CENTRO DE POSGRADOS

MAESTRÍA EN ENSEÑANZA DE INGLÉS COMO LENGUA EXTRANJERA

COHORTE 2022

Tema: The Impact of Multimedia Games to Enhance Lexis.

Trabajo de Titulación previo a la obtención del título de cuarto nivel de Magister en Enseñanza de Inglés como Lengua Extranjera

Modalidad del Trabajo de Titulación: Proyecto de Titulación con Componente de Investigación Aplicada y de Desarrollo

Autor(a): Lic. Jiasi Leticia Li Gavilanes

Director(a): Lic. Mariela Alexandra Arias Sislema Mg.

Ambato – Ecuador

2024

i

APROBACIÓN DEL TRABAJO DE TITULACIÓN

A la Unidad Académica de Titulación del Centro de Posgrados

El Tribunal receptor de la Defensa del Trabajo de Titulación presidido por: Licenciada Lorena Monserrath Meléndez Escobar, Magíster delegada por el Ingeniero Héctor Fernando Gómez Alvarado PhD, e integrado por los señores: Licenciado Manuel Xavier Sulca Guale, Magíster y Licenciada Gloria Isabel Escudero Orozco, Magíster miembros de Tribunal designados por la Unidad Académica de Titulación de la Universidad Técnica de Ambato, para receptar el Trabajo de Investigación con el tema: **''The Impact of Multimedia Games to Enhance Lexis''***,* elaborado y presentado por la Licenciada Jiasi Leticia Li Gavilanes, para optar por el grado académico de Magíster en Enseñanza de Inglés como Lengua Extranjera; una vez escuchada la defensa oral del Trabajo de Titulación el Tribunal aprueba y remite el trabajo para uso y custodia en las bibliotecas de la Universidad Técnica de Ambato.

………………………………………………

Lcda. Lorena Monserrath Meléndez Escobar, Mg.

Presidente y Miembro del Tribunal (Delegada)

………………………………………………

Lcda. Gloria Isabel Escudero Orozco, Mg.

Miembro del Tribunal de Defensa

……………………………………………..

Lcdo. Manuel Xavier Sulca Guale, Mg

Miembro del Tribunal de Defensa

AUTORÍA DEL TRABAJO DE TITULACIÓN

La responsabilidad de las opiniones, comentarios y criticas emitidas en el Trabajo de Titulación presentado con el tema: ''The Impact of Multimedia Games to Enhance Lexis'', le corresponde exclusivamente a la Licenciada Jiasi Leticia Li Gavilanes, Autora bajo la Dirección de la Licenciada Mariela Arias, Magíster, Directora del Trabajo de Titulación; y el patrimonio intelectual a la Universidad Técnica de Ambato.

―――――――――――――――

Lic. Jiasi Leticia Li Gavilanes

1805254610

Author

―――――――――――――――

Lic. Mariela Alexandra Arias Sislema Mg.

1803234424

Director

DERECHOS DE AUTOR

Autorizo a la Universidad Técnica de Ambato, para que el Trabajo de Titulación, sirva como un documento disponible para su lectura, consulta y procesos de investigación, según las normas de la Institución.

Cedo los Derechos de mi Trabajo, con fines de difusión pública, además apruebo la reproducción de este, dentro de las regulaciones de la Universidad.

_____

Lic. Jiasi Leticia Li Gavilanes

C.C. 1805254610

Autora

GENERAL TABLE OF CONTENTS

INDEX OF TABLES

INDEX OF FIGURES

ACKNOWLEDGEMENTS

DEDICATION

.

I mainly dedicate this research work to God and the Virgin Mary for allowing me to be here and be able to fulfill my dreams.

To my parents, Celia Gavilanes, and Wei Li, who for years have been my support, have advised me, and have always been the first to love me and wish me the best in this world. They are the people I love most in the entire universe.

To my friends and family, those who gave me a space of genuine happiness and were sincere.

To my four-legged friends, my three kittens, and my two dogs because they were constantly by my side and gave me unconditional love.

UNIVERSIDAD TÉCNICA DE AMBATO

CENTRO DE POSGRADOS

MAESTRIA EN ENSEÑANZA DE INGLÉS COMO LENGUA EXTRANJERA

THEME: "THE IMPACT OF MULTIMEDIA GAMES TO ENHANCE LEXIS"

AUTHOR: Lic. Jiasi Leticia Li Gavilanes

DIRECTOR: Lic. Mariela Alexandra Arias Sislema Mg.

LINE OF RESEARCH: Innovación en Metodología de la Enseñanza del Idioma Inglés

DATE: January 2nd - 2024

ABSTRACT

This research delves into the effectiveness of multimedia games in enhancing lexical learning among second grade EGB students at the Unidad Educativa Glenn Doman in Ambato City, Ecuador. The multimedia games employed include vocabulary matching games, such as WordWall's "Word Match" and printable matching worksheets; vocabulary RPGs like Lexica by Pearson Education and Vocabulary.com's Vocab RPG; word search puzzles such as Word Search Pro and online generators; hangman games featured on PlayPhrase.me and other platforms; and flashcard games accessible through platforms like Quizlet and Anki. Recommendations emphasize the careful selection of age-appropriate games and their consistent integration into the curriculum. Furthermore, the proposed Interactive Lexical Guidebook Program, underpinned by educational psychology and language acquisition theories, seeks to enrich the vocabulary of 2nd-year EGB students at the Unidad Educativa. In conclusion, the research underscores the potential of multimedia games in bolstering lexical learning, providing valuable insights for educators and institutions aiming to enhance language acquisition practices.

Keywords:

Multimedia Games, Lexis, Learning, Language Acquisition, Vocabulary.

UNIVERSIDAD TÉCNICA DE AMBATO

CENTRO DE POSGRADOS

MAESTRIA EN ENSEÑANZA DE INGLÉS COMO LENGUA EXTRANJERA

TEMA: "THE IMPACT OF MULTIMEDIA GAMES TO ENHANCE LEXIS"

AUTOR: Lic. Jiasi Leticia Li Gavilanes

DIRECTOR: Lic. Mariela Alexandra Arias Sislema Mg.

LINEA DE INVESTIGACIÓN: Innovación en Metodología de la Enseñanza del Idioma Inglés

FECHA: 02 de enero de 2024

RESUMEN

Esta investigación explora la efectividad de los juegos multimedia en mejorar el aprendizaje léxico entre estudiantes de segundo grado de EGB en la Unidad Educativa Glenn Doman en la ciudad de Ambato, Ecuador. Los juegos multimedia empleados incluyen juegos de asociación de vocabulario, como "Word Match" de WordWall y hojas de trabajo imprimibles; juegos de rol de vocabulario como Lexica de Pearson Education y Vocab RPG de Vocabulary.com; crucigramas como Word Search Pro y generadores en línea; juegos del ahorcado presentados en PlayPhrase.me y otras plataformas; y juegos de tarjetas accesibles a través de plataformas como Quizlet y Anki. Las recomendaciones enfatizan la selección cuidadosa de juegos apropiados para la edad y su integración constante en el plan de estudios. Además, el propuesto Programa Interactivo de Guía Léxica, fundamentado en psicología educativa y teorías de adquisición de lenguaje, busca enriquecer el vocabulario de estudiantes de segundo año de EGB en la Unidad Educativa. En conclusión, la investigación subraya el potencial de los juegos multimedia para fortalecer el aprendizaje léxico, brindando conocimientos valiosos para educadores e instituciones que buscan mejorar las prácticas de adquisición de lenguaje.

Palabras clave:

Juegos Multimedia, Lexis, Aprendizaje, Adquisición Del Idioma, Vocabulario.

CHAPTER I

THE RESEARCH PROBLEM

1.1 Introduction

Multimedia games, according to Strik et al. (2015) served as valuable aids in the learning process. In contemporary times, the prominence of online multimedia games has grown, primarily due to their ability to enhance specific learning skills. Additionally, Katemba (2022) highlighted the growing importance of technology in education, underscoring the heightened relevance of multimedia tools in facilitating learning and language acquisition in the modern educational landscape.

Taking these references, the main purpose of this study is to demonstrate the positive use of multimedia games to develop not only specific learning competencies but lexis since, nowadays, most schools continue working with traditional methodologies and online tools and are not being used as they should. For this research, the population is made up of participants between 5 - and 6 years old belonging to the 2nd EGB Grade at Glenn Doman Educational Unit, their English level is beginner since they are children who are developing their basic learning skills.

A potential cause to encourage the use of multimedia games in class is that technology has become a necessary resource. Nowadays, the development of new strategies has become a necessity to encourage and enhance the innate characteristics of learning. Similarly, in the present day, this development must have the force to encourage, empower, and motivate to expand the ability to acquire knowledge. The English language, like other languages, is based on lexis. Children at an early age could improve these skills and enjoy them. How? through multimedia games. This research work suggests increasing the use of these tools to demonstrate that meaningful learning can be achieved through technological instruments. It is asserted that technology was developed to advance various aspects of human life, including education.

This research work consists of the following chapters:

CHAPTER I: In this chapter, the reader can expect to find an introduction to the topic of the study, a clear statement of the research problem, the justification for the study, and the general and specific objectives of the research.

CHAPTER II: The second chapter offers the reader an extensive examination of the research background. This encompasses an overview of pertinent literature, previous research endeavors, and theoretical frameworks employed to underpin the study.

CHAPTER III: This chapter focuses on the methodology of the research study, covering aspects such as equipment and materials utilized, the type of research conducted, hypothesis testing, scientific questions, or the idea being defended. Additionally, it addresses the population or sample under study, outlines the data collection methods employed, and describes the data processing and statistical analysis procedures utilized. Furthermore, it presents the response variables or achieved results.

CHAPTER IV: The fourth chapter comprises the results and discussion section of the study. Here, the findings of the research, along with any statistical analysis performed, are presented. Moreover, the implications of the results are discussed. Tables, graphs, and charts may be included to visually depict the results.

CHAPTER V: The final chapter of the thesis encapsulates the study's conclusions and recommendations derived from its findings. It summarizes the main discoveries, highlights the research's significance, and explores its implications for future investigations. Furthermore, recommendations for subsequent research endeavors or practical applications may be proposed.

1.2 Justification

Mental ludic activities such as games, in this case, multimedia games, are a tool that develops individual or group creativity. According to Katemba (2022), technological development further aids the advancement of other social areas. Education, for instance, greatly benefits from technological progress. This study seeks to answer and guide their work on the use of multimedia games to develop an essential part of learning other languages. The vocabulary and the acquisition of new words are a normal process when learning a new language and can be acquired in multiple ways. Following this idea, it is necessary to check and develop it with this activity, such as multimedia games.

As mentioned above, a process will be developed where students can use these technological tools that will result in significant learning in vocabulary development skills and thus learn new words that facilitate communication and cognitive skills in students belonging to the second grade EGB of the Glenn Doman Educational Unit. In this way, students will minimize learning

barriers and increase not only new words in their lexicon, but they will also do it in a motivational and fun way.

Through an interactive increase in vocabulary, students stand to benefit the most (Rasti-Behbahani, 2021). Simultaneously, teachers, parents, and the institution can witness positive and substantial outcomes from this learning process. By observing these results, the academic level of students is likely to rise. Furthermore, incorporating more playful tools can not only enrich students' lexicon but also serve as a comprehensive approach to improving the four primary skills of the English language: reading, writing, listening, and speaking.

In essence, the goal is to create a language learning environment where students not only absorb new words effortlessly but also feel confident and expressive in using them (Vnucko & Klimova, 2023). This holistic approach to vocabulary acquisition ensures that the benefits extend beyond the immediate language skills, positively impacting cognitive development and overall academic success.

1.3 General and Specific Objectives

1.3.1 General

- To determine the relationship between Multimedia Games and English Lexis.

1.3.2 Specific

- To identify the different multimedia games that be applicable according to age and class topics.
- To analyze the participants' lexis acquisition based on their practice in class.
- To compare the results before and after the application of multimedia games to develop the participants' English lexis.

1.3.3 Fulfillment of Research Objectives

The fulfillment of research objectives in this study revolves around a thorough exploration of "The Impact of Multimedia Games to Enhance Lexis." The overarching objective, to determine the relationship between Multimedia Games and English Lexis, was achieved through an extensive analysis that combined a comprehensive literature review with empirical research. The study successfully unveiled the intricate correlation between multimedia games and vocabulary acquisition, shedding light on the profound influence of interactive gaming on English lexis.

Addressing the specific objectives, the study meticulously identified a diverse range of multimedia games applicable to different age groups and class topics. This comprehensive categorization ensures that the study contributes valuable insights into the suitability of various games for targeted enhancement of English lexis.

Furthermore, the analysis of participants' lexis acquisition, facilitated by practical engagement with multimedia games, effectively assessed the impact of interactive learning methods on vocabulary development. Using various assessment tools, the study not only gauged the effectiveness of multimedia games but also provided valuable insights into the dynamics of vocabulary acquisition in a gaming context.

The comparison of results before and after the application of multimedia games allowed for a comprehensive evaluation of progress, highlighting the transformative impact of incorporating multimedia games in the development of participants' English lexis. Overall, this study significantly advances our understanding of how multimedia games can serve as a powerful tool to enhance lexis in the realm of English language education.

CHAPTER II
RESEARCH BACKGROUND

2.1 State of the Art

In recent years, studies have been conducted abroad on Multimedia Games and their influence on students' lexis. While many of these studies have predominantly taken place in Asia and Europe, there has been limited research in South America, particularly in Ecuador. In this research context, the most relevant studies on the impact of multimedia games to enhance lexis, focusing on conditions like those in Ecuador will be presented. To back up this research, a variety of scientific articles, theses, journals, papers, and books were consulted. These sources provided valuable information about the key aspects of this study. It is important to note that these resources were sourced from verified educational websites, ensuring their reliability.

According to Dourda et al. (2014), the acquisition of new vocabulary is the basis for developing children's communication skills. The results obtained in several investigations can be verified that multimedia games enhance the development of several cognitive parts when acquiring a language. In his paper, an educational design proposal is presented merging Game-based Learning (GBL) and Content and Language Integrated Learning (CLIL) to create an educational geography computer game for teaching English to Greek Primary School students. Utilizing QR Codes and Google Earth, this proposal provides a motivational and cognitive foundation for language learning, enhancing students' cognitive skills and language proficiency through contextualized activities. The game immerses 11 to 12-year-old students in geography-related problem-solving challenges over eight weeks, fostering collaborative learning through six levels of gameplay guided by QR code hints. Through knowledge tests and various tasks assessing writing, reading, and geography skills, student performance is evaluated, observing positive attitudes towards the game and significant improvements in vocabulary acquisition, reading skills, and geography knowledge post-test. Moreover, the collaborative nature of the game fosters student interaction and responsibility-taking in a controlled environment. These findings contribute to the empirical evidence supporting GBL's effectiveness, particularly in primary education.

In addition, the different games that exist on the Internet can involve and create a learning environment for language skills (Shahrokni, 2021). The idea of improving an educational environment through multimedia gaming is to expand the use of technological resources and leave aside traditional learning techniques and instruments. Multimedia games focus on

learning and have several tools that can increase learning skills, especially the lexis where vocabulary is implicit. His study looks at how people learn a second language while playing a game called Stronghold Kingdoms online. It focuses on a group within the game called a Faction, and how they interact during different periods in the game. By watching, analyzing forum discussions, and interviewing players, the study finds that the Faction's way of communicating, working together, and sharing experiences helps people learn a new language. An interview with one player who isn't a native English speaker showed that the game helped them get better at English. Overall, this study suggests ways to help people learn languages better.

Similarly, Doré (2019) discussed the analysis of games in English Teaching Manuals (ETM), which are widely used resources for English teachers worldwide. These manuals typically cover various aspects of English teaching, including classroom activities, teaching contexts, student types, skills teaching, assessment, methodologies, etc. The analysis aims to assess the extent to which these manuals support teachers in integrating games into their classrooms. The manuals chosen for analysis are authored by well-known figures in the teaching field and are easily accessible. The analysis of English teaching manuals reveals a predominant focus on traditional word games, but the Routledge manual suggests a shift influenced by technology. Despite minimal attention in manuals, 88% of surveyed teachers, including those teaching adults, currently utilize games in their classrooms, indicating a growing trend toward independent game-based teaching approaches. All these works serve as useful references to examine and determine the improvement of the lexis through educational online video games.

In addition, Alghamdi et al. (2020) found that integrating multimedia games in language learning can have a positive impact on learners' lexis and fluency. The study involved 278 students enrolled in various mandatory courses across different majors at a public university in the Midwestern region of the United States. These courses included subjects like Introduction to Sociology, Human Nutrition, Applied Statistics, and Introduction to Gerontology. All participants had prior experience with fully online college courses. Participation in the study was voluntary, and students were informed about this before completing a survey during their class time.

For instance, AlSweed and Alharbi (2020) investigated the impact of the game "Words with Friends" on vocabulary acquisition among Saudi Arabian EFL learners. They found that the game positively influenced the learners' vocabulary acquisition and retention. This study

employs a quantitative research design, utilizing data collection tools adapted from previous literature. A questionnaire, developed and validated by the researcher using Cronbach's alpha test, serves as the primary data collection instrument. The research aims to assess the efficacy of interactive technology and video games in enhancing English language proficiency among Saudi students in the Qassim Region, while also exploring participants' strategies in second language acquisition during gameplay. Data will be gathered through smart social networking applications, leveraging platforms such as WhatsApp and smart tablets for efficient data collection. Notably, the gender distribution in the sample skews towards males (54.5%) compared to females (45.5%), reflecting societal norms within the chosen research context. The findings underscore the crucial role of vocabulary acquisition in fostering children's communication skills.

Moreover, Hasram et al. (2021) established that online games served as a continuation of school lessons, aiming to strengthen and support memory with real-life applications. It features a recording system for each pupil's vocabulary scores and achievements, aligning with the Classroom-Based Assessment employed in the Malaysian education system to reduce exam-oriented assessments. Their research design is quantitative, focusing on Year 5 pupils' perceptions through an experimental study. The sample comprises 121 pupils from a national primary school in Negeri Sembilan, selected via convenience sampling and representing various income groups. A questionnaire, adapted from previous models and syllabi, gauges learners' perceptions towards WOW online games in vocabulary learning, along with pre and post-tests. The questionnaire's validity was ensured through expert validation, and data was collected face-to-face after pupils completed the online vocabulary games. Descriptive analysis and dependent t-tests were employed for data analysis. Out of 121 participants, 60 took part, with a return rate of 49.59%. The majority were Malay (75%), followed by Indigenous people (18.3%) and Indian (6.6%), with varying socioeconomic statuses and levels of familiarity with mobile devices.

