



UNIVERSIDAD TÉCNICA DE AMBATO

FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN

**CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y
EXTRANJEROS**

**Proyecto de Trabajo de Graduación o Titulación previo a la obtención del Título
de Licenciada en Pedagogía del Idioma Inglés.**

Theme:

KNUDGE.ME APP AND ENGLISH LANGUAGE VOCABULARY

Author:

Guerrero Quinatoa Karen Elizabeth

Tutor:

Lcda. Mg. Jordán Buenaño Cristina del Rocío

Ambato – Ecuador

2022

A. PRELIMINARY PAGES

SUPERVISOR APPROVAL

CERTIFY:

I, Mg, Cristina del Rocio Jordán Buenaño holder of the I.D No 1804010500, in my capacity as supervisor of the Research dissertation on the topic: “**KNUDGE.ME APP AND ENGLISH LANGUAGE VOCABULARY**” investigated by Miss Karen Elizabeth Guerrero Quinatoa with I.D No 1804750782, confirm that this research report meets the technical, scientific and regulatory requirements, so the presentation of it is authorized to the corresponding organism in order to be submitted for evaluation by the Qualifying Commission appointed by the Directors Board.

.....

SUPERVISOR

Lic. Mg. Cristina del Rocio Jordan Buenaño

I.D. 1804010500

DECLARATION PAGE

I declare this undergraduate dissertation entitled "**KNUDGE.ME APP AND ENGLISH LANGUAGE VOCABULARY**" is the result of the author's investigation and has reached the conclusions and recommendations described in the present study.

Comments expressed in this report are the author's responsibility.

A handwritten signature in blue ink that reads "Karen Guerrero". The signature is written in a cursive style with some overlapping letters.

.....
AUTHOR

Karen Elizabeth Guerrero Quinatoa
I.D. 1804750782

**TO THE DIRECTIVE COUNCIL OF FACULTAD DE CIENCIAS HUMANAS Y
DE LA EDUCACIÓN**

The Board of Directors which has received the defense of the research dissertation with the purpose of obtaining the academic degree with the topic **"KNUDGE.ME APP AND ENGLISH LANGUAGE VOCABULARY"** which is held by Karen Elizabeth Guerrero Quinatoa undergraduate student from Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros, academic period October 2021 – March 2022, and once the research has been reviewed, it is approved because it complies with the basic, technical, scientific and regulatory principles.

Therefore, the presentation before the pertinent organisms is authorized.

Ambato, March 2022

REVISION COMMISSION

.....
Phd. Veronica Elizabeth Chicaiza Redin
REVISER

.....
Mg. Wilma Elizabeth Suarez Mosquera
REVISER

COPYRIGHT REFUSE

I, Karen Elizabeth Guerrero Quinatoa with I.D. No. 1804750782, confer the rights of this undergraduate dissertation "KNUDGE.ME APP AND ENGLISH LANGUAGE VOCABULARY", and authorize its total reproduction or part of it, as long as it is in accordance with the regulations of the Universidad Técnica de Ambato, without any kind of profit from it.



.....
AUTHOR

Karen Elizabeth Guerrero Quinatoa
I.D. 1804750782

DEDICATION

TO:

God for giving me life and blessing me to reach successfully the culmination of my professional career, for giving me his infinite love.

My parents Jose Luis and Maria for being an example and teach me the value of being a good person. For supporting me in the moments that I needed them and give me their loving and wise words.

My husband Christian and my son Dimitri for being the reason to keep going and not give up. For being my motivation and especially for giving me their unlimited love day after day.

My brother Mateo for being my unconditional friend and being the person who was always by my side giving me all his love.

My beautiful friends Caro, Isa, Mary, Gaby and Bella who always supported and helped me in this university phase. I always hold you in my heart.

Karen.

