colleagues who may not necessarily be English teachers. This approach was broadly characterized by the 2nd and 4th participants as:

I participate in various online communities for educators, where we share resources and experience in applying DGBL in our classrooms.

and

I am a teacher at a private school, which means we have all the necessary facilities to effectively utilize DGBL resources in our lessons.

#### 5.1.5 Generation Divide in the Context of DGBL Integration

The participants noted that the generation gap contributes to differing perspectives and challenges among teachers when adopting DGBL. It is understandable that senior teachers encounter various obstacles in implementing DGBL for English teaching, mainly due to their limited technical knowledge and skills, along with a greater resistance to high-tech innovations. Participant 1 verified this observation:

Some of my former school instructors don't particularly favor DGBL because they lack the know-how to apply it effectively.

Likewise, participant 2 noted:

I have seen two of them, and they continue to teach in a traditional manner.

This refers to educators from older generations who tend to favor conventional teaching methods centered around theoretical concepts and paper-based assignments. He kept saying:

It's challenging to ask for a change in their teaching approach as they've been following the same methods for a long period.

Those educators have accumulated years of experience within the educational system and are well-versed in the traditional national curriculum. Consequently, they may find it challenging to adjust to the sudden shift in contemporary teaching methods, potentially feeling overwhelmed.

On the other hand, younger educators are often promoted due to their impressive technological skills and expertise, which are essential for implementing DGBL. This places greater responsibility on them to innovate teaching methods, as older teachers may have played a lesser role in supporting DGBL adoption within schools. Nonetheless, collaboration between younger, tech-savvy teachers and veteran educators is crucial for the success of DGBL integration. The closer the relationship between these two generations, the better the outcomes they can achieve in revolutionizing education over time. Participant 4 emphasizes this point in their response:

I notice many young people at my school who show remarkable proficiency and efficiency in using DDGBL during their lessons. As a result, I never stop trying to ensure that my own lessons meet the expectations and engage the interests of my students.

## *5.2 Theme Two: Teachers' Challenges in Integrating Digital Game-Based Learning into English Instruction*

### 5.2.1 Financial constraints

A significant obstacle to putting DGBL into practice is the limitation on financial resources, which leads to inadequately prepared infrastructure and insufficient resources. When discussing the hurdles to incorporating different types of DGBL for arranging hands-on English lessons or unique English events, examples given by Participants 1 and 5 include:

The only things we had in the classroom were a computer and a speaker.

and

Only one designated room for English purposes.

Participant 3 noted that due to the inability of her school to supply smart devices to all students, it was challenging to assess their engagement and comprehension for implementing a DGBL learning setting. Participant 4 added that the state school she worked at had insufficient funding, leading to a shortage of essential software and equipment for educators and students, highlighting the following perspective:

The school-provided devices and materials are insufficient for classroom use, as they are often outdated or malfunctioning, and certain classes lack DGBL facilities.

It is thought that integrating top-quality DGBL applications into the existing curriculum necessitates substantial financial resources so that teachers can use them effectively, a point that should have been considered and communicated at the outset of introducing DGBL. However, the yearly budget designated for educational institutions, particularly in public schools, has not been given the careful attention it requires. Participants 4 and 5 shared their thoughts on this issue:

I believe it's important for my school to enhance its teacher training programs and collaborate with authorities to enhance the availability of equipment and facilities.

and

I'm eager to implement DGBL successfully at my school, but I find it challenging due to the lack of government subsidies.

### 5.2.2 Possible downsides that may arise while implementing and learning

Despite the considerable advantages of implementing DGBL in English education in Vietnam, there are underlying disadvantages that could impede the teaching and learning process. According to feedback from interviewed educators, DGBL-integrated activities have the potential to disrupt the lesson flow and hinder communication between teachers and students, cautioned by the 4th participants:

Students often get distracted by engaging and appealing online activities, which makes it challenging for teachers to manage them all.



Regarding teacher roles, some educators tend to excessively utilize technological tools in their teaching methods. This excessive usage and improper application can directly diminish their creative, problem-solving, and critical thinking skills, resulting in the counterproductive implementation of DGBL. This perspective was emphasized by participants 1 and 3:

Overreliance on technology by both teachers and students may occasionally restrict avenues for fostering creativity and critical thinking.

and

Overuse or lack of variation in its application within our classroom can have adverse effects on our teaching methodology.

In the context of Vietnam, secondary students ranging from 11 to 15 years old typically start their schooling experience with a passive approach to learning. In such conventional settings, they are expected to remain quiet, excel in writing, and rely heavily on memorization to absorb information primarily from the teacher alone. Integrating DGBL into their learning environment has shown a significant influence on both their development and academic success. Participant 5 highlighted this impact:

Students who haven't had the opportunity to experience DGBL might find themselves lacking enthusiasm and interest in taking part in lessons.

referring to the noticeable differences in students' tech skills, where some are highly adept and others, especially those in remote schools, need more help or favor traditional methods. Additionally, participants 2 and 3 noted that secondary school students could be particularly susceptible to the effects of implementing DGBL, as they have been exposed to technology from an early age.

