



**EFFECTIVENESS OF IMPLEMENTING BLOOKET, A GAME-BASED LEARNING
PLATFORM TO LEARN VOCABULARY IN ESL CLASSROOM IN SEKOLAH
MENENGAH JENIS KEBANGSAAN (SMJK) SAN MIN, PERAK.**

TAN YING TORNG

20AAB05532

SUPERVISOR: MR MOHD AMIR IZUDDIN BIN MOHAMAD GHAZALI

UALZ3013 - FYP1 REPORT

**SUBMITTED IN
PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR BACHELOR OF ARTS (HONS) ENGLISH EDUCATION / BACHELOR OF
ARTS (HONS) ENGLISH LANGUAGE
FACULTY OF ARTS AND SOCIAL SCIENCE**

OCT 2023

Table of Content

| | |
|---|-----------|
| Chapter 1: Introduction..... | 1 |
| 1.1 Background of Study..... | 1 |
| 1.2 Statement of Problem..... | 3 |
| 1.3 Research Objectives..... | 4 |
| 1.4 Research Questions..... | 5 |
| 1.5 Significant of Study..... | 5 |
| 1.6 Definition of Key Terms..... | 6 |
| 1.7 Scope and Limitation of Study..... | 6 |
| Chapter 2: Literature Review..... | 8 |
| 2.1 Introduction..... | 8 |
| 2.2 Use of Technology..... | 8 |
| 2.3 Importance of Acquire Vocabulary..... | 10 |
| 2.4 ESL Perspectives on Using Technology..... | 11 |
| 2.5 Theoretical Framework..... | 13 |
| 2.6 Conclusion..... | 14 |
| Chapter 3: Methodology..... | 15 |
| 3.1 Research Design..... | 15 |
| 3.2 Theoretical Framework..... | 15 |
| 3.3 Experimental Methodology..... | 15 |
| 3.3.1 Participants and Sampling..... | 15 |
| 3.3.2 Data Collection..... | 16 |
| 3.3.3 Data Analysis..... | 17 |
| 3.4 Interview Methodology..... | 18 |
| 3.4.1 Participants and Sampling..... | 18 |
| 3.4.2 Data Collection..... | 19 |
| 3.4.3 Data Analysis..... | 20 |
| 3.5 Validity and Reliability..... | 21 |
| Chapter 4: Finding and Analysis..... | 23 |
| 4.1 Introduction..... | 23 |

| | |
|--|----|
| 4.2 Participant Demographic..... | 23 |
| 4.3 Analysis of Research Question 1..... | 25 |
| 4.3.1 Analysis of Control Group..... | 25 |
| 4.3.1.1 Analysis of Pre-test..... | 25 |
| 4.3.1.2 Analysis of Post-test..... | 27 |
| 4.3.1.3 Comparison of Pre-test and Post-test..... | 28 |
| 4.3.2 Analysis of Experimental Group..... | 29 |
| 4.3.2.1 Analysis of Pre-test..... | 29 |
| 4.3.2.2 Analysis of Post-test..... | 30 |
| 4.3.2.3 Comparison of Pre-test and Post-test..... | 31 |
| 4.3.3 Comparison of Experimental Group and Control Group..... | 32 |
| 4.3.3.1 Pre-test Comparison..... | 32 |
| 4.3.3.2 Post-test Comparison..... | 32 |
| 4.3.3.3 Improvement Comparison..... | 33 |
| 4.4 Analysis of Research Question 2..... | 33 |
| 4.4.1 Engagement and Motivation..... | 34 |
| 4.4.1.1 Engagement through Technology (Blooket) | 34 |
| 4.4.1.2 Challenges in Maintaining Engagement (Conventional Methods)..... | 35 |
| 4.4.2 Challenges with Technology and Conventional Methods..... | 35 |
| 4.4.2.1 Technology-Related Challenges..... | 35 |
| 4.4.2.2 Challenges with Traditional Methods..... | 36 |
| 4.4.3 Effectiveness of Learning Outcomes..... | 37 |
| 4.4.3.1 Improvement through Technology-Assisted Learning..... | 37 |
| 4.4.3.2 Retention Challenges in Traditional Methods..... | 38 |

| | |
|---|-----------|
| 4.4.4 Conclusion..... | 38 |
| Chapter 5: Discussion and Conclusion..... | 40 |
| 5.1 Introduction..... | 40 |
| 5.2 Interpretation of Key Findings..... | 40 |
| 5.2.1 Objective 1: Effectiveness of Blooket vs. Conventional Methods..... | 40 |
| 5.2.1.1 Reason of Effectiveness of Blooket..... | 41 |
| 5.2.1.2 Reasons for the Limited Effectiveness of Conventional Methods..... | 42 |
| 5.2.2 Objective 2: Students’ Perspectives on Blooket..... | 43 |
| 5.2.2.1 Positive Aspects of Blooket from Students’ Perspectives..... | 43 |
| 5.2.2.2 Negative Aspects and Challenges of Using Blooket..... | 44 |
| 5.2.3 Linking Findings to Educational Theories..... | 44 |
| 5.2.4 Broader Applications of Game-Based Learning Beyond ESL Education..... | 45 |
| 5.3 Theoretical Implication..... | 45 |
| 5.3.1 Contribution to the Technology Acceptance Model (TAM) | 46 |
| 5.3.1.1 Perceived Ease of Use..... | 46 |
| 5.3.1.2 Perceived Usefulness..... | 47 |
| 5.3.1.3 Enhancing the Applicability of TAM in Educational Contexts..... | 47 |
| 5.3.2 Implication of Future Research and Practice..... | 48 |
| 5.3.3 Summary..... | 48 |
| 5.4 Practical Implication..... | 49 |
| 5.4.1 Implications for Educators..... | 49 |
| 5.4.1.1 Integrating Blooket into the ESL Curriculum..... | 49 |
| 5.4.1.2 Addressing Technical Issues and Learning Curve Challenges..... | 50 |
| 5.4.2 Implication for Policymakers..... | 51 |

| | |
|--|-----------|
| 5.4.2.1 Promoting Professional Development and Training..... | 51 |
| 5.4.2.2 Ensuring Access to Technological Resources..... | 52 |
| 5.4.3 Implication for Curriculum Developers..... | 52 |
| 5.5 Limitation of the Study..... | 53 |
| 5.5.1 Small Sample Size..... | 53 |
| 5.5.2 Short Intervention Duration..... | 53 |
| 5.5.3 Focus on Single School Setting..... | 54 |
| 5.6 Recommendations for Future Research..... | 54 |
| 5.6.1 Conduct Long-Term Studies on the Sustained Impact of Blooket..... | 55 |
| 5.6.2 Compare Blooket with Other Digital Learning Tools..... | 55 |
| 5.6.3 Explore the Use of Digital Tools in Diverse Educational Contexts..... | 56 |
| 5.6.4 Investigate the Impact of Game-Based Learning Tools on Different Learner Groups...57 | |
| 5.7 Conclusion..... | 57 |
| 5.7.1 Summary of Key Findings..... | 57 |
| 5.7.2 Final Thoughts..... | 58 |
| References..... | 60 |

Chapter 1: Introduction

1.1 Background of Study

English as a Second Language (ESL) education in Malaysia holds significant importance in providing students with the essential global communication skills required for achieving academic and professional accomplishments (Kaya, 2022).

According to (Secondary Education Regional Information Base, 2011), general secondary education is offered by a variety of institutions, each with a unique programmed structure and duration. The majority of secondary education institutions typically provide the whole secondary cycle, which consists of two (2) years of upper secondary education and three (3) years of lower secondary education (Grades 7–11). Malaysia offers a variety of secondary education options, including military colleges run by the Ministry of Defence, MARA Junior Colleges run by the Council of Trust for the Bumiputera of Malaysia, regular secondary schools under the MOE's authority, regular secondary schools run by private organizations, and religious schools run by the Ministry of Education (MOE), state governments, or private organizations.

The school that involved in this study is a government school which bears resemblance to SMK schools in Malaysia namely Sekolah Menengah Jenis Kebangsaan (SMJK) San Min. Nevertheless, SMJK schools are distinct in that they are commonly recognized as Chinese-medium educational institutions, where Mandarin Chinese serves as the predominant language of instruction. The SMJK schools exhibit inclusivity by admitting students from diverse racial and ethnic backgrounds, rather than exclusively catering to Chinese students. Indeed, a considerable number of non-Chinese students opt to enroll in SMJK schools due to their provision of a superior standard of education and a pronounced focus on scholastic excellence. It is important to acknowledge that SMJK schools receive government subsidies, albeit to a

lesser extent compared to SMK schools. This implies that students enrolled in SMJK schools may still be required to make certain financial contributions towards their education, albeit at a comparatively reduced rate in comparison to private educational institutions.

According to Rashid et al. (2022), for pupils to learn and be proficient in a language, vocabulary is crucial. Students who have a large vocabulary will find it easier to learn English and its four (4) main language skills: speaking, listening, reading, and writing. Students may find it difficult to express their own thoughts and understand those of others if they lack a wide vocabulary. Furthermore, a variety of distinct word-learning strategies such as implementing technology and game-based learning are needed for children, and comprehension is more likely to be impacted by in-depth instruction (Rashid et al., 2022). Therefore, in order to increase students' vocabulary mastery, vocabulary instruction should be given a lot of weight in language teaching.

The incorporation of technology into English as a Second Language (ESL) education has arisen as a potentially fruitful approach to augment language acquisition by promoting interactive and customized learning experiences (Alamri, 2021). Blooket, a learning platform that incorporates gamification, offers an inventive resource for fostering engagement among English as a Second Language (ESL) students through its interactive activities and games (Blooket, 2023). Nevertheless, the extent to which it is effective in the context of English as a Second Language (ESL) education in Malaysia has not been thoroughly investigated. This research aims to fill the existing research gap by examining the appropriateness of integrating Blooket into English as a Second Language (ESL) classrooms, with a specific emphasis on its capacity to enhance vocabulary acquisition and foster student engagement. Through this endeavor, the primary objective is to disseminate knowledge regarding educational methodologies and make a valuable contribution to the advancement of English as a Second Language (ESL) instruction in Malaysia.

1.2 Statement of Problem

According to Zaman (2019), the English language has consistently held a prominent position in Malaysia's pursuit of attaining developed nation status. However, it is evident that the English language proficiency level among Malaysian students is considerably below the desired standard (Zaman, 2019). According to Zulkornain et al. (2020), there seems to be a noticeable decrease in the level of English language proficiency among students in Malaysia. According to the article, the failure rate for English 1119 among students was 50%. Additionally, the performance of applicants in the MUET examination was found to be subpar, with 52% of them achieving just band 1 and band 2. Additionally, it is worth noting that there was a noticeable disparity in the failure rates of English language topics across important examinations in Malaysia. Specifically, the pass rates for the UPSR, PMR, and SPM were recorded at 25%, 23%, and 22% respectively.

Based on Thang et al. (2011), the underlying cause of this issue likely originates from a deficiency in motivation and a negative attitude that first emerged during secondary school. According to Hussin et al. (2016), the primary conclusions derived from the investigation pertaining to the introduction of novel lexical items in the English language textbook utilized in Malaysian Form Three education were as follows: firstly, the textbook demonstrated deficiencies in its approach to vocabulary presentation; secondly, no particular instructional method was employed for the teaching of new vocabulary; and finally, the textbook lacked an index of the newly introduced lexical items at its conclusion.

According to Sim (2020), despite English being included in the Malaysian school curriculum, a significant proportion of Malaysian students struggle to attain proficiency in the language due to their lack of interest and perception of it as a tedious subject. Despite recent reforms to the curriculum, classroom research has shown that Malaysian secondary school teachers tend to continue with the old teaching and learning methods where the major emphasis

is on finishing tasks prescribed by textbooks and drilling for exams. (Mohd. Saat Abbas et al., 2011; Mukundan, 2011; Pandian, 2002; Pandian & Baboo, 2015).

