



Teacher's Beliefs and Practices in Integrating Digital Game-Based Learning in a Technology-Integrated School

Miranti¹, Lusi Nurhayati¹, and Dyah Setyowati Ciptaningrum¹

¹Universitas Negeri Yogyakarta

Corresponding author. E mail: miranti.2023@student.uny.ac.id

Permalink: <http://dx.doi.org/10.24036/ld.v19i2.132686>

DOI: 10.24036/ld.v19i2.132686

Submitted: 14-01-2025

Accepted: 30-11-2025

Published: 30-11-2025

Abstract

This study explores an English teacher's beliefs and practices in integrating Digital Game-Based Learning (DGBL) within an EFL classroom in a technology-integrated school in Medan, Indonesia. Using a qualitative case study approach, data were collected through in-depth interviews with one teacher and teaching materials analysis, providing comprehensive insights into the teacher's perspectives and classroom practices. The data analysis technique employed in this research was thematic analysis. The findings revealed that the teacher believed DGBL was a flexible and engaging pedagogical tool that aligns 21st-century learning principles and fosters student-centered instruction. The teacher frequently utilized tools such as Kahoot, Quizziz, and Wordwall to enhance student engagement and interactivity. Despite its benefits, challenges were identified, including limited suitability of DGBL for all materials, difficulty in assessing comprehension, and occasional technical barriers such as poor internet connectivity. The teacher emphasized the importance of balancing DGBL with traditional teaching methods to address diverse learning preferences and objectives. Additionally, the lack of formal training in DGBL integration highlighted a gap in professional development, suggesting a need for targeted training and administrative support. The study underscores the potential of DGBL to enhance student engagement and teacher innovation while identifying areas for improvement. It recommends future research on game design, feedback mechanisms, and collaboration to optimize learning outcomes alongside structured professional development for educators integrating DGBL into their practices.

Keywords: *Digital Game-Based Learning (DGBL), Teacher's beliefs and practices, Technology-integrated school.*

INTRODUCTION

The rapid development of new digital technologies has resulted in rising interest in studying English as a foreign language (Liu, 2017), necessitating a move from traditional to more modern learning methods (Dehghanzadeh et al., 2016; Renandya et al., 2016). For more modern learning innovation, The Indonesian Ministry of Education encourages teachers to integrate information and communication technology (ICT) into their classes. The Ministry Decree Number 22 Year 2016 states that one of the main principles in education is the use of technology to improve the effectiveness and efficiency of learning (Ministry of Education and Culture, 2016). This means that using

technological advancements is essential for English teachers, who play a crucial part in the success of the English language teaching and learning process.

Regulation 22/2016 from the Ministry of Education and Culture also says that learning should be fun, engaging, inspiring, challenging, efficient, and motivating to encourage more student participation (Ministry of Education and Culture, 2016). The most important aspect of achieving success in learning is making the learning process enjoyable, ensuring that students remain engaged and entertained while acquiring knowledge. Thus, one effective way to get kids excited and promote active learning in the classroom is through Digital Game-Based Learning (DGBL) (Nadeem et al., 2023). With its capacity to improve learning a language, which is immersive, multimodal, interactive, and hugely popular, digital game-based learning, has drawn the attention of educators in recent years (Reinders, 2016; Reinhardt, 2019). Digital game-based learning has shown its potential in enhancing language learning, as it provides an interactive and engaging environment for students and makes it easier to apply the material (Chen, 2017; Hilmun, 2020). Some examples of digital game-based learning that can be applied in the classroom include bamboozle, duolingo, wordwall, ESL kids games, kahoot, quizizz, and educandy. These student-centered digital games can enforce engagement in a classroom since students' burden decreases in a relaxed setting and they can become active learners (Deng et al., 2020).

Numerous studies have been carried out by academics who are aware of the potential that digital game-based learning may offer. Jia et al. (2024) found that digital game-based learning has the potential as an effective and long-lasting teaching tool in EFL classrooms. It improves students' thinking and lifelong learning skills (Eyal et al., 2023). Dixon and Jordan (2020) also claimed that digital games can be effective tools for L2 acquisition. Additionally, Acquah and Katz (2020) emphasized that digital games may bring playfulness to the classroom, as kids in the digital era value immersive activities, technology integration, and entertaining learning. Hence, the integration of digital game-based learning in the English classroom is highly suggested to enhance students' English proficiency.