ACKNOWLEDGEMENTS

First of all, I thank God for giving me life and blessing me at every stage and goal of it. Likewise, to my parents who have worked hard and have made an effort to give me a good education throughout my life. Also, to the Universidad Técnica de Ambato for training me as a great professional. In addition, to Lic. Mg. Cristina Jordan for being an excellent person and teacher. For giving me all his knowledge and motivating me in my university life. Thanks Miss Cristina for teaching me the correct way a teacher should be with the students.

Karen.

TABLE OF CONTENTS

A. PRELIMINARY PAGES.....	ii
SUPERVISOR APPROVAL.....	ii
DECLARATION PAGE.....	iii
TO THE DIRECTIVE COUNCIL OF FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN.....	iv
COPYRIGHT REFUSE.....	v
DEDICATION.....	vi
AKNOWLEDGEMENTS.....	vii
TABLE OF CONTENTS.....	viii
INDEX OF TABLES.....	ix
INDEX OF FIGURES.....	ix
RESUMEN.....	x
ABSTRACT.....	xi
B. CONTENTS.....	12
CHAPTER I.....	12
THEORETICAL FRAMEWORK.....	12
1.1 Investigative Background.....	12
1.2 Objectives.....	22
CHAPTER II.....	23
METHODOLOGY.....	23
2.1 Resources.....	23
2.2 Methods.....	23
CHAPTER III.....	26
RESULTS AND DISCUSSIONS.....	26
3.1 Analysis and discussion of the results.....	26
3.2. Hypothesis verification.....	34
CHAPTER IV.....	36
CONCLUSIONS AND RECOMMENDATIONS.....	36
4.1 Conclusions.....	36
4.2 Recommendations.....	37
C. REFERENCE MATERIALS.....	38
Bibliographic references.....	38
Annexes.....	45

INDEX OF TABLES

Table 1: Pre-test results of the KET exam of the control group and experimental group.....	26
Table 2: Post-test results of the KET exam of the control group and experimental group.	27
Table 3: Shapiro-Wilk normality test	28
Table 4: Knudge.me app was very easy to use	29
Table 5: You enjoyed learning English with Knudge.me	30
Table 6: Knudge.me helped you learn new English vocabulary	31
Table 7: You were motivated learning new vocabulary with Knudge.me	32
Table 8: You liked Knudge.me better than regular homework	33
Table 9: Comparison of the pre-test and post-test of the KET test of the control group and the experimental group.....	34
Table 10: Test of paired samples of the pre-test and post-test of the KET examination of the control group and experimental group.....	34

INDEX OF FIGURES

Figure 1: Knudge.me app was very easy to use.....	28
Figure 2: You enjoyed learning English with Knudge.me	29
Figure 3: Knudge.me helped you learn new English vocabulary.....	30
Figure 4: You were motivated learning new vocabulary with Knudge.me	31
Figure 5: You liked Knudge.me better than regular homework.....	32

UNIVERSIDAD TÉCNICA DE AMBATO
FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN
CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y
EXTRANJEROS