Education research has paid significant attention to the investigation of technology use in the context of vocabulary acquisition in ESL classrooms, especially in a number of foreign contexts. Many research conducted in various nations, including the United States, the United Kingdom, and South Korea, have examined how well technological tools like Blooket may be used to improve vocabulary proficiency among English language learners. According to Alamri (2021), the study has provided insightful information about the possible advantages and difficulties of integrating technology into language instruction. On the other hand, given the dearth of comparable studies carried out within the Malaysian educational context, a clear research vacuum becomes apparent. There does not seem to be any research specifically looking at how technology is used for vocabulary learning in ESL classes in Malaysia, especially at the secondary education level, despite the fact that this pedagogical method is gaining popularity worldwide. This gap highlights the need for a tailored study that takes into account the distinct cultural and educational context of Malaysia, offering a nuanced viewpoint on the suitability and efficacy of technology integration in boosting vocabulary acquisition in the context of Malaysian ESL classes. Closing this gap will help to ensure that research findings are suitable to the local ESL teaching and learning environment and that educational interventions are specifically tailored to the demands and dynamics of the Malaysian setting.

1.3 Research Objective

This study outlines two (2) objectives and they are as follows:

1. To assess the efficiency of utilizing Blooket as a pedagogical tool in enhancing the vocabulary proficiency of English as a Second Language (ESL) learners, in comparison to traditional teaching methods.

2. To investigate the ESL students' perspectives on the use of Blooket in learning vocabulary.

1.4 Research Questions

This study outlines two (2) questions and they are as follows:

1. What is the comparative efficiency of Blooket-based instruction versus traditional teaching methods in augmenting the vocabulary proficiency of ESL students?
2. What are the ESL students' perspective on the use of Blooket to learn vocabulary?

1.5 Significance of the Study

The utilisation of game-based learning platforms, such as Blooket, is a relatively recent development within the realm of English as a Second Language (ESL) classrooms in Malaysia. This study aims to address a gap in the current body of literature by investigating the efficacy of Blooket as a tool for enhancing English vocabulary acquisition among secondary school students.

Educators in Malaysian English as a Second Language (ESL) instructional settings frequently encounter difficulties when attempting to effectively engage students and cultivate an engaging environment for vocabulary acquisition. The findings of this study can provide practical guidance to educators regarding the effective integration of game-based learning platforms, thereby enhancing the engagement and learner-centeredness of their teaching practises.

The findings of this study can provide valuable insights for educational policymakers and administrators who are contemplating the incorporation of technology into the curriculum. The presence of empirical support for the beneficial effects of Blooket on vocabulary acquisition has the potential to shape decision-making processes regarding the allocation of resources

towards integrating similar technological tools within English as a Second Language (ESL) educational settings.

Facilitating student engagement in the educational process and offering avenues for active involvement can enhance their sense of empowerment in the process of acquiring language skills. By comprehending the advantages associated with the utilisation of technological tools such as Blooket, students may potentially experience heightened levels of motivation and enthusiasm towards the acquisition of English vocabulary.

1.6 Definition of Key Term

1. Vocabulary- English vocabulary refers to the collection of words and phrases that are employed to articulate ideas and comprehend the statements of others in a non-native language (Shermatov, 2020).
2. Blooket- An educational platform that incorporates gamification, enabling teachers to facilitate interactive learning experiences by creating question sets for students to engage with using their personal devices (Thu & Dan, 2023).
3. Gamification- The utilisation of conventional components found in game playing, such as point scoring, competitive interaction, and established rules, in many domains of activity, often employed as a strategy in online marketing to stimulate user involvement with a particular product or service (Da Silva Hounsell et al., 2019).
4. Technology Acceptance Model (TAM)- A widely recognized and established theoretical framework that assesses the acceptance and usage of technology by individuals (Feng et al., 2020).

1.7 Scope and Limitation of the Study

The research aims to assess the efficacy of integrating Blooket, a gamified educational platform, to enhance vocabulary acquisition in English as a Second Language (ESL) classes at

Sekolah Menengah Jenis Kebangsaan San Min in Perak, Malaysia. The study seeks to offer insights into the comparison results between technology-assisted vocabulary acquisition and conventional techniques. The research utilizes a mixed-methods approach, combining quantitative measurements of vocabulary competency with qualitative data from interviews with students and teachers. This technique provides a thorough knowledge of the impact of the intervention within the unique educational context.

The study's findings may be subject to various constraints that could affect their interpretation and generalizability. The research is limited in scope to a particular educational institution, which restricts the generalizability of the findings to other ESL settings. Furthermore, the study's timeframe, which spans across a six-week intervention period, does not adequately capture the long-term impact or lasting nature of vocabulary acquisition outcomes. Furthermore, discrepancies in teacher competence with technology and availability of classroom resources may lead to inconsistencies in the faithful execution of the program across different classrooms, which could potentially impact the reliability of the outcomes. Furthermore, the study's external validity may be limited to cultural or geographical settings other than Malaysia due to the influence of cultural and contextual elements unique to the Malaysian educational scene on student and teacher answers.

Chapter 2: Literature Review

2.1 Introduction

The incorporation of technology in English as a Second Language (ESL) instruction has emerged as a central focus for improving learning outcomes. This literature study provides a thorough analysis of important subtopics concerning the integration of Blooket, a game-based learning platform, in ESL classes. The review covers the utilisation of technology in education, the importance of vocabulary learning, the viewpoints of ESL students towards technology usage, and the Technology Acceptance Model (TAM). This analysis seeks to provide context for the research objectives and examine the potential influence of Blooket on the vocabulary proficiency of ESL learners.

2.2 Use of Technology

In recent years, there has been a noticeable development in the application of technology in education, with a growing focus on incorporating digital technologies to improve the learning process (Larson & Sung, 2019). According to Wang (2021), the advanced information technology has offered an effective technique for enhancing the management of basic education groups. However, there is a significant lack of study on the use of information technology to optimise the governance of basic education groups. The incorporation of technological applications in education has the potential to greatly enhance the English language proficiency of EFL and ESL learners, but the process of integrating these applications into classrooms may pose some difficulties (Kawinkoonlasate, 2019). According to Hung and Ha (2021), computer-based adaptive testing systems in Vietnam offer more precise and efficient student evaluation outcomes in comparison to conventional approaches. Within the field of English as a Second Language (ESL) instruction, educators have examined many electronic platforms to actively involve students and enhance their language competence. Emerging technologies, such as Google Classroom, Jamboard, and Zoom, are essential for

improving the student-centered and successful teaching and learning process in education (Patil, 2022). The "Rain Classroom" technology integrates PPT multimedia education technology, MOOC Internet resources, and mobile phone Wechat to facilitate classroom reform and foster self-learning, collaborative learning, and knowledge application (Luo & Yu, 2020). According to Ahmed (2021), online educational tools such as Google Classroom and ICA have significantly transformed the pedagogy of teaching and learning, leading to improved comprehension and involvement among students and teachers.

Blooket is a highly effective educational tool for enhancing English vocabulary. Students find it both engaging and fun, although there are a few minor enhancements that could further optimise its use (Thu & Dan, 2023). According to Pham and Ly (2023), Blooket is an educational tool that gamifies the learning process, offering students an effective means to review course material, strengthen their understanding of learning goals, and enhance their academic performance. Specifically, Blooket has proven to be successful in language instruction. However, the effectiveness of using Blooket for teaching grammar has not been extensively researched. According to Mohd et al. (2023), Blooket is an educational platform that employs game-based learning, enabling teachers to generate educational games for dissemination among their students. It also serves as an innovative online tool for language learning, providing educators with the means to create formative assessments in the form of quizzes, discussions, and surveys. One possible approach to facilitating student engagement and learning is through the utilisation of live games, which can be hosted and accessed by students through a generated identification code (Mohd et al., 2023). Blooket represents an amalgamation of various educational platforms, including Quizlet, Kahoot, Quizizz, Wordwall, and Liveworksheets. Blooket offers teachers the convenience of creating a series of questions to facilitate engagement in various online game modes, consisting of 13 different modes (Thu & Dan, 2023). These modes can be played collectively with the entire class or individually as

assigned exercises (Thu & Dan, 2023). The game modes range from traditional options to more challenging ones, such as Gold Quest and Fishing Frenzy, which involve risk-taking (Thu & Dan, 2023).

Within the scope of my study objectives, it is essential to investigate the efficiency of incorporating Blooket as opposed to conventional teaching approaches. This analysis is necessary for comprehending the possible advantages and disadvantages of this technology. Nevertheless, it is crucial to take into account any potential challenges and constraints linked to the use of technology in ESL courses. It is important to carefully evaluate factors such as the availability of technology, the skill level of teachers in using digital tools, and the possibility for distractions caused by gamified features. Analyse these factors in relation to conventional approaches to gain a thorough comprehension of the feasibility and durability of Blooket as an educational instrument within the specific setting of Sekolah Menengah Jenis Kebangsaan San Min, Perak. This rigorous comparison will provide useful insights to the current literature on technology-assisted language acquisition and inform future efforts in ESL education.

2.3 Importance of Acquire Vocabulary

Vocabulary acquisition is crucial in the process of learning and becoming proficient in a language, especially in the field of English as a Second Language (ESL) education (Lam, 2020). According to Fan and Liu (2022), the inclusion of English vocabulary in textbooks for primary and secondary schools is crucial for facilitating language acquisition and facilitating the flow of information. Vocabulary is the basis of language and plays a crucial role in language acquisition (Fan & Liu, 2022). Consequently, the significance of vocabulary instruction has been increasingly recognised both domestically and internationally. Acquiring vocabulary is a crucial aspect of instructing and attaining proficiency in English as a second or foreign language (Q. Wang, 2021). According to Uswahsadieda et al. (2020), vocabulary plays a crucial part in language as it may be used to all linguistic skills. Vocabulary is a crucial

component of language acquisition, as it greatly enhances learners' linguistic proficiency (Uswahsadieda et al., 2020). An extensive vocabulary is essential for proficient speaking, comprehensive reading, and general linguistic proficiency (Baissydyk et al., 2023). Extensive research has continuously demonstrated that possessing a wide range of words not only aids in the ability to communicate well and understand others, but also has a strong association with achieving success in academics (Ha, 2019). According to Zhang and Daller (2019), the significance of gaining vocabulary is heightened in ESL classrooms, as students endeavour to surmount linguistic obstacles and interact more profoundly with English language content. According to Rashid et al. (2022), acquiring and comprehending vocabulary is crucial for students and researchers to explore the terminology and significance of mastering the English language. Prior to acquiring any language proficiency, such as reading, writing, or listening, kids must initially acquire vocabulary (Suryani et al., 2022). Typical instructional techniques sometimes rely on repetitive memorization and isolated vocabulary exercises, prioritising the memory of word lists without necessarily promoting a profound comprehension of word usage and context (Gouda & D'Mello, 2019).

Within the framework of my research objectives and questions, the investigation of language acquisition has significant importance. Through evaluating the efficiency of Blooket as an instructional tool for improving vocabulary skills, I am essentially assessing its usefulness in meeting the important requirement of a strong English vocabulary for ESL learners. Traditional methods of vocabulary building may lack the dynamic and engaging components that a gamified platform like Blooket may provide. Examining the effectiveness of Blooket in enhancing comprehension and retention of vocabulary, as compared to conventional ways, can provide insights into its ability to overcome the shortcomings of previous approaches.

2.4 ESL Perspectives on Using Technology

Studying the viewpoints of ESL students about the utilisation of technology is crucial for comprehending the intricacies of their educational setting and preferences (Pragasam & Sulaiman, 2023). ESL educators in Pakistan maintain optimistic viewpoints regarding the utilisation of Computer-Assisted Language Learning (CALL) in their English teaching. They perceive it as a helpful instrument that promotes language acquisition, enhances motivation, and facilitates skill development (Talpur et al., 2021). ICT self-efficacy, favourable conditions, interest, and a growth mindset are all factors that have a positive influence on the intention of primary school English as a second language instructors to continue using ICT in their classrooms (Bai et al., 2019). Technology integration has become more common in today's education system, and English as a Second Language (ESL) learners, like their classmates, are adapting to a society that relies heavily on digital technology (Irving-Bell, 2020). According to Thu and Dan (2023), the viewpoints of ESL students regarding the utilisation of technology in language acquisition might offer valuable perspectives on the efficacy and reception of novel tools such as Blooket. According to Lesagia and Ciptaningrum (2020), it is crucial to analyse how ESL learners view the incorporation of technology in their language education due to the potential mismatch between traditional teaching methods and the technological expectations and preferences of modern pupils.