Despite the increasing interest in integrating DGBL into EFL education due to its potential to enhance student engagement, motivation, and learning outcomes, integrating DGBL in EFL classrooms is not without challenges. Based on interviews with the teacher, some challenges appeared during the implementation of DGBL. Research indicate that teachers have challenges while implementing ICT in their classrooms (Alimyar & Lakshmi G, 2021; Farjon et al., 2019; Nugroho & Mutiaraningrum, 2020). Some teachers still struggle with confidence, which prevents them from utilizing the technology (Winter et al., 2021). Therefore, understanding the beliefs and challenges of EFL teachers is significant for successful integration.

The greatest challenge to the actual usage and implementation of technology in education is the educators' attitudes toward it. Whether they are unprepared and lack confidence in their ability to use technology (Nugroho & Mutiaraningrum, 2020) or disagree with adopting technology in the classroom (Lovett, 2017). Zheng (2015) asserts that teachers' beliefs are a personal system that influences their behaviour, thought processes, and actions related to the teaching and learning process. Their beliefs influence the way that teachers utilize technology in the classroom, and these beliefs have a big impact on how well teachers use ICT in the classroom (Tondeur et al., 2017). Teachers who believe that technology can be used to support education often use the technology themselves. In contrast, teachers who disagree with the benefits of technology use generally disregard integrating technology. According to this, teachers

with similar knowledge and capabilities may have different approaches to teaching depending on their beliefs.

In Indonesia, there is a growing focus on integrating technology into education (Farjon et al., 2019), with many efforts aimed at incorporating digital tools into various teaching and learning processes. However, the use of Digital Game-Based Learning (DGBL) in the classroom is still relatively under-explored, especially regarding its practical application and teacher perspective. Although global studies consistently emphasize the potential of DGBL to improve student engagement and language skills, Indonesia's unique educational landscape, with its specific challenges and opportunities, requires more in-depth research. Unfortunately, the research on teacher's beliefs and challenges in integrating DGBL in a classroom is still limited, especially in Indonesian context.

Based on the current situation and prior investigations, this research aims to address the existing research gap on integrating Digital Game-Based Learning (DGBL). We decided to conduct the study in school that have integrated technology into their classrooms. The objective of the study is to explore the English as a Foreign Language (EFL) teacher's belief, challenges, and practices in integrating digital game-based learning in a classroom. Thus, this study aims to address the subsequent research questions: (1) What are the beliefs of an EFL teacher regarding the integration of Digital Game-Based Learning (DGBL) and the challenges in a technology-integrated school? and (2) How does the EFL teacher implement DGBL in their classroom practices?

The research is expected to provide valuable insights into the integration of Digital Game-Based Learning (DGBL) in EFL classrooms in Indonesia. It will contribute to the understanding of how teachers' beliefs influence their teaching practices, particularly in the context of technology integration. Moreover, it will highlight best practices and common obstacles, offering a road map for the successful implementation of DGBL in diverse classroom environments.

Literature Review

Teacher Beliefs

Various definitions of belief have been proposed by experts. Beliefs are defined as cognitive constructs and psychological perceptions that are acknowledged as accurate (Tondeur et al., 2017). Kagan says that teachers' beliefs refer to their underlying assumptions on students, classrooms, and the academic content they are responsible for teaching (Kagan, 1992). Furthermore, Hughes et al. (2019) states that teachers' beliefs are a personal system that shapes their behavior, mental processes, and actions connected to the teaching and learning process. This implies that teachers' underlying beliefs about education, students, and the learning process greatly impact their instructional methods, classroom interactions, and decision-making processes.

Based on the experts' definitions above, it suggests that teachers' beliefs play a crucial role in shaping their interactions with students and their approach to education, underscoring the importance of understanding and addressing these underlying beliefs in educational contexts.

The Importance of Teacher's Beliefs in the Use of Technology in the Teaching and Learning Process

The beliefs of the teacher are crucial in how technology is implemented in the teaching process. Cheng et al. (2024) emphasize that educators' beliefs influence the integration of technology in the classroom. Tlili et al., (2023) asserted that teachers'

pedagogical ideas might influence their level of acceptance and implementation of a specific strategy, instrument, or resource in classroom teaching. Gaining insight into the teacher's beliefs might enhance comprehension of the teacher's teaching practices and, ultimately, an understanding of her students' performance (Arifin, 2023). Borg stated that beliefs are considered a crucial component of teacher learning and have gained significant attention in the field of language teacher education (Borg, 2011). It may determine a teacher's perspective on the language, the methods they choose to use, how they handle difficulties in their day-to-day work, and how they influence students' learning, motivation, and success (Shinta Sari et al., 2020). The explanations demonstrated that educators' beliefs significantly correlate with technological integration, hence impacting the teaching process.