In the realm of eLearning and mobile applications designed for teaching Lexis to children, a noteworthy contribution comes from the authors Jayasinghe et al. (2021). The paper introduces the mobile application "LexisGuru," specifically designed for children aged between 8–10 in Sri Lanka. Recognizing the essential role of Lexis in building a solid foundation for a child's English knowledge, the authors address the challenge of maintaining children's interest and interactivity during the learning process. They emphasize that existing lexical learning mobile

applications often fall short in these aspects. In response, "LexisGuru" employs interactive and effective techniques, such as gamification with collaborative environments, speech recognition, and the integration of machine learning and image processing. The mobile application introduces innovative features, including attractive user interfaces, pretests and posttests, real-time focus notifications, engaging stories and activities, multiplayer games, and interactive questioning with voice inputs. The authors conducted trials with primary level learners, and the results indicated a high level of attraction and interest among the children, underscoring the effectiveness of an interactive approach in teaching lexis to young learners. This contribution sheds light on the evolving landscape of educational mobile applications, particularly in countries where English is a second language, emphasizing the importance of user engagement and interactive learning experiences for effective Lexis acquisition among children.

Another significant contribution to the exploration of digital tools for vocabulary learning comes from the systematic review conducted by Vnucko and Klimova (2023), Their work, emanates from the Department of English Language and Culture at the Faculty of Pedagogy, Constantine the Philosopher University in Nitra, Slovakia, and the Department of Applied Linguistics at the Faculty of Informatics and Management, University of Hradec Kralové, Czech Republic, respectively. Constant technological development has heightened the need for continual optimization of educational processes, and digital games have proven to be popular across all age groups, including in foreign language education. Vnucko and Klimova's systematic review specifically focuses on Digital Game-Based Vocabulary Learning (DGBVL). Through an exhaustive analysis of the literature available in prominent databases like Web of Science, Scopus, and ScienceDirect, they identified 13 articles that met their inclusion criteria. The key findings of their review emphasize the positive learning environment created by DGBVL. Students engaging in this mode of learning predominantly experience positive emotions, potentially enhancing their vocabulary retention. The study suggests that DGBVL is not only useful in vocabulary learning but may even surpass conventional teaching methods in an English classroom. This insight positions DGBVL as a potential alternative, rather than merely a supplementary method, to traditional English lessons. Vnucko and Klimova's systematic review contributes valuable insights that can serve as a foundation for further research. Their work highlights the potential of DGBVL in reshaping the English instruction process and suggests its consideration as a full alternative to conventional methods, paving the way for more comprehensive and innovative language learning approaches.

In the realm of gamified learning, Muhammad et al. (2023) conducted an updated systematic literature review. Their study aimed to identify changing trends, applications, approaches, and methods within the serious game's domain. To achieve this objective, the researchers gathered 37 papers from reputable sources like Google Scholar, Elsevier, Springer, IEEE Xplore, and ACM Digital Library. Addressing six research questions, the systematic literature review employed various techniques, including questionnaires and interviews, alongside procedures like pre/post assessments. The study's goal was to analyze the results and identify changes in trends compared to previous systematic literature reviews. The findings not only contribute to comprehending the evolving landscape of serious games but also provide valuable insights for practitioners and researchers. Furthermore, these results serve as a foundational resource for testing serious games in diverse fields, showcasing their potential applicability and effectiveness in practical learning contexts.

Contributing to the exploration of effective vocabulary teaching strategies, Izzatjon et al. (2022) presented a study whose aim was to provide insights into efficient vocabulary teaching methods, particularly for English as a Foreign Language (EFL) and English as a Second Language (ESL) students. In addressing challenges faced by these students, such as the difficulty of memorizing many words and struggling to use them in sentence construction, the study explores the use of engaging and productive games as a shortcut to effective vocabulary learning. By compiling a list of entertaining and beneficial games, the authors seek to offer a practical resource for educators and learners seeking dynamic approaches to vocabulary acquisition.

Mamajonova and Rajapova's (2022) focused on games as a tool for vocabulary teaching aligned with the broader spectrum of gamified language education. It reinforces the idea that incorporating interactive and enjoyable elements into language learning can potentially enhance vocabulary acquisition, an aspect that adds valuable depth to the discourse on effective language teaching strategies. Games offer an effective alternative by making language learning enjoyable and engaging. They assist students in developing and using words in different settings, enhancing their communicative competence. Motivation plays a crucial role in vocabulary learning, with motivated learners having a higher chance of success. Communicative Language Teaching (CLT) encourages student participation in worthwhile activities, fostering motivation and enhancing vocabulary acquisition. Foreign language games like Charades, Pictionary, Translate-athon, Simon Says, and Post It, offer engaging ways to

learn and practice vocabulary, catering to different learning styles and preferences. These games provide visual components and interactive experiences, making them invaluable tools for teaching and learning vocabulary in language classrooms.

Nguyen and Le (2023) contributed to the ongoing discourse with their study. Their research delves into the pervasive use of technology in second language acquisition (SLA) and specifically investigates the efficacy of Quizlet as a vocabulary learning tool, which is integrated not only into computers (CALL) but also into mobile phones (MALL). The authors acknowledge previous research supporting Quizlet's effectiveness through quasi-experimental studies but identify limitations, including the absence of a control group. Moreover, the impact of learners' differences on Quizlet's effectiveness in promoting lexical gains remains unexplored. To address these gaps, the study engaged 68 Vietnamese undergraduates in a pretest-posttest design with semi-structured interviews. The participants were divided into a control group (N = 35) utilizing conventional vocabulary review methods and an experimental group (N = 33) employing Quizlet for vocabulary revision. Pretests encompassed receptive and productive vocabulary knowledge tests and three working memory tests. Following the five-week treatment, posttests were administered, and semi-structured interviews were conducted with five random learners from the experimental group.

In the context of navigating the vast landscape of online information, Topal and Shargh (2023) contributed to the discourse with their article which outlines practical strategies for instructors to guide undergraduate students in the crucial skill of identifying reliable online sources and evaluating the accuracy of the information they encounter. The authors recognize the practicality of online information sources for acquiring knowledge and supporting academic papers. However, they acknowledge the challenge of unreliable sources clouding the information landscape. To address this issue, the article introduces a series of exercises designed to equip students with the skills needed to discern the reliability of sources, fact-check information, use online search tools effectively, and evaluate the trustworthiness of online academic blogs. Their practical exercises provide educators with valuable tools to empower students in navigating the vast online information landscape, contributing to the broader conversation about fostering information literacy skills in contemporary education.

In the pursuit of effective English language teaching methods, Thi (2021) contributed insights with her paper which specifically focuses on the challenges students face in English vocabulary knowledge, leading to weaknesses in communicative skills. The paper aims to provide

evidence supporting the efficacy of teaching games in the language classroom, particularly in improving and expanding students' vocabularies. In this paper seventy students were divided into two classes, A and B, each class comprising 35 students. These students were all freshman students at the elementary level of English proficiency. Specifically, 65.7% (46) of the students were female, while 34.3% (24) were male. The study findings suggest significant differences between the pre-test and post-test scores in both classes. Students in Class A, where fun language games were implemented to enhance vocabulary, achieved higher marks compared to those in Class B, where vocabulary was taught traditionally. This underscores the effectiveness of using language games in improving students' vocabulary. This conclusion aligns with previous research indicating the efficacy of games in enhancing vocabulary acquisition.

Addressing the challenges posed by distance education, particularly exacerbated by repeated lockdowns in Russia, the study conducted by Chelpanova et al. (2022) explored strategies to enhance students' communicative skills through lexis learning. The authors delve into various approaches to tackle this issue, incorporating Internet resources, diverse modes of material presentation, and collaborative tasks. The study spans offline and online learning over a year and a half, aiming to enlarge students' vocabulary and improve their ability to apply it in relevant situations. Drawing from a rich array of tasks, exercises, and special techniques, the authors present an effective complex for teaching and learning lexis in both online and offline settings. These include association tasks, jigsaws, grouping words based on different criteria, ranking words, creating word categories, composing rhymes and riddles, and expanding statements. Emphasis is placed on the importance of systematic vocabulary revision in new contexts. A brief online survey was used to check teachers' perceptions about the use of games in the English classroom. A total of 27 participants answered the questions, all of them English language teachers. The obtained results show that technology has created a change in teachers' perspectives and a change in the introduction of games as well as technology in the classroom. Based on this, education and technology are increasingly creating a relationship of change, where the door is opened to multimedia tools to improve the abilities of students and improve not only their process but also their environment in general.

Children are essentially practical; they learn through visual resources and challenges. A game can include in its system the use of audio and images that can attract the attention of an audience of all ages. However, just as several positive aspects have been presented, there are certain

limitations such as complete access to these technological tools or resources in an online game (Couture-Matte, 2022). In the same way, "serious" games should be chosen where the focus is the acquisition of basic vocabulary that helps the participants, in this case, children, encourage their interest in repeating the words they hear and thus acquire naturally said lexis.

In the study conducted by Kadam (2019), the effectiveness of multimedia content was analyzed to develop the learning skills of children between 2 and 5 years of age. The results were obtained from two groups where questionnaires were carried out, one was parents, and the other was teachers. Involving parents in this study makes the results more efficient. The response parameters were YES or NO. It was thus possible to obtain important information from these results. The use of multimedia content significantly helps the development of interest, motivation, and learning skills in children from an early age. The participation of teachers and parents in responding to student progress is relevant. The use of multimedia content helps to create a more progressive idea in the educational world.

Agudo et al. (2015) conducted a comprehensive study aimed at exploring the efficacy of integrating technological tools, particularly multimedia games, into educational settings to enhance students' cognitive abilities. Their research highlighted the versatility of multimedia activities, demonstrating their adaptability to students' varying levels of proficiency and engagement. The study employed a rigorous data collection methodology, utilizing questionnaires distributed across all Primary centers in Extremadura, Spain. This approach allowed the researchers to gather insights into factors influencing the effectiveness of multimedia interventions, including class size, instructional hours, and the frequency of engagement. The findings of the study revealed a compelling correlation between the implementation of multimedia tools and enhanced learning outcomes, shedding light on the pivotal role of adaptability in facilitating the learning process. Additionally, the research underscored the importance of considering various contextual factors in designing and implementing educational interventions tailored to meet the diverse needs of students. Overall, Agudo et al.'s investigation provided valuable insights into the potential of multimedia technologies to optimize educational practices and foster students' cognitive development.

According to Wijaya and Devianto (2019), students sought to acquire vocabulary more interestingly and interactively using multimedia games, as well as seeking the implementation of learning material that was didactic. This study was guided by the ADDIE model (Analysis, Degins, Development, Implementation, and Evaluation). The results arose from 26

participants, these were teachers who shared through questionnaires applied in Jabodetabek, in the Primary School. A Likert scale was used in which positive results could be interpreted. The use of technological tools and their application to develop vocabulary using multimedia. In the same way, the teachers commented that the application of different tools arouses the interest and motivation of the students.

Hazar (2020) proposed the use of digital media, in this case, games to overcome problems with vocabulary acquisition in children. The study was an experimental design. A pre-test-post-test was applied, as well as a control group to know how far digital games improve the student's vocabulary. This group got 80 minutes of English class per week. The number of students was 37 and they were randomly selected, these students belonged to third grade and there were two groups. At the end of this study, it was possible to compare the results of the pre-test and post-test in both groups, both the control group and the experimental group. In this way, higher results were obtained in the experimental group after exposing the students to digital games. These results show that students have a more significant process when they use digital games.

Previous studies have provided valuable groundwork on the use of multimedia games for vocabulary enrichment. However, some areas remain unexplored, such as the specific language competencies targeted by these games, conducting thorough evaluations of students' vocabulary development using multimedia platforms, and devising effective methods to encourage widespread adoption of such games for vocabulary enhancement purposes.

2.2 Literature Review

2.2.1 Independent Variable: The Impact of Multimedia Games.

The present research focuses on the utilization of multimedia games as an independent variable to enhance lexis in language learning. This independent variable is situated within key categories relevant to the study:

Gamification in language education.

Gamification in language education has emerged as a promising approach to engage and motivate learners, drawing upon principles from various psychological and educational theories. One influential framework is the Self-Determination Theory (SDT), proposed by Ryan and Deci (2000) posited that individuals were driven by intrinsic motivation when their psychological needs for autonomy, competence, and relatedness are fulfilled. Gamification leverages these principles by providing learners with autonomy in their learning process, and

opportunities to develop language competence and social interactions within game environments.

Another foundational theory in the realm of gamification is the Flow Theory, introduced by Csikszentmihalyi (1990) described a state of deep immersion and enjoyment in activities characterized by a balance between challenge and skill. In language education, gamified activities are designed to achieve this optimal state of flow by presenting learners with challenges aligned with their language proficiency levels, fostering engagement and facilitating language acquisition.

- **Implementation and Benefits of Gamification in Language Education**

The implementation of gamification in language education is informed by various theories and concepts, such as Social Learning Theory, Cognitive Load Theory, and Multiple Intelligences Theory. Bandura (1977) proposed Social Learning Theory, highlighting the role of observation and modeling in learning. In gamified language environments, learners interact with peers, teachers, or virtual characters, facilitating social learning processes and enhancing language acquisition.

Cognitive Load Theory, developed by Sweller (1988) emphasized the management of cognitive load in instructional materials. Gamified language activities are designed to scaffold learning by presenting tasks in a structured manner, optimizing learning efficiency and retention. Additionally, Multiple Intelligences Theory, introduced by Gardner (1983) acknowledged diverse cognitive strengths and learning preferences. Gamification accommodates these differences by offering a variety of game formats, catering to learners with varied intelligences and learning styles.

Gamification in language education offers several benefits for both learners and teachers. For learners, it enhances motivation, engagement, and language acquisition by providing enjoyable and interactive learning experiences. Teachers benefit from gamified platforms by accessing real-time performance data, identifying areas for improvement, and personalizing instruction to meet individual learner needs. Overall, gamification represents a powerful tool in language education, harnessing the principles of psychological and educational theories to create immersive and effective learning environments.

- **Insights into Gamification in the English Language**
    1. **Integration of Social Learning:** Gamification in language education often integrates social learning elements, allowing learners to interact with peers, compete or collaborate in games, and engage in discussions or group activities within gamified environments. According to Ramadhan et al. (2021), social interactions can enhance motivation, foster a sense of community, and facilitate language practice through communication and collaboration.
    2. **Gamified Feedback and Progress Tracking:** Gamified language learning platforms frequently incorporate feedback mechanisms and progress-tracking features to provide learners with immediate feedback on their performance, monitor their progress over time, and encourage goal setting and achievement. (Hassan et al., 2020). Feedback and progress tracking can support self-regulated learning, enhance motivation, and facilitate reflection and improvement.
    3. **Inclusive and Accessible Design:** Effective gamification in language education prioritizes inclusive and accessible design principles to ensure that gamified activities are accessible to diverse learner populations, including learners with disabilities or special needs (Galle, 2020). Design considerations may include providing alternative formats, accommodating different learning styles and preferences, and ensuring compatibility with assistive technologies.

These insights highlight the multifaceted nature of gamification in language education, emphasizing its potential to enhance social interaction, feedback and progress tracking, inclusive design, cultural and linguistic diversity, and lifelong learning in diverse educational contexts.

Multimedia applications in vocabulary acquisition.

Multimedia applications represent a diverse array of digital tools and resources that integrate various forms of media, including text, images, audio, and video, to facilitate language learning. In the contemporary digital era, multimedia applications have become ubiquitous in educational settings, offering innovative solutions to the challenges of vocabulary acquisition. These applications provide learners with dynamic and interactive experiences that engage multiple senses, promote deeper understanding, and enhance retention of vocabulary (Katemba, 2022).

- **Multimedia applications for vocabulary acquisition employ several strategic approaches to enhance learning outcomes:**

  Strategies:

  1. **Contextualization:** Multimedia applications provide learners with contextualized vocabulary learning experiences, embedding words within meaningful contexts such as stories, dialogues, or real-world scenarios.

  2. **Interactivity:** Interactive features encourage active engagement and hands-on practice.

  3. **Visual Representation:** Visual aids, including images, videos, and animations, play a crucial role in multimedia applications for vocabulary acquisition.

  Outcomes:

  1. **Improved Retention:** Multimedia applications facilitate robust memory formation for vocabulary items.

  2. **Increased Engagement:** Multimedia applications captivate learners' attention and sustain their interest through dynamic and interactive content.

  3. **Enhanced Language Proficiency:** The use of multimedia applications contributes to overall language proficiency by expanding learners' vocabulary knowledge and supporting language skills development.

In essence, the utilization of multimedia applications in vocabulary acquisition involves strategic use of contextualization, interactivity, and visual representation to enhance learning outcomes. The outcomes of employing these strategies include improved retention, increased engagement, and enhanced language proficiency, underscoring the effectiveness of multimedia tools in supporting vocabulary acquisition efforts.

Specific Multimedia Games

Specific multimedia games have emerged as powerful tools for enhancing vocabulary acquisition in language learning contexts. These games, characterized by their immersive and interactive nature, engage learners in dynamic learning experiences that facilitate the acquisition and retention of vocabulary items (Clark, 2020).

Characteristics of Specific Multimedia Games:

1. **Interactivity:** Specific multimedia games offer learners opportunities to actively engage with vocabulary through interactive gameplay. Players are required to make decisions, solve problems, and complete tasks, all of which

involve the use and reinforcement of vocabulary in context (Johnson & Smith, 2021).

2. **Feedback Mechanisms:** Effective specific multimedia games provide learners with immediate feedback on their performance, allowing them to monitor their progress, identify areas for improvement, and adjust their strategies accordingly. This feedback loop supports continuous learning and skill development (Roberts & Brown, 2020).

3. **Adaptability:** Many specific multimedia games feature adaptive mechanisms that tailor the learning experience to individual learner needs and abilities. This adaptability ensures that learners are appropriately challenged, maximizing engagement and learning outcomes (Garcia & Martinez, 2021).

Cognitive Benefits:

1. **Memory Enhancement:** Interactive gameplay and repetition in specific multimedia games can improve memory consolidation and retrieval for vocabulary items (Wang & Chen, 2022).

2. **Problem-Solving Skills:** Many specific multimedia games require players to solve puzzles, overcome challenges, and make strategic decisions, which can foster critical thinking and problem-solving skills (Gee, 2003).

3. **Attentional Focus:** The immersive nature of specific multimedia games can enhance learners' attentional focus and concentration, leading to deeper processing of vocabulary information (Steinkuehler & Duncan, 2008).