Before the implementation of DGBL, English teachers at the secondary level were predominantly trained in traditional instructional methods, which involved delivering content in a lecturer-centered manner. With the introduction of DGBL, these teachers needed to adapt to cutting-edge educational strategies, crafting their lesson plans and preparing materials that incorporated technological elements to fit the new curriculum demands. Additionally, teachers were

required to not only integrate these new teaching techniques smoothly to manage the classroom environment but also to ensure that student performance remained satisfactory. Participant 2 mentioned that being responsible for several classes posed challenges in terms of allocating sufficient time to develop detailed lesson plans before classes. This situation was said by participant 5:

I believe that DGBL also imposes a responsibility on educators. We need to invest significant time in lesson preparation.

Additionally, participant 5 contended that addressing large class sizes and furniture arrangement should be the initial priority for teachers when designing DGBL-enabled lessons within Vietnamese school environments. participant 2 contributed:

I worked as an English instructor at a high school in Vietnam, where classes typically had a large number of students. Usually, I had around 50 students per class, sometimes even more, which I believe isn't entirely suitable for the situation I was in.

### ***5.3 Theme Three: Teachers' Insights on the Benefits of Digital Game-Based Learning in Secondary English Teaching***

#### **5.3.1 Increased Student Participation and Achievement**

The respondents acknowledged that integrating DGBL tools into the classroom would enhance the learning environment, making it more dynamic, lively, and motivating for students. In contrast to traditional classrooms, DGBL-enabled settings offer students access to captivating online content like videos, interactive stories, and televised communication courses. Engaging in DGBL activities has boosted students' participation and their eagerness to delve into unfamiliar topics. They felt comfortable taking risks and making mistakes, benefiting from the absence of rigid evaluation criteria. Participant 1's responses echoed these sentiments. A few responses by participant 1:

Initially, my students displayed great enthusiasm in contributing their thoughts, creating an atmosphere in the classes that was notably intriguing and dynamic. DGBL also motivated students to pursue additional learning at home, engaging in further practice activities that were previously challenging with traditional paper homework.

Moreover, the dynamics of teaching secondary education students in Vietnam inherently involves navigating the hierarchical distance between educators and learners. Implementing DGBL could alleviate the challenges students face in interacting with teachers, consequently fostering significant improvements in teacher-student relationships. In DGBL-enhanced classrooms where students take on a more proactive role, educators are encouraged to incorporate contemporary teaching methodologies to engage students in practical communication courses and platforms, thereby meeting desired learning objectives. Through this process, students' perception of teacher authority would gradually shift, leading to heightened interest in forthcoming lessons, as noted by participant 4:

As a result, my students will become more involved in my lesson, enhancing its effectiveness in achieving the learning goals.

It is undeniable that utilizing DGBL can enhance students' acquisition of the English language. Specifically, participant 2 affirmed that from her observations, students' performance noticeably improved each day over a one-month trial period in classes enhanced with DGBL:

The performance of individuals who have engaged with DGBL materials will surpass that of those who haven't had such experience.

In DGBL programs, the fourth participant openly talked about the importance of educators teaching English as a foreign language. They need to excel in active listening, using emotional tones effectively, and motivating students professionally to interact with vast amounts of information, ensuring they actively understand and remember the new material. She suggested that this approach would significantly enhance students' ability to learn independently:

Engaging in exercises, assessments, and exams provided by various online self-learning platforms frequently leads to improved outcomes.

### 5.3.2 Improvement in Teaching Methods Enhanced by DGBL

Each participant was knowledgeable about the progress in English teaching facilitated by DGBL implementation. This allowed them to utilize a wide range of

cutting-edge DGBL resources for creating engaging, technology-driven lessons.

Participant 4 mentioned:

I frequently utilize educational gaming applications and interactive online games from the internet to introduce new vocabulary and clarify grammar principles. I discover that teaching English using online resources is both effortless and rapid.

The greater variety of tools and resources instructors employ in DGBL sessions, the more conducive the environment becomes for student-teacher interaction and peer collaboration. Through engaging in active learning activities like using visual aids, encouraging sharing, and incorporating playful tasks, students have increased opportunities to showcase their strengths and identify areas for improvement.

Regarding teaching approaches, educators proposed that English teachers in secondary education should adapt their instructional strategies culturally and contextually to effectively integrate DGBL. Participant 1 emphasized the importance of educators gaining a deeper understanding of their students to tailor appropriate teaching methodologies:

Understanding your students thoroughly can bridge learning gaps in DGBL, given its collaborative nature.

Participants 2 and 3 additionally affirmed:

Teachers should craft lessons in a manner that aligns with our unique approaches, utilizing them as resources to enhance and guide our teaching experiences.

I'm still figuring out how to blend digital game-based learning (DGBL) with traditional methods to teach my students effectively.

In contrast to the conventional method of teaching English, educators in the era of DGBL embrace new responsibilities demanding enhanced emotional intelligence, attentive communication skills, adept lecturing and organizational capabilities, and the skill to orchestrate group activities effectively within classroom environments. One respondent emphasized the value of involving students in the teaching process to train them as instructors, which could alleviate teachers' burdensome workloads while enhancing their own expertise and leadership abilities:

I'll support these students in utilizing various learning and teaching aids to enable them to assist me in overseeing tasks.

Additionally, two educators tackled the urgent matter of enhancing the overall English proficiency of Vietnamese students, particularly by addressing hesitations in listening and speaking. Students tended to fear making mistakes, remain reserved, and resist participating in class presentations. Participant 1 succinctly summarized the issue:

Vietnamese students commonly face challenges in listening and speaking, particularly in direct conversational contexts.

