FIGGERITS APPLICATION FOR MALAYSIAN SECONDARY SCHOOL STUDENTS' VOCABULARY DEVELOPMENT AND MOTIVATION

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ABSTRACT

This study examines the influence of Figgerits on vocabulary enhancement and student motivation in a secondary school in Sabah, Malaysia. The study centres around 36 Form 3 Alnair students with different English proficiency levels. Its objective is to explore students' perceptions and experiences on the impact of Figgerits in an *ESL classroom*. The study used qualitative methods through semi-structured interviews. The findings indicate that students perceive Figgerits to substantially improve their vocabulary acquisition and classroom engagement. The study highlights the significance of integrating *digital game-based language learning* (DGBLL) with educational theories like *Vygotsky's socio-constructivist theory* and the *Zone of Proximal Development* to guarantee accuracy and dependability. Although there are limitations due to technology, the application promotes a cooperative and inspiring atmosphere for learning. The challenges that have been recognised include the need to address technology accessibility and to maintain a balanced level of difficulty to preserve student motivation. Future research should prioritise more significant sample numbers, longitudinal investigations, and the investigation of adaptive learning systems. This study offers valuable insights into the incorporation of gamified learning technologies in ESL instruction, highlighting their capacity to enhance language learning results and student motivation.

Keywords: *vocabulary, motivation, ESL classroom, digital game-based language learning (DGBLL).*

INTRODUCTION

Digital Game-Based Language Learning (DGBLL) integration is a dynamic educational strategy (Chen et al., 2015). This approach is especially applicable in Malaysia, where a wide range of linguistic difficulties necessitate innovative resolutions. The potential of digital games to enhance language acquisition has been acknowledged (Rankin, 2002), and research highlights the need to incorporate game-based components to optimise learning outcomes (Sung, 2015). Figgerits coincides with this trend by providing a pleasurable experience for enhancing one's vocabulary and using advanced technologies to customise the learning process (Chik, 2019).

This study examines the influence of Figgerits on the enhancement of vocabulary and student motivation in secondary schools in Malaysia. Conventional approaches frequently struggle

to captivate students who are used to using digital technology, resulting in disinterest and a restricted expansion of vocabulary (Gardner, 2001; Sung, 2015). Figgerits seeks to close this divide by providing an interactive platform and tailored learning experiences. The research aims to determine the efficacy of Figgerits in enhancing vocabulary acquisition and its influence on motivation levels in English language schools.

The study focuses on the essential aspects of vocabulary development and motivation in secondary education in Malaysia. Acquiring a solid vocabulary is necessary for achieving academic achievement (Beck et al., 2002), and maintaining student motivation is vital for the process of learning a language (Deci & Ryan, 1985). The study enlightens educators and policymakers about the effectiveness of incorporating DGBLL principles in education by offering valuable insights into the advantages of Figgerits. The personalised learning strategy is in line with current educational trends and has the potential to provide customised language training that caters to the various needs of students (Hattie, 2009).

In Malaysian secondary schools, the challenge to effectively enhancing students' vocabulary and maintaining their motivation in language learning remains as a notable concern. Despite the increasing integration of DGBLL tools, a significant gap exists in adjusted solutions for Malaysian students' linguistic challenges (Chen et al., 2015). Traditional methods frequently fail to engage students, while limiting vocabulary development and motivation (Gardner, 2001). This research aims to address this essential gap by examining the efficacy of Figgerits, in enhancing vocabulary acquisition and sustaining motivation.

A problem that usually observed is the disconnect between conventional language teaching approaches and the preferences of students, who are essentially digital natives (Rankin, 2002). Traditional methods may need to align with modern students learning styles, leading to boredom and decreased motivation in language learning (Sung,2015). Notably, Figgerits as a DGBLL tool, has the potential to tackle this gap by providing an interactive and engaging platform, by such mean addressing the challenge of students' detachment in language learning.

Furthermore, the lack of individualised learning experiences in vocabulary development worsens this problem. Conventional approaches often use a one-size-fits-all approach, overlooking the diverse linguistic needs of students (Hattie, 2009). Above all, Figgerits application introduces adaptive algorithms that adapt vocabulary exercises based on individual proficiency, aiming to reduce the challenge of limited personalisation in traditional language learning methods. This research investigates whether personalised approaches can effectively address the main development and motivation issues.