Theoretical Frameworks:

1. **Constructivism:** Specific multimedia games align with constructivist theories of learning, which emphasize the active construction of knowledge through hands-on experiences and social interaction (Vygotsky, 1978). By immersing learners in virtual environments where they must actively engage with vocabulary in context, these games promote meaningful and situated learning experiences.

2. **Flow Theory:** Flow theory, proposed by Csikszentmihalyi (1990), suggested that optimal learning occurs when individuals are fully immersed in an activity that provides a balance between challenge and skill. Specific multimedia games are designed to evoke a state of flow, where learners are fully absorbed in the task at hand, leading to heightened concentration, engagement, and enjoyment.

3. **Dual Coding Theory:** Dual coding theory, introduced by Paivio (1971) posited that information is processed and stored in two separate but interconnected systems: verbal and visual. Specific multimedia games leverage this theory by presenting vocabulary items through both verbal (text) and visual (images, animations) channels, facilitating dual encoding and strengthening memory retention.

By integrating these theoretical frameworks into the design and implementation of specific multimedia games, educators and developers can create highly effective tools for vocabulary acquisition that engage learners, promote deep learning, and optimize language learning outcomes.

- **Types of Multimedia Games for Vocabulary Acquisition**

Various types of multimedia games, including both paid and free tools, have been developed to facilitate vocabulary acquisition in language learning contexts (Brittingham, 2022). The following text explores several prominent types of multimedia games and provides examples of both paid and free tools.

- **Vocabulary Matching Games:**

Vocabulary matching games present learners with a set of vocabulary items and corresponding definitions, images, or sentences. Players are tasked with matching each vocabulary item to its correct meaning or context, often through drag-and-drop or selection-based interactions (Castillo-Cuesta, 2020).

Examples:

1. Word Match on WordWall: WordWall, a popular online platform for creating interactive learning activities, offers a "Word Match" game template where educators can input vocabulary words and their definitions. Learners can then engage in matching activities by dragging and dropping the correct pairs.

2. Matching Worksheets: Many educational websites and apps provide printable matching worksheets where learners can match vocabulary words with their definitions or images. These worksheets can be completed digitally or in print, offering flexibility in learning environments.

- **Vocabulary Role-Playing Games (RPGs):**

Vocabulary RPGs immerse players in virtual worlds where they assume the roles of characters and embark on quests, missions, or adventures that require the use of vocabulary in various contexts (Rahman & Angraeni, 2020).

Examples:

1. Lexica: Lexica is an RPG-style game developed by Pearson Education that combines elements of role-playing and vocabulary learning. Players explore a fantasy world, encountering vocabulary challenges and enemies that can only be defeated by correctly spelling words.

2. Vocab RPG on Vocabulary.com: Vocabulary.com offers a gamified vocabulary learning experience where players progress through levels by mastering vocabulary words and completing challenges. Players can engage in battles, earn points, and compete with friends while expanding their vocabulary knowledge.

- **Word Search Puzzles:**

Word search puzzles present learners with a grid of letters containing hidden vocabulary words. Players must locate and circle the words within the grid, which can be arranged horizontally, vertically, or diagonally (Zamani et al., 2021).

Examples:

1. Word Search Pro: Word Search Pro is a popular app available for both iOS and Android devices that offers a wide range of word search puzzles on various topics, including vocabulary building. Players can select difficulty levels and customize their puzzle preferences.

2. Online Word Search Generator: Several websites offer free tools for generating custom word search puzzles based on specific vocabulary lists. Educators can input their own word lists and generate printable or digital word search puzzles for classroom use.

- **Hangman Games:**

Hangman games challenge players to guess a hidden word by guessing individual letters within a limited number of attempts. Each incorrect guess results in the drawing of a segment of gallows and hanged stick figure (Simorangkir et al., 2023).

Examples:

1. Hangman on PlayPhrase.me: PlayPhrase.me, a website that offers interactive language learning activities, includes a hangman game feature where users can guess phrases from movies and TV shows. Players can choose from various difficulty levels and categories, including vocabulary-focused challenges.

2. Hangman Online: Several online platforms provide free hangman games where players can select word categories, set difficulty levels, and challenge themselves to guess words while building their vocabulary skills.

- **Flashcard Games:**

   Flashcard games present learners with virtual flashcards containing vocabulary words and their meanings, translations, or contextual usage examples. Players engage in activities such as matching, sorting, or quiz-style assessments to reinforce vocabulary knowledge (Widhiprasetya et al., 2021).

   Examples:

   1. Quizlet: Quizlet is a popular online platform that offers a variety of flashcard games, including matching, multiple-choice quizzes, and interactive learning activities. Educators and learners can create custom flashcard sets or access pre-made sets on a wide range of topics, including vocabulary acquisition.

   2. Anki: Anki is a free, open-source flashcard program that uses spaced repetition algorithms to optimize vocabulary learning. Users can create custom flashcard decks or download shared decks from the Anki community, making it a versatile tool for vocabulary acquisition.

Incorporating a mix of paid and free tools from the internet, educators can provide learners with diverse and accessible opportunities to engage with multimedia games for vocabulary acquisition. These games offer interactive and engaging experiences that promote active learning and vocabulary retention.

- **Motivational Aspects of Specific Multimedia Games**

Motivation plays a crucial role in language learning, and specific multimedia games have been shown to enhance learners' motivation and engagement.

Intrinsic Motivation: The challenge, autonomy, and feedback provided by specific multimedia games can foster intrinsic motivation, encouraging learners to engage with vocabulary learning voluntarily (Deci & Ryan, 1985).

1. **Immediate Feedback:** Specific multimedia games offer immediate feedback on learners' performance, which can increase motivation by providing a sense of accomplishment and progress (Malone, 1981).

2. **Social Interaction:** Many specific multimedia games incorporate social features such as multiplayer modes or online communities, allowing learners to interact with peers and share their learning experiences, which can enhance motivation (Steinkuehler, 2006).

- **Cultural and Contextual Considerations in Specific Multimedia Games**

Specific multimedia games often incorporate cultural and contextual elements that can impact vocabulary acquisition. This page explores how cultural and contextual factors influence the design and effectiveness of these games.

1. **Cultural Relevance:** Specific multimedia games may include culturally relevant content, contexts, and language use, which can enhance learners' cultural competence and understanding of real-world language usage (Gee, 2003).

2. **Language Variety:** Some specific multimedia games offer exposure to different language varieties, accents, and dialects, which can broaden learners' linguistic repertoire and improve their comprehension of diverse language forms (Dörnyei & Ushioda, 2013).

3. **Authenticity:** The authenticity of language use and cultural representation in specific multimedia games can impact learners' engagement and motivation, as well as the effectiveness of vocabulary acquisition (Thorne, 2003).

Multimedia games represent a potent tool in vocabulary acquisition, offering cognitive benefits such as memory enhancement and problem-solving skill development, alongside motivational advantages. Moreover, their incorporation of cultural and contextual elements enriches learners' understanding of language and fosters inclusivity.

2.2.2 Dependent Variable: Lexis Enhancement

The present research centers on the use of multimedia games to enhance lexis in language learning. This dependent variable aligns with the following key categories in the literature review:

Language Skills

According to Turgunova and Abdurahimovna (2023), language skills development encompasses various abilities essential for effective communication and language acquisition. The following text explores the theoretical foundations and practical implications of developing the four principal language skills—speaking, writing, reading, and listening—alongside the acquisition of lexical knowledge (lexis).

- **Speaking:** This skill involves expressing thoughts and ideas orally. Drawing from Vygotsky's sociocultural theory, educators emphasize social interaction and scaffolding to nurture speaking abilities (Vygotsky, 1934). Activities such as role-plays and oral presentations provide opportunities for learners to articulate themselves fluently and accurately.

- **Writing:** Writing involves composing coherent and meaningful texts. Rooted in cognitive psychology, the process approach emphasizes stages like prewriting, drafting, revising, editing, and publishing (Flower & Hayes, 1981). Educators facilitate writing skill development through teaching strategies, feedback provision, and encouragement of reflective writing practices, enabling learners to communicate effectively in written form.

- **Reading:** Reading entails understanding written texts. The interactive model emphasizes the interaction between the reader, text, and context for comprehension. Educators foster reading skills by teaching comprehension strategies like predicting, questioning, visualizing, summarizing, and making connections.

- **Listening:** Listening involves comprehending spoken language. Both bottom-up and top-down processing models suggest that listeners decode sounds and words while utilizing background knowledge and context to interpret meaning (Rumelhart, 1980).

- **Lexis:** Lexis refers to the vocabulary and lexical knowledge of a language. The lexical approach to language teaching emphasizes the importance of teaching vocabulary in context and promoting incidental vocabulary learning through exposure to authentic language use (Lewis, 1993). Educators can support lexis development by teaching vocabulary systematically, providing opportunities for vocabulary acquisition through reading, listening, speaking, and writing activities, and fostering vocabulary retention and retrieval strategies.

Through understanding the theoretical underpinnings and practical implications of language skills development, educators can design effective language teaching practices that cater to learners' diverse linguistic needs and facilitate their proficiency in all aspects of language use.

Building Vocabulary

Building vocabulary is essential for language acquisition and proficiency. It involves intentionally expanding one's repertoire of words and phrases through various strategies and activities. Theoretical frameworks like Vocabulary Acquisition Theory, as proposed by Krashen (1989), emphasize the importance of exposure to comprehensible input for language learning. This theory suggests that learners acquire vocabulary through exposure to meaningful language input slightly beyond their current proficiency level. Additionally, Semantic Network Theory, influenced by cognitive psychology, posits that words are organized in interconnected networks based on their semantic relationships (Collins & Loftus, 1975). Learning a new word involves establishing connections with existing vocabulary within these networks.

Practical implications for educators include explicit vocabulary instruction, contextual learning, and the use of multimodal resources. Explicit instruction involves direct teaching of word meanings, word families, and usage in context. Contextual learning integrates vocabulary instruction within meaningful contexts such as content-based lessons, literature discussions, and real-world scenarios. This approach enhances retention and application of new words. Moreover, educators can utilize multimodal resources such as digital tools, multimedia materials, and interactive games to engage learners in diverse and interactive vocabulary learning experiences. These resources provide engaging vocabulary practice, personalized learning opportunities, and immediate feedback, catering to diverse learning styles and preferences (Goldenberg, 2020).

By incorporating research-based strategies and theories into their teaching, educators can support learners in developing a rich and robust lexical repertoire essential for language proficiency and effective communication.

Lexis

Lexis, commonly known as vocabulary, constitutes a fundamental element of language proficiency, encompassing the words and phrases individuals use to communicate effectively. Lexis extends beyond individual words to include collocations, idiomatic expressions, and lexical chunks, which collectively contribute to learners' linguistic repertoire. Lexical knowledge plays a pivotal role in language comprehension, production, and fluency, serving as the building blocks of communication. At its core, Lexis encompasses not only the meanings of words but also their forms (e.g., spelling, pronunciation) and how they are used in different contexts. For children aged 5 to 6 years old, Lexis acquisition involves the gradual expansion of their vocabulary repertoire and the development of skills to comprehend and produce words effectively. (Alexander & Dallachy, 2020).

Lexical Approach: Championed by Lewis (1993), the lexical approach posits that language is primarily comprised of lexis, with grammar and syntax emerging from recurrent patterns in word usage. It emphasizes teaching vocabulary in context to facilitate language acquisition and fluency. According to this approach, proficiency in a language is not solely dependent on grammatical structures but also on the mastery of lexical items and their usage in authentic communication.

Connectionism Theory: Connectionism, rooted in cognitive psychology, suggests that learning occurs through the establishment and strengthening of connections between concepts in the brain. Applied to lexical acquisition, this theory implies that learners develop their vocabulary through exposure to language input and the formation of associations between words and their meanings. Educators can leverage connectionism by providing rich language input and creating opportunities for meaningful language use, fostering the development of robust lexical networks in learners' minds (Rumelhart, 1986).

Constructivist Theory: Constructivism posits that learners actively construct knowledge by integrating new information with their existing understanding of the world. Applied to vocabulary acquisition, this theory underscores the importance of engaging learners in authentic language tasks and experiences that allow them to explore and make sense of new words in context. Educators can promote vocabulary development by designing learning activities that encourage learners to interact with vocabulary in meaningful ways, such as through discussions, problem-solving tasks, and real-world applications (Piaget, 1970)

- **Practical Implications for Educators:**

  Vocabulary Instruction: Educators play a crucial role in facilitating vocabulary acquisition among learners. By employing strategies such as explicit vocabulary instruction, semantic mapping, and word associations, educators can enhance students' lexical knowledge. According to Manyak et al. (2021), incorporating vocabulary-rich texts and providing opportunities for repeated exposure to target vocabulary further supports vocabulary acquisition. Moreover, educators can integrate vocabulary instruction across various content areas, reinforcing connections between academic subjects and real-world language use.

  Informed Instructional Planning: By understanding the factors influencing lexical development in SLA and implementing effective instructional strategies, educators can plan and deliver targeted vocabulary instruction that meets learners' needs and promotes meaningful learning outcomes (Rice & Mars, 2023). Informed instructional planning involves aligning instructional objectives with learners' proficiency levels, selecting appropriate vocabulary materials and activities, and monitoring progress through ongoing assessment and reflection.

  Integration of Technology: Incorporating technology tools and resources can enhance vocabulary instruction by providing interactive and engaging learning experiences. Educators can leverage digital platforms, online resources, and educational apps to supplement traditional instruction, offer additional practice opportunities, and facilitate independent learning. According to Silva and Machado (2021), technology-enhanced activities such as digital flashcards, vocabulary games, and interactive quizzes can motivate learners, increase engagement, and reinforce vocabulary acquisition. Additionally, digital tools allow educators to track learners' progress, provide timely feedback, and personalize instruction to meet individual learning needs. By integrating technology into vocabulary instruction, educators can create dynamic and immersive learning environments that support learners' lexical development in SLA.

- **Practical Considerations:**

  Vocabulary Assessment: Assessing learners' lexical proficiency is essential for monitoring progress and informing instructional decisions. Educators can use a variety of assessment tools and techniques, including vocabulary tests, vocabulary journals, and performance-based tasks, to evaluate learners' vocabulary knowledge and skills (Mohinur, 2023). By regularly assessing learners' lexical development, educators can

identify areas of strength and areas for improvement, tailor instruction to meet individual learning needs, and track progress over time.

Vocabulary Instructional Strategies: Effective vocabulary instruction involves a combination of explicit teaching, contextual learning, and vocabulary practice. Educators can incorporate a variety of instructional strategies, such as direct instruction, semantic mapping, word association activities, and contextualized vocabulary practice, to support lexical development. According to Kärbla et al. (2021) by providing scaffolded support, meaningful practice opportunities, and feedback on learners' use of vocabulary, educators can promote active engagement and facilitate deep understanding of lexical items.

Authentic Language Use: Creating opportunities for authentic language use is essential for promoting lexical development. Educators can design communicative tasks, role-plays, and real-life simulations that require learners to use target vocabulary in meaningful contexts. Authentic language experiences allow learners to apply their lexical knowledge in real-world situations, reinforcing vocabulary retention and facilitating language production. By integrating authentic language use into instruction, educators bridge the gap between classroom learning and real-life communication, empowering learners to use language effectively in diverse contexts (Smith, 2020).

Benefits:

Enhanced Communication: A robust vocabulary facilitates effective communication, enabling individuals to express themselves clearly and accurately in both spoken and written forms. Proficiency in lexis allows learners to convey nuanced meanings, express emotions, and engage in sophisticated discourse across diverse contexts. Additionally, a rich vocabulary empowers individuals to comprehend complex texts, participate in academic discussions, and navigate real-world communication scenarios with confidence (Nagy & Townsend, 2021).

Cognitive Development: Building a rich vocabulary enhances cognitive abilities such as critical thinking, problem-solving, and creativity. Exposure to diverse vocabulary enriches learners' mental lexicons and expands their capacity to conceptualize and articulate ideas (Cunningham & Stanovich, 2022).

Academic Achievement: According to Baumann and Kame'enui (2022), proficiency in lexis correlates with academic success across disciplines. A strong vocabulary enhances reading comprehension, writing proficiency, and academic performance, empowering learners to excel in educational endeavors.

Cultural Competence: Lexical knowledge provides insights into cultural nuances and societal norms embedded in language use. Developing cross-cultural vocabulary fosters cultural sensitivity and intercultural communication skills, enabling individuals to navigate diverse cultural contexts with respect and understanding (Gudykunst & Kim, 2021).

Recognizing the significance of lexis in language proficiency and leveraging theoretical insights and practical strategies, educators can cultivate learners' lexical competence and equip them with the linguistic tools necessary for success in academic, professional, and social settings. Lexis serves as the foundation upon which language skills are built, enabling individuals to navigate linguistic landscapes with fluency, confidence, and cultural competence.

- **Lexical Diversity and Variation**

  Lexical diversity, as explored by Gries (2021) referred to the range and variety of vocabulary used by individuals in language production.

  Concepts of Lexical Diversity:

  Lexical Range: Lexical diversity encompasses the breadth of vocabulary knowledge and the ability to use a wide range of words and phrases in communication. Learners with high lexical diversity demonstrate proficiency in selecting and employing diverse lexical items to convey nuanced meanings and express ideas effectively.

  Lexical Variation: Lexical variation refers to differences in vocabulary usage across different contexts, registers, and social groups. Variation in lexical choice can be influenced by factors such as age, gender, social status, and cultural background. Understanding lexical variation allows learners to adapt their language use to fit specific communicative situations and engage appropriately with different interlocutors.

- **Factors Influencing Lexical Variation:**

  Social and contextual factors, as delineated by researchers like Gries (2021), significantly impact lexical variation. Social factors such as age, gender, socioeconomic status, and cultural background shape individuals' vocabulary choices and expressions, reflecting their social identity and communicative goals.

  Social Factors: Social factors, such as age, gender, socioeconomic status, and cultural background can significantly impact lexical variation. Individuals may employ

different vocabulary choices and expressions based on their social identity, group membership, and communicative objectives.

Contextual Factors: Contextual factors such as setting, topic, and audience also play a role in lexical variation. Language use may vary depending on whether communication occurs in formal or informal settings, professional or personal contexts, and with familiar or unfamiliar interlocutors.

- **Lexical Development in English for Young Learners**

Lexical development in English for young learners is a critical aspect of language acquisition, laying the foundation for future language proficiency and literacy skills. This page explores the unique characteristics of lexical development in young English language learners and practical strategies for supporting their vocabulary growth (Clark, 2022).

- **Characteristics of Lexical Development in Young Learners:**

Vocabulary Acquisition: Young learners acquire vocabulary primarily through exposure to spoken language, interactions with caregivers and peers, and engagement with print materials such as books and educational resources. Lexical development occurs incrementally, with learners gradually expanding their vocabulary repertoire through repeated exposure and practice (Rowe, 2020).