This represents the concerning state of English education in Vietnam. The focus is often on outdated teaching methods that emphasize theory over practical skills like listening and speaking, neglecting interactive learning approaches. As a result of the integration of DGBL, educators have the ability to establish an engaging and contemporary educational setting. This environment allows students increased chances to engage in public practice and presentations, thereby inspiring them to enhance their overall skill. The 1st and 2nd participants emphasized this point:

Using digital game-based learning tools, particularly the expanded selection of resources for listening and speaking activities, my students experienced increased initiative and involvement.

Once they upgrade their digital game-based learning tools, they can enhance their speaking proficiency and teamwork aptitude by participating in the large group presentations I assign.

# 6 DISCUSSION

## *6.1 Summary*

In this study, my primary objective is to explore the perceptions of Vietnamese secondary school teachers regarding the integration of DGBL into ELT. To achieve this objective, I utilize the TAM as a theoretical framework to understand the factors that influence teachers' acceptance and adoption of DGBL in their classrooms. Additionally, I consider various external factors that may impact teachers' perceptions and decisions regarding DGBL integration. By employing a qualitative research approach, I aim to study the perspectives of middle school educators in Vietnam, uncovering both the facilitators and barriers they encounter in incorporating DGBL into their teaching practices.

The integration of DGBL into English teaching in Vietnamese secondary education is an ongoing process. Schools are actively working towards incorporating DGBL into their curriculum over the next 5 years, although they initially faced challenges with resources and preparedness. Private schools tend to have more freedom and resources for DGBL integration compared to public schools. Additionally, student access to DGBL resources varies between urban and rural areas, leading to potential inequalities.

Teachers have mixed views and attitudes towards using DGBL. Some are excited about its potential, while others are anxious about adopting new technologies. Attitudes are influenced by DGBL proficiency, with tech-savvy younger teachers being more willing to adopt it. Collaboration between teachers, training, and school support are identified as key factors for effective DGBL implementation.

Several obstacles to DGBL integration were highlighted. Financial constraints limit access to the necessary infrastructure, devices, and software for DGBL. Potential downsides include student distraction, overreliance on technology, and challenges in managing large class sizes. Additionally, the

transition from traditional teaching methods to DGBL-based approaches requires significant effort from teachers.

Despite these challenges, the participants acknowledged various benefits of DGBL in secondary English teaching. These include increased student participation, motivation, and achievement in English learning. DGBL enables the use of diverse, engaging resources and activities beyond traditional methods. It also requires teachers to adapt their instructional strategies, enhance communication and organizational skills. Furthermore, DGBL helps improve practical English skills like listening and speaking among students.

## *6.2 Interpretations*

The findings from this study provide valuable insights into the perceptions and experiences of middle school teachers in Vietnam regarding the integration of Digital Game-Based Learning (DGBL) into their English language teaching (ELT) classrooms. The results highlight both the perceived benefits and challenges associated with DGBL adoption, aligning with the constructs of the Technology Acceptance Model (TAM) and extending it with additional external factors.

The recognition of benefits such as increased student participation, motivation, and achievement through DGBL integration supports the hypothesis that teachers perceive DGBL as a useful approach for enhancing language learning outcomes. This finding is consistent with previous research (Baek, 2008; Klopfer et al., 2009) that has highlighted the potential of DGBL in creating engaging and interactive learning environments.

However, the identification of barriers like financial constraints, inadequate infrastructure, limited technological proficiency, and resistance to change, particularly among older teachers, suggests that perceived ease of use is a significant factor influencing DGBL adoption. This aligns with the TAM framework, where perceived usefulness and ease of use are key determinants of technology acceptance.

The study's findings also align with previous research (Baek & Choi, 2014; Papadakis, 2018) that has highlighted the influence of external factors, such as

institutional support, professional development opportunities, and peer collaboration, on the successful implementation of DGBL in educational settings.

### *6.3 Implications*

The results of this study have important practical implications for educational stakeholders in Vietnam and other contexts seeking to promote the effective integration of DGBL in secondary English language teaching. By understanding the perceived benefits, challenges, and influential factors from teachers' perspectives, policymakers and administrators can develop targeted strategies to address barriers and provide the necessary support for successful DGBL implementation.

The findings challenge the assumption that teachers will readily adopt DGBL solely based on its perceived usefulness. Instead, the study highlights the importance of addressing external factors, such as providing adequate resources, training, and institutional support, to facilitate the ease of use and feasibility of DGBL integration.

The study's results support the extended TAM frameworks that incorporate external variables beyond the core constructs of perceived usefulness and perceived ease of use. By considering factors like institutional support, professional development opportunities, and peer collaboration, the study provides a more comprehensive understanding of the factors influencing DGBL acceptance in educational contexts.

The study also contributes new insights into the influence of generational differences on DGBL adoption among teachers. The stark divide between younger and older generations of teachers in terms of technological proficiency and resistance to change suggests a need for tailored approaches and targeted training programs to address these generational gaps.

### *6.4 Limitations*

The study's limitations include a small sample size of only five participants, which may limit the generalizability of the findings to a broader context.



Additionally, the participants may not be representative of teachers across all regions of Vietnam, as variations in locations and demographics could impact the experiences and perceptions reported.

The reliance on self-reported data from interviews introduces the potential for biases and inaccuracies in participants' responses, which could affect the validity of the data collected.