The research aims, including the examination of ESL students' viewpoints on utilising Blooket for vocabulary acquisition, strongly correspond to this subtopic. Blooket is a digital platform for learning that deviates from traditional approaches by incorporating interactive and engaging elements into language learning. An examination of the opinions of ESL students about the utilisation of Blooket in contrast to their outlook on conventional teaching approaches can unveil intricate attitudes towards technology within the educational setting. This literature review does not include the potential obstacles or benefits related to the incorporation of technology. Consequently, my research attempts to provide a comprehensive comprehension

of how ESL students at Sekolah Menengah Jenis Kebangsaan San Min, Perak, perceive and participate in language learning facilitated by technology.

2.5 Theoretical Framework

Theoretical frameworks offer a systematic perspective for researchers to analyse and make sense of circumstances. The Technology Acceptance Model (TAM) has become a significant theoretical framework in the field of technology acceptance and integration in educational settings. The Technology Acceptance Model (TAM), proposed by Davis (1989), seeks to elucidate the factors that influence the acceptance and utilisation of computers. According to the concept, the perception of usefulness (PU) and the perception of ease of use (PEOU) are important aspects that affect an individual's inclination to utilise technology. The Technology Acceptance Model (TAM) accurately predicts the acceptance and utilisation of technology by preschool instructors (Rad et al., 2022). This assists educational decision-makers in developing interventions to enhance the use of technology in early childhood education and care. The Technology Acceptance Model (TAM) accurately predicts users' propensity to utilize information technology in education, employing perceived ease of use and usefulness as fundamental components (Zaineldeen et al., 2020). According to Granić and Marangunić (2019), the Technology acceptability Model (TAM) is a reliable framework for evaluating various learning technologies in educational settings, where the perceived simplicity of use and utility are crucial elements influencing the acceptability of technology-based learning. The Technology Acceptance Model (TAM) is a reliable model for elucidating instructors' inclinations to utilize technology, accounting for 39.2% of the variability seen in 45 research (Scherer & Teo, 2019).

Regarding my research on the efficiency of Blooket in ESL classes, the Technology Acceptance Model (TAM) provides a systematic framework for comprehending the fundamental aspects that could impact students' willingness to adopt and actively participate in

this game-based educational platform. Integrating the TAM framework can enhance my study objectives, specifically the evaluation of ESL students' viewpoints about the utilization of Blooket for vocabulary acquisition. By assessing students' subjective opinions regarding the utility and user-friendliness of Blooket, I can obtain valuable insights into the elements that may either encourage or hinder the integration of this technology in the ESL classroom. Analyzing the results in relation to the TAM constructs can offer a theoretical framework for comprehending the patterns of technology acceptance among ESL learners at Sekolah Menengah Jenis Kebangsaan San Min, Perak. This critical analysis can provide insights into effective techniques for maximizing the incorporation of Blooket or comparable platforms in ESL instruction, in accordance with the principles of Technology Acceptance Model (TAM) to promote acceptance and utilization of technology.

2.6 Conclusion

The literature review has emphasised the changing nature of ESL instruction, particularly the use of technology and new resources such as Blooket in improving vocabulary acquisition. The viewpoints of ESL students and the use of the Technology Acceptance Model (TAM) offer a detailed comprehension of how technology is embraced in the classroom. Together, these subtopics enhance the theoretical basis for studying the effectiveness of Blooket in Sekolah Menengah Jenis Kebangsaan San Min, Perak, and pave the way for future research on language acquisition through technology.

Chapter 3: Methodology

3.1 Research Design

The present study utilises a mixed-methods research design, integrating both experimental methodology and qualitative interviews. The combination of these two methodologies facilitates a thorough examination of the effectiveness of Blooket as a gamified educational platform in English as a Second Language (ESL) instructional settings, encompassing both quantitative and qualitative viewpoints.

3.2 Theoretical Framework

The research is guided by the Technology Acceptance Model (TAM) proposed by Davis (1989). The Technology Acceptance Model (TAM) proposes that the perceived ease of use and perceived usefulness of a technology have a substantial impact on users' intentions to adopt and utilise it. This study employs the Technology Acceptance Model (TAM) as a theoretical framework to examine the various factors that impact the adoption of Blooket as a technological tool within English as a Second Language (ESL) classrooms.

3.3 Experimental Methodology

3.3.1 Participants and Sampling

The study would involve the students currently enrolled in English as a Second Language (ESL) courses at Sekolah Menengah Jenis Kebangsaan San Min in Perak, Malaysia. The participants will be chosen from the Form 3 classes. Two classes will be chosen, with one class designated as the experimental group and the other class designated as the control group. The inclusion criteria will encompass students who possess comparable levels of English ability and share a similar background. Exclusion criteria may pertain to pupils who have previously been exposed to particular vocabulary learning systems.

In order to assure the study's validity, the classes will be assigned randomly to either the experimental group, which will endure the technology method, or the control group, which will undergo the traditional approach.

One ESL class will be assigned as the experimental group. The experimental group will utilise the Blooket platform for technology-enhanced vocabulary learning. The intervention will last for a period of 6 weeks, with a weekly allocation of one hour specifically designated for technology-assisted learning.

A second ESL class, with similar grade level and English skill, will be designated as the control group. The control group participants will receive conventional vocabulary acquisition techniques without the utilisation of technology. The control group sessions will have the same duration as the experimental group, consisting of one hour per week for a total of 6 weeks.

Before the study begins, we will get informed consent from both students and their parents or guardians. The confidentiality of participants' identities and personal information will be maintained during the duration of the study. Engagement in the research will be completely optional, and individuals have the freedom to discontinue their involvement at any point without facing any repercussions.

This sampling methodology guarantees that the experimental and control groups are comparable from the beginning, so enhancing the internal validity of the study. Random assignment reduces potential biases in the composition of groups, enabling more precise evaluations of the effects of technology-assisted vocabulary learning on ESL students.

3.3.2 Data Collection

The data collection for this experimental methodology involves a comprehensive approach to thoroughly evaluate the effects of technology-assisted vocabulary learning in ESL

classrooms. At the beginning, a pre-intervention assessment will be given to all participants in both the experimental group and control group. The purpose of this standardised vocabulary test is to assess the initial competency levels of pupils, thereby establishing a baseline equivalence among the groups. Subsequently, a vital technique entails the random allocation of classes to either the experimental or control group, employing a random assignment method to minimise potential biases.

Following that, the intervention phase will begin, during which the experimental group will participate in vocabulary sessions aided by technology. They will particularly use the selected platform which is Blooket for one hour per week for a duration of six weeks. Conversely, the controlled group will persist with conventional techniques for acquiring vocabulary within the identical time period.

The post-intervention assessments will employ the same standardised vocabulary exam to evaluate changes in proficiency levels and assess the efficacy of the therapies. The post-test evaluation entails analysing performance data and use statistical methods to ascertain any notable disparities in vocabulary proficiency between the two groups.

The following phase of data analysis will entail doing statistical analyses on the assessment scores before and after the intervention in order to measure the extent of changes in language proficiency.

3.3.3 Data Analysis

The quantitative data analysis for this experimental investigation entails a methodical examination of the assessment scores before and after the intervention, obtained from both the experimental and control groups. Descriptive statistics, such as means, standard deviations, and ranges, will be computed to provide a thorough summary of the starting vocabulary proficiency and the degree of progress in each group. These metrics will be crucial in comprehending the

mean and dispersion of the data. The presentation of findings will be enhanced by incorporating graphical representations of quantitative outcomes, such as charts or graphs, which will improve clarity and visually emphasise the results. This rigorous quantitative data analysis methodology seeks to provide accurate insights into the effectiveness of technology-supported vocabulary learning in ESL classrooms, serving as a basis for the broader findings derived from the study.

3.4 Interview Methodology

3.4.1 Participants and Sampling

The qualitative interview phase of this study will utilise a purposive sampling technique to recruit individuals from both the experimental and control groups, so assuring a wide range of viewpoints and insights. Two students will be picked from the experimental group, where technology-assisted vocabulary learning is being used, and two students will be chosen from the control group, which is using traditional vocabulary learning methods.

Two students from the experimental group will be intentionally chosen to take part in qualitative interviews. This evaluation will take into account variables such as scholastic achievement, active participation in the technology-enhanced educational platform known as Blooket, and general receptiveness to the intervention.

Likewise, two students from the control group will be deliberately selected for qualitative interviews. The control group participants will be selected based on their proficiency in traditional vocabulary learning methods, active participation in classroom activities, and overall receptiveness to conventional teaching methodologies.

The purposeful sampling strategy enables the deliberate selection of participants who can offer comprehensive and significant insights into their experiences with various vocabulary acquisition methodologies. The study seeks to gather a diverse range of experiences, attitudes,

and obstacles related to technology-assisted and traditional vocabulary learning by conducting interviews with students from both the experimental and control groups. This sample method improves the depth and variety of the qualitative data, leading to a more thorough comprehension of the effects of the interventions on ESL students in the Malaysian setting.

3.4.2 Data Collection

The initial stage of the qualitative data gathering process entails the creation of a semi-structured interview protocol. The protocol will comprise of open-ended inquiries formulated to get comprehensive responses from participants. The inquiry will consist of questions designed to investigate students' encounters, perspectives, difficulties, and achievements in vocabulary acquisition, with an emphasis on contrasting the use of technology in learning with conventional approaches.

Before conducting interviews, we will get explicit and informed consent from each participant. Participants will be provided with comprehensive information regarding the study's objectives, the voluntary aspect of their involvement, and the guarantee of confidentiality.

Each participant will undergo individual semi-structured interviews in a confidential and comfortable environment. The interviews will be recorded in audio format, with the explicit permission of the participants, in order to capture comprehensive and detailed responses. The interview sessions will investigate students' experiences, attitudes, and difficulties associated with either the technology-assisted or traditional ways of vocabulary learning.

The interview tapes will be transcribed word for word to ensure comprehensive analysis. The transcripts will undergo anonymization to guarantee confidentiality, and all identifiable data will be eliminated.

3.4.3 Data Analysis

In order to analyse the data for this qualitative study, the interview transcripts are carefully reviewed and categorised into three main categories: experiences, attitudes, and challenges. The objective of this theme analysis is to identify trends, revelations, and complex interpretations of the participants' answers.

The analysis starts out by concentrating on the language acquisition experiences of the participants. By closely examining their stories, recurring themes about interesting exercises, moments that stick in your memory, and the general effects of vocabulary acquisition strategies become apparent. This part of the study makes it possible to pinpoint particular elements that have affected students' experiences in both the experimental and control groups in a good or negative way.

The analysis then explores participant perceptions regarding traditional and technology-assisted vocabulary acquisition. This section offers a better insight of the participants' feelings, preferences, and general attitudes by examining the emotional and psychological components of their involvement with each approach. The study provides insights that help paint a complete picture of the affective aspects connected to each learning strategy.

The analysis's last section focuses on the difficulties that members of the two groups encountered. This section highlights typical roadblocks or challenges that arise when learning vocabulary, which helps to illuminate any potential drawbacks with each approach. Comprehending these obstacles is important in order to formulate suggestions and modifications that may augment the effectiveness of both technology-enabled and conventional vocabulary acquisition methodologies.

In order to make sure that new themes are methodically coded and categorised during the research, a reflexive and iterative methodology is utilised. The validity and reliability of the results are increased when data from both experimental and control groups are triangulated. The analysis seeks to offer a comprehensive understanding of the intricate relationship between educational practices and student experiences in ESL classrooms by fusing findings from these many points of view. The interpretations that emerge will have significant ramifications for educators and legislators who aim to enhance language acquisition techniques in comparable educational environments.

3.5 Validity and Reliability

Validity and Reliability of the Experimental Method:

By assigning groups randomly, the experimental design minimises confounding variables and guarantees strong internal validity. The comparison of baseline and post-intervention vocabulary proficiency made possible by the pre-test and post-test methodology improves internal validity. In order to address external validity, individuals were chosen who are typical of Malaysian ESL students. The accuracy of findings about the influence of technology-assisted vocabulary learning is ensured by the reliability of quantitative results, which are bolstered by standard operating processes and well-established assessment instruments.