TEMA: Knudge.me App and English Language Vocabulary

AUTOR: Karen Elizabeth Guerrero Quinatoa

TUTOR: Lic. Mg. Cristina del Rocío Jordán Buenaño

RESUMEN

El objetivo de la investigación fue evaluar la efectividad de la aplicación móvil Knudge.me en el desarrollo del vocabulario en inglés en los estudiantes. Para verificar lo enunciado, se realizó un estudio bajo el paradigma post-positivista, con enfoque cuantitativo, y tipo de investigación descriptiva, analítica y experimental, con modalidad pre-test, intervención, post-test. Los participantes fueron 22 estudiantes de 3° año BGU de la Unidad Educativa “Augusto N. Martínez”, divididos en dos grupos: 11 estudiantes en el grupo control (GC) y 11 en el grupo experimental (GE). Los instrumentos que se aplicaron fue la ficha sociodemográfica, el test KET Pre-test y Post-test, y un cuestionario para analizar las opiniones con respecto al uso de la aplicación. La intervención con la aplicación Knudge.me se realizó durante 10 días, utilizándola una hora diaria. El análisis estadístico *t* de estudiante, en la fase pre-test, muestra que no existe diferencias significativas entre los grupos ($t=1,281$; $p=0,220$), el grupo experimental tuvo una media de 4.4 y el grupo control una media de 5,56, dichas calificaciones son inferiores a 7, puntaje aceptable para la institución. Sin embargo, en la fase post-test se hallan discrepancias ($t=2,396$; $p=0,026$), siendo el grupo experimental ($M= 8,47$), quienes presentaron mejores puntuaciones tras el uso de la aplicación Knudge.me en relación al grupo control ($M= 6,18$). Además, se halló diferencias significativas entre el pre-test y pos-test del grupo experimental ($t= -6,53$, $p= 0,000$), y no en el grupo control ($t=-,540$, $p=0,601$). Por tanto, se rechaza la hipótesis nula y se acepta la hipótesis alternativa, la aplicación Knudge.me mejora el vocabulario, dado que los estudiantes del GE mejoraron sus calificaciones a diferencia del GC. Cabe mencionar que el GE, disfrutó y se motivó, con la aplicación, para el aprendizaje de nuevo vocabulario.

Palabras clave: Knudge.me App, Vocabulario en inglés, CALL, TIC’S

UNIVERSIDAD TÉCNICA DE AMBATO

FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACIÓN

CARRERA DE PEDAGOGÍA DE LOS IDIOMAS NACIONALES Y EXTRANJEROS

THEME: Knudge.me App and English Language Vocabulary

AUTHOR: Karen Elizabeth Guerrero Quinatoa

TUTOR: Lic. Mg. Cristina del Rocio Jordan Buenaño

ABSTRACT

The objective of the research was to evaluate the effectiveness of the Knudge.me mobile application in the development of English vocabulary in students. To verify the statement, the study was carried out under the post-positivist paradigm, with a quantitative qualitative approach, and a descriptive, analytical, and experimental type of research, with pre-test, treatment, post-test modality. The participants were 22, students from 3rd year BGU and 2nd year BGU at Unidad Educativa "Augusto N. Martínez", divided into two groups: 11 students in the control group (CG) and 11 in the experimental group (EG). The instruments applied were the sociodemographic record, the KET Pre-test and Posttest, and a questionnaire to analyze the opinions regarding the use of the application. The intervention with Knudge.me application was carried out for 10 days, using it one hour per day. The statistical analysis *t* of student, in the pre-test phase, showed that there were no significant differences between the groups ($t=1.281$; $p=0.220$), the experimental group had an average of 4.4 and the control group an average of 5.56, these grades were lower than 7, an acceptable score for the institution. However, in the post-test phase discrepancies were found ($t=2.396$; $p=0.026$), being the experimental group ($M= 8.47$), who presented better scores after the use of the Knudge.me application in relation to the control group ($M= 6.18$). In addition, significant differences were found between the pretest and post-test of the experimental group ($t= -6.53$, $p= 0.000$), and not in the control group ($t=-.540$, $p=0.601$). Therefore, the null hypothesis was rejected and the alternative hypothesis is accepted, the application Knudge.me improves vocabulary, as a conclusion EG students improved their grades different the CG student's. It is worth mentioning that the EG students' enjoyed and was motivated by the application to learn new vocabulary.

Keywords: Knudge.me, English vocabulary, CALL, ICT'S

CHAPTER I

THEORETICAL FRAMEWORK

1.1 Investigative Background

Technology and digital tools are advancing rapidly, so that their use is essential within society, becoming a requirement for companies and jobs. However, it is becoming an essential part at an educational level, in order to promote learning, and even more so, language learning.