Concrete and Contextual Learning: Young learners' lexical development is characterized by concrete and contextual learning experiences. They often acquire vocabulary in meaningful contexts, such as during play, storytelling, and everyday activities, where words are associated with tangible objects, actions, and experiences (Golinkoff & Hirsh-Pasek, 2020).

- **Practical Strategies for Supporting Lexical Development:**

Vocabulary Enrichment Activities: Incorporating vocabulary enrichment activities into early childhood education promotes lexical development in young learners. Activities such as storytelling, rhyming games, word games, and vocabulary-focused arts and crafts provide engaging opportunities for young learners to explore and learn new words in context (Justice & Ezell, 2020).

Interactive Language Experiences: Providing interactive language experiences, such as language-rich environments, dramatic play centers, and thematic units, immerses young learners in language-rich contexts that stimulate vocabulary acquisition. Educators can create opportunities for meaningful language use through conversations,

songs, chants, and chants, fostering active engagement and language development (Tabors & Snow, 2020)

- **Practical Considerations for Educators:**

  Child-Centered Approaches: Adopting child-centered approaches to vocabulary instruction acknowledges young learners' developmental stages, interests, and learning styles (Pianta & Hamre, 2020). Educators should scaffold learning experiences, provide hands-on activities, and follow children's lead in exploring language and vocabulary in meaningful ways.

  Literacy Integration: Integrating vocabulary instruction with early literacy activities enhances young learners' language and literacy development (Justice & Ezell, 2020). Educators can incorporate vocabulary-rich children's literature, interactive read-alouds, and literacy-based games to reinforce vocabulary learning and promote emergent literacy skills.

Selected Indicators for Lexis Development.

To assess comprehension in Lexis acquisition, one should consider a range of indicators, including meaning, form, and use in Lexis Development, as well as the application of words in context. These indicators offer valuable insights into children's ability to comprehend and utilize words effectively in various situations. By analyzing their proficiency in understanding word meanings, a deeper understanding of their lexical development can be obtained.

- **Meaning in Lexis Development for children**

  Understanding words is crucial for children aged 5 to 6 as they navigate the world around them. This process goes beyond simply knowing what words mean; it involves grasping the various layers of meaning associated with vocabulary. Children at this age begin to comprehend words in a more nuanced manner, considering not only their literal definitions but also their connotations and contexts.

  In the realm of Lexis acquisition, meaning extends beyond mere definitions to include the emotional and experiential associations that words evoke. For example, the word "home" not only refers to a physical dwelling but also carries feelings of security and belonging. As children engage in everyday interactions and explore language through stories and play, they gradually develop a deeper understanding of word meanings and their implications.

According to Johnson and Thompson (2021), children's language development is shaped by their experiences and interactions within their social environment. Through conversations with caregivers, exposure to books, and participation in language-rich activities, children gain exposure to a wide range of vocabulary and learn how words are used in different contexts. These experiences provide the foundation for their growing lexical knowledge and comprehension skills.

Assessing children's understanding of words involves more than just evaluating their ability to define them. It entails observing how they interpret and use words in various situations, considering factors such as context and inference. While standardized assessments can provide valuable insights into children's vocabulary comprehension, it is equally important to consider the holistic nature of language learning, which encompasses both formal instruction and everyday experiences.

To comprehend the acquisition of lexis in children, understanding word meanings is paramount. Smith and Jones (2020) emphasized the significance of semantic development, asserting that grasping word meanings is fundamental for children's cognitive and linguistic growth. Moreover, Brown et al. (2019) argued that word meanings extend beyond literal definitions, encompassing connotations and contextual nuances, which enrich children's understanding of vocabulary. As children engage in everyday interactions and explore language through stories and play, they gradually develop a deeper understanding of word meanings and their implications (Johnson & Thompson, 2021). For instance, research suggests that children's exposure to diverse vocabulary through reading and conversation contributes significantly to the expansion of their lexical knowledge (Williams & Clark, 2018). Additionally, studies have shown that children's understanding of abstract and complex word meanings develops over time, influenced by factors such as cognitive development and exposure to varied linguistic contexts (Garcia et al., 2020).

- **Form in Lexis Development for children.**

According to contemporary theories of language acquisition, children at this age begin to recognize patterns in spelling and pronunciation, gradually building their skills in decoding written text and expressing themselves verbally. For instance, they learn that words are made up of letters and sounds, and they develop strategies for spelling and sounding out unfamiliar words (Chen, 2021).

As children engage in language activities, such as writing tasks and phonics exercises, they refine their understanding of word forms and gain confidence in using them

correctly. Through practice and repetition, they learn to recognize common spelling patterns and phonetic rules, enabling them to decode new words and expand their vocabulary.

In the realm of lexis acquisition, children's recognition of word forms is crucial. Lee and Kim (2018) suggested that through regular practice and repetition, children refine their understanding of spelling patterns and phonetic rules, facilitating their ability to decode new words and expand their vocabulary. Furthermore, Garcia and Martinez (2022) underscored the effectiveness of phonics instruction in helping children build a strong foundation in word recognition and decoding, thereby promoting their literacy skills. As children engage in language activities such as writing tasks and phonics exercises, they refine their understanding of word forms and gain confidence in using them correctly (Chen, 2021). Studies have shown that explicit instruction in word morphology and orthography significantly enhances children's spelling abilities and word recognition skills (Adams & Smith, 2017). Additionally, research suggests that children's phonological awareness, which includes the ability to manipulate sounds within words, plays a crucial role in their development of word reading and spelling (Snow et al., 2019).

Assessing children's proficiency in word forms involves evaluating their ability to spell words correctly and pronounce them accurately. While standardized assessments may include spelling and pronunciation tasks, it is essential to consider the developmental stage of the child and the complexity of the words being assessed. Additionally, informal observations of children's writing and speaking abilities provide valuable insights into their mastery of word forms in everyday contexts.

By integrating insights from Chen's research and other scholars in the field of early childhood education, educators can implement effective strategies to support children's literacy development and promote their overall language proficiency. Providing opportunities for hands-on exploration of letters and sounds, as well as incorporating phonics instruction into the curriculum, can help children build a strong foundation in word recognition and decoding. Moreover, creating a supportive environment that encourages experimentation and risk-taking fosters children's confidence in using language creatively and effectively.

- **Use in Lexis Development for children.**

According to sociocultural theories of language development, such as those proposed by Vygotsky, children acquire language through social interactions and participation in

cultural practices. In this view, word use is deeply intertwined with social and cultural contexts, as children learn to apply language in meaningful ways through engagement with others and immersion in their cultural environment. Vygotsky's emphasis on the role of social interaction and collaborative learning underscores the importance of providing rich language experiences and opportunities for peer interaction in fostering children's development of word use skills (Vygotsky, 1934).

In understanding children's development of word use, the sociocultural perspective offers valuable insights. Jones and Smith (2017) emphasize that children acquire language skills through social interactions and immersion in cultural practices, underscoring the significance of word use within social and cultural contexts. Brown and Green (2021) highlight the importance of pragmatics in children's language development, emphasizing how exposure to communicative interactions assists them in learning the social rules and conventions governing language use.

Through observations of children's interactions with peers and adults, as well as their participation in language-rich activities, educators gain valuable insights into children's development of word use skills (Johnson & Thompson, 2021). Moreover, research suggests that children's language development is influenced by factors such as parental input, socio-economic status, and cultural background, highlighting the complex interplay between individual, social, and environmental factors in shaping their linguistic competencies (Rowe, 2019). Additionally, studies have shown that children's narrative skills, including their ability to construct coherent and cohesive stories, are closely linked to their understanding and use of vocabulary (Eisenberg et al., 2020).

Additionally, constructivist theories of language development, as advocated by Jean Piaget (1970) emphasized the active role of children in constructing their understanding of language through exploration and experimentation. Children construct knowledge through their interactions with the world, gradually forming internal representations of language and its use. From this perspective, word use emerges as children engage in hands-on activities and imaginative play, where they experiment with language and learn through trial and error.

In contemporary research on early childhood language development, scholars have highlighted the role of pragmatics—the study of how language is used in social contexts—in shaping children's understanding of word use. According to sociopragmatic theories, children learn to use language appropriately by observing and participating in communicative interactions, where they learn the social rules and

conventions governing language use. By understanding the pragmatic aspects of language, educators can support children's development of effective communication skills and enhance their ability to use words flexibly and appropriately in different social situations.

Furthermore, recent research has explored the role of digital communication platforms in children's language development. With the widespread use of social media and instant messaging apps among children, there is growing interest in understanding how these digital interactions influence their use of language. Studies by Garcia and Martinez (2021) suggested that while digital communication offers opportunities for children to engage in written language production, it also presents challenges such as abbreviated forms of expression and informal language conventions. Educators and parents need to consider how to balance children's exposure to digital communication with opportunities for formal language learning to support their development of effective communication skills across diverse contexts.

Assessing children's proficiency in word use involves considering a range of factors, including their ability to produce and comprehend language in diverse contexts, their use of language to achieve communicative goals, and their understanding of the social and cultural dimensions of language use. Observations of children's interactions with peers and adults, as well as their participation in language-rich activities such as storytelling and role-playing, provide valuable insights into their development of word use skills (Johnson & Thompson, 2021).

In summary, this literature review delves into the fusion of multimedia games and lexical development, exploring theoretical underpinnings, practical implications, and future directions. Theoretical frameworks like usage-based theory and cognitive linguistics underscore the importance of interactive and contextual learning in vocabulary acquisition. Practical strategies such as gamification and differentiated instruction empower educators to create engaging learning environments, while multimedia games offer diverse modalities for experiential learning. Despite challenges, integrating multimedia games into vocabulary instruction shows promise for enhancing lexical development and nurturing lifelong language skills.

CHAPTER III

METHODOLOGY

3.1 Location

The research was conducted at the institution known as Unidad Educativa Gleen Doman located in the Av, Antonio Clavijo and Pasaje la Y in Ambato city, which has been operational for several years. This establishment boasts a distinguished history. Renowned for its solid foundation, the institution is also recognized for the keeping abreast of the latest technological advancements, employing well-prepared values, and maintaining appropriately equipped classrooms.

The participants in this study were Second General Education Basic Level, aged between 6 and 7. The classes were conducted in person, following national authorization and clearance.

3.2 Equipment and Materials

Table 1. Equipment and Materials

Human Resources	Technological Material and Techniques	Institutional
Researcher	Web Browsers	Unidad Educativa Glenn Doman
Students	Multimedia Games	
Teacher	Internet	
Research Tutor	Computer	

Note: Resources used for the research.

3.3 Research Approach

Quantitative

The focus of the research was quantitative as it aided in measuring the variables through tests to determine if the experiment had been successful and to identify other features by comparing them with the control variable. It was important to determine the numerical characteristics to obtain precise values in the results and to verify, corroborate, and establish the reliability of the tests that were applied before and after the treatment using multimedia games. According to Morgan (2018), quantitative research is one that utilized quantitative data to gather specific information, such as figures. These data were structured and statistical, providing the necessary support to draw general research conclusions.

3.4 Research Modality

Bibliographical research

This research is bibliographical because it involved an extensive review and analysis of existing literature, documents, and other scholarly sources related to the topic. According to Van et al. (2021) by synthesizing and summarizing the findings from previously published studies, articles, books, and other relevant sources, this research aims to build upon existing knowledge and provide a comprehensive understanding of the use of multimedia games in enhancing lexical acquisition.

Quasi-experimental Research

It is quasi-experimental because is a systematic process and a scientific approach to research, in which the researcher manipulates one or more variables and controls and measures any changes in other variables. According to Cerquetti and Ferrara (2018), the research also wants to know the relation between the Multimedia Games as independent variable with the Lexis enhancement as dependent variable. It is estimated the application of different multimedia games to enhance lexis. While quasi-experimental designs allow for the comparison of groups and the examination of cause-effect relationships, they do not involve random assignment of participants, which is a characteristic of true experimental designs. Therefore, in this study, the lack of random assignment to groups necessitated the use of a quasi-experimental design to investigate the impact of multimedia games on lexical acquisition.

3.5 Level or Type of research

Exploratory Research

The research adopted an exploratory approach, characteristic of the early stages of investigation into a relatively underexplored phenomenon within the field of language education (Swedberg, 2020). The utilization of multimedia games to enhance lexical acquisition represented a novel area of inquiry, prompting an investigative endeavor to explore its potential efficacy. Pre-tests and post-tests were administered, and outcomes were compared between a control group and an experimental group to glean preliminary insights. Limited existing literature on this specific topic necessitated an exploratory stance, aiming to uncover new insights and generate knowledge. Consequently, the research design aligned with the exploratory nature of the study, as it sought to investigate and unearth novel insights in an area with scant prior research.

Correlational Research

Th research was identified as correlational due to its focus on examining relationships between variables without manipulation. The study involved analyzing data collected from pre-tests and post-tests administered to two distinct groups: a control group and an experimental group. By observing changes in lexical acquisition between these groups, the research aimed to establish correlations between the use of multimedia games and improvements in lexical skills. According to Pandey et al. (2021), the absence of random assignment and experimental manipulation characterized the research design as correlational, emphasizing the exploration of associations rather than causation.

3.6 Hypothesis - scientific question - idea to defend.

The hypothesis that the present research intended to verify consisted of the following:

Alternative Hypothesis: Multimedia Games enhance Lexis in Second grade EGB students at ''Glenn Doman'' Educational Unit.

Null Hypothesis: Multimedia Games do not enhance Lexis in Second grade EGB students at ''Glenn Doman'' Educational Unit.

3.7 Population or Sample

The participants in this work have been divided into two random groups, one control and one experimental.

Table 2. Total Population

Participants	Population	Percentage
Man	18	60%
Female	12	40%
Total	30	100%

Note: Total number of participants.

Each group has 15 students. The age varies between 6 and 7 years and their level of English is a beginner. Each participant studies at the Glenn Doman Educational Unit on the 2nd grade EGB in the city of Ambato located in the province of Tungurahua-Ecuador. Both groups are mixed between boys and girls.

3.8 Data Collection

Table 3. Groups for Data Collection

Groups	Students	Percentage
Experimental	15	50%
Control	15	50%
Total	30	100%

Note: Study groups

In quantitative research, mathematical procedures were utilized, and the results were presented statistically. Each statistical result was segmented to address the various research questions (Creswell, 2015). To collect this data, a pre-test was administered to ascertain the participants' level of knowledge and lexis. Subsequently, diverse multimedia games were employed in the experimental group, and this process was juxtaposed with the control group. Following this, both groups underwent a post-test, aimed at delineating the disparity in lexis both at the commencement and conclusion of the treatment. The instruments utilized were pronunciation tests tailored to the participants' age. The technological resources played a crucial role, ensuring Internet connectivity, utilization of television, and access to diverse educational games and online platforms aimed at motivating participants to independently practice basic vocabulary words.

The instrument used for this research was a standardized test from Cambridge, specifically the Pre-A1 Starters, which was chosen to meet the participants' needs by focusing on improving pronunciation and acquiring basic English vocabulary words. This evaluation served as both a pre-test and post-test, administered before and after the treatment, respectively. The Pre-A1 Starters test was selected for its dynamic nature, encouraging children to engage in speech and play simultaneously through visual stimuli. It is worth noting that this test is validated by Cambridge University. A computer was utilized as the technological medium for selecting and presenting test options. Following Cambridge guidelines (2018), the pre-test application and subsequent results were analyzed. Upon analyzing the responses, a treatment plan was implemented for the experimental group, focusing on enhancing vocabulary through online games. Meanwhile, the control group underwent a more traditional approach, utilizing the choral repetition technique.

The validity is based on the relationship with the variables. This standardized test falls within the framework of application in previous research works where the same test was used. According to Seed & Holland (2020), the recognition of competence and abilities within individual learners is beginning to influence language learning and teaching and should

influence language evaluation, particularly if it is integrated learning and an evaluation approach is adopted, as the CEFR has done This thus demonstrates that the evaluations applied to the participants have shown improvements in the skills of everyone. The same thing happens in the instrument analysis table where vocabulary acquisition is measured in which the evidence from studies of vocabulary measurements can be tied to the levels of the CEFR with some confidence. (Milton, 2010).

3.9 Information processing and statistical analysis

Being a quantitative investigation, it is necessary to mathematically measure the average obtained in the different tests and compare them at the beginning and the end of the application of the treatment. The data and analysis can be done through programs specifically related to the collection of statistical data such as SPSS.

SPSS stands for Statistical Package for the Social Sciences. It is a software program widely used for statistical analysis in various fields, including social sciences, psychology, business, and health sciences. SPSS provides a user-friendly interface for performing statistical analyses and data management tasks. It allows researchers to conduct a wide range of statistical procedures, including descriptive statistics, inferential statistics, regression analysis, factor analysis, and more. Additionally, SPSS facilitates data visualization through charts, graphs, and tables, making it easier to interpret and present research findings. Overall, SPSS is a powerful tool for analyzing data and deriving meaningful insights from research studies.

During the data collection phase, the t-test was utilized as a statistical tool to analyze the results obtained from the pre-test and post-test assessments. The t-test is commonly used to determine if there is a significant difference between the means of two independent groups. In this study, the t-test was employed to compare the mean scores of lexical acquisitions between the pre-test and post-test results in the experimental group before and after the treatment.

Overall, the t-test served as a crucial analytical tool in the data collection process, enabling researchers to assess the effectiveness of the intervention and draw meaningful conclusions about the impact of multimedia games on lexical acquisition.

The application process follows these steps:

(1) The pre-test was applied based on knowing the prior knowledge of the participants. (2) Subsequently, the need for improvement in both courses was ensured for both the control group and the experimental group (comprising 15 children who progressed through online educational games), utilizing the respective materials such as television and internet connection. This process was conducted for 6 classes of 40 minutes each, and upon completion, (3) the evaluation (Pre-A1 Starters) was administered again as a post-test. In this phase, the obtained results were analyzed alongside the initial hypothesis, and conclusions were drawn by comparing them from the outset, throughout the process, and at the conclusion of treatment, using the corresponding marking guide to measure the outcomes.