Validity and Reliability of the Qualitative Interview:

Validity is given top priority in qualitative interviews by carefully crafting open-ended questions that are in line with research goals and ESL learning environments. By extending the applicability of qualitative findings to analogous educational environments, purposeful sampling improves external validity. Reliability is ensured by a semi-structured interview technique, which keeps the essential questions consistent. Inter-coder dependability is

enhanced by many researchers, which promotes agreement in topic identification. The dependability of qualitative insights into students' experiences with both traditional and technology-assisted vocabulary acquisition is further enhanced by member-checking and debriefing sessions.

Chapter 4: Finding and Analysis

4.1 Introduction

This chapter provides an analysis of the data acquired throughout the study. Its main objective is to address the research questions on the comparative efficiency of Blooket-based training compared to traditional teaching approaches in improving vocabulary proficiency among ESL students. The chapter is organised in a manner that aims to offer a thorough comprehension of the outcomes derived from both quantitative and qualitative data. The chapter begins by presenting the data collection methods and the steps used to guarantee the analysis is accurate and reliable. Subsequently, the chapter explores the quantitative analysis, whereby the pre-test and post-test scores of both the control and experimental groups are compared to ascertain any notable disparities in vocabulary learning. In addition, the chapter briefly discusses the qualitative data gathered from student interviews, which offer additional insights into the experiences and attitudes of students regarding the integration of Blooket as a game-based learning tool in ESL instruction. This evaluation is essential for gaining a holistic understanding of the impact and might potentially provide valuable insights for teaching practices and educational strategies in comparable contexts.

4.2 Participant Demographic

The participants for the quantitative data collection were chosen from two Form 3 classes at Sekolah Menengah Jenis Kebangsaan San Min in Perak. The control group had 30 students, consisting of 16 male and 14 female students, mostly of Chinese ethnicity (28 Chinese, one(1) Malay, and one(1) Indian student).

| Gender | Number | Percentage (%) |
|--------|--------|----------------|
| Male | 16 | 53 |

| | | |
|---------------|----|----|
| Female | 14 | 47 |
|---------------|----|----|

Table 4.1 Number and percentage of gender of control group

| Ethnic | Number | Percentage (%) |
|----------------|---------------|-----------------------|
| Chinese | 28 | 94 |
| Malay | 1 | 3 |
| India | 1 | 3 |

Table 4.2 Number and percentage of ethnic of control group

The experimental group consisted of 18 students, including 12 boys and six(6) girls. The majority of the students in the group were Chinese, with 17 being Chinese and one(1) being Indian. For the qualitative interviews, a pair of students was chosen from each group, ensuring a diverse representation in terms of gender, academic performance, and involvement with the learning approaches.

| Gender | Number | Percentage (%) |
|---------------|---------------|-----------------------|
| Male | 12 | 67 |
| Female | 6 | 33 |

Table 4.3 Number and percentage of gender of experimental group

| Ethnic | Number | Percentage (%) |
|----------------|---------------|-----------------------|
| Chinese | 17 | 94 |
| Malay | 0 | 0 |
| Indian | 1 | 6 |

Table 4.4 Number and percentage of ethnic of experimental group

4.3 Analysis of Research Question 1

Research Question 1 aims to ascertain the relative efficacy of Blooket-based instruction compared to traditional teaching methods in enhancing vocabulary proficiency among ESL students. The analysis centres on the pre-test and post-test outcomes of both the experimental group, which utilised Blooket, and the control group, which adhered to conventional methods. By comparing the results of these two groups, this analysis endeavours to determine which instructional approach yields superior enhancement in vocabulary skills.

4.3.1 Analysis of Control Group

4.3.1.1 Analysis of Pre-Test

| Student | Pre-test Score |
|----------------|-----------------------|
| SC1 | 15 |
| SC2 | 17 |
| SC3 | 13 |
| SC4 | 12 |
| SC5 | 16 |
| SC6 | 16 |
| SC7 | 15 |
| SC8 | 17 |
| SC9 | 14 |
| SC10 | 13 |
| SC11 | 13 |
| SC12 | 18 |
| SC13 | 15 |
| SC14 | 15 |

| | |
|------|----|
| SC15 | 13 |
| SC16 | 14 |
| SC17 | 13 |
| SC18 | 16 |
| SC19 | 16 |
| SC20 | 13 |
| SC21 | 18 |
| SC22 | 20 |
| SC23 | 13 |
| SC24 | 10 |
| SC25 | 12 |
| SC26 | 11 |
| SC27 | 12 |
| SC28 | 13 |
| SC29 | 13 |
| SC30 | 14 |

Table 4.5 Pre-test score of control group

The pre-test was given to the control group, which comprised 30 students, in order to assess their initial level of vocabulary competency. The pre-test scores varied between 10 and 20, with a maximum achievable score of 30. The pre-test yielded a total score of 430, and the mean score was calculated as follows:

$$\text{Mean Pre-test Score} = \frac{\text{Total Pre-test Scores}}{\text{Number of Students}} = \frac{430}{30} = 14.33$$

The mean score of 14.33 serves as the initial measure of vocabulary proficiency for the control group prior to any educational intervention, establishing a baseline.

4.3.1.2 Analysis of Post-Test

| Student | Post-test Score |
|----------------|------------------------|
| SC1 | 17 |
| SC2 | 21 |
| SC3 | 16 |
| SC4 | 13 |
| SC5 | 15 |
| SC6 | 18 |
| SC7 | 15 |
| SC8 | 19 |
| SC9 | 19 |
| SC10 | 16 |
| SC11 | 15 |
| SC12 | 18 |
| SC13 | 17 |
| SC14 | 18 |
| SC15 | 16 |
| SC16 | 17 |
| SC17 | 14 |
| SC18 | 17 |
| SC19 | 18 |
| SC20 | 16 |
| SC21 | 21 |
| SC22 | 25 |

| | |
|------|----|
| SC23 | 16 |
| SC24 | 15 |
| SC25 | 15 |
| SC26 | 15 |
| SC27 | 16 |
| SC28 | 16 |
| SC29 | 18 |
| SC30 | 18 |

Table 4.6 Post-test score of control group

Following a duration of six weeks, the same students underwent an assessment after being taught using conventional techniques of vocabulary instruction. The scores obtained after the test varied between 13 and 25, out of a maximum of 30. The post-test yielded a total score of 510, and the mean score was computed as:

$$\text{Mean Post-test Score} = \frac{\text{Total Post-test Scores}}{\text{Number of Students}} = \frac{510}{30} = 17$$

The average post-test score of 17 indicates an enhancement in vocabulary proficiency resulting from the typical teaching methods employed with the control group.

4.3.1.3 Comparison of Pre-test and Post-test

A comparative analysis was undertaken to evaluate the influence of conventional teaching methods by comparing the scores obtained in the pre-test and post-test. The average pre-test score was 14.33, while the average post-test score climbed to 17. The disparity between the results obtained after the exam and the scores obtained before the test is:

$$\text{Differences} = \text{Mean Post-test Scores} - \text{Mean Pre-test Scores} = 17 - 14.33 = 2.67$$

The observed rise of 2.67 points indicates a notable enhancement in the students' vocabulary competency who were taught using traditional methods.

4.3.2 Analysis of Experimental Group

4.3.2.1 Analysis of Pre-test

| Student | Pre-Test Score |
|----------------|-----------------------|
| SE1 | 13 |
| SE2 | 15 |
| SE3 | 15 |
| SE4 | 12 |
| SE5 | 15 |
| SE6 | 14 |
| SE7 | 20 |
| SE8 | 18 |
| SE9 | 17 |
| SE10 | 17 |
| SE11 | 13 |
| SE12 | 14 |
| SE13 | 10 |
| SE14 | 12 |
| SE15 | 19 |
| SE16 | 20 |
| SE17 | 14 |
| SE18 | 12 |

Table 4.7 Pre-test score of experimental group

The pre-test was given to the experimental group, consisting of 18 students, to assess their initial vocabulary proficiency before the intervention with Blooket. The pre-test scores varied between 10 and 20 out of a maximum score of 30. The pre-test had a total score of 270, and the mean score for the pre-test was determined as follows:

$$\text{Mean Pre-test Score} = \frac{\text{Total Pre-test Scores}}{\text{Number of Students}} = \frac{270}{18} = 15$$

The mean score of 15 serves as a benchmark for assessing the students' vocabulary proficiency prior to their involvement with the Blooket platform. The test represents the pupils' initial level of understanding on the terminology being assessed.

4.3.2.2 Analysis of Post-test

| Student | Pre-Test Score |
|---------|----------------|
| SE1 | 25 |
| SE2 | 22 |
| SE3 | 22 |
| SE4 | 24 |
| SE5 | 21 |
| SE6 | 24 |
| SE7 | 27 |
| SE8 | 25 |
| SE9 | 25 |
| SE10 | 24 |
| SE11 | 25 |
| SE12 | 27 |
| SE13 | 23 |

| | |
|------|----|
| SE14 | 23 |
| SE15 | 24 |
| SE16 | 23 |
| SE17 | 28 |
| SE18 | 22 |

Table 4.8 Post-test score of experimental group

Following the utilisation of the Blooket platform for a period of six weeks, the identical students underwent a post-test. The post-test results varied between 22 and 28 out of a maximum of 30. The post-test yielded a total score of 434, and the mean score was calculated as:

$$\text{Mean Post-test Score} = \frac{\text{Total Post-test Scores}}{\text{Number of Students}} = \frac{434}{18} = 24.11$$

The average post-test score of 24.11 indicates a notable enhancement in vocabulary proficiency following the utilisation of the Blooket platform. The findings suggest that the use of technology in learning had a beneficial effect on the students' vocabulary proficiency.

4.3.2.3 Comparison of Pre-test and Post-test

In order to assess the efficacy of the Blooket platform, it is crucial to compare the scores obtained in the pre-test and post-test. The average pre-test score was 15, while the average post-test score increased to 24.11. The disparity between the scores obtained in the post-test and pre-test is:

$$\text{Differences} = \text{Mean Post-test Score} - \text{Mean Pre-test Score} = 24.11 - 15 = 9.11$$

The observed rise of 9.11 points in the average score indicates a significant enhancement in vocabulary proficiency among students who utilised Blooket.

4.3.3 Comparison of Experimental Group and Control Group

In order to assess the effectiveness of the Blooket platform in relation to standard teaching methods, a comparative analysis was conducted on the pre-test and post-test outcomes of both the experimental and control groups. This analysis offers valuable insights into the relative effectiveness of different methods in enhancing vocabulary proficiency among ESL students.

4.3.3.1 Pre-test Comparison

Both groups underwent a pre-test before the interventions in order to create a baseline for their vocabulary proficiency. For the experimental group, the average pre-test score was 15, with a cumulative score of 270. While for the control group, the average pre-test score was 14.33, with a cumulative score of 430. The preliminary test findings suggest that both groups began with a roughly comparable level of vocabulary proficiency, with the experimental group exhibiting a slightly higher average score than the control group.

4.3.3.2 Post-test Comparison

Following the various interventions, the experimental group used Blooket while the control group used traditional methods. Subsequently, both groups underwent the identical post-test to assess any alterations in vocabulary proficiency. For the experimental group, the average score after the test rose to 24.11, with a cumulative score of 434. For the control group, the average score after the test rose to 17, resulting in a cumulative score of 510.

The post-test findings indicate a notable enhancement in vocabulary proficiency in both groups. Nevertheless, the experimental group, which utilised the Blooket platform, exhibited a significantly greater improvement in their results.

4.3.3.3 Improvement Comparison

The primary measure for assessing the efficacy of the interventions is the disparity between the average scores before and after the interventions within each group. For the experimental group, the mean score increased by 9.11 points, going from 15 to 24.11. For the control group, the mean score increased by 2.67 points, going from 14.33 to 17. The comparison demonstrates that the experimental group, which employed Blooket, exhibited a significantly higher enhancement in vocabulary proficiency compared to the control group, which adhered to conventional teaching approaches. The disparity in progress between the two groups indicates that the Blooket platform was more efficacious in augmenting vocabulary acquisition among the pupils.