In essence, the central problem addressed in this research is the need for more current and modern language teaching methods in Malaysian secondary schools to cater to the evolving needs of students, resulting in poor vocabulary development and motivation. Therefore this study attempts to answer the following question: How do students perceive the impact of Figgerits on their vocabulary development and motivation?

The research acknowledges limitations such as the exclusive emphasis on secondary school students in Malaysia and the dependence on self-reported indicators of motivation. These factors can influence the applicability and understanding of the results. Acknowledging these limitations emphasises the necessity for additional investigation using varied samples and approaches to fully comprehend the influence of Figgerits on vocabulary acquisition and motivation.

LITERATURE REVIEW

Digital game-based language learning (DGBLL) has emerged as a promising educational strategy, effectively engaging students and facilitating language acquisition. Researchers have highlighted the benefits of integrating gamification elements, such as goal-oriented and rule-based activities, into educational contexts. McGonigal (2013) defines gamification as a structured and enjoyable activity designed to teach academic content (Mayer, 2015). Studies indicate that using games to teach vocabulary fosters enjoyment and interest, making it easier for secondary school students to learn new words (Bakhsh, 2016).

Vocabulary instruction is often challenging, requiring students to memorise unfamiliar words and spellings. Teachers must create effective materials to capture students' attention and motivation. Digital technologies can enhance classroom interactivity and productivity, as evidenced by Peterson (2013), who found that children learning vocabulary through digital games performed better than those using traditional methods. Other studies corroborate these findings, showing that students using gamified approaches score higher and are more engaged (Yudintseva, 2015; Calvo, 2017).

Gamification in education creates engaging learning environments that motivate students. The concept, popularised in 2002 by Nick Pelling and further developed by Kapp (2012) and Marczewski (2013), involves using game-based mechanics to engage and motivate learners. The Malaysian National Higher Education Action Plan 2017-2020 emphasises integrating technology in education, aligning with Deterding et al. (2011), who highlight the motivational benefits of gamification. Studies show that gamification improves student engagement, knowledge retention, and cooperation (Hakulinen & Auvinen, 2015; Garland, 2015).

While gamification has many benefits, concerns exist regarding its competitive nature and potential to induce pressure and reduce motivation (Burguillos, 2010). Poorly planned gamification can lead to confusion and negatively impact students' confidence and attention (Phung, 2020; Rom, 2014). Therefore, careful planning and alignment with lesson content are essential. Gamification has proven effective in enhancing motivation and vocabulary skills. Keller's ARCS model (Attention, Relevance, Confidence, Satisfaction) links motivation with learning. Studies show that gamification can significantly enhance vocabulary skills and interest in learning (Boyinbode, 2018; Bal, 2019; Kijpoonpol & Phumchanin, 2018). Research also indicates that gamified language learning applications improve motivation and vocabulary proficiency (Chen et al., 2015; Sung, 2015; Hamari et al., 2014).

Studies on Malaysian secondary school students highlight factors influencing vocabulary acquisition, such as language anxiety and teacher-student interactions (Abdullah & Ismail, 2016; Roorda, 2011). The use of mobile applications for vocabulary acquisition has shown promise, aligning with the current study's focus on Figgerits' effectiveness (Lei et al., 2022). Insufficient vocabulary knowledge hampers communication quality and reading comprehension (Alqahtani, 2015; Coxhead et al., 2010). Effective vocabulary acquisition is essential, requiring students to master a significant number of word families to function effectively in language skills (Laufer, 1997; Subon, 2013)

Vygotsky's socio-constructivist theory emphasises the importance of social interaction and scaffolding in cognitive development. According to Vygotsky (1978), students can achieve more with guidance and support. The Zone of Proximal Development (ZPD) further supports this, highlighting the role of scaffolding in learning. This study applies these theories by encouraging collaborative learning and providing personalised feedback through Figgerits.

The Figgerits application integrates DGBLL and gamification strategies, offering interactive puzzles and contextual clues to enhance vocabulary skills. By examining its impact on motivation

and vocabulary acquisition, this study aims to contribute to innovative language education approaches. Theoretically grounded and empirically driven, the study seeks to address the challenges and opportunities in leveraging digital technologies for language learning.