RESULTS AND DISCUSSION

The integration of multimedia games as a pedagogical tool to enhance lexical acquisition is considered a crucial aspect of contemporary language education. This chapter presents findings from a comprehensive investigation into the efficacy of multimedia games in improving lexis among language learners. The research methodology involved the administration of pre-tests and post-tests to two distinct groups: a control group and an experimental group. Through meticulous analysis and interpretation of the collected data, this chapter endeavors to elucidate the impact of multimedia games on lexical development and engage in a nuanced discussion surrounding the implications of these findings for language teaching and learning practices. By scrutinizing the outcomes of the pre-test and post-test assessments within the context of the control and experimental groups, valuable insights are provided into the effectiveness of multimedia games as a pedagogical intervention for fostering lexical growth. Through an in-depth examination of the results, chapter four contributes to the burgeoning discourse on innovative approaches to language instruction and underscores the potential of multimedia games in revolutionizing vocabulary acquisition methodologies.

Table 4. Pre-test Results from the Control Group and Experimental Group

Group	Total Score obtained from the pre-test	Mean Score
Control	233	15,5
Experimental	239	15,9

Note: Results over 25 points from the pre-test in the control and experimental groups.

The table presents results obtained from averages in both the control and experimental groups. In the control group, the average score was 15,5 during the pre-test. It is evident that most students did not meet the desired benchmark; some even scored below 15, with only one student reaching a score of 20 or higher. The target score is set at 25 points, indicating a lack of strong lexical integration among students. In the experimental group, similar trends were observed. During the pre-test, the mean score stood at 15,9, with only two students achieving scores of 21 out of a possible 25 points. While most students fell within the 15 to 20 range, the desired outcome was not achieved in either group.

Table 5. Post-test Results from the Control Group and Experimental Group

Group	Total Score obtained from the post-test	Mean Score
Control	262	17,5
Experimental	331	22,1

Note: Results over 25 points from the post-test in the control and experimental groups.

The table compares average scores from both the control and experimental groups, indicating that in the control group, the traditional method, specifically Choral Repetition, resulted in a modest increase in students' knowledge of new words, with the average score rising to 17,5 post-tests. However, this improvement was not significant, and only two students achieved a score of 22 out of 25 points again. Despite most students showing improvement from their initial scores, the desired outcome was not met. Conversely, in the experimental group, where a treatment was applied, the average score substantially increased to 22,1, with thirteen students achieving scores within the range of 20 to 25 points, marking significant progress compared to the pre-test, indicating the efficacy of the treatment in enhancing learning outcomes.

Table 6. General Results

General Results from the Pre-Test and Post-Test Application	
Pre-test Control Group	15,5
Pre-test Experimental Group	15,9
Post-test Control Group	17,5
Post-test Experimental Group	22,1

Note: Comparison of results obtained in both groups.

Figure 1. General Results

	Total
Pre-test: Control Group	15,5
Post-test: Control Group	17,5
Pre-test: Experimental Group	15,9
Post-test: Experimental Group	22,1
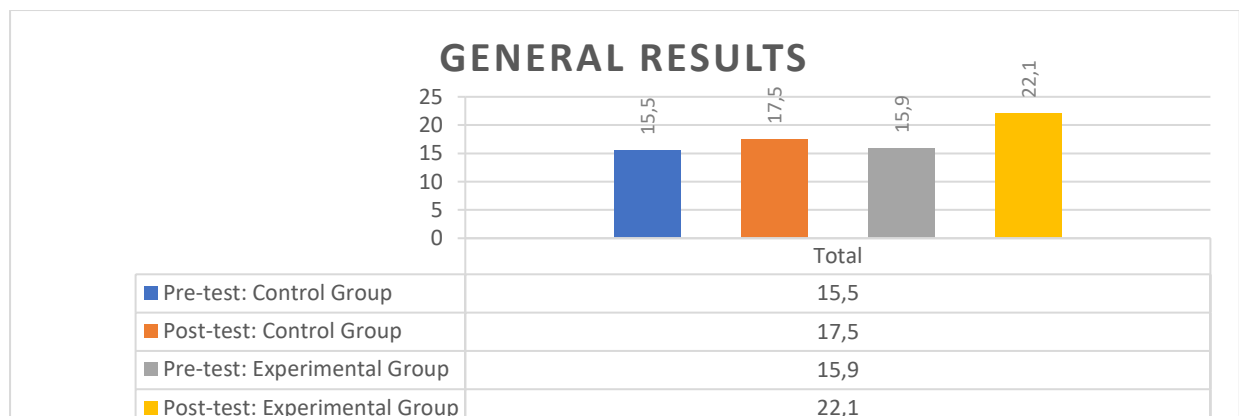
Note: Comparison of the overall results obtained in the figure.

As can be seen in the figure, there is great progress when applying the treatment since the results of the post-test in the experimental group are significant. At the beginning in the application of the pre-test, means of 15,5 and 15,9 were obtained in each of the groups: Control and Experimental, these results do not have a large difference. Subsequently, the treatment was applied only in the experimental group, this treatment consisted of the application of multimedia games for a month that was distributed in a total of 6 sessions so that the students, through these games, could improve the students' lexis and increase this way your knowledge of words in the English language. On the other hand, in the control group, the traditional strategy called Choral Repetition was applied. At the end of the application of the treatment, the post-test was carried out in both groups, which helped to demonstrate that in the end there is progress in both the control and experimental groups, but the difference is varied. However, in the control group there is no relevant progress since the average obtained was 17,5 and in the experimental group it was 22,1. These results demonstrate that there is a positive relationship between the application of multimedia games and lexis.

Table 7. Indicators of Lexis Acquisition

Group	Meaning Comprehension	Word Form Mastery	Word Use Proficiency
Experimental (Initial)	75%	80%	85%
Experimental (Final)	90%	95%	95%

Note: This table provides the initial and final assessment percentages for meaning comprehension, word form mastery, and word use proficiency

The results of the study provide valuable insights into the language development progress among children in the experimental group. The comparison between initial and final assessment percentages reveals significant improvements across all three indicators of Lexis acquisition: meaning comprehension, word form mastery, and word use proficiency.

In terms of meaning comprehension, the experimental group demonstrated a notable enhancement from an initial percentage of 75% to a final percentage of 90%. This increase suggests that the implemented intervention effectively facilitated the children's ability to grasp word meanings more accurately and comprehensively. The observed improvement in meaning comprehension indicates that the intervention strategies employed, such as contextual word

usage activities and discussions, were successful in deepening the children's understanding of vocabulary beyond mere definitions.

Similarly, significant progress was observed in word form mastery within the experimental group. The initial percentage of 80% rose to 95% in the final assessment, indicating enhanced spelling accuracy and refined pronunciation skills among the participants. This improvement suggests that the intervention, which likely included phonics instruction and structured spelling practice, effectively supported the children in developing their skills in decoding written text and expressing themselves verbally.

Furthermore, the results indicate substantial advancement in word use proficiency among the children in the experimental group. The initial percentage of 85% increased to 95% in the final assessment, highlighting the children's adept deployment of vocabulary across diverse communicative contexts. This enhancement suggests that the intervention fostered the children's ability to apply language creatively and effectively in various social and cultural settings.

Overall, the findings suggest that the intervention implemented in the experimental group had a positive and transformative impact on the language development of children aged 5 to 6. The significant improvements observed in meaning comprehension, word form mastery, and word use proficiency underscore the effectiveness of the intervention strategies in promoting the children's lexical development. These results emphasize the importance of targeted and scaffolded language instruction in facilitating children's acquisition and mastery of vocabulary, laying a strong foundation for their literacy and communication skills.

4.1 Hypothesis Testing

Alternative Hypothesis: Multimedia Games enhance Lexis in Second grade EGB students at ''Glenn Doman'' Educational Unit.

Null Hypothesis: Multimedia Games do not enhance Lexis in Second grade EGB students at ''Glenn Doman'' Educational Unit.

The analysis of the hypotheses was carried out by using the t-test statistical method. This statistical method helps us differentiate both hypotheses and define the differences in results between them using deductive statistics. In the end, we can verify the hypothesis using the SPSS program to obtain reliable data.

The formula for the t-test in statistics (paired samples) is as follows:

$$t = \frac{\bar{d}}{\frac{s_d}{\sqrt{n}}}$$

In this context:

- $\bar{d}$ = the mean of the differences, as located in the statistics table.

- Sd = the standard deviation of the differences.

- n = stands for the sample size, aligning with the number of pairs of observations.

Table 8. Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Average_PRETEST	15,9333	15	3,99046	1,03033
	Average_POSTTEST	22,0667	15	1,98086	,51146

Note: Results of paired sample statistics from the t-test.

In the data produced by the IBM SPSS statistical software, it is evident that the initial average of the pre-test significantly rose from 15,9 to an average of 22,06, indicating a difference of 6,16. This signifies progress in the research.

Table 9. Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Average_PRETEST	-6,13333	2,99682	,77378	-7,79292	-4,47375	-7,926	14	,000
	Average_POSTTEST								

Note: Results of the Paired Samples Test.

Based on the results of the paired samples test, which compared pre-test and post-test scores, the decision has been made to reject the null hypothesis. With an extremely low p-value of 0,000, below the commonly used significance level of 0,05, compelling statistical evidence is if there is a significant difference between scores before and after the intervention. This means we reject the idea that multimedia games do not enhance lexis and accept that multimedia games positively enhance lexis.

Discussion

The chapter delves into the use of multimedia games as a pedagogical tool to enhance lexical acquisition in language education. By conducting a thorough investigation, it examines the effectiveness of multimedia games in enhancing vocabulary among language learners through the meticulous analysis of pre-tests and post-tests administered to both control and experimental groups. The findings shed light on the impact of multimedia games on lexical development, paving the way for a nuanced discussion on their implications for language teaching and learning practices.

The comparison of results between the control and experimental groups reveals notable differences, with the experimental group showing substantial progress following the application of multimedia games compared to the traditional method employed in the control group. This progression underscores the potential of multimedia games in revolutionizing vocabulary acquisition methodologies. Moreover, hypothesis testing utilizing the t-test statistical method corroborates these findings, providing compelling evidence to reject the null hypothesis and affirm the positive effect of multimedia games on lexical enhancement.

In addition to the discussion on the efficacy of multimedia games in enhancing vocabulary acquisition, it is important to consider the specific types of multimedia games used as the treatment in the research. Various types of multimedia games, both paid and free, have been developed to facilitate vocabulary acquisition in language learning contexts. These include vocabulary matching games, vocabulary role-playing games (RPGs), word search puzzles, hangman games, and flashcard games (Johnson & Smith, 2021).

Vocabulary-matching games present learners with vocabulary items and corresponding definitions, images, or sentences, requiring players to match them correctly (Roberts & Brown, 2020). Examples include Word Match on WordWall and Matching Worksheets. Vocabulary RPGs immerse players in virtual worlds where they assume roles and complete quests requiring the use of vocabulary. Examples include Lexica and Vocab RPG on Vocabulary.com.

Word search puzzles challenge players to find hidden vocabulary words within a grid of letters, available in apps like Word Search Pro and through online generators. Hangman games involve guessing a hidden word by selecting individual letters within a limited number of attempts. PlayPhrase.me offers a hangman feature with phrases from movies and TV shows.

Flashcard games present virtual flashcards containing vocabulary words and meanings, with activities such as matching and quizzes. Platforms like Quizlet and Anki provide customizable

flashcard sets for vocabulary acquisition. By incorporating these diverse multimedia games into the research, it allows for a comprehensive examination of their effectiveness in enhancing lexical acquisition among language learners. This diverse range of game types caters to different learning preferences and provides opportunities for engaging and interactive vocabulary practice (Clark, 2020).

The results of the study, as reflected in the percentages obtained from the experimental group, provide tangible evidence that supports the theoretical frameworks and insights discussed in the literature review. Johnson and Thompson (2021) emphasized the importance of considering multiple indicators, including meaning, form, and use, in assessing Lexis acquisition. The significant improvements observed across all three indicators within the experimental group underscore the validity of this approach.

The increase in meaning comprehension from 75% to 90% among the children in the experimental group aligns with the theoretical perspectives presented by Brown et al. (2019) and Smith and Jones (2020). These authors highlighted the nuanced nature of word meanings and the importance of understanding vocabulary beyond literal definitions. The observed enhancement in meaning comprehension suggests that the intervention strategies implemented in the study effectively facilitated the children's ability to grasp the complexities and contextual variations of vocabulary, as advocated by these authors.

Similarly, the substantial progress in word form mastery from 80% to 95% resonates with the principles of language acquisition theory discussed by Lee and Kim (2018) and Garcia and Martinez (2022). These authors emphasized the importance of phonics instruction and structured spelling practice in promoting children's skills in decoding written text and expressing themselves verbally. The significant improvement in word form mastery suggests that the intervention strategies implemented in the study were successful in enhancing the children's abilities in these areas, aligning with the insights provided by these authors.

Moreover, the increase in word use proficiency from 85% to 95% among the children in the experimental group reflects the sociocultural and constructivist perspectives on language development proposed by Jones and Smith (2017) and Brown and Green (2021). These authors emphasized the role of immersive language-rich activities and collaborative learning experiences in fostering children's ability to apply language creatively and effectively across diverse communicative contexts. The observed advancement in word use proficiency suggests

that the intervention strategies implemented in the study facilitated the children's development of effective communication skills, as advocated by these authors.

Overall, the findings of the study provide empirical validation for the theoretical frameworks and insights presented in the literature review. By integrating the empirical evidence with the percentages obtained from the experimental group, the study contributes to a deeper understanding of Lexis development and provides valuable implications for educators and practitioners working in the field of early childhood education.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

- This study confirms a positive link between Multimedia Games and English Lexis, showcasing the effectiveness of age-appropriate interactive games in elevating vocabulary acquisition among second-grade students. The results emphasize the potential of multimedia games to engage students and enhance their English lexicon, supporting the need for their seamless integration into language curricula. Moving forward, educators are encouraged to tailor games for specific age groups, fostering adaptability, and ensuring continued exploration and collaboration in leveraging multimedia games as impactful tools in language education.

- In conclusion, choosing multimedia games based on age and class topics is crucial for effective learning. This study highlighted the importance of selecting games that match students' ages and classroom subjects. The choice of specific games, including vocabulary matching games, RPGs, word search puzzles, hangman games, and flashcard games, was made with careful consideration of students' ages and preferences. These games were selected to provide engaging and interactive learning experiences that resonate with students' interests and developmental stages. Vocabulary matching games offer intuitive digital interactions suitable for younger learners, while RPGs immerse students in immersive storytelling. Word search puzzles appeal to visual learners, while hangman games tap into students' love for wordplay and competition. Flashcard games offer versatility and adaptability, catering to diverse learning needs. By aligning games with students' preferences and educational goals, educators can create an enriching and enjoyable learning environment that promotes active participation and deepens understanding.

- Analyzing how students learn vocabulary through multimedia games revealed that active participation significantly improves vocabulary acquisition. The analysis of participants' lexis acquisition, focusing on topics such as Parts of the House, Animals, Fruits, and Prepositions of Place, underscores the effectiveness of targeted vocabulary instruction. By examining how learners engage with these specific lexical items in classroom practice, valuable insights emerge regarding their acquisition and retention. The deliberate selection of age-appropriate and contextually relevant vocabulary enhances the relevance and applicability of learning experiences for young learners.

Through systematic analysis, educators can gain a deeper understanding of students' vocabulary development and tailor instructional strategies to optimize language acquisition outcomes in early childhood education settings. The interactive nature of these games helps students understand and remember words better. This insight emphasizes the value of interactive learning methods, enhancing students' vocabulary in a fun and effective way.

- Comparing students' progress before and after incorporating multimedia games into the learning process revealed significant advancements in various aspects of vocabulary acquisition. Prior to using these interactive tools, students demonstrated limited proficiency in identifying different parts of the house, animals, and fruits. However, following their engagement with multimedia games, there was a noticeable improvement in their ability to recognize and name a wider range of vocabulary items. For instance, while initially only identifying two parts of the house, students were able to identify four parts after using multimedia games. Similarly, their knowledge of animals and fruits expanded substantially. These findings underscore the effectiveness of multimedia games in facilitating vocabulary expansion across diverse thematic areas, highlighting their potential as dynamic tools for enhancing language proficiency among learners. Such positive outcomes not only enhance the enjoyment of learning but also underscore the transformative impact of multimedia games on vocabulary acquisition and retention.

5.2 Recommendations

- Multimedia games have proven effective in boosting vocabulary acquisition and engaging students in learning English. To maximize impact, educators should tailor games for specific age groups, ensuring adaptability. The study highlights the importance of seamlessly integrating multimedia games into language education and emphasizes the need for ongoing exploration and collaboration in leveraging these tools effectively.

- Educators should invest time in researching and selecting age-appropriate multimedia games that align with the specific subjects taught in class. Training programs and workshops can be organized to familiarize teachers with suitable game options. Educational institutions should consider forming committees to regularly update the list of approved games, ensuring that the content remains relevant and age-appropriate for their students.

- Encourage active participation by integrating interactive elements into classroom activities and lessons. Educators can incorporate multimedia games that require students to engage with the content actively. Additionally, regular assessments focused on vocabulary acquisition through interactive methods should be integrated into the curriculum. Professional development workshops for teachers can emphasize effective strategies to enhance student engagement in language learning.

- Incorporate multimedia games consistently into the curriculum, ensuring that they are utilized as supplementary learning tools. Establish a system for tracking students' progress before and after the implementation of these games. Schools and educational institutions should collaborate with developers to create custom educational games that align with their curriculum, providing students with a personalized learning experience. Regular assessments and feedback loops can help gauge the effectiveness of these games, allowing for continuous improvement and adaptation based on student needs and progress.

CHAPTER VI

PROPOSAL

Topic: Creation of an Interactive Lexical Guidebook program for children in the 2nd year of EGB, utilizing multimedia games.

6.1 Informative Data

Name of the Institution: Unidad Educativa "Glenn Doman"

Location: Ambato City

Beneficiaries: 2nd-year EGB students

Estimated Time for Execution: Two months.

Beginning: March 15th, 2023

Person in Charge: Researcher

Cost: $150

6.2 Background of the Proposal

This proposal introduces an Interactive Lexical Guidebook Program designed to enrich the vocabulary of 2nd-year EGB students at Unidad Educativa "Glenn Doman." Recognizing the pivotal role of multimedia in capturing children's interest, this initiative aims to create an engaging and interactive learning experience to foster lexicon development.

The term "lexis" refers to the vocabulary or words used in a particular language. For 2nd-year EGB students, building a robust lexicon is a fundamental aspect of language development. Traditional methods often rely on rote memorization, which may not be the most effective approach for young learners. Our program places a strategic emphasis on lexis, envisioning a curriculum that is not only rich in vocabulary but also one that instills a deep understanding and practical application of words.

By incorporating lexis as a key variable, the Interactive Guidebook program seeks to make vocabulary acquisition an interactive and engaging process. Multisensory experiences, interactive exercises, and contextually relevant examples within the multimedia games facilitate a more profound comprehension of words, enabling students to not only memorize but also comprehend and use the vocabulary in various contexts.