Currently, adolescents are hyper connected. Digital tools, more than being a way to search for information, are ways to communicate and establish relationships with people from all over the world. Adolescents see the Internet as a space related to leisure, hanging out, downloading music or movies, informal spaces, unrelated to the educational field (Sánchez et al, 2015)

For this reason, it has been necessary to adapt the teaching-learning methods to the digital age. So, to take advantage of the resources they provide, such as the case of applications aimed at the orientation and acquisition of vocabulary in students, known that one of the main problems of the English is learning vocabulary, acquiring and memorizing new words. For that reason, applications have been designed to increase learning, in a practical way, generating interest and motivation of the student (Olivares, 2018), in addition to improving educational quality.

This analysis was supported in several in-depth investigations, related to the previously proposed topic.

The first article emphasizes the application of “blending learning” in the English class. This research was approached by Mora et al (2016), whose objective was to know the results of an educational experience in the English subject of the use of the Blended learning application. It was carried out in secondary level students at Santa Rosa de Lima School and English I subject of Facultad de Ingeniería. A pedagogical proposal was presented that describes different ways of using mobile devices that contribute to the teaching of English. Among the results, an improvement was found in the student-teacher relationship, greater participation of students, when asking questions to the teacher, and fewer errors than in traditional exercises. Lower grade students showed greater

enthusiasm. Finally, the application made it possible to carry out translations that have taken longer with the traditional method, using the dictionary.

Moreover, according to Almeida (2020) whose the main objective of her research was to evaluate the application called 'WordBit Inglés' in the learning of the English vocabulary. This investigation was applied to 22 students from first semester of "Carrera de los Idiomas Nacionales y Extranjeros" in "Universidad Técnica de Ambato." This was an experimental research taking into account the qualitative and quantitative approaches. Also, the KET test pre-test and post-test were used to collect data. Finally, after two weeks of investigation, it concluded that the app had positive results in the acquisition of vocabulary because students feel more comfortable and entertained in comparison to traditional methods.

Furthermore, the research done by Pacheco and Parra (2017) whose purpose was to verify whether Duolingo is an app that helps in the development of ESL vocabulary. This was a quantitative and qualitative study in which 90 students from 9th elementary level used the app. As a result, there were positive effects on students learning vocabulary. Students showed a better attitude towards the English language and it was a dynamic tool that could be used in future classes.

Another study carried out with 253 students from Unidad Educativa "Los Shyris", with a sample of 102 individuals, 100 students and 2 teachers, aimed to use mobile applications for the teaching-learning process of English, in order to strengthen the listening and speaking skills. The research was carried out by Barahona (2017), whose results show the limited use of the App in the teaching-learning process, and the proposal that improves the English skills, with the use of Wlingua, Babbel, Duolingo, and Learn English from the British council and Beelinguo.

Also, the investigation elaborated by Zambrano and Encalada (2018), was about Quizlet app and the goal of the experiment was to evaluate the Quizlet App's efficiency in the growth of English language vocabulary learning. The focus of this study was on analytical and experimental approaches for analyzing the findings acquired after using the mobile application. The population was 50 students of 12th and 13th BGU level at "Unidad Educativa Cusubamba," and the research instruments were pre-test and post-test, which helped to collect data. This study evidenced the significant and positive influence of mobile apps on the learning process and the effectivity of their use in the classroom.

Klímova and Berger (2018), had the goal of explaining how mobile learning may be used to teach English. This research was carried out on tourist management students in their 3rd year of education. The results of the final test confirmed that the mobile application aids and facilitates the learning of vocabulary and phrases based on the user's demands. Furthermore, this investigation helped the students' independence and self-study.

Finally, in the Llumiquinga research (2020) the total population was taken of 143 students from “Charlotte English School”, Pichincha, Ecuador. The objective was to analyze the association between the application of m-learning and the learning of English by digital natives, through a correlational study. Looking for the results, it is evident that the greater use of applications and m-learning resources, the better interaction and development of English skills. They conclude that the implementation of the application contributes to the learning process.

1.1.1 Technical- Scientific Foundation

Independent Variable: Knudge.me App Information Communication Technology

Information and Communication Technologies or known as ICTs are a set of technological tools. They are required for the management, processing, transmission, and storage of information convertible into knowledge. Through computer networks, being the Internet, through different applications among them, email, virtual libraries, among others (Granda et al, 2019).