In addition, Breen et al. (2001) emphasizes the significance of studying teachers' beliefs for three main reasons: (1) to determine the fundamental principles that teachers exclusively apply in their classroom practice, (2) to help teachers gain insight into their own understanding of pedagogical knowledge, and (3) to illustrate teachers' perspectives and how these beliefs are manifested in their teaching practices. (add more explanation)

Teacher's Practice in DGBL

In today's digitalization era, where most students are called digital natives, the integration of technology in a classroom is a must since teachers can be more creative in engaging students in the learning process. According to Regulation 22/2016 issued by the Ministry of Education and Culture (Permendikbud), the learning process should be conducted in an interactive, inspirational, enjoyable, challenging, efficient, and motivating manner, with the aim of encouraging students to actively participate. One example of an innovative technology currently claimed to be more exciting and student-centered and integrated into language education environments is digital game-based learning (DGBL).

Digital game-based learning refers to the acquisition of knowledge and skills through the utilization of electronic devices in educational settings (Leong, 2017). C. C. Chen & Tu (2021) define digital game-based learning as the process of acquiring knowledge by engaging in problem-solving activities or completing tasks using computers, mobile phones, or tablets. According to Kapp (2012), game-based learning or gamification is considered to be an optimal learning environment because of its inherent allowance for failure, promotion of innovative thinking, and providing a sense of control to the player. Game-based learning encompasses more than just teaching through games; it also involves learning from games, applying the concepts of gaming to teaching, and comprehending the unconscious learning that occurs during game play (Chee, 2016).

Thus, Digital game-based learning provides students with the opportunity to try new things, gain knowledge from the failures, and be in control of what they do, which creates an environment that is ideal for learning.

Benefits of Digital Game-Based Learning

The rapid growth of technology has had a huge impact on the teaching-learning process. Liu (2017) says that the rapid development of new digital technologies has led to an increased demand for studying English as a foreign language, which requires a transition from conventional to advanced learning approaches. One example of the application of technology in the educational context is Digital Game-Based Learning (DGBL).

Integrating digital game-based learning in a classroom has many benefits. Hilmun (2020) States that digital learning provides learners with engaging learning experiences and facilitates the integration of learning content into their daily lives. In their study, Cagiltay et al. (2015) also showed that incorporating competition into digital game-based learning leads to an improvement in students' learning performance. Hung et al. (2014) also found that implementing digital game-based learning would enhance students' self-efficacy, enthusiasm for learning, and academic achievement.

METHODS

Research Design

This research explores teacher's beliefs and practices about integrating digital game-based learning in EFL classroom. Through a case study design, this research aligned with (Creswell and Creswell, (2018) and; Yin, (2014) theory of case study, which involves an in-depth investigation of a specific individual or group within a real-world context. Furthermore, this is a case study as the research focuses on just one teacher (Gay et al., 2009; Merriam & Tisdell, 2015). This research aims to provide a rich, detailed understanding of teachers' beliefs and practices in integrating digital game-based learning in EFL classrooms by focusing on a single case.

Participants

The participant of this research is an English teacher at an Islamic Boarding School in Medan. She has been teaching English at the school for four years. Participant selection was carried out using purposive sampling (Merriam & Tisdell, 2015; Nyimbili & Nyimbili, 2024), as the teacher has been utilizing digital tools in the classroom due to the technology-integrated nature of the school, where both teachers and students use iPads during the teaching and learning process. Her experience in ELT professional development includes active participation and contribution as both a participant and speaker. The rationale for choosing this design is to focus on a participant with direct experience with technology-integrated schools, specifically through integrating Digital Game-Based Learning (DGBL). It makes the teacher an ideal subject for exploring the practical application of DGBL in an EFL Classroom. A pseudonym is used for the participant's name to maintain confidentiality, following ethical research guidelines (Hennink et al., 2019; Wiles, 2013).

Instruments

The present study employed in-depth interviews and document as the instrument, a key method in the case study (Creswell & Poth, 2018). An in-depth interview enabled an in depth-investigation of the beliefs and practices of the participants (Polkinghorne, 2006). Interviews were carried out online using WhatsApp call in June 2024, specifically designed to provide ease for participants (Kaufmann & Peil, 2020). WhatsApp calls facilitated a more relaxing environment, encouraging participants to express their views more openly since it allows them to choose a convenient time. Open-ended questions allowed the participant to express their thoughts, which encouraged more detailed responses freely.