Multimedia games offer a dynamic platform for learning that transcends traditional teaching methods. The integration of multimedia games in education has been proven to enhance engagement, critical thinking, and problem-solving skills. In the context of our proposal, these games serve as interactive tools to reinforce lexis in a captivating and enjoyable manner.

The Interactive Guidebook program envisions a diverse array of multimedia games, each carefully designed to cater to different learning styles and intelligences. From vocabulary-building quests to language-based puzzles, these games provide a multisensory experience that accommodates the varied needs of 2nd-year EGB students. By immersing students in a digital realm filled with linguistic challenges and interactive scenarios, multimedia games become catalysts for the organic acquisition of vocabulary.

Moreover, the incorporation of multimedia games acknowledges the technological landscape that students are growing up in. By harnessing the appeal of technology, our program aligns with contemporary educational trends and aims to bridge the gap between traditional teaching methods and the digital preferences of young learners.

In essence, the fusion of lexis and multimedia games within the Interactive Guidebook program represents a holistic approach to language education. By addressing the variables of vocabulary acquisition and technological integration, our initiative aspires to create a vibrant and effective learning environment that not only enriches students' linguistic capabilities but also nurtures a lifelong love for learning.

6.3 Justification.

This proposal is based on the idea that 2nd-year EGB students, at their developmental stage, benefit significantly from interactive multimedia tools. These students, being naturally curious and enthusiastic, can engage more effectively with learning materials that are dynamic and visually appealing. By introducing the Interactive Lexical Guidebook Program at Unidad Educativa "Glenn Doman," our aim is to tap into these characteristics and create an engaging learning experience.

The decision to include multimedia tools is grounded in research suggesting that interactive and visual elements positively impact cognitive development in young learners. Elements like animated visuals, audio cues, and interactive activities provide a multi-sensory experience, accommodating various learning styles and making vocabulary acquisition both effective and enjoyable. Introducing technology into the learning environment is not just about staying

modern; it is about recognizing that in current digital age, educational methods need to be innovative to capture and maintain children's interest.

Additionally, the Interactive Lexical Guidebook Program acknowledges the importance of meaningful learning experiences. By integrating multimedia content, it is aimed to create scenarios and stories that relate to the daily lives of 2nd-year EGB students. This ensures that vocabulary learning isn't an isolated exercise but a natural part of their experiences, enhancing retention and application in real-life situations.

In essence, this proposal is driven by the belief that a well-designed Interactive Lexical Guidebook Program, with rich multimedia content, aligns with the developmental needs and interests of 2nd-year EGB students. The approach is rooted in educational principles recognizing the importance of interactive and contextualized learning experiences in shaping the language development journey of young learners.

6.4 Objectives

6.4.1 General

- To design a guide with sample lesson plans that use age-appropriate interactive multimedia content focusing on vocabulary enrichment among 2nd-year EGB students at Unidad Educativa "Glenn Doman."

6.4.2 Specific Objectives

- To choose the activities that will be part of the Interactive Lexical Guidebook Program at Unidad Educativa Glenn Doman.
- To socialize the proposal to the teachers of the English area as well as to the
- authorities at Unidad Educativa Glenn Doman.

6.5 Feasibility Analysis

The implementation feasibility of the proposed Interactive Lexical Guidebook Program at Unidad Educativa "Glenn Doman" is supported by institutional backing, where teachers, central figures in the educational structure, endorse the initiative. Unlike the current scenario in Unidad Educativa "Glenn Doman" lacks a comparable program, emphasizing the uniqueness of the proposed initiative and its alignment with the institution's commitment to innovation. With existing physical and human resources, the institution provides a solid foundation for the program, minimizing the need for substantial additional investments.

Economically, the proposal is viable, as the researcher undertakes all associated expenses, ensuring a cost-effective execution. A meticulous cost-benefit analysis considers both the economic feasibility and potential positive impacts on the learning environment. By addressing unique institutional needs, leveraging existing resources, and emphasizing economic viability, the proposed program demonstrates a strategic and feasible approach to enhancing vocabulary acquisition for 2nd-year EGB students at Unidad Educativa "Glenn Doman." This program also seems like a good idea because it could make learning more fun for students and help them remember words better. The school is a good place to try. It works well, and it can be used to help students learn more words in English.

6.6 Proposal Foundation

Theoretical Foundation

The proposed Lexical Learning Program is deeply rooted in a comprehensive theoretical foundation, synthesizing insights from renowned educational psychologists and language acquisition theorists. Tailored to the distinctive needs of Unidad Educativa "Glenn Doman" in Ambato City, this theoretical framework serves as a robust scaffold for fostering effective vocabulary enhancement among 2nd-year EGB students.

Educational Psychology Perspectives

Incorporating principles from Vygotsky and Piaget, stalwarts in educational psychology, the program adopts a constructivist approach. Aligned with Vygotsky's Zone of Proximal Development (ZPD), the design emphasizes activities that stretch students just beyond their current capabilities. Through engaging multimedia games, the program facilitates cognitive growth by applying the principles of scaffolding and social interaction.

Language Acquisition Theories

Drawing from Krashen's Input Hypothesis, the program recognizes the significance of exposing learners to language input slightly above their current proficiency. The immersive multimedia content aims to create a linguistically enriched environment, adhering to the belief that language acquisition is optimized when learners engage with challenging yet comprehensible content. This integration of language acquisition theories shapes the design of the Interactive Lexical Guidebook Program.

Context and Setting

The theoretical framework places a paramount focus on understanding and adapting to the unique context of Unidad Educativa "Glenn Doman" in Ambato City. Acknowledging the cultural and educational nuances, the program's design is tailored to resonate with the students' background. By contextualizing the program, it aims to forge a meaningful connection between the curriculum and the students' lived experiences.

Key Concepts and Strategies

At its core, the theoretical framework advocates for the strategic use of multimedia games to enhance lexis. Recognizing the necessity for interactive and age-appropriate content, the program aims to transform vocabulary acquisition into an enjoyable and engaging experience for 2nd-year EGB students. The three specific objectives provide a practical roadmap for the implementation of these strategies: developing interactive multimedia content that aligns with students' interests, seamlessly integrating the program into the existing curriculum, and promoting the application of acquired vocabulary through hands-on projects and interactive assignments.

Implications for Practice

The theoretical framework not only shapes the design but also holds significant implications for the practical implementation of the Lexical Learning Program. Aligned with educational psychology and language acquisition theories, the program seeks to create an optimal learning environment for 2nd-year EGB students. Practical implications extend to instructional strategies, resource development, and ongoing assessment methods, ensuring a holistic and effective approach to vocabulary enhancement.

In essence, the theoretical framework serves as the guiding compass for the design and implementation of the Lexical Learning Program, weaving together insights from educational psychology, language acquisition theories, and the specific educational context to create a tailored and impactful vocabulary enhancement initiative for 2nd-year EGB students.

Incorporating Research Findings

Rasti-Behbahani's systematic review from 1996 to 2020 identifies seven key themes in digital game-based vocabulary learning (DGBVL) literature: motivation, authenticity, repetition, instantiation, dual encoding, interactivity, and feedback. (Rasti-Behbahani, A. 2021). These

themes emerge as influential factors in digital games that contribute to enhancing vocabulary acquisition.

Motivation

Digital games serve as a motivational tool, creating an engaging environment that stimulates active participation and sustained interest in vocabulary learning. The theoretical underpinning of the Interactive Lexical Guidebook Program is further enriched by insights from Elaish et al.'s (2019), as presented in their work titled "Development of a Mobile Game Application to Boost Students' Motivation in Learning English Vocabulary." This study, conducted at the University of Malaya, Malaysia, sheds light on the effectiveness of mobile game applications in enhancing motivation and learning outcomes among students, particularly focusing on English as a foreign language (EFL) learner.

Integrating Mobile Game-Based Motivation

Elaish et al.'s (2019) research provides a compelling rationale for incorporating mobile game applications as a motivational tool in language learning. The study recognizes the importance of motivation, especially among non-native English learners in Arab countries, where formal English teaching is introduced later. The lack of motivation among students poses a significant barrier to effective language learning, and the study explores the potential of mobile games to address this challenge.

Motivational Impact of Mobile Games

The research emphasizes the positive impact of mobile game applications on motivation levels and learning achievement. It explores the intrinsic and extrinsic motivations facilitated by persuasive technology embedded in mobile games. The findings suggest that mobile games, designed with persuasive technology principles, can create enthusiasm, engagement, and improved confidence, particularly for students with initially low English proficiency.

Persuasive Technology and Motivational Learning

Drawing from Elaish et al.'s (2019) persuasive technology framework, the theoretical foundation integrates principles of motivation, engagement, and encouragement. Persuasive technology, as discussed in the literature, offers individualized feedback and guidance, fostering a positive learning environment. The theoretical framework acknowledges the role of

mobile interactive games in influencing attitudes and supporting students in their language learning journey.

Implications for Lexical Learning Program Design

By referencing Elaish et al.'s (2019) research, the theoretical foundation underscores the importance of incorporating persuasive technology principles into the design of the Lexical Learning Program. This includes creating interactive and engaging content that aligns with the motivational needs of 2nd-year EGB students at Unidad Educativa "Glenn Doman." The integration of mobile game elements in the program is seen as a strategic approach to overcome motivation barriers and enhance overall learning outcomes.

In summary, according to Elaish et al.'s (2019). research serves as a valuable addition to the theoretical foundation, reinforcing the significance of mobile game applications in motivating language learners. The findings guide the design and implementation of the Lexical Learning Program, aligning it with contemporary approaches that leverage technology to foster motivation and engagement among students.

Authenticity

The authenticity of digital game scenarios provides real-world context, facilitating a deeper understanding and application of vocabulary in practical situations.

Innovative Approaches in Vocabulary Learning: An Artificial Vocabulary Learning Assistant

Contributing to the theoretical foundation is the article titled "An Artificial Vocabulary Learning Assistant" by Panagiota Polyzi & Moussiades (2023). This study presents an online application designed to enhance vocabulary learning through the incorporation of games, quizzes, and interaction with a chatbot. The research was experimentally conducted on a sample of twenty proficiency-level students, divided into control and experimental groups, and evaluated over two stages.

Vocabulary Learning through Technology

Polyzi & Moussiades (2023) contribute to the theoretical foundation by emphasizing the growing importance of learning foreign languages, particularly English, in the era of globalization. Their research underscores the significance of vocabulary acquisition in

language learning, noting that it forms a foundational component for acquiring other language skills such as listening, speaking, writing, and reading.

Insights for Lexical Learning Program Enhancement

The research by Polyzi & Moussiades (2023) provides valuable insights for enhancing the Lexical Learning Program. The development of an artificial vocabulary learning assistant aligns with the need for innovative and enjoyable approaches to vocabulary acquisition. The study's focus on games, quizzes, and interaction with a chatbot offers potential avenues for integrating gamified elements into the Lexical Learning Program, making it more engaging and effective.

Repetition

The repetitive nature of digital games helps reinforce vocabulary, contributing to the consolidation of word knowledge over time.

Instantiation

Digital games offer instances where vocabulary is applied in various contexts, promoting a more profound comprehension and retention of word meanings.

Adding to the theoretical foundation is the project titled "The use of active subtitling activities for students of Tourism in order to improve their English writing production" by José Javier Ávila-Cabrera & Rodríguez-Arancón (2021), affiliated with Universidad Complutense de Madrid (UCM) and UNED-Universidad Nacional de Educación a Distancia (Spain). This initiative explores the integration of audiovisual translation as a pedagogical tool, specifically active reverse subtitling, to enhance English writing skills among university students majoring in Tourism.

Multimedia Influence on Learning

Ávila-Cabrera & Rodríguez-Arancón (2021) address the evolving learning landscape shaped by multimedia content, affecting students' attention span and communication styles. Acknowledging this, the researchers embark on the challenge of creating engaging activities that leverage students' interest in multimedia while focusing on skill development, notably in English writing and domain-specific vocabulary related to Tourism.

Audiovisual Translation as a Pedagogical Tool

The project emphasizes the utility of audiovisual translation (AVT), particularly reverse subtitling, to improve writing skills in English. The integration of AVT modes in language learning classes aligns with the contemporary preferences of students, many of whom are accustomed to consuming audiovisual content on various platforms. The paper underscores the motivational and entertaining aspects of using AVT modes in language classes, contributing to the development of different language skills and cultural awareness.

Dual Encoding

The dual encoding mechanism in digital games, combining visual and auditory stimuli, enhances the encoding and retrieval of vocabulary.

Investigating Textual Enhancement and Captions in L2 Grammar and Vocabulary: An Experimental Study

This research article, titled "Investigating Textual Enhancement And Captions In L2 Grammar And Vocabulary: An Experimental Study," conducted by Cintrón-Valentín & García-Amaya (2021) from the University of Michigan, adds valuable insights to the theoretical foundation. The study employs a randomized control design to explore the impact of captioned media on the learning of vocabulary and grammar in L2 Spanish, involving 369 learners.

Technologically Driven Learning Environment

The research addresses the evolving landscape of second language (L2) education within a technologically driven environment. Recognizing the challenges posed by low perceptual salience of certain input features, the study focuses on the role of form-focused instruction (FFI) techniques and the need to adapt to contemporary learning needs.

Multimodal Input and Form-Focused Instruction

The study investigates the effectiveness of multimodal input, specifically captioned video, in enhancing learner attention to commonly unattended input features. With a focus on form-focused instruction (FFI) techniques such as Textual Enhancement (TE) and explicit grammar instruction, the researchers explore the potential of multimodal input in facilitating L2 development.

Interactivity

The interactive nature of digital games fosters active engagement, allowing learners to interact with vocabulary in dynamic ways, promoting better retention. Enhancing Vocabulary Competence in Teacher Working Groups: The Kahoot! Contributing to the theoretical foundation is the research article by Fadhilah, Andriyanti, & Putera (2023) titled "The Use of Online Games for English Vocabulary Learning Media in Teacher Working Group: Some Advantages and Barriers." This study, conducted at Yogyakarta State University, Indonesia, investigates the effectiveness of Kahoot! online game in enhancing the professional competence of English teachers, specifically focusing on vocabulary memorization within Teacher Working Groups (KKG or MGMP).

Bridging the Gap in Professional Development

The study recognizes the fundamental challenges faced by English teachers, such as inadequate language competence and outdated teaching materials, as highlighted by Rosebbusch and discussed by Zulhermindra. In response to the monotony and perceived ineffectiveness of KKG or MGMP activities, the research explores the potential of incorporating Kahoot! as a dynamic and engaging tool to bridge the gap in professional development.

Kahoot! as a Catalyst for Learning Motivation

Fadhilah et al.'s (2023) research brings attention to the role of Kahoot! in transforming the traditional, serious, and passive class atmosphere into an interactive and enjoyable learning environment. By emphasizing the elements of involvement, focus, motivation, and fun, Kahoot! is proposed as a catalyst for revitalizing KKG or MGMP forums, making them more interesting and beneficial for English teachers.

Empowering Teachers through Gamified Learning

While the study recognizes that Kahoot! has been traditionally associated with grammar teaching, it underscores the adaptability of online games, particularly Kahoot! for improving vocabulary teaching and learning. The gamified approach is deemed effective in making the learning process more meaningful, fun, and conducive to teamwork, aligning with the observations of Kayaaltı, Derakhshan, Khatir, Tuan, and Bavi.

Insights for Professional Competence Improvement

Fadhilah et al.'s (2023) research contributes empirical insights into the positive effects of Kahoot! on teachers' competence in mastering English vocabularies. The study's findings reveal significant improvements in the experiment class, indicating a potential positive correlation between Kahoot! implementation and enhanced vocabulary memory abilities among English teachers in KKG or MGMP forums.

Implications for Lexical Learning Program Enhancement

Integrating the findings from Fadhilah et al.'s (2023) research, the theoretical foundation highlights the potential benefits of incorporating gamified elements, specifically Kahoot! into the Lexical Learning Program. The adaptability of Kahoot! for both student and teacher learning are acknowledged, suggesting that a gamified approach could foster motivation, engagement, and improved vocabulary retention among 2nd-year EGB students and their teachers.

Feedback

Digital games provide immediate feedback, enabling learners to assess their performance, correct errors, and reinforce correct vocabulary usage.

Implications for Lexical Learning Program

Integrating these findings into the Lexical Learning Program design ensures a nuanced understanding of how digital games can effectively impact vocabulary acquisition. By incorporating motivational elements, creating authentic scenarios, strategically utilizing repetition, providing instances for vocabulary application, employing dual encoding, fostering interactivity, and offering timely feedback, the program aims to optimize the vocabulary learning experience for 2nd-year EGB students at Unidad Educativa "Glenn Doman."

Multimedia Tools and Activities

The action research focuses on the use of specific multimedia tools, such as Kahoot and Jeopardy, along with interactive activities like hot seats, charades, and tongue twisters. These tools and activities are expected to enhance the learning process, strengthen student attention, and contribute to a positive attitude toward vocabulary acquisition.

Significance of Technology in Education

Acknowledging the omnipresence of technology, the researcher emphasizes its role as a valuable support in education. By leveraging technology, students can analyze and identify the meanings of words, thereby reinforcing their understanding of new vocabulary.

Necessity of Technology Integration

The research argues for the necessity of integrating technology into the classroom to improve the dynamics of classes. Using technology, particularly multimedia materials, enables students to actively engage with and understand new vocabulary, thereby enhancing the overall learning experience.

The Role of Multimedia in Vocabulary Learning

Importance of Engaging Multimedia Tools

The integration of multimedia tools into language learning environments is pivotal. Panagiota Polyzi & Moussiades (2023) exploration of an artificial vocabulary learning assistant reveals the potential of gamification, quizzes, and chatbot interactions. These elements not only engage students but also create an immersive learning experience that transcends traditional classroom boundaries.

Online Games for Vocabulary Learning

Fadhilah, Andriyanti & Putera (2023) research emphasizes the significance of online games, specifically Kahoot! in enhancing vocabulary retention. The study provides insights into the flexibility and accessibility of online platforms, addressing the technological challenges faced by educators.

Captioned Media for Grammar and Vocabulary

Cintrón-Valentín & García-Amaya (2021) experimental study explores the impact of captioned media on vocabulary and grammar learning in L2 Spanish. The research scrutinizes the immediate and lasting effects of different captioning formats, providing valuable insights into the nuanced relationship between multimedia input and language acquisition.