4.4 Analysis of Research Question 2

Research Question 2 explores the viewpoints of ESL students regarding the use of Blooket, a game-based learning platform, for the purpose of acquiring vocabulary. Gaining insight into students' perspectives is essential for assessing the tangible effects of this technology on their educational experience. The study focuses on the main topics that represent students' level of involvement, difficulties faced, and perceived efficacy of Blooket in improving their language proficiency. This chapter provides an overview of the results and thematic analysis of the interviews carried out with students from two groups: the experimental group, who used the Blooket platform for vocabulary acquisition, and the control group, who adhered to conventional learning approaches. The analysis reveals three recurring themes: Engagement and Motivation, Challenges with Technology and Traditional Methods, and Effectiveness of Learning Outcomes. The pupils in the experimental group are known as SE4, SE12, while the control group is labelled as SC5, SC8.

4.4.1 Engagement and Motivation

This theme explores the impact of utilising Blooket, a gamified educational platform, on students' level of engagement and motivation in vocabulary acquisition, particularly in comparison to conventional instructional approaches. The research indicates that conventional approaches frequently resulted in students feeling uninterested and lacking motivation, whereas the interactive and entertaining aspect of Blooket converted vocabulary acquisition into a pleasurable and stimulating task.

4.4.1.1 Engagement through Technology (Blooket)

The implementation of Blooket in the classroom undeniably enhanced student involvement in the experimental group. SE4, a student with little competency, characterised his previous vocabulary acquisition experience as "boring" and acknowledged that he frequently had difficulty maintaining focus. Nevertheless, Blooket presented a novel dynamic that piqued his curiosity. *"With Blooket, it's more fun and interesting,"* he said. *"The games make it feel like I'm not really studying, but I'm still learning new words."* The statement demonstrates how the incorporation of technology in the learning process facilitated a change in his/her mindset from lack of interest to active participation, therefore converting a previously repetitive activity into a pleasurable intellectual endeavour.

In the same vein, SE12, who is also part of the experimental group, conveyed his/her recently acquired passion for acquiring vocabulary. He/she acknowledged that prior to utilising Blooket, maintaining word recall was difficult, but with the advent of the platform, his/her experience underwent a substantial transformation. He/she commented, *"I actually look forward to our vocabulary lessons now."* The interactive aspect of Blooket, characterised by its dynamic games such as 'Café,' generated a feeling of enthusiasm and immediacy, leading her to actively participate in a more profound exploration of the vocabulary.

4.4.1.2 Challenges in Maintaining Engagement (Conventional Methods)

By contrast, the students in the control group, who were exposed to conventional vocabulary acquisition techniques, consistently struggled with engagement. SC5, a student with average competency, remarked that the process of acquiring vocabulary was frequently "repetitive and boring." He/she acknowledged that although certain conventional exercises, such as vocabulary quizzes, effectively enhanced his word retention, the general methodology was repetitive. *"We mostly do a lot of writing and memorization, which gets a bit dull after a while,"* he/she clarified, emphasising a dearth of enthusiasm or drive in contrast to the gamified method employed in the experimental group.

Furthermore, SC8 encountered difficulties in maintaining active participation in conventional lessons. *"The traditional methods are just so repetitive and boring"* he/she said. *It's hard to keep myself interested and engaged.* The absence of opportunities for active participation in the classroom appeared to impede her excitement, which was in stark contrast to the favourable experiences of his/her classmates in the experimental group.

4.4.2 Challenges with Technology and Conventional Methods

This theme delves into the diverse obstacles that students faced when utilising both technology-enhanced vocabulary learning with Blooket and conventional vocabulary learning methods. The data indicates that while Blooket had a notable positive impact on student engagement and motivation, it also presented students with various technical difficulties. Similarly, conventional approaches, although more familiar, were frequently regarded as repetitive and less efficient in retaining vocabulary over a long period of time.

4.4.2.1 Technology-Related Challenges

While the implementation of Blooket drastically increased student involvement, students in the experimental group also faced certain difficulties associated with technology.

SE4 noted, *"Sometimes, the internet connection can be slow or the game might freeze, which is really annoying."* Inadequate technical connectivity hindered the learning process, therefore reducing the efficacy of the game-based platform. In addition, SE4 first encountered challenges in comprehending the navigation of certain games, but this factor improved with repeated experience. He/she conveyed, *"It was a bit confusing to understand how to play the games at first, but I got used to it after a while."*

Likewise, SE12 voiced apprehension over the tempo of the matches. *"Sometimes, it's hard to keep up with the pace of the games"* he/she admitted, recognising that although the dynamic character of Blooket inspired his/her, it could also be daunting. Furthermore, he/she emphasised the importance of having more opportunities outside of class to engage in practice with Blooket. He/she expressed a desire for additional time to familiarise himself/herself with the new vocabulary. Both students acknowledged the technical difficulties but also recognised the beneficial influence that Blooket had on their educational journey.

4.4.2.2 Challenges with Traditional Methods

The main difficulties faced by students in the control group were mostly related to the constraints of conventional approaches in sustaining interest and facilitating more profound learning. *"The biggest challenge is staying focused,"* SC5 noted. Engaging in repetitive tasks or redoing the same exercises might lead to a rapid decline in interest. His/her observation highlights the inherent passivity of conventional learning, which has minimal impact on sustaining long-term interest or active engagement.

In agreement with this viewpoint, SC8 characterised conventional approaches as insufficient for enhancing language retention beyond examinations. *"We memorize them for tests, but I often forget them afterwards because we don't use them in real situations,"* he/she clarified. The previously mentioned observation highlights the constraints of rote

memorisation, which may facilitate exam success but does not foster profound comprehension and enduring retention of language. SC8 further noted that conventional approaches, particularly those incorporating hypothetical vocabulary, did not consistently offer adequate elucidation or practical implementation, therefore impeding her complete understanding of the definitions of some terms.

4.4.3 Effectiveness of Learning Outcomes

This study investigates the efficacy of Blooket versus traditional approaches in improving vocabulary retention and comprehension among ESL students. The research indicates that although both approaches have their advantages, Blooket's interactive and repetitive characteristics had a role in enhancing vocabulary retention and comprehension. Conversely, conventional approaches proved to be most efficient when they incorporated active utilisation of vocabulary, such as through projects or quizzes, but were less effective in fostering long-term retention when relying exclusively on memorisation.

4.4.3.1 Improvement through Technology-Assisted Learning

Both SE4 and SE12 students in the experimental group indicated significant enhancements in their vocabulary retention and comprehension as a result of using Blooket. SE4 recounted a particular occasion when he ultimately realised the distinction between often conflated terms such as "affect" and "effect" after repeated exposure in a game. *"I finally understood the difference,"* he/she stated, underlining how the repetition and context offered by the game facilitated the consolidation of his/her knowledge.

SE12 recounted a comparable encounter with the term "benevolent," which he/she encountered on multiple occasions in Blooket's 'Battle Royale' game. By the conclusion of the exercise, he/she had not only acquired knowledge of the word but also developed assurance in its accurate usage. *"Before, I would have had to look it up multiple times to remember, but now*

I am able to recall it without any difficulty," he/she reflected. These remarks indicate that Blooket was very successful in improving the long-term memory of vocabulary, which is a crucial aspect of language learning.

4.4.3.2 Retention Challenges in Traditional Methods

Conversely, students in the control group had difficulties in retaining information, since the repetitious type of conventional approaches did not facilitate long-term learning. SC5 acknowledged that although conventional instruction facilitated his/her study and short-term retention of words, *"I often forget them afterward,"* he/she frequently struggled to recall them later on. The lack of available interactive and practical applications for the lexicon appeared to restrict its long-term influence.

Concerns regarding retention were also expressed by SC8. He/she clarified, *"I find it challenging to remember the words after the test because we don't use them enough in real situations"* The experiences of both students indicate that although conventional approaches may contribute to short-term memorisation, they may not necessarily result in the profound comprehension or long-term retention attained by more dynamic and captivating platforms such as Blooket.

4.4.4 Conclusion

An examination of students' viewpoints on Blooket uncovers both the benefits and difficulties associated with its use as a tool for vocabulary acquisition. The themes of Engagement and Motivation underscore the favourable influence of Blooket on student interest and passion. Nevertheless, the theme of Challenges with Technology and Traditional Methods highlights certain obstacles, specifically pertaining to technological concerns and the constraints of conventional ways. The theme of Learning Outcomes Effectiveness demonstrates how Blooket enhances vocabulary retention and comprehension. These findings

give vital insights for educators seeking to incorporate technology into their teaching methods. They demonstrate that although Blooket has notable advantages, addressing technical and pedagogical obstacles is crucial for optimising its efficacy.

Chapter 5: Discussion and Conclusion

5.1 Introduction

This chapter explores the correlation of the findings of the present study with the global trends in ESL education that increasingly support the adoption of interactive and gamified learning applications. This section is dedicated to the highlighting of the importance and contributions of the findings of this study within the broad field of educational practices and innovation by way of analyzing the associations between them. The discussion falls into many subtopics, each focusing on a different aspect of how Blooket's game-based learning adheres to modern educational innovations and increases student engagement, motivation, and instructional success.

5.2 Interpretation of Key Findings

This section shall analyze and interpret the main findings that are related to the research objectives. The paper is going to discuss an examination of the effectiveness of Blooket compared to typical teaching methods in enhancing students' vocabulary acquisition among ESL learners (Objective 1) and shall investigate students' perceptions of using Blooket for learning purposes (Objective 2). This section shall explore the causes of the observed results, weigh both favourable and unfavourable features of using Blooket, and connect these discoveries with wider educational ideas such as the Technology Acceptance Model, or TAM.

5.2.1 Objective 1: Effectiveness of Blooket vs. Conventional Methods

The results of this study have indicated that Blooket is more effective than conventional methods in bringing improvement to the vocabulary competence of ESL learners. The students in the experimental group, who used Blooket, demonstrated a gain in test scores in vocabulary significantly higher compared to the control group that employed the conventional rote memorization and repetitive exercises. Precisely, what this means is that the experimental

group gained, on average, 9.11 points in vocabulary, while the control group did so much more modestly and at a rate equal to 2.67 points.

5.2.1.1 Reason of Effectiveness of Blooket

Several reasons can be pinned up as to why Blooket is more efficient. First, Blooket's interactiveness makes learning more enjoyable. The site introduces playful learning with quizzes, challenges, and rewards, making learning from passivity an active activity and an enjoyable one. These findings by Thu and Dan confirm that students who used Blooket were mostly engaged in some way and somewhat interested in the acquisition of vocabulary. Among other things, this is because of interaction characteristics in Blooket and immediate feedback that it gives to users. Gamifying learning activities really encourages students to be more active participants, which improves cognitive engagement in higher ways and helps in wasting less time memorizing new terminologies.

In addition, Blooket offers immediate feedback, which is essential for reinforcement to improve the learning process. With this kind of feedback, learners are capable of seeing mistakes right away and making the proper adjustments immediately, thus improving learning and belief in self-capability with respect to language mastery. The competitive nature of Blooket—that the students accrue points or prizes for generating correct answers—promotes motivation and sustained engagement, hence driving learning outcomes. This confirms the study by López-Fernández et al. (2021) that showed that digital game-based learning tools had a significant positive effect on increasing student motivation rather than traditional educational methods.

These findings are thus in concert with global trends in ESL teaching methods that increasingly embrace interactive and game-based learning tools to enhance student engagement and motivation. The effectiveness of Blooket, as evidenced from this study, speaks volumes of

a growing recognition within the field that traditional teaching methods may not serve effectively in engaging learners, particularly in the process of language learning. Results showed that the experimental group, taught by Blooket, demonstrated significantly higher improvement in vocabulary competence when compared to the control group, which received instruction through conventional methodology.

Additional support from studies emphasizes that digital game-based learning methodologies do indeed improve not just student engagement but also academic achievement and, therefore, support the global trend for their adoption. Indeed, the very recent research by Xie and Huang (2022) has shown that the approach of digital game-based learning significantly influenced the grammar skills of secondary school students in China. Again, this proves that such tools can serve effectively for the betterment of various elements of language acquisition.