The documents analyzed are teaching materials in the form of lesson plans, websites and digital tools to answer the second research questions. These documents provided additional data, served as additional sources of knowledge for the research (Bowen, 2009), and were examined to assess Digital Game-Based Learning (DGBL) practices in the classroom.

Data Analysis Procedures

This study analyzed the data using a thematic analysis approach (Braun & Clarke, 2012). There are six phases in thematic analysis. First, data familiarization. This phase requires interacting with the data through extensive reading and re-reading textual materials such as interview transcripts, listening to audio recordings, or viewing video content. This phase aims to comprehensively understand the data collection material and identify elements that may be related to the research issue. Second, we make preliminary code related to the research question. The third step is searching for a theme. During this step, your analysis begins as you convert from codes to themes. The fourth step involved the researchers collaboratively assessing and refining the themes. Phase five involves the identification and naming of themes. The last phase is to present the report.

RESULTS AND DISCUSSION

This research aimed to know the teacher's beliefs and practices in Integrating Digital Game-Based Learning in a Technology-Integrated School. The findings are thus divided into two sub-sections.

Teacher's Beliefs in Integrating Digital Game-Based Learning in a Technology-Integrated School

Based on the data analysis, we identified six main themes regarding teachers' beliefs in integrating DGBL, including 1) beliefs about the effectiveness of DGBL, 2) beliefs of DGBL powerful teaching tool than traditional, 3) benefits of DGBL, 4) challenges of DGBL, 5) the weaknesses in integrating DGBL, 6) teacher awareness and proficiency in DGBL usage.

Belief on the Effectiveness of DGBL

This study reveals that the teacher believes positively about integrating DGBL in the classroom. In the first response, the teacher expressed strong beliefs in the potential of DGBL to enhance the quality of teaching and learning significantly, confirming studies by (Alyaz & Sinem, 2016; N. W. S. Mahayanti et al., 2024) who reported similar findings.

“I believe that technology especially DGBL will improve the quality of teaching and learning process”

This belief is in line with the principles of 21st-century learning, which emphasizes the integration of digital devices to make learning more interactive, dynamic, and student-centered (Ramaila & Molwele, 2022). Furthermore, a second response indicates that teacher perceives as a versatile resource capable of addressing a variety of student needs and enhancing differentiated instruction.

“To my knowledge, Digital Game-Based Learning (DGBL) can assist in scaffolding students or facilitating differentiated learning to enhance their understanding.”

The idea of scaffolding is rooted in socio-cultural theory by (Vygotsky, 1978) emphasizing the importance of providing support to students to help them reach deeper levels of understanding.

Furthermore, the teacher emphasized that students acquire active skills through DGBL, including critical thinking, problem solving, teamwork, and adaptability to new challenges. Digital game-based learning enables students to explore knowledge while acquiring skills for the classroom, as students collaborate to solve problems and engage in innovative thinking beyond the conventional methods.

Beliefs of DGBL as Powerful Teaching Tool than Traditional

The participant shared various viewpoints on the use of Digital Game-Based Learning (DGBL) as a teaching method in contrast to traditional approaches. She pointed out that DGBL can serve as a powerful educational tool, especially in enhancing engagement and interactivity within the classroom.

“... Yes, it is more powerful because DGBL can make students more engaged and attached to the learning process...”

This aligns with existing literature (Aeni et al., 2024a; Anastasiadis et al., 2018), which emphasizes how digital games can effectively capture learners' attention and maintain motivation through engaging and immersive experiences.

However, the participant also noted that the success of DGBL isn't consistent across all contexts.

“..If teaching without game based, hmm.. it also depends on the material, sometimes, project-based learning without technology can also engage students. So actually both DGBL and traditional game based teaching have their strengths. DGBL is great for making learning fun, engaging, and interactive. Sometimes, a mix of both works best, giving students a well-rounded learning experience.”

The reliance on the appropriateness of the material indicates that some subjects or skills might be more effectively taught through traditional methods. For example, project-based learning could provide greater engagement for tasks that necessitate critical thinking or practical application without a heavy dependence on technology. Furthermore, the viewpoint advocating for a balanced approach highlights the significance of pedagogical adaptability. Merging DGBL with traditional techniques can create a flexible framework that accommodates diverse learning preferences and goals.

The Benefits of DGBL in Teaching and Learning Activities

Regarding the benefits of DGBL, the teacher highlighted its potential benefits. The findings support earlier studies that suggest DGBL can significantly boost student engagement (Aeni et al., 2024a; Ghani et al., 2022; S. Mahayanti, 2020). Engagement plays a vital role in learning, as it promotes active participation and motivation, which are often associated with improved learning results.