An Artificial Vocabulary Learning Assistant

Innovative Approaches to Vocabulary Learning

Polyzi & Moussiades (2023) exploration of an artificial vocabulary learning assistant introduces an innovative paradigm. The inclusion of gamified elements, quizzes, and chatbot interactions offers a holistic and engaging approach to vocabulary acquisition. This artificial assistant serves as a beacon, illuminating the potential of technology in creating dynamic and interactive learning environments.

Overcoming Challenges Through Technology

To overcome the identified challenges, the model proposes a multifaceted approach that harnesses the power of technology and innovative teaching methods:

Strategies for Vocabulary Enhancement

Multimedia Tools and Apps

Kahoot!

The integration of Kahoot! and similar interactive platforms emerges as a practical solution. Vargas (2020). advocates for the use of such apps to motivate students, recognizing that incorporating technology aligns with their everyday learning experiences.

Quizlet

In addition to Kahoot! platforms like Quizlet offer customizable tools to create engaging vocabulary learning activities. The gamified nature of Quizlet enhances motivation and encourages repeated exposure to new words, reinforcing retention.

Innovation in Classroom Dynamics

Muhammad Reza Fadhilah et al.'s (2023) study highlights the effectiveness of diverse classroom activities such as hot seat, charades, and tongue twisters. When combined with technology, these activities create an engaging and dynamic learning environment.

Recommendations for Implementation

Balancing Technology and Tradition

Educators are encouraged to implement a judicious blend of multimedia tools, diverse activities, and active subtitling exercises. Balancing technology with traditional teaching methods ensures a holistic approach that caters to diverse learning preferences.
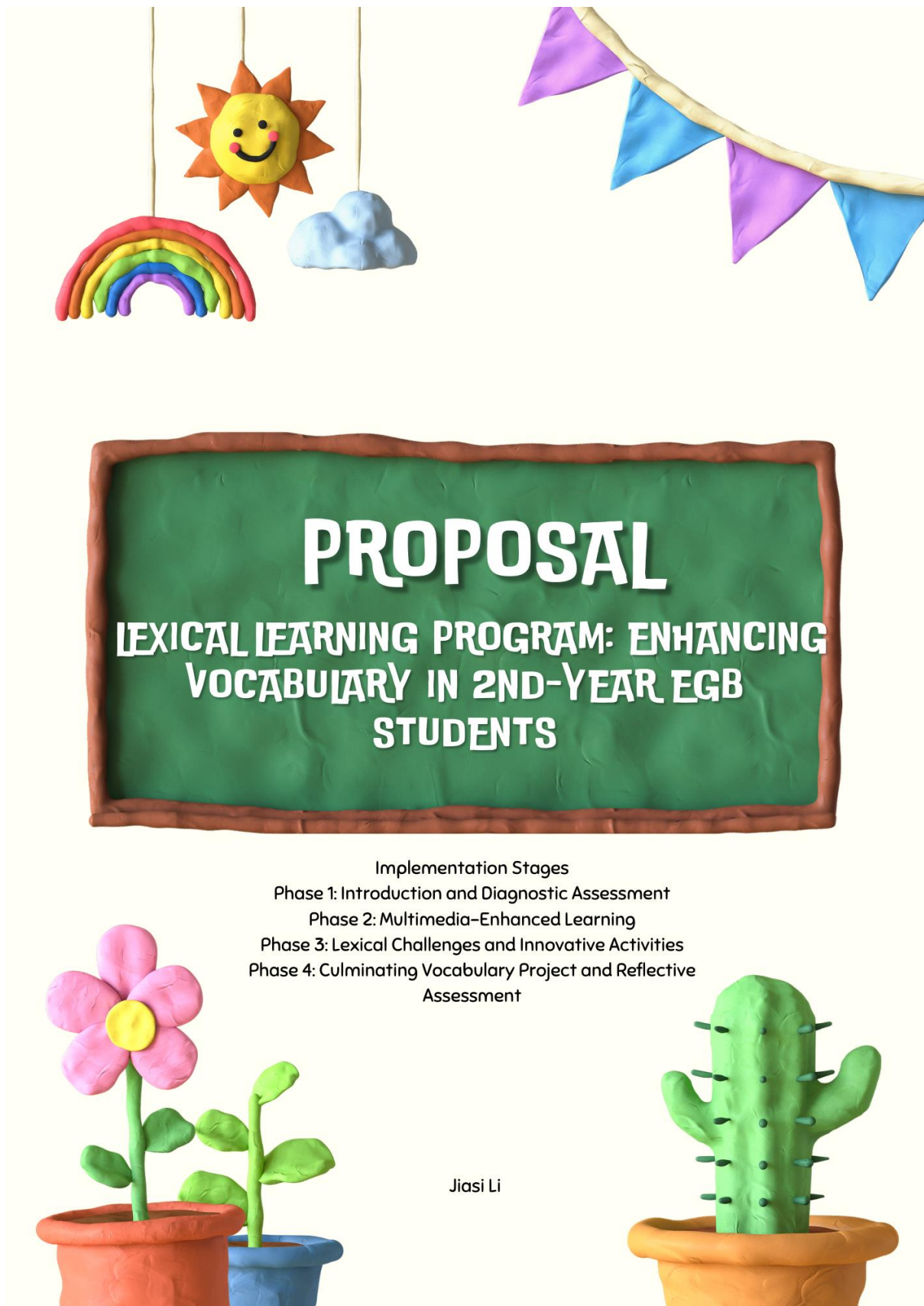
Encouraging Student Participation

The model places significant emphasis on the active participation of students. Encouraging them to engage with interactive platforms, collaborate in classroom activities, and immerse themselves in multimedia content fosters a sense of ownership in their learning journey.

Continuous Professional Development

To ensure effective implementation, continuous professional development for educators is crucial. Training programs can empower teachers to harness the full potential of multimedia tools and pedagogical approaches, fostering a positive impact on vocabulary learning outcomes.

Lexical Learning Program: Enhancing Vocabulary in 2nd-year EGB Students

Figure 2. Cover Page

PROPOSAL

LEXICAL LEARNING PROGRAM: ENHANCING VOCABULARY IN 2ND-YEAR EGB STUDENTS

Implementation Stages
Phase 1: Introduction and Diagnostic Assessment
Phase 2: Multimedia–Enhanced Learning
Phase 3: Lexical Challenges and Innovative Activities
Phase 4: Culminating Vocabulary Project and Reflective Assessment

Jiasi Li

6.7 Proposal Development

Program Overview:

The Lexical Learning Program is a comprehensive initiative designed to elevate vocabulary acquisition among 2nd-year EGB students at Unidad Educativa "Glenn Doman." Based on robust theoretical foundations in educational psychology and language acquisition theories, this four-month program integrates engaging multimedia content to create an immersive and interactive learning experience.

Implementation Stages:

Phase 1: Introduction and Diagnostic Assessment

Objective: To assess the baseline vocabulary level of students.

Description: The program begins with an introduction to the Lexical Learning approach, highlighting the importance of vocabulary in language acquisition. A diagnostic assessment, incorporating elements from Cintrón-Valentín & García-Amaya (2021) study, is administered to gauge students' current vocabulary proficiency.

Instruction: Educators introduce the program, emphasizing the role of multimedia tools and gamification in enhancing vocabulary learning.

Learning Objectives: Students will understand the significance of vocabulary in language learning, and educators will identify the specific challenges faced by individual learners.

Assessment: Diagnostic tests and quizzes are used to evaluate students' initial vocabulary knowledge.

Phase 2: Multimedia-Enhanced Learning

Objective: To expose students to a variety of vocabulary-rich multimedia content.

Description: Building on the work of Ávila-Cabrera & Rodríguez-Arancón (2021), this phase incorporates active subtitling activities and captioned media. Platforms like Kahoot! and Quizlet are introduced for interactive learning. The focus is on creating an immersive environment where students actively engage with vocabulary through multimedia.

Instruction: Educators guide students through multimedia activities, encouraging active participation and exploration.

Learning Objectives: Students will demonstrate increased engagement with multimedia-enhanced vocabulary activities. They will also begin to recognize and use new words in different contexts.

Assessment: Formative assessments, quizzes, and participation evaluations gauge students' progress in engaging with multimedia tools.

Phase 3: Lexical Challenges and Innovative Activities

Objective: To address specific lexical challenges and reinforce learning through innovative activities.

Description: Inspired by the work of Polyzi & Moussiade (2023), this phase focuses on tailoring activities to overcome identified lexical challenges. Innovative techniques such as hot seat, charades, and tongue twisters are incorporated to make vocabulary acquisition dynamic and enjoyable.

Instruction: Educators provide targeted instruction based on students' identified challenges. They introduce innovative activities to reinforce vocabulary in context.

Learning Objectives: Students will actively participate in lexically challenging activities, demonstrating improved retention and application of vocabulary in both familiar and novel contexts.

Assessment: Observation, participation assessments, and periodic quizzes measure students' progress in overcoming lexical challenges.

Lesson Plan Activities

Lesson Plan

Grade: 2nd Grade EGB	Subject: English	Date: March 15th, 2023

Topic: Vocabulary Introduction and Icebreaker

Lesson #1

Lesson Focus and Goals:
Establishing a positive classroom environment.
- Students comprehend the importance of a rich vocabulary.
- Icebreaker activities foster a positive and inclusive atmosphere

Materials Needed:
Introduction presentation, computer, board, online multimedia game: ABCmouse.com

Learning Objective:
Students will understand the significance of vocabulary in language learning and create a positive learning atmosphere.

Structure / Activity:

Step 1: Introduction to Vocabulary (20 minutes)
Warm welcome and introduction to the Lexical Learning Program.
Emphasize the significance of vocabulary in language learning.

Step 2: Vocabulary Discussion (15 minutes)
Facilitate a discussion on personal experiences with vocabulary.
Discuss the relevance of vocabulary in various aspects of life.

Step 3: Icebreaker Activity – "Vocabulary in ABCmouse.com" (25 minutes)
Introduce a online multimedia game with simple questions.
Encourage students to find classmates who can provide examples or definitions for the words.
Promote positive and inclusive interactions. (https://www.abcmouse.com/abc/?8a08850bc2=T3120885528.1707138992.0317)
- Combine drawing with favorite words.
- Encourage creative expression.

Step 4: Group Reflection (10 minutes)
Gather students for a brief reflection on challenging or interesting words.
Discuss different examples and definitions shared during the icebreaker.

Assessment:

- Informal observation during the interactive game and craft activity.
- Review the collages for individual understanding of the introduced words.

| GRADE: 2ND GRADE EGB | SUBJECT: ENGLISH | DATE: MARCH 20TH, 2023 |

TOPIC: MULTIMEDIA EXPLORATION DAY | LESSON: #2

Lesson Plan

LESSON FOCUS/GOALS:
ACTIVE PARTICIPATION AND ENGAGEMENT THROUGH INTERACTIVE MULTIMEDIA TOOLS.
1. CHILDREN ACTIVELY ENGAGE WITH INTERACTIVE MULTIMEDIA TOOLS.
2. INCREASED FAMILIARITY AND COMFORT WITH MULTIMEDIA PLATFORMS

MATERIALS NEEDED:
- KID-FRIENDLY MULTIMEDIA PLATFORMS WITH COLORFUL VISUALS.
- INTERACTIVE QUIZZES WITH SIMPLE QUESTIONS.
- WHITEBOARD AND MARKERS.
- MULTIMEDIA GAME: WORDWALL.COM

LEARNING OBJECTIVE: FACILITATE ENGAGING MULTIMEDIA ACTIVITIES TO PROMOTE VOCABULARY LEARNING AMONG 6-YEAR-OLD CHILDREN.

STRUCTURE/ACTIVITIES:
1. INTRODUCTION TO INTERACTIVE TOOLS (15 MINUTES):
   o BRIEFLY INTRODUCE KID-FRIENDLY MULTIMEDIA PLATFORMS WITH COLORFUL VISUALS.
   o SHOW EXAMPLES OF INTERACTIVE QUIZZES DESIGNED FOR CHILDREN.
2. INTERACTIVE QUIZ FUN (20 MINUTES):
   o CONDUCT SIMPLE INTERACTIVE QUIZZES WITH QUESTIONS RELATED TO THE LESSON.
   o ENCOURAGE CHILDREN TO PARTICIPATE ACTIVELY BY ANSWERING QUESTIONS.
3. GROUP EXPLORATION (15 MINUTES):
   o INTRODUCE THE ONLINE MULTIMEDIA GAME ON WORDWALL . (HTTPS://WORDWALL.NET/ES/RESOURCE/15102555)
   o GUIDE CHILDREN THROUGH THE GAME, ENCOURAGING ACTIVE PARTICIPATION.
4. CREATIVE DRAWING ACTIVITY (15 MINUTES):
   o INTEGRATE A DRAWING ACTIVITY RELATED TO THE MULTIMEDIA CONTENT.
   o CHILDREN DRAW THEIR FAVORITE VOCABULARY ITEMS FROM THE INTERACTIVE SESSION.
5. WRAP-UP AND POSITIVE REINFORCEMENT (10 MINUTES):
   o GATHER CHILDREN FOR A QUICK DISCUSSION ON WHAT THEY ENJOYED.
   o PROVIDE POSITIVE REINFORCEMENT, PRAISE, AND ENCOURAGEMENT FOR ACTIVE PARTICIPATION.

ASSESSMENT:
- FORMATIVE ASSESSMENTS DURING INTERACTIVE ACTIVITIES.
- INFORMAL OBSERVATIONS OF ENGAGEMENT AND PARTICIPATION.

Lesson Plan

Grade: 2nd Grade EGB

Subject: English

Date: March 25th, 2023

Topic: Lexical Challenge Adventure

Lesson #3

Lesson Focus and Goals:
Overcoming specific lexical challenges through playful activities.
Goals:
1. Children actively engage in lexically challenging activities.
2. Improved retention and application of vocabulary in diverse contexts.

Materials Needed:
- Kid-friendly lexical challenge toolkit (e.g., flashcards with simple words, charades prompts).
- Fun and lively tongue twisters.
- Whiteboard and markers.
- Multimedia game: Starfall's "Word Machine Challenge" (starfall.com)

Learning Objective:
Engage 6-year-old children in playful lexical challenges to enhance vocabulary retention.

Structure / Activity:
1. Introduction to Lexical Challenges (15 minutes):
   - Use simple and colorful flashcards to introduce basic words.
   - Explain the concept of lexical challenges in a playful way.
2. Charades Fun (20 minutes):
   - Engage children in a charades game with easy-to-act-out vocabulary.
   - Encourage children to guess and act out words in a lighthearted manner.
3. Tongue Twisters Play (15 minutes):
   - Introduce fun and simple tongue twisters.
   - Guide children in repeating tongue twisters together for a playful linguistic challenge.
   - Introduce the online multimedia game "Word Machine Challenge" on Starfall (https://www.starfall.com/h/)
   - Guide children through the game, emphasizing active participation.
4. Creative Word Art (15 minutes):
   - Combine a creative drawing activity with vocabulary.
   - Children draw pictures representing challenging words from the activities.

Assessment:
- Observation of children's participation and engagement during lexical challenges.
- Informal assessment of drawings to gauge understanding and retention of challenging words.

Lesson Plan

| Grade: 2nd Grade EGB | Subject: English | Date: April 5th, 2023 |

| Topic: Multifaceted Multimedia Project Exploration | Lesson #4 |

Lesson Focus and Goals:
Applying acquired vocabulary in a creative, hands-on project.
Goals:
1. Children integrate acquired vocabulary into a simple culminating project.
2. Exploration of multimedia elements enhances project creativity.

Materials Needed:
- Simple project guidelines with colorful visuals.
- Multimedia elements for exploration (e.g., pictures, basic audio).
- Whiteboard and markers.
- Multimedia game: PBSKids.org

Learning Objective: Encourage 6-year-olds to explore multimedia elements and apply vocabulary in a creative project

Structure / Activity:
1. Introduction to the Project (15 minutes):
   - Present a simple and colorful project guideline.
   - Discuss the importance of using learned vocabulary in a creative way.
2. Multimedia Exploration (20 minutes):
   - Showcase multimedia elements (pictures, simple audio).
   - Allow children to explore these elements for project inspiration.
3. Guided Project Creation (20 minutes):
   - Introduce the online multimedia game "Create Your Story" on PBS Kids. (https://pbskids.org/xavier/games/xavier-story-creator)
   - Guide children through the game, emphasizing creative story building.
4. Show and Share Time (15 minutes):
   - Allow each child to briefly share their project.
   - Encourage positive feedback and questions from their peers.

Assessment:

- Formative assessments during project creation.

- Instructor feedback on the incorporation of vocabulary into the project.

LESSON PLAN

Grade: 2nd Grade EGB

Subject: English

Date: April 15th, 2023

Topic: Reflective Assessment and Future Goals

Lesson #5

Lesson Focus and Goals:
Developing basic metacognitive skills and setting achievable goals.
Goals:
1. Children articulate their learning experiences in simple terms.
2. Setting individual goals for continued vocabulary improvement.

Materials Needed:
- Reflective assessment prompts with visuals.
- Simple visuals representing future goals.
- Whiteboard and markers.
- Multimedia game: FunBrain.com

Learning Objectives:
Encourage 6-year-old children to reflect on their learning experiences and set simple future goals for vocabulary improvement.

Structure / Activity:
1. Reflection Time (15 minutes):
   - Use visuals and simple prompts to facilitate reflection.
   - Encourage children to share what they enjoyed and learned during the vocabulary lessons.
2. Creative Expression (20 minutes):
   - Provide materials for a drawing or coloring activity.
   - Children express their reflections through pictures.
3. Future Goals Discussion (15 minutes):
   - Discuss the concept of setting simple goals.
   - Ask children to share what they would like to achieve in terms of vocabulary.
4. Visual Goal Setting (15 minutes):
   - Use visuals to represent different goals (e.g., a star for speaking more words).
   - Allow children to choose or draw their individual goals.
   - Introduce the online multimedia game "Word Turtle" on Funbrain. (https://www.funbrain.com/games/word-turtle)
   - Guide children through the game, connecting it to the concept of word variety.

Assessment:
- Review of drawings and expressions for individual reflections.
- Class discussion on insights gained and simple future goals set by children.

Phase 4: Culminating Lexis Project and Reflective Assessment

Objective: To synthesize acquired vocabulary knowledge in a culminating project.

Description: The final phase entails a comprehensive vocabulary project where students apply their acquired vocabulary in real-world scenarios. Reflective assessments encourage students to articulate their learning experiences, providing valuable insights for future curriculum enhancements.

Instruction: Educators guide students through the project, emphasizing the application of learned vocabulary in meaningful contexts.

Learning Objectives: Students will demonstrate mastery of the vocabulary introduced throughout the program. Additionally, reflective assessments aim to enhance metacognitive skills.