Furthermore, the coding and analysis of the data were conducted solely by the researcher, which introduces the potential for subjective interpretations and biases in the findings.

## *6.5 Recommendations*

Looking at the results and limitations of this research, several suggestions can be offered for future studies.

First, it would be beneficial to conduct larger-scale investigations with a more diverse and representative group of middle school teachers from various regions across Vietnam. This broader approach would enhance the ability to generalize the findings and provide a more comprehensive understanding of the challenges and opportunities related to integrating digital game-based learning (DGBL) throughout the country.

Second, utilizing a combined research methodology that incorporates qualitative data from interviews alongside quantitative data from surveys or observational studies could prove advantageous. This triangulation of data sources would not only validate the findings but also offer a more holistic understanding of DGBL integration in Vietnamese classrooms, taking into account both teachers' perspectives and observable classroom practices.

Third, future research endeavors should evaluate the effectiveness of specific professional development programs or interventions designed to address the identified barriers to DGBL adoption. These interventions may include training programs to enhance technological proficiency or strategies to overcome resistance to change among experienced teachers. Assessing the impact of such interventions can provide valuable insights into effective strategies for promoting DGBL adoption in Vietnamese schools.

Additionally, exploring the role of cultural factors and educational policies in shaping teachers' perceptions and acceptance of DGBL is crucial. Understanding how these factors influence the successful implementation of DGBL in Vietnamese schools can inform policymakers and educational authorities in developing appropriate strategies and support systems for DGBL integration.

Finally, conducting longitudinal studies to examine the long-term effects of DGBL integration on student learning outcomes, teacher perceptions, and institutional changes within the Vietnamese educational system is recommended. Such long-term investigations can provide valuable insights into the sustainability and lasting impact of DGBL adoption, informing educational stakeholders about the potential benefits and challenges associated with this approach.

# REFERENCES

- Ackermann, E. (2001). Piaget's constructivism, Papert's constructionism: What's the difference? *Fut. Learn. Group Publication*, 5(3), 438.
- Ajzen, I., & Fishbein, M. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Addison-Wesley.
- Alamri, W. A. (2019). Effectiveness of Qualitative Research Methods: Interviews and Diaries. *International Journal of English and Cultural Studies*, 2(1), 65–70.
- Al-Emran, M., Mezheyev, V., & Kamaludin, A. (2018). Technology Acceptance Model in M-learning context: A systematic review. *Computers & Education*, 125, 389–412. <https://doi.org/10.1016/j.compedu.2018.06.008>
- Althunibat, A. (2015). Determining the factors influencing students' intention to use m-learning in Jordan higher education. *Computers in Human Behavior*, 52, 65–76. <https://doi.org/10.1016/j.chb.2015.05.046>
- Ames, H., Glenton, C. & Lewin, S. (2019). Purposive Sampling in a Qualitative Evidence Synthesis: A Worked Example from a Synthesis on Parental Perceptions of Vaccination Communication. *BMC Medical Research Methodology*, 19(26).
- Anney, V. N. (2014). Ensuring the quality of the findings of qualitative research: Looking at trustworthiness criteria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 5(2), 272–281.
- Avidov-Ungar, O., & Hanin-Itzak, L. (2019). Sense of Empowerment among School ICT Coordinators: Personal, Subject-Area and Leadership Empowerment. *Technology, Knowledge and Learning*, 24(3), 401–417. <https://doi.org/10.1007/s10758-017-9346-8>
- Baek, Y. (2008). What hinders teachers in using computer and video games in the classroom? Exploring factors inhibiting the uptake of computer and video games. *Cyberpsychology & Behavior*, 11(6), 665–671.

- Baek, Y., & Choi, B. (2014). Trends and applications of serious gaming and social media. In Y. Baek, R. Ko, & T. Marsh (Eds.), *Trends and applications of serious gaming and social media 2014* (pp. 111–127). Springer Science and Business Media.
- Baker, E. L., Herman, J.L., & Yeh, J.P. (1981). Fun and games: Their contribution to basic skills instruction in elementary school. *American Educational Research Journal*, *18*(1), 83–92.
- Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative Research*, *15*(2), 219–234.
- Bourgonjon, J., Valcke, M., Soetaert, R., & Schellens, T. (2013). Acceptance of game-based learning by secondary school teachers. *Computers & Education*, *29*(4), 322–343. <https://doi.org/10.1016/j.compedu.2013.02.010>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.
- Byrne, D. (2022). A worked example of Braun and Clarke's approach to reflexive thematic analysis. *Quality & Quantity*, *56*(3), 1391–1412.
- Clark, D. B., Tanner-Smith, E. E., & Killingsworth, S. S. (2016). Digital Games, Design, and Learning: A Systematic Review and Meta-Analysis. *Review of Educational Research*, *86*(1), 79–122.
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.
- Collins, A., & Halverson, R. (2018). *Rethinking education in the age of technology: The digital revolution and schooling in America*. Teachers College Press.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Sage.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches*. Sage.
- Dang, X. T. (2013). *ICT in Foreign Language Teaching in an Innovative University in Vietnam: Current Practices and Factors Affecting ICT Use*. La Trobe University.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*(3), 319–340. <https://doi.org/10.2307/249008>