“I believe DGBL would tremendously enhance student engagement ..”

However, participants pointed out that high engagement doesn't always lead to better learning outcomes, emphasizing the need to align game content with educational objectives and to integrate DGBL effectively into the curriculum.

“..high student engagement often leads to better learning outcomes, but sometimes even the engagement is high, this high engagement in DGBL does not always guarantee high learning outcomes. It's kinda weird, right?. Maybe it can enhance teacher innovation and help create more engaging classes with this digital game-based learning.”

Additionally, DGBL fosters teacher innovation and enhances classroom interactivity, allowing for dynamic and creative learning experiences that cater to various learning styles. While its effectiveness as a tool for engagement and pedagogical innovation is evident, the mixed results in learning outcomes indicate a need for further investigation. Future studies could examine how factors like game complexity, feedback, and collaboration influence learning, and professional development programs could assist teachers in aligning DGBL with educational aims.

The Challenges of DGBL

The teacher reported no significant barriers to integrating Digital Game-Based Learning (DGBL) due to access to iPads and positive attitudes toward technology.

“I think there are no significant challenges in integrating DGBL because teachers are provided with iPads, and I personally enjoy integrating technology in the classroom”

This contrasts with the findings of (Chowdhury et al., 2024; Wandana et al., 2024), which highlighted limitations in technological infrastructure. However, some fundamental challenges are also highlighted. One notable concern was the perceived limitation of DGBL in accurately assessing student performance.

“I don't think DGBL will accurately reveal students' performance but will focus more on engagement.”

Additionally, the suitability of DGBL methods for all types of learning materials was questioned, emphasizing the need for careful alignment between games and instructional content.

“Another challenge is the teacher's knowledge of DGBL and also because not all DGBL methods are suitable for every material”

Lastly, technical issues such as low internet connectivity were identified as barriers, potentially hindering smooth DGBL implementation. This finding aligns with studies from (Aeni et al., 2024b; Blume, 2020; S. Mahayanti, 2020; Nadeem et al., 2023), where unreliable internet access poses significant challenges. These insights highlight the need to address technical and pedagogical challenges to fully realize the potential of DGBL in the classroom.

The Weaknesses in Integrating DGBL

Despite its potential benefits, Digital Game-Based Learning (DGBL) has some inherent weaknesses that could limit its effectiveness in promoting comprehensive learning outcomes (Nadeem et al., 2023).

“The weakness is that we cannot know if the students really understand the lesson. Students can sometimes cheat in DGBL. For instance, when playing Kahoot, they might focus on the game for fun on like how they can win rather than on the comprehension of the content. So sometimes for material wise it's not really helpful but for engaging students, I guess it will help”

Three main concerns emerged regarding the implementation of DGBL in educational settings. Firstly, there is a lack of assurance about students' understanding of the lesson content. Although DGBL often focuses on interactive and engaging delivery methods, there is no clear way to confirm that students truly grasp the material being taught. Secondly, the issue of student dishonesty or superficial engagement was noted. In games like Kahoot! students may prioritize the competitive aspect of the activity over the actual content. While these tools can effectively boost student engagement, their influence on deep learning and comprehension may not always align with educational objectives. These findings underscore the need to balance entertainment and educational objectives in DGBL (Kucher, 2021). Educators need to integrate DGBL thoughtfully, ensuring that engagement does not come at the expense of learning outcomes.

Teacher Awareness and Proficiency in DGBL Usage

The results emphasize the importance of teachers being aware and skilled in using DGBL. This approach has been acknowledged as an effective way to enhance

learning engagement, particularly in language skills, by incorporating interactivity, collaboration, and immediate feedback.

“...teachers should know how to actually use DGBL because it makes learning more engaging, encourages teamwork among students, but they should also be familiar with other methods too”

These insights are consistent with previous research that highlights DGBL's potential to boost student engagement and promote teamwork (Blume, 2020). To fully leverage its advantages, teachers need to be knowledgeable and practically equipped to implement DGBL successfully. Training should focus on selecting appropriate games, customizing them, and integrating them into the curriculum. For instance, picking games that align with specific learning objectives ensures that DGBL activities are meaningful and connected to educational aims. However, relying solely on DGBL may not be appropriate in every situation. Teachers should find a balance between DGBL and traditional teaching methods, like lectures or discussions, to accommodate various learning styles and preferences. This balance is essential, as focusing too much on one approach could diminish the overall effectiveness of teaching.