METHODOLOGY

This research adopts a qualitative design to explore students' perceptions and experiences on the impact of the Figgerits application on their vocabulary development and motivation. The participants are 36 form 3 Alnair students from SMK Takis, Papar, Sabah, Malaysia. Mostly, the students are monolingual, meaning they are proficient in only one language, which they speak fluently at home and in their everyday activities. The population comprises students adhering to CEFR standards to represent critical stages of language development. Convenience sampling was used to ensure representation across different CEFR proficiency levels, capturing a comprehensive view of the intervention's impact.

A semi-structured interview was used to gather qualitative data from the participants to provide meticulous data related to students' experiences and perceptions of Figgerits. There are five questions in total that participants must answer. In this part, participants were chosen based on their performance in class after utilizing Figgerits application. Thus, the selection also takes into account students CEFR level, six participants were chosen (3 female and 3 male students). Moreover, the flexibility of the interview in investigating the students' perspectives on the Figgerits application's influence on their motivation also applied. In addition, each participant was interviewed one-by-one in English room. Overall, the interview seeks to explore participants' reflection on motivation, personal perception and experiences, aiming to uncover the nuances of individual responses. To analyse the qualitative data, thematic analysis is employed to identify and interpret key themes such as "motivational factors" and "new vocabulary words" (Braun & Clarke, 2006). This methodological technique offers educators an understanding of how the application influences students' learning experiences (Creswell, 2013).

RESULTS

These are the findings from the six participants in the semi-structured interviews organized according to questions.

Question 1: How do you feel when you use the Figgerits application during English class?

During the interviews, participants regularly expressed that Figgerits is both challenging yet enjoyable, greatly boosting their motivation to acquire additional knowledge. Participant 1 expressed a desire to expand her knowledge of the English language through Figgerits, while Participant 2 regarded it as an enjoyable method to enhance his cognitive abilities and engage in mental stimulation. This topic emphasizes that integrating difficulty and pleasure in Figgerits cultivates a heightened degree of involvement and drive among 3 Alnair students. These are some of the extracts:

- *"Figgerits sometimes can be challenging and sometimes can be fun at the same time. And make me want to learn more about English vocabulary as I used to be. It makes the English class more fun than usual. Especially when you teach us."* (Participant 1)
- *"Emm yes it makes the class more interesting for me and it's a fun way to practice or challenge my mind to answer some vocabulary questions, and grammar."* (Participant 2)

Another prevalent topic among the responses was that Figgerits enhances the enjoyment and engagement of the English class. Participant 3 emphasized that Figgerits is enjoyable and educational, while Participant 4 succinctly said that it adds an element of interest to the session. This topic suggests that integrating Figgerits into classroom activities enhances students' overall satisfaction and enthusiasm for the subject. Participants 5 and 6 highlighted the cognitive advantages of utilizing Figgerits. They noted that it stimulates the mind to generate replies and compels the brain to discover unfamiliar phrases. This topic demonstrates that Figgerits presents a substantial cognitive challenge, necessitating students to engage in critical thinking and enhance their vocabulary as in the following extracts:

- "*Yes, it does, because Figgerits stimulates your mind to think of the answers*" (Participant 5)
- "*It makes the class interesting for me because it forces my brain to find the words that I haven't heard before.*" (Participant 6)

Question 2: Do you feel more motivated to learn English vocabulary when you use Figgerits? Can you explain how it affects your willingness to study?

Concerning motivation, participants conveyed ambivalent sentiments regarding their inclination to acquire vocabulary using Figgerits. Participant 1 stated that Figgerits assists her in actively participating in vocabulary activities, even if it is not her preferred subject. Participant 3 emphasized that Figgerits enhances her lexicon and facilitates her acquisition of novel word connotations. Participant 5 discovered that Figgerits was a helpful instrument for acquiring new English vocabulary, particularly words often used in the United States. These following comments suggest that Figgerits can boost motivation by offering a pragmatic and captivating method for acquiring new words.