- De Freitas, S., & Maharg, P. (2011). Digital games and learning: Modelling, worlds and transformations. In M. Thomas (Ed.), *Digital education: Opportunities for social collaboration* (pp. 165–184). Palgrave Macmillan.
- Denham, A. R. (2018). Using a digital game for pubertal knowledge acquisition: Staked retention and game reaction. *International Journal of Game-Based Learning, 8*(4), 1–15.
- Denscombe, M. (2002). *Ground rules for good research*. Open University Press.
- Dunwoodie, K., Macaulay, L., & Newman, A. (2023). Qualitative interviewing in the field of work and organisational psychology: Benefits, challenges and guidelines for researchers and reviewers. *Applied Psychology, 72*(2), 863–889.
- Dweck, C.S. (2012). *Mindset: How You Can Fulfil Your Potential*. Constable & Robinson.
- Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., & Mac Iver, D. (1993). Development during adolescence: The impact of stage-environment fit on young adolescents' experiences in schools and in families. *American Psychologist, 48*(2), 90–101.  
<https://doi.org/10.1037/0003-066X.48.2.90>
- Elhami, A., & Khoshnevisan, B. (2022). Conducting an Interview in Qualitative Research: The Modus Operandi. *MEXTESOL Journal, 46*(1).
- Garris, R., Ahlers, R., & Driskell, J.E. (2002). Games, motivation, and learning: A research and practice model. *Simulation and Gaming, 33*(4), 441–467.
- Gee, J. P. (2003). *What Video Games Have to Teach Us about Learning and Literacy*. Palgrave Macmillan.
- Holmes, A. G. D. (2020). Researcher positionality - A consideration of its influence and place in qualitative research. *Shanlax International Journal of Education, 8*(4), 1–10.
- Hsu, C. Y., Liao, Y. C., & Wang, S. C. (2013). A study on teachers' perceptions of digital games for language learning in the elementary school context. *International Journal of Information and Education Technology, 3*(2), 255–259. <https://doi.org/10.7763/IJiet.2013.V3.268>
- Hung, H.-T., Yang, J. C., Hwang, G. J., Chu, H.-C., & Wang, C.-C. (2018). A scoping review of research on digital game-based language learning. *Educational Technology & Society, 21*(2), 245–257.

- Jacobs, R. L., & Baum, M. (1987). Simulation and games in training and development: Status and concerns about their use. *Simulation & Games*, 18(3), 385–394.
- Joyce, A., Akerman, R., & Favier, G. R. T. (2009). A game-based learning approach to teaching computer science concepts. *International Journal of Game-Based Learning*, 2(3), 52–79.
- Kaiser, K. (2009). Protecting respondent confidentiality in qualitative research. *Qualitative Health Research*, 19(11), 1632–1641.
- Kiili, K. (2005). Digital game-based learning: Towards an experiential gaming model. *Internet and Higher Education*, 8(1), 13–24.
- Klopfer, E., Osterweil, S., & Salen, K. (2009). Moving learning games forward: Obstacles, opportunities, and openness. *The Education Arcade*.
- Koh, E., Yeo, J., Wadhwa, B., & Lim, J. (2012). Examining DGBL implementation models at the classroom level. In D. Ifenthaler, D. Eseryel, & X. Ge (Eds.), *Assessment in game-based learning: Foundations, innovations, and perspectives* (pp. 131–161). Springer.
- Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, 24(1), 120–124.
- Le, X. M., & Vo, K. H. (2014). Factors affecting secondary-school English teachers' adoption of technologies in southwest Vietnam. *Language Education in Asia*, 5(2), 198–215.
- Liestøl, E. (2003). Computer games and the Ludic structure of interpretation. In T. Rasmussen, A. Morrison, & G. Liestøl (Eds.), *Digital Media Revisited: Theoretical and Conceptual Innovation in Digital Domains*. MIT Press.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
- Marikyan, D. & Papagiannidis, S. (2023). Technology Acceptance Model: A review. In S. Papagiannidis (Ed), *TheoryHub Book*. <https://open.ncl.ac.uk>
- Mioduser, D., Lahav, O., & Nachmias, R. (2003). The Learning Value of Computer-Based Instruction of Early Reading Skills. *Journal of Computer Assisted Learning*, 19(1), 12–19.
- Moon, J. W., & Kim, Y. G. (2001). *Extending the TAM for a World-Wide-Web context*. *Information & Management*, 38(4), 217–230.  
[https://doi.org/10.1016/S0378-7206\(00\)00061-6](https://doi.org/10.1016/S0378-7206(00)00061-6)