Teacher’s Practices in Integrating Digital Game-Based Learning in a Technology-Integrated School

The integration of DGBL into English teaching supports the student-centered learning, by emphasizing active participation, engagement, and motivation (Nadeem et al., 2023). Tools such as Kahoot and Quizziz create a competitive yet collaborative atmosphere that appeals to the learning styles of digital-native students.

“DGBL tools I usually use are Kahoot, Quizziz, Bamboozle, Mentimeter, Wordwall and games created with PowerPoint. I use DGBL in almost every meeting”

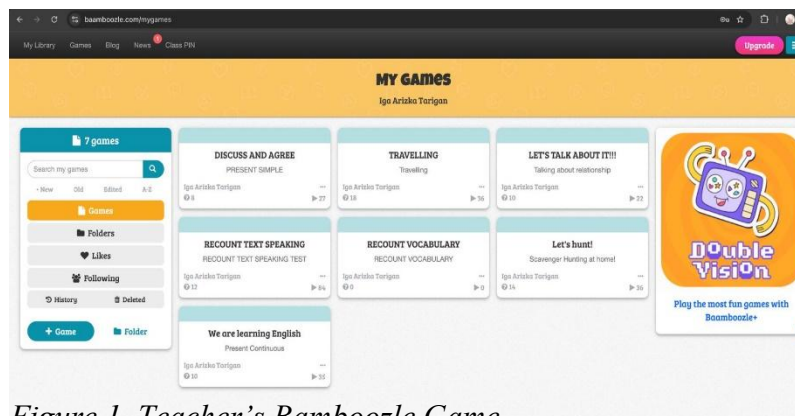


Figure 1. Teacher’s Bamboozle Game

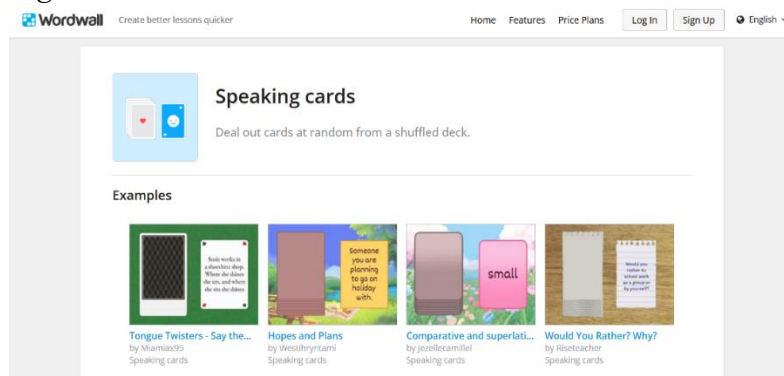


Figure 2. Teacher’s Wordwall Game

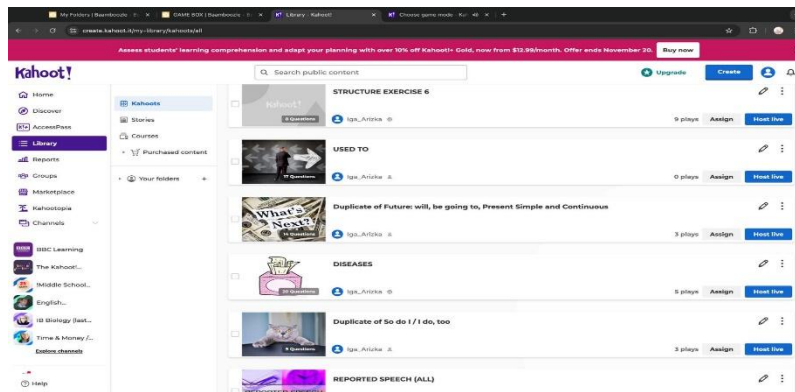


Figure 3. Teacher's Kahoot Game

Teacher noted that the choice of application is determined by the content and objectives of the lesson. The teacher begins each session by explaining how to use the tools and ensuring that students remain actively engaged throughout the activity.

"I use these apps in my lessons based on what I want to teach and the goals I have. I start by explaining how to use them and make sure students stay engaged"

The effective integration of DGBL depends on several key factors. First, teachers need to possess sufficient digital literacy to effectively navigate and customize these tools. Second, careful preparation is essential to ensure that the games align with curriculum standards and learning objectives. Moreover, starting lessons with clear instructions on how to use the games is vital. As the findings suggest, explaining how these tools work helps students grasp the purpose of the activity and reduces confusion during gameplay. Keeping students engaged throughout the session is also crucial for achieving the instructional goals.