- "*Yes, because sometimes I'm not really interested to learn vocabulary as it not my favorite subject.*" (Participant 1)
- "*Yes, because it expands my vocabulary and some new meanings of words.*" (Participant 3)
- "*Yes, I do because Figgerits is a free and fun way to learn any English words you did not know. Or English words that only commonly use in America.*" (Participant 5)

In contrast, certain individuals perceived Figgerits as difficult and discouraging. Participant 4 confessed to having a mild level of motivation due to his lack of proficiency in playing Figgerits. Participant 6 conveyed that the challenging nature of Figgerits can be discouraging, leading to a sense of dejection due to the demanding tasks. These responses indicate that Figgerits can be a useful educational tool for certain individuals but can also provide difficulties that may discourage other students.

- "*A little bit. Because I don't really know how to play it.*" (Participant 4)
- "*Not really as Figgerits involve your brain to find the answer. But for me, it just makes me feel down as how hard it can be.*" (Participant 6)

Question 3: Do you find Figgerits to be challenging or fun? Why?

Most participants indicated that the Figgerits application is both challenging and enjoyable. Participant 1 characterized it as a dual experience, acknowledging that the challenge might amplify the enjoyment. Participants 4 and 6 indicated that the application offers a balanced blend of difficulty and fun, referred to as a "half-half" or "50-50" experience. Participant 5 succinctly expressed that the activity was simultaneously demanding and enjoyable. This theme implies that

the inherent duality of Figgerits, encompassing both challenging and enjoyable parts, is a fundamental factor in its attractiveness to students.

- "*It was both at the same time. Because sometimes I want to challenge to be more fun and Figgerits is the proof.*" (Participant 1)
- "*Hmm, half-half. It's challenging and also fun*" (Participant 4)
- "*I couldn't decide on that. But I would say 50-50. It depends on the person*" (Participant 6)

Additionally, certain individuals highlighted the educational advantages and motivational elements of the challenges posed by Figgerits. Participant 2 noted that the presence of foreign English words in the application adds difficulty but also recognized it as an excellent tool for learning. In addition, Participant 3 emphasized that the difficulties posed by Figgerits serve as a source of motivation for her further to enhance her knowledge of English vocabulary and grammar. Thus, it suggests that the demanding characteristics of Figgerits can function as a catalyst for students, compelling them to enhance their vocabulary and language proficiency.

- "*Sometimes it can be more challenging and sometimes it can be more fun. But it's a great way to learn English more. If I never heard some of the English words, it can be challenging.*" (Participant 2)
- "*It is quite challenging because some words I don't know. And I think it give me more motivation about the English vocabulary and grammar.*" (Participant 3)

Question 4: How has using Figgerits changed the way you participate in English class? Do you feel more involved or eager to join class activities?

Regarding class participation, most participants reported that utilizing Figgerits has heightened their engagement in class activities. Participant 1 expressed that it enhanced her level of engagement in classroom activities. Participant 3 expressed heightened engagement by discovering words and numbers in Figgerits. Participant 6 also conveyed enthusiasm for engaging in classroom activities as a result of Figgerits. This theme emphasizes that Figgerits positively impacts students' involvement and active participation in classroom activities.

- "*It's made me more involve in the class activity.*" (Participant 1 and Participant 3)
- "*Yes, it does make me eager to involve in class activity.*" (Participant 6)

Furthermore, some participants also highlighted that using Figgerits in the ESL classroom promotes a cooperative learning atmosphere, motivating students to collaborate and engage in discussions to find solutions to difficulties. Participant 5 observed that Figgerits facilitates his collaboration with his peers. Participant 2 observed that although Figgerits aids his engagement in class, he finds other activities to be more beneficial. While Figgerits may be advantageous for certain kids, others may find alternative activities more captivating and beneficial for their class participation.

- "*I do feel more involve in class when using Figgerits. For instance, Figgerits can also help to cooperate with my classmates*" (Participant 5)
- "*Not really because Figgerits also helps me involve in class but for me other activities will helps me more than Figgerits.*" (Participant 2)

Question 5: How does Figgerits help you achieve your learning goals in English? Can you give an example of a time when the application motivated you to improve your vocabulary or language skills?