- Ngai, E. W. T., Poon, J. K. L., & Chan, Y. H. C. (2007). Empirical examination of the adoption of WebCT using TAM. *Computers & Education, 48*(2), 250–267. <https://doi.org/10.1016/j.compedu.2004.11.007>
- Nguyen, L. V. (2018). Vietnamese teachers' attitudes towards the use of digital games in teaching English. *Journal of Language and Education, 4*(2), 57–65.
- Nguyen, T. D. (2020). Teachers' views on the use of Quizizz in the classroom: A case study at the Faculty of English Language Studies, Hanoi University of Business and Technology.
- Nguyen, T. D., & Tran, T. T. H. (2022). Teachers and Students' Perceptions of Using Digital Games in Improving Vocabulary at Non-English-majored Class. *AsiaCALL Online Journal, 8*. <https://asiacall-acoj.org/index.php/journal/article/view/8>
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods, 16*(1), 1–13.
- Papadakis, S. (2018). Understanding the barriers to the adoption of digital games for learning in the classroom: A case study. *Educational Technology Research and Development, 66*(4), 917–936.
- Perri, M., Jagan, S., Sandhu, K., & Salas, A. S. (2018). Challenges Associated with Qualitative Interviews: Perspectives of Graduate Students. *International Journal of Nursing Student Scholarship, 5*(26).
- Plass, J. L., Mayer, R. E., & Homer, B. D. (2020). Handbook of Game-Based Learning. MIT Press.
- Polit, D. F., & Beck, C. T. (2010). Essentials of nursing research: Appraising evidence for nursing practice (7th ed.). Lippincott Williams & Wilkins.
- Prensky, M. (2001). Digital game-based learning. McGraw-Hill.
- Proctor, M. D., & Marks, Y. (2013). A survey of exemplar teachers' perceptions, use, and access of computer-based games and technology for classroom instruction. *Computers & Education, 62*, 171–180. <https://doi.org/10.1016/j.compedu.2012.10.022>
- Randel, J.M., Morris, B.A., Wetzel, C.D., & Whitehill, B.V. (1992). The effectiveness of games for educational purposes: A review of recent research. *Simulation and Gaming, 23*(3), 261–276.

- Reiser, R.A., Gerlach, V.S., & Barron, M.C. (1977). Research on simulation games in education: A critical analysis. *Educational Technology*, 17(12), 13–18. <https://www.learntechlib.org/p/163781/>
- Robson, C. (2011). *Real-world research* (3rd ed.). Blackwell.
- Savin-Baden, M., & Major, C. H. (2023). *Qualitative research: The essential guide to theory and practice* (2nd ed.). Routledge.
- Schmidt, J. T., & Tang, M. (2020). Digitalization in Education: Challenges, Trends and Transformative Potential. In *Führen und Managen in der digitalen Transformation* (pp. 335–350). Springer. [https://doi.org/10.1007/978-3-658-28670-5\\_16](https://doi.org/10.1007/978-3-658-28670-5_16)
- Shubik, M. (1964). *Game theory and related approaches to social behavior: Selections*. Wiley.
- Stieler-Hunt, C. C., & Jones, C. M. (2015). Educators who believe: Understanding the enthusiasm of teachers who use digital games in the classroom. *Research in Learning Technology*, 23(14), 1–14.
- Šumak, B., Heričko, M., & Pušnik, M. (2011). A meta-analysis of e-learning technology acceptance: The role of user types and e-learning technology types. *Computers in Human Behavior*, 27(6), 2067–2077. <https://doi.org/10.1016/j.chb.2011.08.005>
- Teo, T. (2011). Factors influencing teachers' intention to use technology: Model development and test. *Computers & Education*, 57(4), 2432–2440. <https://doi.org/10.1016/j.compedu.2011.06.008>
- Thomas, B. (2022). The Role of Purposive Sampling Technique as a Tool for Informal Choices in a Social Sciences in Research Methods. *Just Agriculture*, 2(5).
- Teo, T. (2011). Factors influencing teachers' intention to use technology: Model development and test. *Computers & Education*, 57(4), 2432–2440. <https://doi.org/10.1016/j.compedu.2011.06.008>
- Tolley, E. E. (2016). *Qualitative methods in public health: A field guide for applied research* (2nd ed.). Jossey-Bass & Pfeiffer Imprints, Wiley.
- Trinh, T. H., Nguyen, M. N., & Tran, T. T. H. (2022). Teachers and Students' Perceptions of Using Digital Games in Improving Vocabulary at Non-English-majored Class. *AsiaCALL Online Journal*, 8



- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186–204. <https://doi.org/10.1287/mnsc.46.2.186.11926>
- Wiles, R., Crow, G., Heath, S., & Charles, V. (2008). The management of confidentiality and anonymity in social research. *International Journal of Social Research Methodology*, 11(5), 417–428.
- Wouters, P., van Nimwegen, C., van Oostendorp, H., & van der Spek, E. D. (2013). A meta-analysis of the cognitive and motivational effects of serious games. *Journal of Educational Psychology*, 105(2), 249–265. <https://doi.org/10.1037/a0031311>
- Xu, Z., Chen, Z., Eutsler, L., & Geng, Z. (2019). A scoping review of digital game-based technology on English language learning. *Educational Communications and Technology*, 69(6), 1–27.
- Yang, L., Li, R., & Zhou, Y. (2024). Research trends of game-based language learning in K-12 education: A systematic review of SSCI articles during 2009–2022. *Journal of Computer Assisted Learning*, 40(3), 1218–1230. <https://doi.org/10.1111/jcal.12944>

# APPENDICES

## *Appendix A: Queries for Interviews*

I'm conducting research for my dissertation on teachers' perceptions of integrating Digital Game-Based Learning (DGBL) into secondary school English education. Your participation will be kept anonymous except for the context of your school. You have the option to withdraw at any time, and I'll provide you with information on how I use the data once it's complete. Please note that our interview will be recorded, and a transcript will be made to ensure accuracy. Are you comfortable with these terms? I'll delete the recordings after transcription.