5.2.1.2 Reasons for the Limited Effectiveness of Traditional Methods

On the other side of things, less effective in this experimental research were the traditional methods, such as rote memorization. Maybe this is due to the fact that most of the time, there will not be anything interactive in these approaches, which makes interactive tools more interesting to the students than them. Traditional methods rely mostly on repetitive exercise and memory techniques that can quickly lead to boredom and less motivation. Evidence shows that all of these techniques do not actively engage the individual students in the process of learning; hence, limiting their own role in promoting better long-term retention of vocabulary.

On the other hand, none of these traditional techniques can provide immediate feedback; hence leading to continuous commitment of redundant errors unconsciously by the students. Moreover, lack of immediate corrective feedback may reduce the rate of progress in

learning and minimize the general effectiveness of traditional methods of vocabulary instruction.

5.2.2 Objective 2: Students' Perspectives on Blooket

The results which concern the attitudes of the students toward using Blooket in vocabulary acquisition are mostly positive overall, with many illustrating that they liked the tool due to its interactive and helpful nature. A lot of them reported satisfaction with the interactivity of Blooket, like the game-based quizzes and the ability to compete with their peers, thereby feeling at ease without many stressful moments when learning. This response follows the general trend in gamification research; game-based learning props may be supported to have a potential effect on enhancing motivation and engagement since they might be more dynamic, interactive, as opposed to the traditional learning material that would be used.

5.2.2.1 Positive Aspects of Blooket from Students' Perspectives

Based on relevant comments from students, some features were distinguished as positive for Blooket. Students acclimated interface friendliness and easily accessible software, which allows correspondence with the principles of TAM. According to TAM, perceived ease of use and perceived usefulness are the major dimensions that importantly influence the acceptance of new technologies in educational contexts. The research revealed that students found Blooket easy to use and effective for learning vocabulary, thus it most probably contributed to the higher acceptability and perceived usefulness of Blooket. Also, the students reported that the competitive features in Blooket such as leaderboards and rewards, were the major characteristics increasing their motivation to participate in vocabulary activities. This view is supported by findings from Xie and Huang, 2022 that game-based tools are an efficient means of motivating students, considering that aspects of competition and reward are

integrated. This will enhance participation and lead to regular involvement in the activities as indicated by Xie and Huang, 2022.

The studies have shown that gamified learning technologies, such as Blooket, raise student motivation through changing the passive learning mode into an active and interactive process. A study recently conducted by Thu and Dan demonstrated that the incorporation of Blooket in teaching vocabulary in English increased students' participation level and interest in learning. On this basis, Thu and Dan reported the student preference lists regarding the interactive element of Blooket through competitive quizzes, for instance, "Immediate feedback after quizzes". All these features helped to keep them focused on the classes effectively and motivated them. This is in line with the results of the current study, as it is seen to show that Blooket's gamifying setting can create a positive and engaging environment for learning, which really is quite important for recognition and retention of the language.

5.2.2.2 Negative Aspect and Challenges of Using Blooket

Although the overall comments were favourable, some students did find difficulties in the use of Blooket. Some students had problems from a technological perspective: either they were having connectivity problems or were not as comfortable with the digital platform. Then, there were some students who preferred traditional methods because they had grown accustomed to them and because traditional methods were perceived by them as weighted with gravitas in comparison to learning. It means that though Blooket has some merits, not every learner is sure to like it, especially those at low proficiency in digital technologies.

5.2.3 Linking Findings to Educational Theories

Resulting in an association with the Technology Acceptance Model, or TAM, which describes reasons why participants responded to Blooket so well. According to the Technology Acceptance Model, or TAM, "the assessment of usefulness and the handling of the ease of use

are critical determinants of user acceptance." Davis 1989. The students' favorable responses regarding ease of use with Blooket and perceived benefits of the gamified learning approach are coherent with the Technology Acceptance Model, which purports that these two factors helped to improve the effectiveness of the tool within the classroom setting. In addition, support was lent to Self-Determination Theory, which maintains that autonomy, competence, and relatedness are the central elements paired with internal motivation. With this in mind, the interactivity and competition in Blooket probably tap into these very psychological needs, further increasing the hard-wired motivation to learn in students.

5.2.4 Broader Applications of Game-Based Learning Beyond ESL Education

However, gamification in education has been in development for more than language acquisition and has covered a great number of educational areas. One of the recently conducted studies by López-Fernández et al. (2021) has shown that GBL tools provide better results compared to traditional teaching methods in motivating students in computer science education. As López-Fernández et al. (2021) showed, students who have been exposed to instructional video game products produced by teachers exhibit higher motivation and greater preference for learning via game format, as opposed to students who are taught through more traditional means. This broader use of gamification would therefore suggest that game-based tools have a wide-reaching ability for enhancing educational performance in a variety of areas.

5.3 Theoretical Implication

The purpose of this section is to analyze the theoretical implications of the results obtained in the study, especially in relation to the Technology Acceptance Model. This section looks at how the study contributes to developing theoretical knowledge on technology adoption in educational settings with a view to emphasizing the wider implications of the research.

5.3.1 Contribution to the Technology Acceptance Model (TAM)

The results of this study provide substantial inputs to the Technology Acceptance Model, a widely recognized model for explaining technology adoption across a wide range of environments, hence including an educational system. According to the Technology Acceptance Model proposed by Davis (1989), the attitude of the users as far as the acceptance and use of any new technologies is concerned is dictated by two crucial factors perceived to be useful and perceived ease of use. In the light of this model, any technology will be adopted if people believe it is easy to use and useful to their objectives.

5.3.1.1 Perceived Ease of Use

These research findings confirm TAM, as it shows perceived ease of use is a critical factor in the acceptability of Blooket among ESL students. Many students have mentioned that Blooket is easily understandable and requires very little effort to discover and navigate, hence enhancing their positive perceptions regarding its utility in vocabulary acquisition. This aligns with the Technology Acceptance Model, which says a technology perceived to be user-friendly is more capable of being taken in by its users. The simplicity and ease of use in Blooket's design probably reduced the cognitive load associated with learning a new tool and thus allowed students of all levels of technological expertise to adopt it.

In addition, this study showed that the students who were initially apprehensive using a new digital tool quickly adapted to Blooket due to its ease of use and fascinating features it employed. The flexibility of this mechanism suggests that apparent ease-of-use not only encourages early adoption but allows for continued use of the tool in itself. Such findings have also been extended in related studies; one of them is the research undertaken by Xie and Huang in 2022, where the students chose the digital game-based learning tool because it had a friendly interface and responsive structure for heightened acceptance and engagement.

5.3.1.2 Perceived Usefulness

The study further proved the TAM model, as it is crystal clear from the evidences that perceived usefulness of Blooket has significantly influenced the students' acceptance of Blooket as a learning tool. Many students have found that Blooket is more effective than traditional methods when it comes to building their vocabulary. They attribute this to the platform's interactive and game-like features, which make learning more engaging. This perspective aligns with the Technology Acceptance Model (TAM) (Davis, 1989), which suggests that people are more likely to adopt technology if they believe it will improve their performance or help them achieve better outcomes.

The results showed that students viewed Blooket as a helpful tool that made studying more enjoyable and engaging, ultimately improving their vocabulary skills. For example, the platform's instant feedback allowed students to quickly identify and correct mistakes, reinforcing what they learned. Additionally, features like quizzes and leaderboards introduced a fun, competitive element that boosted motivation and made the learning experience more dynamic. This is consistent with other research that suggests gamified learning technologies can enhance learning outcomes by increasing both motivation and engagement (López-Fernández et al., 2021).

5.3.1.3 Enhancing the Applicability of TAM in Educational Contexts

The present study expands the relevance of Technology adoption Model (TAM) to the domain of ESL instruction by illustrating the significance of perceived ease of use and perceived usefulness in shaping students' adoption of Blooket. Although the Technology Acceptance Model (TAM) has found extensive use in many domains, its implementation in the specialised domain of language acquisition, namely using gamified tools, has received less investigation. Empirical evidence from this study confirms the importance of Technology

Acceptance Model (TAM) in comprehending the adoption of new technologies by ESL students, especially those that include aspects of play and interaction.

The results indicate that educational technologies, such as Blooket, which are judged as user-friendly and beneficial, can be successfully included into language learning curriculum to improve participation and academic achievements. This is consistent with current demands in the literature for greater investigation on the suitability of TAM in various educational environments (Venkatesh & Bala, 2008). Through its contribution to this existing research, the study emphasises the need of educators and developers taking into account these aspects while creating and deploying new learning tools.

5.3.2 Implication for Future Research and Practice

The conclusions of the study have several implications for both future research and educational practice. Firstly, it is recommended that future research should go deeper into the intricacies of how the perceived simplicity of use and utility interact to impact the acceptance of various instructional technologies. To assess the applicability of TAM in various educational environments, researchers may investigate these aspects in distinct contexts, like as different subjects or age groups.

Furthermore, the results emphasise the need of creating user-friendly and efficient learning tools that are in line with the concepts of Technology Acceptance Model (TAM). Educators and developers should give priority to the development of technologies that are user-friendly and clearly advantageous to learners in order to optimise their acceptance and influence in educational environments.

5.3.3 Summary

In summary, this study enhances the Technology Acceptance Model (TAM) by presenting factual data that substantiates the fundamental principles of the model within the

realm of ESL instruction. These findings validate that the perceived simplicity of use and perceived usefulness are crucial elements in students' acceptance of Blooket, a gamified learning tool. Furthermore, they indicate that these concepts are applicable for comprehending the adoption of technology in many educational environments. Hence, it is imperative for educators and developers to prioritise these aspects while creating and executing novel technologies to augment learning results.

5.4 Practical Implication

This section addresses the practical ramifications of the study's findings for educators and policymakers in ESL education. This document offers suggestions for incorporating Blooket and comparable game-based learning tools into the ESL curriculum, taking into account possible constraints such as technical difficulties and learning curve obstacles. Through an examination of these pragmatic factors, the section intends to provide practical knowledge for improving language acquisition results by revolutionary instructional methods.

5.4.1 Implications for Educators

The results of this study indicate that Blooket, when used as a game-based learning aid, can significantly improve vocabulary skills and increase audience involvement among ESL learners. Thus, it is recommended that instructors include Blooket and comparable utilities into their instructional methods to establish more dynamic and engaging learning settings. Nevertheless, it is imperative to tackle many pragmatic factors in order to guarantee the attainment of good execution.

5.4.1.1 Integrating Blooket into the ESL Curriculum

In order to optimise the advantages of Blooket, educators should consider integrating it into the ESL curriculum in a methodical and intentional approach. This may include utilising Blooket for certain educational goals, such as acquiring vocabulary, where its interactive

assessments and competitive components can inspire pupils and strengthen the learning process. Educators have the ability to create Blooket activities that are in line with the educational objectives of their courses, therefore guaranteeing that the gamified exercises are highly relevant to the subject matter covered in the curriculum.

Furthermore, instructors should give consideration to using Blooket as a supplementary instrument rather than a substitute for conventional approaches. Although Blooket has demonstrated efficacy in improving vocabulary acquisition, integrating it with conventional teaching methods, such as direct lecture and practice exercises, can offer a more well-rounded and systematic learning experience (Thur & Dan, 2023). This integrated methodology enables educators to accommodate a wide range of learning styles and preferences, therefore enhancing the overall efficacy of the learning process.

5.4.1.2 Addressing Technical Issues and Learning Curve Challenges

While incorporating Blooket into the ESL curriculum, instructors should be aware of any technological problems and difficulties in adapting to the learning curve that may impact its efficacy. Certain pupils may encounter challenges as a result of restricted availability of technology or a relative lack of knowledge with digital tools. In order to address these difficulties, educators should offer explicit guidance and assistance to enable students to effectively use the platform and optimise its advantages. For example, organising an initial workshop to acquaint students with the features and capabilities of Blooket could facilitate the migration and enhance their confidence in using the software.

Furthermore, it is important to foresee and resolve technological challenges, such as connectivity problems or software compatibility concerns, in a proactive manner. Instructors should devise contingency plans or alternate activities in the event of technical malfunctions, therefore guaranteeing the continuous progress of the learning process. Furthermore, schools

must guarantee the presence of sufficient technological infrastructure and resources to facilitate the use of digital tools in the classroom.

5.4.2 Implication for Policymakers

The facilitation of the integration of game-based learning technologies such as Blooket into ESL instruction is heavily dependent on the active involvement of policymakers. The results of this study indicate multiple methods by which policymakers might assist educators in implementing novel teaching approaches to enhance language acquisition results.