The lack of formal training and professional development in DGBL indicates a significant gap in how teachers are prepared to incorporate innovative tools into EFL instruction.

"I have never participated in training or professional development regarding the use of DGBL in EFL teaching. I learn how to use it autodidacally by watching tutorial from youtube or from another teacher. I think a DGBL Short Course or training that introducing some of DGBL that can be used in EFL Classroom and ready-made lesson plans would be immensely helpful. Collaborating with colleagues who have experience with DGBL would also be beneficial"

This finding aligns with prior research (Alimyar & Lakshmi G, 2021; Ardic & Ciftci, 2019; Hol & Aydın, 2020; Nugroho & Mutiaraningrum, 2020) that highlights how teachers often do not receive adequate training and support from school administration. This underscores the necessity for professional development to facilitate the effective integration of technology in the classroom. Without structured professional development, the effective use of DGBL may be compromised, which could limit its potential to enhance student engagement and achieve desired learning outcomes.

CONCLUSION

This study concludes that incorporating Digital Game-Based Learning (DGBL) into English language teaching has great potential to increase student engagement, motivation and interactivity, in line with 21st-century learning principles. Teachers

generally have a positive view of DGBL, seeing it as a versatile tool that aids differentiated instruction, scaffolding, and student-centered learning. These findings highlight DGBL's capacity to encourage active participation and create dynamic classroom experiences, thereby reinforcing its status as a pedagogical innovation.

However, this research also points to several challenges. The success of DGBL depends on how aligned the game content is with curriculum objectives and learning outcomes. Teachers mentioned difficulties in assessing student understanding, possible interference from competitive aspects, and technical problems such as unreliable internet access. Additionally, the absence of formal training in DGBL integration indicates a significant gap in teacher preparation, highlighting the need for professional development programs that focus on game selection, adaptation, and effective implementation strategies.

To fully utilize the advantages of DGBL, it is important to implement a balanced strategy that combines traditional teaching methods with digital tools so as to cater to a variety of learning styles. Educators must have sufficient digital skills and receive support from the administration to successfully implement DGBL. Providing clear instructions and thorough preparation is critical to ensuring that DGBL activities are aligned with educational goals while keeping students engaged and minimizing confusion.

Future research should explore how game design, feedback systems, and collaborative efforts influence learning outcomes. By addressing technical and educational challenges, DGBL can develop into a more effective resource for enhancing comprehensive learning in English education.

REFERENCES

- Aeni, N., Nur, S., & Yunus, M. (2024a). *Promoting EFL Students' Engagement by Using Bamboozle: Digital Game-Based Learning in Indonesian Higher Education*.
- Aeni, N., Nur, S., & Yunus, M. (2024b). *Promoting EFL Students' Engagement by Using Bamboozle: Digital Game-Based Learning in Indonesian Higher Education*.
- Alimyar, Z., & Lakshmi G, S. (2021). A study on language teachers' preparedness to use technology during COVID-19. *Cogent Arts & Humanities*.
- Alyaz, Y., & Sinem GENC, Z. (2016). Digital Game-Based Language Learning In Foreign Language Teacher Education. In *Turkish Online Journal of Distance Education*.
- Anastasiadis, T., Lampropoulos, G., & Siakas, K. (2018). Digital Game-based Learning and Serious Games in Education. *International Journal of Advances in Scientific Research and Engineering*, 4(12), 139–144. <https://doi.org/10.31695/ijasre.2018.33016>
- Ardic, O., & Ciftci, H. (2019). ICT competence and needs of Turkish EFL instructors: The role of gender, institution and experience. *Eurasian Journal of Applied Linguistics*, 5(1), 153–173. <https://doi.org/10.32601/ejal.543791>
- Blume, C. (2020). Games people (don't) play: An analysis of pre-service EFL teachers' behaviors and beliefs regarding digital game-based language learning. *Computer Assisted Language Learning*, 33(1–2), 109–132. <https://doi.org/10.1080/09588221.2018.1552599>
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40.