Its importance is linked to its use in education, being a resource for the teaching-learning process, developing motivation, interest and cooperation in students, but it also allows teachers to optimize their class, provide accurate and adequate information, but above all, direct communication (Rizzo & Pérez, 2018). However, they influence all social spheres in the process of building a technological culture, transforming economic, social, and cultural aspects (Zambrano & Zambrano, 2019).

Castro, Guzmán and Casado (2017) make a compilation of the characteristics of ICTs, highlighting the amount of information that allows handling at great speed and easily accessible to all, the use of compact and portable electronic devices, leaving aside the barriers of space and time. Together they become an essential resource in learning and teaching, because it could be used in person and virtually, generating interaction between teachers and students, and between classmates, a bidirectional process or horizontal

communication, leaving vertical and unidirectional communication aside. Where the teacher was the only one who had the knowledge to impart and the student maintained a passive posture, listening only.

It is worth mentioning that, although it is true that adolescents have incorporated technological skills into their development, it has become necessary to learn and use another language, in addition to their mother tongue. One of them is English, considering it as the universal language also, as a communication tool and nowadays, as a requirement for jobs (Castro et al., 2017).

Thus, Arteaga (2021) in his study points out that, in the process of learning a new language, TICs play an important role, since they could favor and enrich the acquisition of a second language, through the conversations and links that could establish with foreign universities, so that students put the language into practice with native people, and in this way develop communication skills, it means, go from the theoretical to the practical. In this way, the traditional teaching method would be modified.

Educational Software

To understand what educational software is, it is important to start from the term software, which defined by Marquez & Marquez (2018), they are computer programs and data. In such a way that educational software are informative programs intended for the teaching learning process, with characteristics such as ease of use, didactic purpose, curricular support, pedagogical intention, among others.

There are several benefits of said software, but among the most important, its use in education stands out, contributing to teaching and learning autonomously, the development of cognitive skills, as well as, through multimedia tools, videos, sounds, exercises, interactive games that serve both for evaluation and diagnosis, together with the teacher's explanations, generate significant learning (Maldonado et al, 2020).

Zhou et al (2017) pointed out: "The increasing popularity of mobile technology provides more opportunities for educators and developers to create a wider range of educational tools." Since electronic devices seem to be unavailable in all environments.

This is due, according to Mateus and Ortiz (2020), to the fact that educational software contains a system of symbols such as voices, music, texts, as well as application exercises

based on the institutional curriculum or syllabus, with the support of the computer. , which are the support for software manipulation.

Moreover, Lecourtois and Vázquez (2013) point out that not only is it enough to have a computer, but software is required based on the needs of the students. It is the teacher who knows the problems in the classroom and the possible solutions to them, which makes him the ideal person to determine when to use software, added to the educational needs of adolescents.

Corroborated with the research by Mackencie, Triana, Alcazar, Navarrete, and Navarrete (2019), software facilitates the teaching-learning process, in addition to improving the academic performance of students in the English language, when it is used correctly. The academic level and preparation of the teacher come into play, as well as their interests to apply it. Therefore, it is important that teachers identify the content that requires the use of software to guarantee the learning of their students (Lecourtois & Vázquez, 2013).

Computer Assisted Language Learning

The acronym for CALL stands for Computer Assisted Language Learning. Teachers and students use it as part of a language course to explain the use of computers. Traditionally, it has been described as a means of presenting, strengthening, and testing specific language objects. First, provide the learner with a rule and some examples, and then answer a series of questions to measure her/his knowledge of the rules, and then the computer provides enough feedback and awards a score, which could be stored for the teacher's follow-up inspection. Traditional CALL The definition is unfortunate, and the computer could be used as a general classroom help (Borja, 2018).

According to Ortiz (2015), it is also called CALL, referring to computer applications for the teaching-learning process of languages, using image, sound, and text, in order to promote autonomous learning.