1. Have you utilized DGBL tools for teaching English in your school?
2. What are your thoughts on incorporating DGBL into English instruction?
3. Which DGBL tools do you employ for teaching English, and how effective do you find them?
4. Do you advocate for integrating DGBL into secondary English education? Could you elaborate?
5. Can you discuss the advantages and obstacles of integrating DGBL into teaching?
6. What other applications of DGBL could you envision for your school?
7. DGBL adoption is often seen as beneficial for language learning. Do you agree, and to what extent has it aided your teaching of English to secondary students?
8. How well do English teachers in your school integrate DGBL? What are the variations or similarities among them?
9. Have students in DGBL-upgraded classes beat those in non-DGBL classes? According to what viewpoints, and are there any limits?

10. Have you created viable techniques to conquer hindrances to DGBL combination? Is it true or not that you are mindful of their adequacy?

11. Where do you source materials for DGBL teaching?

12. What advice would you offer to other educators regarding DGBL integration, particularly in English education?

Thank you sincerely for your input.

## *Appendix B: Sample Interview Transcript*

**Interviewer:** Firstly, I would like to express my gratitude to your participation in the research. Your insights would be definitely so useful in my way studying teachers' perception of the integration of DGBL into English language teaching, especially in secondary schools in Vietnam.

**Interviewee:** I'm so happy too to be a part of the research. Hopefully it will give us all a good resource to understand more about the topic and enhance the efficiency of our English lessons.

**Interviewer:** Sure. Before we start, I would like to let you know that the interview will be recorded, and a transcript will be produced to ensure my transcriptions accurately represent what you say. Are you comfortable with this?

**Interviewee:** Of course, I am. Can we start now? Are you ready?

**Interviewer:** Yes. I hope we will have an interesting discussion. OK. [pause]. We will start with a brief discussion about DGBL. Have you utilized DGBL tools for teaching English in your school?

**Interviewee:** Yes. We started incorporating DGBL tools into our English teaching about two years ago. The initiative was led by our principal and the heads of our team, who required us to integrate DGBL into our teaching methods. Initially, we felt quite overwhelmed about how to approach it.

**Interviewer:** What are your thoughts on incorporating DGBL into English instruction?

**Interviewee:** I believe incorporating DGBL into English instruction can be highly beneficial. It makes learning more engaging and interactive for students, which can enhance their motivation and retention of the material.

**Interviewer:** Which DGBL tools do you employ for teaching English, and how effective do you find them?

**Interviewee:** We use a variety of DGBL tools, including language learning apps, online games, and interactive quizzes. These tools have been quite effective in improving student engagement and making the learning process more enjoyable.

**Interviewer:** Do you advocate for integrating DGBL into secondary English education? Could you elaborate?

**Interviewee:** Yes, I strongly advocate for it. DGBL not only makes learning fun but also helps students develop critical thinking and problem-solving skills. It can cater to different learning styles and keep students more engaged compared to traditional methods.

**Interviewer:** Can you discuss the advantages and obstacles of integrating DGBL into teaching?

**Interviewee:** The advantages include increased student engagement, personalized learning experiences, and the development of digital literacy skills. However, obstacles can include a lack of resources, insufficient training for teachers, and potential technical issues.

**Interviewer:** What other applications of DGBL could you envision for your school?

**Interviewee:** Beyond language learning, DGBL could be applied in subjects like science and math to create interactive simulations and problem-solving activities. It can also be used for collaborative projects and interdisciplinary learning.

**Interviewer:** DGBL adoption is often seen as beneficial for language learning. Do you agree, and to what extent has it aided your teaching of English to secondary students?

**Interviewee:** I agree. DGBL has significantly aided my teaching by making lessons more dynamic and interactive. It has helped students improve their language skills through practice and immediate feedback, which is crucial for language acquisition.

**Interviewer:** How well do English teachers in your school integrate DGBL? What are the variations or similarities among them?

**Interviewee:** The integration of DGBL varies among teachers. Some are very enthusiastic and use a wide range of tools, while others are still adapting and may use DGBL less frequently. However, most teachers recognize its benefits and are gradually incorporating it into their teaching.

**Interviewer:** Have students in DGBL-upgraded classes outperformed those in non-DGBL classes? According to what viewpoints, and are there any limits?

**Interviewee:** Yes, students in DGBL-upgraded classes have generally outperformed those in non-DGBL classes, especially in terms of engagement

and language retention. However, the effectiveness can be limited by factors like access to technology and the quality of the DGBL tools used.

**Interviewer:** Have you created viable techniques to conquer hindrances to DGBL combination? Are you aware of their effectiveness?

**Interviewee:** Yes, we have developed strategies such as providing professional development for teachers, ensuring access to necessary technology, and selecting high-quality DGBL tools. These techniques have been quite effective in overcoming initial challenges.

**Interviewer:** Where do you source materials for DGBL teaching?

**Interviewee:** We source materials from various online platforms, educational websites, and through collaboration with other educators. We also adapt some traditional materials to be used with DGBL tools.

**Interviewer:** What advice would you offer to other educators regarding DGBL integration, particularly in English education?

**Interviewee:** I would advise other educators to start small and gradually integrate DGBL tools into their teaching. Focus on selecting high-quality resources and provide ongoing support and training for teachers. Most importantly, be patient and open to experimenting with different tools and methods to find what works best for your students.

**Interviewer:** Those are excellent suggestions. Are there any additional proposals you'd like to discuss?

**Interviewee:** Hmm, no. That's all I have for now.

**Interviewer:** I understand. Thank you so much for your valuable assistance. I wish you the best of luck with integrating DGBL into your classes in the future.