Assessment: The culminating project serves as a summative assessment, evaluating students' ability to integrate acquired vocabulary into coherent and contextually appropriate expressions. Reflective assessments provide insights into students' self-awareness of their learning journey.

Conclusion

By incorporating the Lexical Learning Program into the broader framework of multimedia-enhanced language education, this model seeks to provide a holistic and effective approach to vocabulary acquisition. The program's structured phases, aligned with theoretical foundations, emphasize active participation, engagement, and the integration of technology for a transformative language learning experience.

BIBLIOGRAPHY

Agudo, J. E., Rico, M., & Sánchez, H. (2015). Multimedia games for fun and learning English in preschool. Digital education review, 183-205. https://shorturl.at/efwY3

Alexander, M., & Dallachy, F. (2020). Lexis.

Alghamdi, A., Karpinski, A. C., Lepp, A., & Barkley, J. (2020). Online and face-to-face classroom multitasking and academic performance: Moderated mediation with self-efficacy for self-regulated learning and gender. Computers in Human Behavior, 102, 214-222. https://www.sciencedirect.com/science/article/pii/S074756321930305X

Alharbi, L. (2020). The Effectiveness of Using Interactive Technology and Video Games on Developing English as a Foreign Language among Saudi Students in Qassim Region. TESOL International Journal, 15(5), 6-30.

Ávila-Cabrera, J. J., & Rodríguez-Arancón, P. (2021). The use of active subtitling activities for students of Tourism in order to improve their English writing production. Ibérica, (41), 155-180.

Baumann, J. F., & Kame'enui, E. J. (2022). Vocabulary and comprehension: Two sides of the same coin. Teachers College Press.

Beck, I. L., McKeown, M. G., & Kucan, L. (2002). Bringing words to life: Robust vocabulary instruction. Guilford Press.

Chelpanova, E., Bystray, E., Orlova, I., Moshkovich, V., & Zakirova, F. (2022). ENHANCING STUDENTS'COMMUNICATIVE SKILLS THROUGH LEXIS LEARNING. In INTED2022 Proceedings (pp. 239-245). IATED.

Cintrón-Valentín, M. C., & García-Amaya, L. (2021). Investigating textual enhancement and captions in L2 grammar and vocabulary: An experimental study. Studies in Second Language Acquisition, 43(5), 1068-1093.

Collins, A. M., & Loftus, E. F. (1975). A spreading-activation theory of semantic processing. Psychological Review, 82(6), 407-428.

Couture-Matte, R. (2022). Digital Games in the Elementary Classroom: Using Club Penguin Island with Grade 6 ESL students. The Canadian Modern Language Review, 78(1), 34- 51. https://www.utpjournals.press/doi/full/10.3138/cmlr-2020-0050

Creswell, J. W. (2015). Educational research: Planning, conducting, and evaluating quantitative (Fifth Edition). The University of Nebraska-Lincoln. Pearson

Cunningham, A. E., & Stanovich, K. E. (2022). The Reading Brain: Teaching and Understanding Reading. Guilford Press.

Din, S. U., Baig, M. Z., & Khan, M. K. (2023). Serious Games: An Updated Systematic Literature Review. arXiv preprint arXiv:2306.03098.

Doré, C. (2019). The use of games in the english classroom. https://www.lume.ufrgs.br/handle/10183/200158

Dourda, K., Bratitsis, T., Griva, E., & Papadopoulou, P. (2014). Content and language integrated learning through an online game in primary school: A case study. Electronic Journal of eLearning, 12(3), 243-258. https://eric.ed.gov/?id=EJ1035666

Elaish, M. M., Ghani, N. A., Shuib, L., & Al-Haiqi, A. (2019). Development of a mobile game application to boost students' motivation in learning English vocabulary. IEEE Access, 7, 13326-13337.

Fadhilah, M. R., Andriyanti, E., & Putera, A. R. (2023). The Use of Online Games for English Vocabulary Learning Media in Teacher Working Group: Some Advantages and Barriers. International Journal of Education and Digital Learning (IJEDL), 1(5), 161-168.

Flower, L. S., & Hayes, J. R. (1981). A Cognitive Process Theory of Writing. College Composition and Communication, 32(4), 365-387.

Galle, T. (2020). Designing and using gamification elements to improve students' user experience in a video-based mobile language learning app.

Goldenberg, C. (2020). Teaching English Language Learners: What the Research Does--And Does Not--Say. American Educator, 44(3), 12-44.

Golinkoff, R. M., & Hirsh-Pasek, K. (2006). How toddlers begin to learn verbs. Trends in Cognitive Sciences, 10(12), 529-533.

Hasram, S., Nasir, M. K. M., Mohamad, M., Daud, M. Y., Abd Rahman, M. J., & Mohammad, W. M. R. W. (2021). The effects of wordwall online games (Wow) on english language vocabulary learning among year 5 pupils. Theory and Practice in

Language Studies, 11(9), 1059-1066.
https://tpls.academypublication.com/index.php/tpls/article/view/1402

Hassan, L., Xi, N., Gurkan, B., Koivisto, J., & Hamari, J. (2020). Gameful self-regulation: A study on how gamified self-tracking features evoke gameful experiences.

Hazar, E. (2020). Use of digital games in teaching vocabulary to young learners. Educatia 21, (19), 98-104. https://shorturl.at/xACXY

Hmelo-Silver, C. E., Kapur, M., & Hamstra, M. (2018). Learning through problem solving. In International handbook of the learning sciences (pp. 210-220). Routledge. https://educ-met-inclusivemakerspace-2023.sites.olt.ubc.ca/files/2023/05/Halverson-_-Peppler-2018-International-Handbook-of-Learning-Sciences-The-Maker-Movement-and-Learning.pdf#page=233

Hoff, E. (2006). How social contexts support and shape language development. Developmental Review, 26(1), 55-88.

Horowitz, K. S. (2019). Video Games and English as a Second Language: The Effect of Massive Multiplayer Online Video Games on the Willingness to Communicate and Communicative Anxiety of College Students in Puerto Rico. American journal of play, 11(3), 379-410. https://eric.ed.gov/?id=EJ1220304

Jayasinghe, M. J. W., Hennayaka, W. A. D. H., Fernando, M. P. M., Thilakarathne, K. N. U., Samarakoon, U., & Kumari, S. (2021). LEXISGURU: Mobile Application for Learning Basic Lexis in English for Kids. In Interactive Mobile Communication, Technologies and Learning (pp. 133-144). Cham: Springer International Publishing.

Justice, L. M., & Ezell, H. K. (2020). Vocabulary instruction in early childhood: Setting the stage for academic success. In R. K. Wagner, C. A. Muse, & K. R. Tannenbaum (Eds.), Handbook of early literacy research (Vol. 3, pp. 189-210). Guilford Press.

Kadam, P. S. (2018). Effects of multimedia on learning skills of Kids (2-5 yrs). IOSR Journal of Engineering (IOSRJEN), February 2019, 20-24. https://shorturl.at/sCFJL

Kärbla, T., Uibu, K., & Männamaa, M. (2021). Teaching strategies to improve students' vocabulary and text comprehension. European Journal of Psychology of Education, 36, 553-572.

Katemba, C. (2022). Vocabulary Enhancement Through Multimedia Learning Among Grade 7th EFL Students. MEXTESOL Journal, 43(1). https://repository.unai.edu/id/eprint/69/

Krashen, S. D. (1989). We acquire vocabulary and spelling by reading: Additional evidence for the input hypothesis. The Modern Language Journal, 73(4), 440-464.

Kuliahana, A., & Marzuki, A. G. (2020). Repetition technique in an EFL speaking class in Islamic higher education in Indonesia. Academic Journal Perspective: Education, Language, and Literature, 8(1), 20-28. http://jurnal.ugj.ac.id/index.php/Perspective/article/view/3295.

Lewis, M. (1993). The Lexical Approach: The State of ELT and a Way Forward. Language Teaching Publications.

Mamajonova, S. I. Q., & Rajapova, N. M. Q. (2022). TEACHING VOCABULARY WITH THE USE OF GAMES FOR EFL AND ESL STUDENTS. Central Asian Research Journal for Interdisciplinary Studies (CARJIS), 2(11), 343-347.

Manyak, P. C., & Manyak, A. M. (2021). Multifaceted vocabulary instruction in a third-grade class: Findings from a three-year formative experiment. Reading Psychology, 42(2), 73-110.

Milton, J. (2010). The development of vocabulary breadth across the CEFR levels. Communicative proficiency and linguistic development: Intersections between SLA and language testing research, 211-232. http://eurosla.org/monographs/EM01/EM01tot.pdf#page=211

Mohinur, S. (2023). VOCABULARY ASSESSMENT METHODS. THEORY AND ANALYTICAL ASPECTS OF RECENT RESEARCH, 2(19), 98-100.

Nagy, W. E., & Townsend, D. (2021). Words as tools: Learning academic vocabulary as language acquisition. Reading Research Quarterly, 56(3), 457-477.

Nasaruddin, N. S. A., & Kamalludeen, R. M. (2020). A case study of how Malay esl learners build vocabulary using multimedia technology. IIUM Journal of Educational Studies, 8(2), 112-130. https://shorturl.at/fsMSV

Nguyen, L. Q., & Le, H. V. (2023). Enhancing L2 learners' lexical gains via Quizlet learning tool: The role of individual differences. Education and Information Technologies, 1-25.

Piaget, J. (1952). The origins of intelligence in children. International Universities Press.

Pianta, R. C., & Hamre, B. K. (2020). Measures of classroom interactions in prekindergarten and associations with children's development of academic, language, and social skills. Child Development Perspectives, 14(3), 156-161.

Polyzi, P., & Moussiades, L. (2023). An artificial vocabulary learning assistant. Education and Information Technologies, 1-25.

Pre-A1 Starters. (s/f). Cambridgeenglish.org. https://www.cambridgeenglish.org/Images/young-learners-sample-papers-2018-vol1.pdf

Ramadhan, S., Sukma, E., & Indriyani, V. (2021, February). Multimedia with Social Learning Networks (SNL): As Learning Innovation in the 4.0 Industrial Era. In Journal of Physics: Conference Series (Vol. 1779, No. 1, p. 012022). IOP Publishing.

Rasti-Behbahani, A. (2021). Why digital games can be advantageous in vocabulary learning. Theory and Practice in Language Studies, 11(2).

Reinhardt, J., & Thorne, S. L. (2020). 17 Digital Games as Language-Learning Environments. Handbook of game-based learning, 409. https://shorturl.at/jEJMS

Rice, A. H., & Mars, M. (2023). Planning for Effective Instruction. The Art and Science of Teaching Agriculture: Four Keys to Dynamic Learning.

Rowe, M. L. (2020). Child-directed speech: Relation to socioeconomic status, knowledge of child development and child vocabulary skill. Journal of Child Language, 47(5), 1085-1101.

Rumelhart, D. E. (1980). Schemata: The Building Blocks of Cognition. In R. J. Spiro, B. C. Bruce, & W. F. Brewer (Eds.), Theoretical Issues in Reading Comprehension (pp. 33-58). Lawrence Erlbaum Associates.

Seed, G., & Holland, M. (2020). Taking account of plurilingualism in Cambridge Assessment English products and services. What does plurilingualism mean for language

assessment? 16. https://www.cambridgeenglish.org/Images/597022-research-notes-78.pdf#page=18

Shahrokni, S. A. (2021). Evidence for Second Language Socialization in Multiplayer Online Game Play. TESL-EJ, 24(4), n4. https://eric.ed.gov/?id=EJ1288721

SILVA, J. B. D., BILESSIMO, S. M. S., & MACHADO, L. R. (2021). Integration of technology in education: proposal for a teacher training model inspired by TPACK. Educação em Revista, 37.

Smith, J. (2020). The Role of Vocabulary Instruction in Language Development. Journal of Educational Psychology, 112(4), 678-692.

Strik, H., Palumbo, L., Wet, F. D., & Cucchiarini, C. (2015). Web-based mini-games for language learning that support spoken interaction. https://repository.ubn.ru.nl/handle/2066/150810.

Tabors, P. O., & Snow, C. E. (2020). Vocabulary development from teaching and learning perspectives. In R. K. Wagner, C. A. Muse, & K. R. Tannenbaum (Eds.), Handbook of early literacy research (Vol. 3, pp. 211-232). Guilford Press.

Thi, H. H. N. (2021). THE IMPLEMENTATION OF GAMES IN ENHANCING VOCABULARY FOR STUDENTS AT A PUBLIC UNIVERSITY. Scientific Journal of Tan Trao University, 7(23).

Topal, R., & Shargh, F. (2023). Teaching Students How to Find and Identify Reliable Online Sources: A Series of Exercises. Journal of Political Science Education, 1-10.

Vargas Villalobos, J. N. (2020). Enhancing Vocabulary Learning Skills in Students by Using Multimedia.

Vnucko, G., & Klimova, B. (2023). Exploring the potential of digital game-based vocabulary learning: A systematic review. Systems, 11(2), 57.

Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.

ANNEXES

Annex 1: Oficio de autorización

Ambato, 05 de junio de 2023

Mg. Gabriela Camino
Rectora de la Unidad Educativa Glenn Doman
Presente.

De mi consideración:

Yo, Jiasi Leticia Li Gavilanes con cédula de ciudadanía N.- 1805254610, me dirijo a usted de la manera más comedida para solicitar me permita aplicar el pre – test, tratamiento y post – test con el tema: **The Impact of Multimedia Games to Enhance Lexis** con los estudiantes pertenecientes a segundo y tercer año de educación general básica.

Esperando que mi petición sea acogida, anticipo mis sinceros agradecimientos.

Atentamente,

Lcda. Jiasi Li
C.I: 1805254610
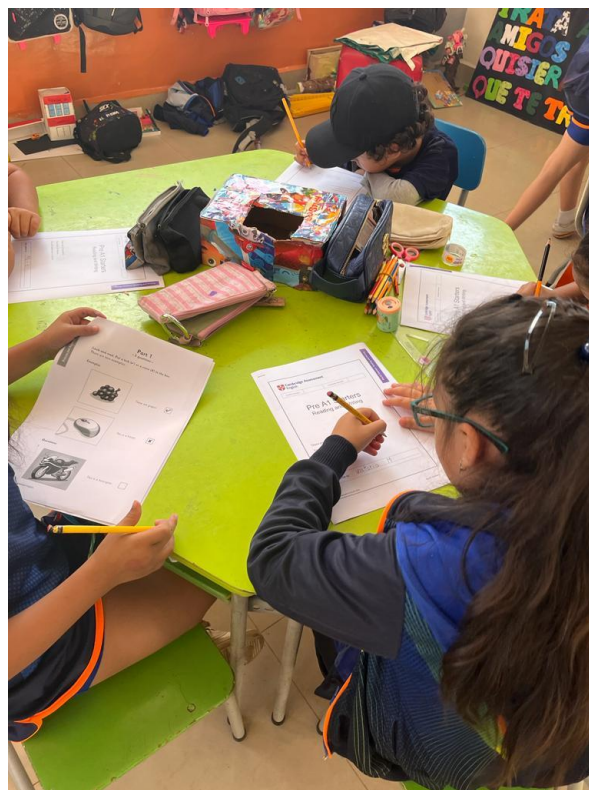Nro. de teléfono: 0980630738

Aprobado
05 - Junio - 2023

Annex 2: Photos Pre - Test Experimental Group

Annex 3: Photos Pre-test Control Group

Annex 4: Photos Post – test Experimental Group

Annex 5: Photos Post – Test Control Group
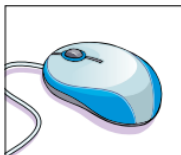
Annex 6 – Pre – A1 Starters

Part 1
– 5 questions –

Look and read. Put a tick (✔) or a cross (✗) in the box.
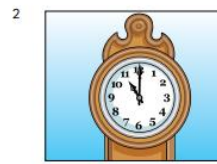There are two examples.

Examples

These are grapes. ✔

This is a house. ✗

Questions

1

This is a helicopter. ☐

2

This is a clock. ☐

3

These are shells. ☐

4

This is a sock. ☐

5

These are chairs. ☐

Part 2
– 5 questions –

Look and read. Write **yes** or **no.**

Examples

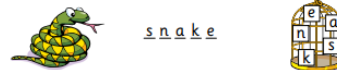There are two armchairs in the living room. .... yes

The big window is open. .... no

Questions

1 The man has got black hair and glasses. ....

2 There is a lamp on the bookcase. ....

3 Some of the children are singing. ....

4 The woman is holding some drinks. ....

5 The cat is sleeping under an armchair. ....

Part 3
– 5 questions –

Look at the pictures. Look at the letters. Write the words.

Example

s n a k e

Questions

1 _ _ _ _

2 _ _ _ _ _

3 _ _ _ _ _

4 _ _ _ _ _ _
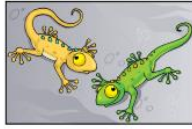
5 _ _ _ _ _ _ _

Part 4
– 5 questions –

Read this. Choose a word from the box. Write the correct word next to numbers 1–5. There is one example.

Lizards

Lots of lizards are very small ___animals___ but some are really big.

Many lizards are green, grey or yellow. Some like eating (1) _____ and some like eating fruit.

A lizard can run on its four (2) _____ and it has a long (3)_____ at the end of its body.

Many lizards live in (4)_____ but, at the beach, you can find some lizards on the (5)_____ . Lizards love sleeping in the sun!

Example			
animals	tail	balloon	trees
legs	spiders	teacher	sand

20   Cambridge Assessment English

Part 5
– 5 questions –

Look at the pictures and read the questions. Write one-word answers.

Examples

Where are the people?   in the ___kitchen___

How many children are there?   ___two___

Questions

1   What are the children playing with?   some toy _____

Pre A1 Starters   21

2   What is Mum standing on?   a _____

3   Where is the spider?   on Mum's _____

4   Who is pointing?   the _____

5   Where are the children?   in the _____

22   Cambridge Assessment English

87

Annex 7 – Marking Key Guide

Pre A1 Starters Reading and Writing

Marking key

()	-	Acceptable extra words are placed in brackets
/	-	A single slash is placed between acceptable alternative words within an answer

Part 1   5 marks

1 ✗
2 ✓
3 ✓
4 ✗
5 ✓

Part 2   5 marks

1 yes
2 yes
3 no
4 yes
5 yes

Part 3   5 marks

1 duck
2 mouse
3 hippo
4 monkey
5 chicken

Part 4   5 marks

1 spiders
2 legs
3 tail
4 trees
5 sand

Part 5   5 marks

1 spiders
2 chair
3 shoe(s)/slipper(s)
4 (a/the) (blonde) girl/sister/daughter
5 garden/(back)yard
   outside
   door (frame)/(way)