5.4.2.1 Promoting Professional Development and Training

In order to effectively incorporate Blooket and other technologies, policymakers should allocate resources towards professional development and training initiatives for educators. The primary objective of these programs should be to provide educators with the necessary skills and expertise to proficiently utilise game-based learning technologies inside their classrooms. Comprehensive training should encompass both the technical facets of utilising digital tools and the educational approaches for integrating them into the curriculum. Consistent with the findings of prior studies, this underscores the need of teacher training in optimising the effectiveness of educational technologies (López-Fernández et al., 2021).

Moreover, offering continual assistance and resources, such as the provision of instructional materials and technology coaches, can facilitate the constant enhancement of instructors' abilities and ensure their awareness of emerging tools and approaches. By fostering a climate of ongoing education, policymakers can enable educators to effectively embrace and incorporate game-based learning tools into their instructional methods.

5.4.2.2 Ensuring Access to Technological Resources

Policymakers should guarantee that schools possess the essential technology framework to facilitate the implementation of game-based learning software. This encompasses the provision of dependable internet connections, sufficient hardware (such as PCs or tablets), and efficient technical assistance. Resolving these infrastructure requirements is crucial for overcoming the technical obstacles that could hinder the efficient use of digital tools in language acquisition.

Besides, it is imperative for policymakers consider the adoption of measures that promote the fair allocation of technology resources across educational institutions, especially in disadvantaged or remote regions. Promoting universal access to essential technologies among students will contribute to narrowing the digital gap and facilitating equitable learning opportunities for all learners.

5.4.3 Implication for Curriculum Developers

This study's findings should be taken into account by curriculum developers when creating ESL programs that use digital technologies such as Blooket. Proper alignment of the use of these tools with particular learning aims and results is crucial to ensure their complementation and enhancement of conventional teaching techniques. Developers should establish comprehensive guidelines and resources to facilitate the seamless integration of game-based learning technologies into educators' instructional practices.

In addition, curriculum makers have the opportunity to partner with technology providers in order to jointly provide tailored material that conforms to national or regional standards. Implementing game-based learning tools such as Blooket will guarantee their relevance and applicability to the unique requirements of ESL learners in various learning environments.

5.5 Limitations of the Study

The purpose of this section is to recognise the restrictions of the study and analyse how these limitations can impact the applicability of the results. This section intends to present a fair viewpoint on the contributions of the study and propose opportunities for development in future research by highlighting these limitations.

5.5.1 Small Sample Size

An inherent constraint of this study is its limited sample size. This study was carried out with a small sample size from a single ESL classroom, so limiting the generalisability of the results to a larger population. An insufficient sample size may fail to sufficiently reflect the varied attributes and experiences of all ESL learners, therefore distorting the findings or resulting in conclusions that lack universal applicability. This constraint aligns with the issues described in comparable research, wherein the presence of small sample sizes has been identified as a determinant that could restrict the dependability and accuracy of the results (Xie & Huang, 2022).

In order to overcome this constraint, forthcoming research should contemplate employing more extensive and varied samples that encompass a wide spectrum of demographics, educational backgrounds, and levels of skill. An increased sample size would yield a more thorough comprehension of the efficacy of Blooket and comparable game-based learning tools in various settings.

5.5.2 Short Intervention Duration

One potential constraint that could impact the results of the study is the brief duration of the intervention. The data collection spanned a duration of six weeks, which may not have been enough to detect enduring effects of using Blooket on the acquisition and retention of language. The capacity of short-term research to determine whether the reported advantages of

a learning aid endure over time or decrease as novelty fades is often constrained (López-Fernández et al., 2021).

In order to ascertain the long-term sustainability of the beneficial impacts of Blooket on vocabulary acquisition, it is necessary to conduct research spanning several months or even years. Subsequent investigations aim to prolong the period of the intervention in order to evaluate the long-term effects of the tool on vocabulary retention, as well as its possible impact on other facets of language acquisition, including grammar and pronunciation.

5.5.3 Focus on Single School Setting

This study was carried out in a single school environment, so restricting the applicability of the results to other educational settings. The effectiveness of game-based learning tools such as Blooket can be influenced by the variation in technical infrastructure, instructor competence, and student involvement across different schools. Specifically, educational institutions that have restricted availability of technology or teachers with fewer expertise may have more difficulties in successfully integrating digital tools (Th & Dan, 2023).

In order to enhance the applicability of the results, forthcoming research should strive to incorporate several educational institutions from different geographical areas, encompassing a wide range of socio-economic conditions and varying degrees of technological availability. This would facilitate comprehension of how various contextual elements impact the utilisation and efficacy of game-based learning software in a wider array of environments.

5.6 Recommendations for Future Research

Based on the findings and constraints of the present study, this section aims to provide suggestions for further research. In order to promote more extensive and varied study on the use of game-based learning tools, such as Blooket, in ESL instruction, this section intends to pinpoint topics that require more exploration. These proposals prioritise the investigation of

the long-lasting effects of these technologies, the comparison with other digital learning platforms, and the evaluation of their efficacy in different educational settings.

5.6.1. Conduct Long-Term Studies on the Sustained Impact of Blooket

One important suggestion for future research is to carry out further studies to investigate the long-lasting effects of Blooket on the acquisition of vocabulary and overall language competence. The present study proved the efficacy of Blooket in improving language acquisition within a limited timeframe, however it did not evaluate the long-term sustainability of these advantages. It is necessary to conduct longitudinal research in order to assess whether the improvements in language retention are sustained over time or if their usefulness decreases as the novelty of the tool fades.

Furthermore, conducting long-term studies could offer valuable understanding of the impact of Blooket on other dimensions of language acquisition, including reading comprehension, speaking fluency, and writing proficiency. This more comprehensive approach would enable researchers to ascertain if Blooket's advantages are limited to the acquisition of vocabulary or encompass other fundamental aspects of ESL instruction. Research of this nature might potentially investigate the combined impact of prolonged exposure to game-based learning aids on students' general language acquisition and their motivation to learn English. Long-term research would provide educators and policymakers with insights into the long-lasting effects of game-based learning aids on students' academic achievements and guide decisions on their ongoing integration into the curriculum (López-Fernández et al., 2021).

5.6.2 Compare Blooket with Other Digital Learning Tools

Furthermore, future study should take into account the comparison of Blooket's effectiveness with other digital learning tools commonly employed in ESL teaching, such as Kahoot!, Quizlet, or Duolingo. Although Blooket has demonstrated potential in improving

vocabulary acquisition, it is crucial to judge its performance in comparison to other platforms that also integrate game-based learning components. By conducting comparative research, educators can ascertain the distinct advantages and disadvantages of each tool, therefore facilitating the selection of the most suitable technology for their particular teaching goals and classroom settings.

The comparison research should encompass not only vocabulary acquisition but also other language abilities, including grammar, listening, and speaking, in order to offer a more thorough assessment of the efficacy of each tool. Moreover, such study might take into account variables such as user engagement, usability, and student preferences to ascertain which platforms are most efficient in various situations. Gaining a comprehensive understanding of these relative dynamics would enable educators to make well-informed decisions regarding the incorporation of digital technologies into their teaching methodologies and guarantee the utilisation of the most efficient tools currently accessible (Thu & Dan, 2023).

5.6.3 Explore the Use of Digital Tools in Diverse Educational Contexts

Future study should investigate the application of Blooket and analogous digital learning aids across diverse educational settings. Given that the present study was carried out in a single school environment, the generalisability of the results is limited. Future research should encompass a diverse range of schools with varying demographic characteristics, socio-economic statuses, and degrees of technological accessibility to ascertain the impact of these variables on the efficacy of digital tools in language acquisition.

Furthermore, research should take into account cultural and regional disparities that could influence the reception and effectiveness of game-based learning aids. Certain cultures may exhibit divergent perspectives on digital learning or differing degrees of technological proficiency. The identification of optimal strategies for incorporating digital tools into various

educational settings and the assurance of their accessibility to a broad spectrum of learners can be achieved by the analysis of their usage in different contexts (Xie & Huang, 2022).

5.6.4 Investigate the Impact of Game-Based Learning Tools on Different Learner Groups

Future study should explore the varying reactions of different learner groups to game-based learning tools such as Blooket. Although the present study concentrated on a particular cohort of secondary school ESL students, it is crucial to comprehend the impact of these tools on learners of various ages, levels of proficiency, and learning preferences. Potential research may investigate the efficacy of Blooket for younger students in elementary education, adult learners in language courses, or proficient ESL students studying for standardised exams.

Furthermore, researchers could investigate how specific learner attributes, such as motivation, technological competence, or previous exposure to digital technologies, impact the efficacy of game-based learning. Through an examination of these aspects, further study can offer more detailed understanding of how Blooket and comparable tools might be customised to cater to the varied requirements of different learner cohorts.

5.7 Conclusion

The purpose of this section is to present a thorough overview of the main discoveries obtained from the study and analyse their importance in connection to the research goals. Furthermore, this part explores the wider impact of the research on ESL education, underlining the need of including cutting-edge, technology-facilitated learning approaches to increase language acquisition results.

5.7.1 Summary of Key Findings

The purpose of this study was to assess the efficacy of Blooket, a game-based learning module, in improving vocabulary acquisition among ESL learners and to investigate students'

viewpoints on using Blooket as a learning aid. Empirical evidence suggests that Blooket outperformed traditional methods in enhancing pupils' vocabulary competence. More precisely, students in the experimental group who were instructed using Blooket had a more significant improvement in their vocabulary test results in comparison to those in the control group who were taught using conventional approaches. This finding indicates that the interactive and gamified characteristics of Blooket contribute to the development of a more engaging and inspiring learning atmosphere, therefore promoting enhanced retention and comprehension of vocabulary (Thur & Dan, 2023).

Furthermore, the survey indicated that students had a predominantly favourable disposition towards the use of Blooket. Participants valued the user-friendly interface, prompt response, and interactive capabilities of the system, which boosted their enthusiasm for learning. The results of this study are consistent with the concepts of the Technology Acceptance Model (TAM), which proposes that the acceptance of new technologies is influenced by the perceived ease of use and perceived usefulness (Davis, 1989). The findings of the study emphasise the significance of these elements in facilitating a favourable learning experience and encouraging the acceptability of digital tools in educational environments.

Nevertheless, the study also revealed certain constraints, such as a limited number of participants, a brief period of intervention, and a limitation to a specific educational environment. These limitations indicate that although the findings offer useful insights, they should be evaluated cautiously, and more study is necessary to confirm and build upon these results.

5.7.2 Final Thoughts

The present study offers significant contributions to the domain of ESL teaching, namely by advocating for the adoption of innovative, technology-driven instructional

approaches. Through its demonstration of Blooket's effectiveness in improving vocabulary acquisition, the study contributes to the increasing body of evidence that supports the use of game-based learning tools in language education. This underscores the capacity of emerging technologies to generate more captivating and participatory educational experiences that might enhance student motivation and academic achievements.

Furthermore, the results of the study strengthen the significance of the Technology Acceptance Model (TAM) in comprehending the patterns of acceptance of digital technologies in educational settings. The study offers empirical evidence for the suitability of Technology Acceptance Model (TAM) in ESL instruction by demonstrating that students' acceptance of Blooket is significantly influenced by their perception of its ease of use and usefulness. The aforementioned observation holds significant value for educators and policymakers that aim to successfully incorporate digital resources into language programs.

Lastly, the research emphasises the significance of thoroughly evaluating any obstacles, such as technological problems and learning curve difficulties, during the implementation of game-based learning aids. A balanced approach is promoted, which integrates both traditional and digital approaches to accommodate the varied needs and preferences of learners. Moreover, the study recommends for more extensive and longitudinal investigation to thoroughly comprehend the influence of game-based learning tools such as Blooket on several facets of language acquisition.