Participants commonly emphasized that Figgerits aids in their acquisition and practical application of new English terminology. Participant 1 observed that Figgerits acquaints her with unfamiliar vocabulary that she can employ in exams to attain superior grades. In addition, Participant 2 noted that the program sparked his curiosity about unfamiliar words, driving him to acquire their definitions. This, in turn, aids him in composing essays and responding to examination questions. Participant 3 expressed similar opinions, affirming that Figgerits enhances her lexicon and aids her in responding to examination inquiries. This theme emphasizes the role of Figgerits as a beneficial instrument for acquiring and using vocabulary in academic settings.

- "*Learn some more English words than I know as far as I learn. Sometimes it surprises me to learn new words. Sometimes what I learn from Figgerits I can use it in exam and achieve more marks.*" (Participant 1)
- "*This application helps me by shows me some words that I never heard before and it make me more curious, and it make me find some of the meanings of the words. Plus, it also helps me during my essay and answering exam questions.*" (Participant 2)
- "*There are sometimes objectives in exam. So, I can use the knowledge to answer the questions.*" (Participant 3)

Several participants emphasized that Figgerits enhances their confidence in conversing in English. Participant 4 stated that the program enhances his knowledge of the English language and boosts his confidence in conversing with his acquaintances. In addition, participants also highlighted that Figgerits acquaints them with intricate and refined vocabulary. Participant 5 expressed gratitude for acquiring a "complex and sophisticated" vocabulary that may be utilized in everyday situations, enhancing their sense of intellectualism. In addition, Participant 6 highlighted that Figgerits offers sophisticated terminology that aids her in attaining her objective of enhancing her essay writing skills. This suggests that Figgerits provides kids with a sophisticated language, which enhances their intellectual and academic development.

- "*Speaking English with my friends and talk more confident in English with my friends*" (Participant 4)
- "*Figgerits help me learn English words that are complex and expensive. The words that I can apply in daily life make me be a more intellectual person.*" (Participant 5)
- "*The Figgerits application really help me in real life. My learning goal in English to write a better essay. So Figgerits provide me more complex and advance words that could help me in my writing.*" (Participant 6)

DISCUSSION

Based on the results, Figgerits was helpful for enhancing class 3 Alnair learning experience. According to Lim and Yunus (2021), to improve students' language proficiency, self-assurance and creativity, educators must integrate technology in the ESl classroom This study shows evidence that the implementation of gamification has a positive impact on students' academic achievements and behaviour toward English language. Moreover, Yusoff and Jamil (2020) study also discovered that incorporating game elements into lesson plans led to greater student involvement and collaboration. These factors have been shown to enhance vocabulary retention and motivation, as supported by studies conducted by Chun and Heng (2018) and Wong and Tan

(2019). A study conducted by Kaur and Singh (2022) examines students' perceptions of gamification in ESL classrooms. The findings indicate that students value the organized and enjoyable learning environment facilitated by gamification. They also report enhanced collaboration and increased overall engagement in language learning activities.

Based on the interview responses, Figgerits does improve students' engagement and enjoyment in ESL classroom. Significantly, Figgerits boosts their motivation to learn as most participants described Figgerits as challenging and fun. Indeed, the challenging nature of Figgerits does stimulate cognitive engagement, making the learning process enjoyable. Evidently, numerous participants do acknowledge that Figgerits allure both challenge and enjoyment as the fundamental elements. Tan and Wong (2020) discovered that students exhibited a high level of engagement with DGBLL. This is because students found the interactive characteristics of digital game is interesting and motivating them. Additionally, the research conducted by Nguyen et al. (2022) and Ali and Bakar (2023) highlighted that the interactive features of DGBLL proven to reduces the stress associated with the learning process. To conclude, Figgerits enjoyable and participatory elements enhance ESL classes and increased students' motivation and involvement.

Participants however had mixed opinions about their desire to acquire vocabulary through the integrate of Figgerits. While some students found Figgerits to be advantageous for their vocabulary development such as opportunity to learn new words and use them in practical contexts, the complexity of Figgerits could possibly discourage certain students especially if they encountered difficulties in comprehending Figgerits. Guidance and supplementary assistance may be needed to ensure that all students acquire maximum value of the utilisation of Figgerits. A study by Smith and Johnson in 2018 founded those students had varied reactions to DGBLL. Some might claim DGBLL increase motivation while other feels overwhelmed by the captivating nature of technology. Although, technology indeed can potentially enhance motivation and engagement, it is also important to note that technology cannot be universally beneficial in inspiring everyone to learn vocabulary. Therefore, it depends upon individual preferences and prior experiences in technology to gain the technology's usefulness.