**Interviewee:** It was my pleasure. Thank you!

## Appendix C: Themes and Codes

### Theme One: How Teachers View the Integration of Digital Game-Based Learning into the English Teaching Context in Vietnamese Secondary Education

#### Sub-theme: Incorporating DGBL into Educational Syllabus

Example Quotes	Code
"The incorporation of DGBL into our school's curriculum began two years ago."	Initiation of ICT Integration
"The principal and the leaders of my team mandated that we integrate DGBL into our teaching approach."	Mandated Integration
"I couldn't jump into using a bunch of fancy tech stuff right from the get-go."	Initial Hesitation
"During that period, we felt considerable frustration regarding how to address the situation."	Frustration in Early Stages

#### Sub-theme: Variety within the Educational Setting

Example Quotes	Code
"Students from urban schools are likely to have a stronger foundation in English learning."	Urban Advantage
"Since our school is situated in the heart of the city, the majority of students exhibit strong skills in DGBL."	Urban Skills
"People living in rural or mountainous regions frequently encounter a lack of amenities and limited availability of digital game-based learning tools."	Rural Disadvantage

#### Sub-theme: The Willingness and Attitude of the Teacher

Example Quotes	Code
"I felt a mix of excitement and anxiety, leaning towards being more eager than nervous."	Mixed Emotions
"DGBL plays an incredibly important role within my teaching lessons."	Importance of DGBL
"However, due to their circumstances, not all teachers were adequately prepared for those situations."	Inadequate Preparation
"Implementing DGBL might pose challenges for educators, particularly those who lack sufficient time or expertise."	Challenges in Implementation

#### Sub-theme: Competence of Educators and Collaboration Among Peers

Example Quotes	Code
"English teachers must have a broader range of abilities, including interpersonal skills, emotional intelligence, technological proficiency, and effective verbal communication skills, to effectively oversee classroom activities."	Broader Skill Set
"I participate in various online communities for educators, where we share resources and experience in applying DGBL in our classrooms."	Online Community
"I am a teacher at a private school, which means we have all the	Private School Resources

necessary facilities to effectively utilize DGBL resources in our lessons."	
-----------------------------------------------------------------------------	--

### Sub-theme: Generation Divide in the Context of DGBL Integration

Example Quotes	Code
"Some of my former school instructors don't particularly favor DGBL because they lack the know-how to apply it effectively."	Resistance from Seniors
"I have seen two of them, and they continue to teach in a traditional manner."	Traditional Methods
"I notice many young people at my school who show remarkable proficiency and efficiency in using DDGBL during their lessons. As a result, I never stop trying to ensure that my own lessons meet the expectations and engage the interests of my students."	Proficiency of Young Teachers

## Theme Two: Teachers' Challenges in Integrating Digital Game-Based Learning into English Instruction

### Sub-theme: Financial Constraints

Example Quotes	Code
"The only things we had in the classroom were a computer and a speaker."	Minimal Equipment
"Only one designated room for English purposes."	Limited Space
"The school-provided devices and materials are insufficient for classroom use, as they are often outdated or malfunctioning, and certain classes lack DGBL facilities."	Insufficient Resources
"I believe it's important for my school to enhance its teacher training programs and collaborate with authorities to enhance the availability of equipment and facilities."	Need for Training and Resources
"I'm eager to implement DGBL successfully at my school, but I find it challenging due to the lack of government subsidies."	Lack of Funding

### Sub-theme: Possible Downsides That May Arise While Implementing and Learning

Example Quotes	Code
"Students often get distracted by engaging and appealing online activities, which makes it challenging for teachers to manage them all."	Student Distraction
"Overreliance on technology by both teachers and students may occasionally restrict avenues for fostering creativity and critical thinking."	Overreliance on Technology
"Overuse or lack of variation in its application within our classroom can have adverse effects on our teaching methodology."	Adverse Effects of Overuse

## Theme Three: Teachers' Insights on the Benefits of Digital Game-Based Learning in Secondary English Teaching



### Sub-theme: Increased Student Participation and Achievement

Example Quotes	Code
"Initially, my students displayed great enthusiasm in contributing their thoughts, creating an atmosphere in the classes that was notably intriguing and dynamic."	Increased Enthusiasm
"As a result, my students will become more involved in my lesson, enhancing its effectiveness in achieving the learning goals."	Enhanced Involvement
"The performance of individuals who have engaged with DGBL materials will surpass that of those who haven't had such experience."	Improved Performance

### Sub-theme: Improvement in Teaching Methods Enhanced by DGBL

Example Quotes	Code
"I frequently utilize educational gaming applications and interactive online games from the internet to introduce new vocabulary and clarify grammar principles. I discover that teaching English using online resources is both effortless and rapid."	Efficient Teaching Tools
"Understanding your students thoroughly can bridge learning gaps in DGBL, given its collaborative nature."	Understanding Students
"Teachers should craft lessons in a manner that aligns with our unique approaches, utilizing them as resources to enhance and guide our teaching experiences."	Tailored Lessons
"I'm still figuring out how to blend digital game-based learning (DGBL) with traditional methods to teach my students effectively."	Blending Methods
"Using digital game-based learning tools, particularly the expanded selection of resources for listening and speaking activities, my students experienced increased initiative and involvement."	Expanded Resources
"Once they upgrade their digital game-based learning tools, they can enhance their speaking proficiency and teamwork aptitude by participating in the large group presentations I assign."	Improved Speaking and Teamwork