The importance of computer-assisted language learning becomes relevant as it allows the student to complement the learning received in classes, and ceases to be a passive subject and becomes an active subject, since he interacts with his peers, developing collaborative skills, ease communication, and conflict resolution, from the computer (Castillo & Candese, 2021).

The computer has favorably influenced the teaching and learning processes, because it integrates the different teaching methods and allows interactivity, being a privileged medium at the time of classes (Lecourtois & Vázquez, 2013). However, according to the same authors, its misuse could lead to complications at the time of teaching, including educational software.

Based on this, it could be said that to achieve adequate learning of the language, hardware is required, such as the computer, the tangible, and software that contains all the programs that facilitated learning; both together contribute to the interaction and educational pedagogy of English.

Knudge.me App

The advancement of technology not only facilitates human interaction, but also the teaching-learning processes, by promoting student motivation and creativity. Thus, apps have taken a leading role among the uses of the Internet and their success depends on simplicity, accessibility, attractive design, availability and adaptability to the needs of users, added in the educational field, the improvement of the process of teaching and learning (Villalonga & Marta, 2015).

Núñez and Montes (2021) point out that technological application are entities guided by software with a specific purpose, depending on the branch of science, for example, education, programming, research, etc. There are paid and free applications that are easily accessible and open to the public, being of great help to teachers and students. These contribute favorably to the teaching of a foreign language, such as English, so the apps are compatible with different operating systems, facilitating their download, and electronic equipment (e.g. tablet, PC, computer, laptop, etc.), which has as objective to reinforce knowledge through technological tools.

Although, there are some applications that contribute to the acquisition of vocabulary in English, and one of them is the Knudge.me application, which takes into account the functions of the brain, a key organ of superior and executive functions, essential for teaching and learning.

This program is designed according to the working principle of the human brain. Research shows that micro learning, that is, short-term learning distributed over a long period, is

more likely to lead to the learning, retention, and application of a given project than full day concentrated learning. The findings also assert that learning is more effective when learning is spread across multiple sessions instead of a single session in the same time. The current courses included in this application are designed to improve vocabulary, English idioms, phrasal verbs, homophonic-homonyms and common confusing English words, all of which play a vital role in language learning (Razdar & Orouji, 2018).

In addition, it could display vocabulary according to the context and provide audio files to check the correct pronunciation. In the spelling part, the words pronounced in British and American accents, which is another educational advantage and could also help improve listening. The arduous task of effectively modifying vocabulary could be made easy through convenient flashcards. Needless to say, mobile courses are very convenient for those with a busy lifestyle, they want to use every minute anytime, anywhere (Razdar & Orouji, 2018).

Despite the advantages of this application, there are still some weaknesses that make it impossible to become a vocabulary learning application. First, if it includes other types of vocabulary, namely collocations, prepositions and discourse markers, it was more educational and inclusive. In addition, the app is somewhat difficult to navigate, especially for learners who do not understand technology. The lack of various games that meet different learning styles is another shortcoming of the application. Since teachers and educators could use this feature to increase learners' participation and motivation, this was also benefit from user curated content (Ortiz, 2015).

Dependent Variable: English Language Vocabulary Language Learning

Language learning strategy is a conscious behavior that could acquire knowledge, memorize and remember information, and use this information in certain activities, actions, and techniques to develop students' language learning ability. Learning strategies allow for planning and organizing learning, controlling the materials learned, making decisions related to the learning process and identifying difficult problems (Varişoğlu, 2016).

It refers to the learning and acquisition of a new language, different from the mother tongue, and is not used in daily life and in the development of their activities. Generally, this process happens in the classrooms through controlled activities, involving the role of the teacher and the student (Beltrán, 2017).

Language learning is seen as necessary and indispensable. English as a language of international communication, trade, and bonds, in addition, its continuous learning until higher education allowing access to bibliographies, books, documents, in which most are in said language; but also, it is a requirement for jobs, it makes it possible to get to know other cultures and interact worldwide (Chavez et al, 2017).