References

- A Technology Acceptance Model (TAM): Malaysian ESL Lecturers' Attitude in Adapting Flipped Learning (Technology Acceptance Model (TAM): Sikap Pensyarah ESL di Malaysia dalam Penyesuaian Pembelajaran Flipped). (2019). *Jurnal Pendidikan Malaysia*, 44(01SI). <https://doi.org/10.17576/jpen-2019-44.01si-04>
- Ahmed, S. (2021). Classroom to Google Room An Incredible Revolution in Teaching-Learning Pedagogy. *International Journal for Research in Applied Science and Engineering Technology*, 9(12), 720–725. <https://doi.org/10.22214/ijraset.2021.38868>
- Alamri, B. (2021). *Challenges of Implementing Technology in ESL writing Classrooms: A case Study*. https://eric.ed.gov/?q=technology+in+ESL+classroom&ff1=dtySince_2019&ff2=sub+Technology+Uses+in+Education&id=EJ1323783
- Alsawaier, R. S. (2018). The effect of gamification on motivation and engagement. *Campus-wide Information Systems*, 35(1), 56–79. <https://doi.org/10.1108/ijilt-02-2017-0009>
- Bai, B., Jing, W., & Chai, C. S. (2019). Understanding Hong Kong primary school English teachers' continuance intention to teach with ICT. *Computer Assisted Language Learning*, 1–23. <https://doi.org/10.1080/09588221.2019.1627459>
- Baissydyk, I., Kuderinova, K., Shakhanova, R., Gulnara, R., & Zhylytyrova, Z. (2023). Lexical aspect in language and culture communication. *XLinguae*, 16(1), 216–223. <https://doi.org/10.18355/xl.2023.16.01.16>
- Blooket*. (2023). Retrieved August 24, 2023, from <https://www.blooket.com/>
- Boyinbode, O. (2018). *Development of a gamification based English vocabulary mobile learning system*. <https://www.semanticscholar.org/paper/Development-of-a-Gamification-Based-English-Mobile-Boyinbode/adaa3d80dd33409e18e14d49a2a14226891138ec>

- ÇiNar, İ. (2019, December 31). *The effects of Quizlet on secondary school students' vocabulary learning and attitudes towards English*.
<https://dergipark.org.tr/en/pub/aji/issue/51548/647002>
- Da Silva Hounsell, M., Rodrigues, R., & Marques, C. P. (2019). Gamification in Management Education: A Systematic Literature Review. *Bar. Brazilian Administration Review*, 16(2). <https://doi.org/10.1590/1807-7692bar2019180103>
- Fan, N., & Liu, Q. (2022). Vocabulary research of English textbooks for primary and secondary schools. *Journal for the Study of English Linguistics*, 10(1), 13.
<https://doi.org/10.5296/jsel.v10i1.19909>
- Feng, G. C., Su, X., Lin, Z. C., He, Y., Luo, N., & Zhang, Y. (2020). Determinants of Technology Acceptance: Two Model-Based Meta-Analytic Reviews. *Journalism & Mass Communication Quarterly*, 98(1), 83–104.
<https://doi.org/10.1177/1077699020952400>
- Gouda, G. G., & D'Mello, L. (2019). A study on identification of auditory, visual, and kinaesthetic learning essentials for adolescents studying in government schools at Dakshina Kannada District. *International Journal of Management, Technology, and Social Science*, 137–157. <https://doi.org/10.47992/ijmts.2581.6012.0078>
- Granić, A., & Marangunić, N. (2019). Technology acceptance model in educational context: A systematic literature review. *British Journal of Educational Technology*, 50(5), 2572–2593. <https://doi.org/10.1111/bjet.12864>
- Ha, H. S. (2019). Lexical richness in EFL Undergraduate Students' academic writing. *영 어 교 육*, 74(3), 3–28. <https://doi.org/10.15858/engtea.74.3.201909.3>
- Handayani, N. F. (2018). Improving English vocabulary for second graders using pictures at SD Pangudi Luhur Jakarta. *Journal of English Teaching*, 4(1), 37.
<https://doi.org/10.33541/jet.v4i1.787>

- Hung, L. T., & Ha, N. T. (2021). Experimental Research and Application of Computerized Adaptive Tests to assess Learners' Competencies. *IEEE Xplore*.
<https://doi.org/10.1109/cste53634.2021.00021>
- Hussin, N. I. S. M., Nimehchisalem, V., Kalajahi, S. a. R., & Yunus, N. (2016). EVALUATING THE PRESENTATION OF NEW VOCABULARY ITEMS IN MALAYSIAN FORM THREE ENGLISH LANGUAGE TEXTBOOK. *Malaysian Journal of Languages and Linguistics (MJLL)*, 5(1), 60.
<https://doi.org/10.24200/mjll.vol5iss1pp60-78>
- Irving-Bell, D. (2020). NTR - Digital Education. *Edge Hill University*.
<https://doi.org/10.25416/edgehill.12673340.v5>
- Kawinkoonlasate, P. (2019). Technology integration and English Language instruction for education. *IJELTAL (Indonesian Journal of English Language Teaching and Applied Linguistics)*, 3(2), 203–213. <https://doi.org/10.21093/ijeltal.v3i2.157>
- Kaya, G. (2022). *Gamification in English as Second Language Learning in Secondary Education Aged between 11-18: A Systematic Review between 2013-2020*.
https://eric.ed.gov/?q=gamification+tools+to+learn+vocabulary&ffl=dtySince_2019&pg=2&id=EJ1344056
- Keoy, I. T. (2021, June 4). *How does SMK and SMJK differs?* Buxi.my. <https://buxi.my/smk-or-smjk/>
- Lam, T. N. (2020). A Study on Vocabulary-Learning Problems Encountered by Non-English Majors at Ho Chi Minh City University of Food Industry. *Zenodo*.
<https://doi.org/10.5281/zenodo.3947598>
- Larson, D. K., & Sung, C. H. (2019). COMPARING STUDENT PERFORMANCE: ONLINE VERSUS BLENDED VERSUS FACE-TO-FACE. *Online Learning*, 13(1).
<https://doi.org/10.24059/olj.v13i1.1675>

- Lesagia, O., & Ciptaningrum, D. S. (2020). Investigating EFL University Students' Self-Efficacy and Outcome Expectation in Technology Integration. *Proceedings of the 4th International Conference on Learning Innovation and Quality Education*.
<https://doi.org/10.1145/3452144.3452237>
- Luo, J., & Yu, Y. (2020). Application of mixed teaching mode under "Rain Classroom" information technology. In *Advances in intelligent systems and computing* (pp. 298–304). https://doi.org/10.1007/978-3-030-51431-0_44
- Mohd, C. K. N. C. K., Mohamad, S. N. M., Sulaiman, H. A., & Rahim, N. R. (2023). A REVIEW OF GAMIFICATION TOOLS TO BOOST STUDENTS' MOTIVATION AND ENGAGEMENT. *ResearchGate*.
https://www.researchgate.net/publication/370059182_A_REVIEW_OF_GAMIFICATION_TOOLS_TO_BOOST_STUDENTS'_MOTIVATION_AND_ENGAGEMENT
- Pardede, P. (2020). Secondary School EFL Teachers' perception of ICT use in learning and teaching. *Journal of English Teaching*, 6(2), 144–157.
<https://doi.org/10.33541/jet.v6i2.1976>
- Patil, U. A. (2022). Effective role of emerging technologies in teaching and learning process. *International Journal for Multidisciplinary Research*, 04(04), 171–174.
<https://doi.org/10.36948/ijfmr.2022.v04i04.019>
- Pham, A. T., & Ly, D. (2023). EFL Students' Perceptions on the Use of Blooket in Grammar Classes. *ACM Digital Library*. <https://doi.org/10.1145/3606094.3606117>
- Pragasam, J. A., & Sulaiman, N. A. (2023). Integrating Technology in ESL Reading Classroom: Accounting Pupils' Perspectives. *Arab World English Journal*, 1, 324–342. <https://doi.org/10.24093/awej/comm1.23>
- Quinn, S. (2022). Blooket: Game on, students! *The FLTMAG*. <https://fltmag.com/blooket-game-on/>

- Rad, D., Egerău, A., Roman, A. F., Dughi, T., Balaş, E., Maier, R., Ignat, S., & Rad, G. (2022). A preliminary investigation of the Technology Acceptance Model (TAM) in early childhood education and care. *Broad Research in Artificial Intelligence Neuroscience*, 13(1), 518–533. <https://doi.org/10.18662/brain/13.1/297>
- Rashid, M. H., Liu, Y., & Wang, H. (2022). The importance of vocabulary in teaching and learning in applied linguistics. *Linguistics and Culture Review*, 6, 1548–1557. <https://doi.org/10.21744/lingcure.v6ns2.2177>
- Scherer, R., & Teo, T. (2019). Unpacking teachers' intentions to integrate technology: A meta-analysis. *Educational Research Review*, 27, 90–109. <https://doi.org/10.1016/j.edurev.2019.03.001>
- Secondary Education Regional Information Base: Country Profile - Malaysia*. (2011).
- Shermatov, E. Y. (2020). SPECIFIC TRAINING OF PROFESSIONAL VOCABULARY OF THE ENGLISH LANGUAGE FOR STUDENTS OF JOURNALISM. *Theoretical & Applied Science*, 89(09), 467–470. <https://doi.org/10.15863/tas.2020.09.89.64>
- Suryani, E. a. A., Majid, A. H., & Suryani, S. (2022). Introducing English vocabulary to young learners with flashcards. *English Education Journal*, 13(2), 160–171. <https://doi.org/10.24815/ej.v13i2.25454>
- Talpur, N., Kalwar, T., & Talpur, M. J. (2021). Computer-assisted language learning in Pakistani context during COVID-19 Pandemic. *REiLA*, 3(3), 210–225. <https://doi.org/10.31849/reila.v3i3.6908>
- Thang, S. M., Ting, M., Ling, S., & Jaafar, N. M. (2011). Attitudes and Motivation of Malaysian Secondary Students towards learning English as a Second Language: A . . . *ResearchGate*. https://www.researchgate.net/publication/265431287_Attributes_and_Motivation_of_

Malaysian_Secondary_Students_towards_learning_English_as_a_Second_Language_
A_Case_Study

- Thu, T. T. M., & Dan, T. C. (2023). STUDENTS' PERCEPTIONS ON ENGLISH VOCABULARY TEACHING AND LEARNING BY USING BLOOKET: a CASE STUDY / NHẬN THỨC CỦA SINH VIÊN VỀ VIỆC DẠY VÀ HỌC TỪ VỰNG TIẾNG ANH BẰNG BLOOKET: MỘT NGHIÊN CỨU TÌNH HUỐNG. *European Journal of Applied Linguistics Studies*, 6(1). <https://doi.org/10.46827/ejals.v6i1.321>
- Uswahsadieda, L., Bimantoro, R., Muzakie, A. W., Bagus, T., & Rahmawati, R. P. (2020). The Effect of Using Dictionary to Develop Students' Vocabulary in MTs. Al-Musthofa. *Atlantis Press*. <https://doi.org/10.2991/assehr.k.200427.036>
- Wang, Q. (2021). Teaching of English vocabulary. *Learning and Education*, 10(2), 22. <https://doi.org/10.18282/l-e.v10i2.2252>
- Wang, Y. (2021). Application of information technology in optimizing the governance of basic education groups. *International Journal of Emerging Technologies in Learning (Ijet)*, 16(05), 281. <https://doi.org/10.3991/ijet.v16i05.22407>
- Zaineldeen, S., Li, H., Koffi, A. L., & Hassan, B. M. A. (2020). Technology Acceptance Model' Concepts, contribution, limitation, and adoption in education. *Universal Journal of Educational Research*, 8(11), 5061–5071. <https://doi.org/10.13189/ujer.2020.081106>
- Zaman, E. (2019). *The representation of English language in the Malaysian Education Blueprint 2013 -2025:A CDA Perspective*. <https://doi.org/10.17635/lancaster/thesis/755>
- Zhang, J., & Daller, M. (2019). Lexical richness of Chinese candidates in the graded oral English examinations. *Applied Linguistics Review*, 11(3), 511–533. <https://doi.org/10.1515/applirev-2018-0004>

Zulkornain, L. H. B., Mat, A. B. C., Mohamed, N., Halim, N. H. F. a. H. A., & Razawi, N. A.

(2020). I Can't Practice What I Preach – The Case of English Language Teachers.

Universal Journal of Educational Research, 8(3), 983–997.

<https://doi.org/10.13189/ujer.2020.080333>