- Braun, V., & Clarke, V. (2012). *Thematic analysis*. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological*.
- Cheng, L., Antonenko, P. D., & Ritzhaupt, A. D. (2024). The impact of teachers' pedagogical beliefs, self-efficacy, and technology value beliefs on 3D printing integration in K-12 science classrooms. *Educational Technology Research and Development*, 72(1), 181–208. <https://doi.org/10.1007/s11423-023-10276-3>
- Chowdhury, M., Dixon, L., Kuo, L.-J., Donaldson, J. P., Eslami, Z., Viruru, R., & Luo, W. (2024). Digital game-based language learning for vocabulary development. *Computers and Education Open*, 6, 100160. <https://doi.org/10.1016/j.caeo.2024.100160>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, Quantitative, and Mixed Methods Approaches*.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design choosing among five approaches (4th Ed.)*. Sage Publications, Inc.
- Farjon, D., Smits, A., & Voogt, J. (2019). Technology integration of pre-service teachers explained by attitudes and beliefs, competency, access, and experience. *Computers and Education*, 130, 81–93. <https://doi.org/10.1016/j.compedu.2018.11.010>
- Gay, L., Mills, G. E., & Airasian, P. (2009). *Educational Research: Competencies for Analysis and Applications*.
- Ghani, M. T. A., Hamzah, M., Daud, W. A. A. W., & Romli, T. R. M. (2022). The Impact of Mobile Digital Game in Learning Arabic Language at Tertiary Level. *Contemporary Educational Technology*, 14(1). <https://doi.org/10.30935/cedtech/11480>
- Hennink, M., Hutter, I., & Bailey, A. (2019). *Qualitative Research Methods (2nd ed.)*. SAGE Publications Ltd.
- Hughes, P.; Swars Auslander, S.; Stinson, D.W.; Fortner, C.K. Elementary Teachers' Mathematical Beliefs and Mathematics Anxiety: How Do They Shape Instructional Practices? *Sch. Sci. Math.* 2019, 119, 213–222
- Hol, D., & Aydın, I. (2020). Is Technology in Our Classrooms? EFL Teachers' Beliefs and Engagement with Technology in the Classroom. *Journal of Educational Issues*, 6(2), 38. <https://doi.org/10.5296/jei.v6i2.17326>
- Kaufmann, K., & Peil, C. (2020). The mobile instant messaging interview (MIMI): Using WhatsApp to enhance self-reporting and explore media usage in situ. *Mobile Media and Communication*, 8(2), 229–246. <https://doi.org/10.1177/2050157919852392>
- Kucher, T. (2021). Principles and Best Practices of Designing Digital Game-Based Learning Environments. *International Journal of Technology in Education and Science*, 5(2), 213–223. <https://doi.org/10.46328/ijtes.190>
- Mahayanti, N. W. S., Kusuma, I. putu I., Ashadi, A., & Rachman, D. (2024). The Impact of Digital Game-Based Learning on Children's Self-Efficacy and Reading Success. *Voices of English Language Education Society*, 8(1). <https://doi.org/10.29408/veles.v8i1.25325>
- Mahayanti, S. (2020). *Digital Game-Based Learning in EFL: Its Effect on Young Learners' Self-Regulated Learning*. <https://www.researchgate.net/publication/342040135>
- Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative Research: A Guide to Design and Implementation*.

- Nadeem, M., Oroszlanyova, M., & Farag, W. (2023). Effect of Digital Game-Based Learning on Student Engagement and Motivation. *Computers*, 12(9). <https://doi.org/10.3390/computers12090177>
- Nugroho, A., & Mutiaraningrum, I. (2020). EFL teachers beliefs and practices about digital learning of English. *EduLite: Journal of English Education, Literature and Culture*, 5(2), 304. <https://doi.org/10.30659/e.5.2.304-321>
- Nyimbili, F., & Nyimbili, L. (2024). Types of Purposive Sampling Techniques with Their Examples and Application in Qualitative Research Studies. *British Journal of Multidisciplinary and Advanced Studies*, 5(1), 90–99. <https://doi.org/10.37745/bjmas.2022.0419>
- Polkinghorne, D. E. (2006). An agenda for the second generation of qualitative studies. *International Journal of Qualitative Studies on Health and Well-Being*, 1(2), 68–77. <https://doi.org/10.1080/17482620500539248>
- Ramaila, S., & Molwele, A. J. (2022). The Role of Technology Integration in the Development of 21st Century Skills and Competencies in Life Sciences Teaching and Learning. *International Journal of Higher Education*, 11(5), 9. <https://doi.org/10.5430/ijhe.v11n5p9>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological Processes*. Harvard University Press.
- Wandana, M. C. T. R., Muniroh, S., & Karmina, S. (2024). The Implementation Of Digital Game-Based Language Learning In A Developing Country: A Literature Review. *Research and Development Journal of Education*, 10(1), 421. <https://doi.org/10.30998/rdje.v10i1.23085>
- Wiles, R. (2013). *What are Qualitative Research Ethics?* Bloomsbury Publishing.
- Yin, R. K. (2014). *Case study research: Design and methods (5th ed)*. Sage Publications.