Many participants found that the fun and challenging activities creates a balanced and engaging learning experience. Thus, this motivates students to engage more deeply with the content, and unconsciously will driving them to improve their vocabulary and language proficiency. Moreover, the challenges presented in Figgerits provided educational benefits to the participants, where they highlight that these challenges motivate them to not only improve their English proficiency but to learn more. Zainal and Hashim (2021) revealed that gamified can be a motivating and enjoyable learning application. At the same time, it can helped maintain students' motivation and interest which leading to positive improvement in learning outcomes. Undoubtedly, the gamified features significantly enhanced students' motivation and learning outcomes (Hassan and Ismail, 2023).

There is positive impact upon integrating Figgerits on class participation. Participants reported feeling more involved and eager to join class activities which attributed to the nature of Figgerits being an interactive and collaborative language learning tool. Furthermore, Figgerits encourages students to work together and discuss the solutions together in pair and group. Yet, some students found that other activities more helpful than Figgerits for their involvement, overall the findings indicates that Figgerits does fosters a collaborative and engaging classroom environment that enhance students participation in ESL classroom. Huang et al. (2019) studied indicated that students enjoy the interactive and competitive features in gamified which contributes to students willing to participate in discussion and activities. Aligned with Ali and Rahman's (2023) that found team-based competitions and digital badges in gamified elements created a more engaging and inclusive learning experience for students.

Implication of the study

The study highlights that in classrooms without individual student access to laptops or tablets, teachers adapt by using an LCD projector to display Figgerits on a whiteboard, with students writing answers on paper. This adaptation may affect the learning experience, indicating the need for low-tech or offline versions of Figgerits to ensure equitable access and engagement for all students (Gee, 2018; Sykes et al., 2019).

The study suggests Digital Game-Based Language Learning (DGBLL) enhances student engagement and enjoyment. However, writing answers on paper due to lack of devices may reduce the game's interactive nature. Maintaining interactivity is crucial for student motivation and engagement, even in low-tech environments (Keller, 2016; Ryan & Deci, 2019; Deterding, 2020). Students have mixed feelings about their motivation to learn vocabulary with Figgerits. This suggests the need for additional support to help all students benefit from the tool. Providing adequate scaffolding can enhance motivation and the tool's effectiveness in vocabulary building (Vansteenkiste et al., 2020; Wu, 2022).

Suggestions for future research

The analysis of Figgerits in enhancing vocabulary and its effectiveness in ESL classrooms highlights several areas for future research. First, while the current study shows no significant gender differences in vocabulary improvement, engagement, and effectiveness, future studies should explore the nuances behind these trends. This could be achieved through larger sample sizes or longitudinal designs, examining how gender, age, socio-economic background, and prior exposure to English influence outcomes.

Additionally, future studies could explore balancing Figgerits' difficulty to maintain student motivation without causing frustration. Adaptive learning technologies adjusting difficulty based on performance might ensure all students benefit. Research could also evaluate support strategies such as instructional scaffolding, peer tutoring, or teacher-led interventions to optimize Figgerits' use in the classroom. Finally, investigating the broader educational implications of gamified learning tools on other language skills and conducting longitudinal studies on their long-term benefits could provide deeper insights for ESL education.

CONCLUSION

The study aimed to evaluate the impact of the Figgerits application on vocabulary acquisition and student motivation in Malaysian secondary schools. The findings indicate that Figgerits significantly enhances student engagement, enjoyment, and vocabulary skills, achieving the primary research objectives. However, challenges related to technological accessibility and varying levels of student motivation were identified, suggesting that while the tool is effective, additional support and low-tech solutions are necessary.

The research question was largely addressed, demonstrating that Figgerits can improve vocabulary acquisition and student motivation in ESL classrooms. However, the study also highlights the need for future research to explore demographic influences, understand gender-specific preferences, and evaluate support strategies to optimize the application's impact. Overall, Figgerits shows promise in transforming language learning, but further studies are needed to fully realize its potential across diverse educational settings.

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