The learning of foreign languages, from the linguistic point of view, implies diverse spaces for its production and social interaction, adding the cognitive, physiological, and psychological factors that contribute to the learning of a language, without neglecting the context in which it develops the person (Ussa, 2020).

Similarly, Rodas and Rodas (2021) point out that, in addition to the existence of variables that influence the learning process, the commitment and active participation of the person is needed, so that they could send and receive messages in the foreign language, that is, it is a dynamic, non-linear process, due to the various factors involved. Therefore, few students reach fluency in another language in the classroom, due to inadequate training that prevents successful learning (Brown, 2017).

It is important to mention that, during the English learning process; the student analyzes and reconstructs new structures based on the rules of the language, relating them to their mother tongue. The more the linguistic needs caused by learning a new language are resolved, the more the student will increase his mastery. However, the presence of interference will cause the student to evaluate their knowledge, verify the notions of the new language, and manage to establish adequate communications with it (Ussa, 2020).

Linguistic Competence

Competence is a series of cognitively controlled skills or abilities in a specific field, which means knowledge, ability, and willingness to solve problems in the field. Ability is obtained through practice and experience. Language ability is the ability to use language correctly in various social aspects or specific situations. This is also the ability to produce grammatically correct sentences (Söylem et al., 2017).

Noam Chomsky employed the concept of language proficiency. He defined it as the system of rules, which the person possesses, which conforms his verbal knowledge (expression), to reach the understanding of a number of linguistic statements (comprehension), through the proper and correct use of grammatical rules.

In other words, the term linguistic competence refers to the unconscious or innate knowledge of grammar that allows people to use and understand the language, that is, the individual is not aware of the grammatical rules that govern sounds, words and sentences, but recognizes these errors (Nordquist, 2020).

The importance of linguistic competence lies in the use of language as an instrument of communication, whether oral or written, that allows understanding and understanding of reality, as well as self-regulation and coherence between feeling, thinking and acting, acquiring a command of oral and written language in different contexts (Barrera & Barragán, 2017).

Therefore, it is essential to develop linguistic skills, within the educational field, in order for students to become competent speakers, that is, able to produce and interpret statements properly, adapting their language to the various contexts and situations (Padilla et al., 2008).

Language skills in people, whose mother tongue is not English, are not established in an equitable way in the context. The subjects use different abilities to produce statements, respecting the grammatical rules, added to the correct pronunciation, not only to be understood but also to understand their meanings (Rodríguez, 2015).

However, Mancero and Veloz (2017) mention that, for the development of linguistic competence, it is essential to know the culture of that country, social rules, customs, and traditions. To make use of didactic tools that adapt to the students' needs and the educational context.

Vocabulary Development

Vocabulary is defined as the breadth and variety of terms that the person knows, which is acquired or developed through own experiences, making the knowledge of vocabulary influence word recognition and reading comprehension, also defined as a continuous process to learn new concepts and terminologies (Ihan, 2019).

Vocabulary plays an important role in the reading process, since it contributes to reading comprehension, as well as acquiring existing knowledge, but it also encourages the habit of reading, since children with a wide repertoire of vocabulary have to read more (Rasinski & Rupley, 2019).

The teaching of vocabulary is not only a fundamental part of grammar, but it is a basic element for the interpretation of texts and dialogue. Having a broad knowledge of words allows you to generate explanations of something that is unknown, and above all to put it into practice, in communication with other people (Castillo & Moya, 2013)

According to several researchers, among the most important aspects for learning a foreign language, such as English, is to have a minimum knowledge, such as vocabulary, for the formulation of simple sentences. Similarly, independent learning is required through listening and reading exercises, so that the subject better understands the words he acquires and the contexts in which he is used. Being one of the great problems, the teaching of certain words at a specific time, and not being familiar with all of them, causes forgetfulness of those that are least used (Castillo & Moya, 2013).

Improving student vocabulary is an urgent need if we are to develop the advanced literacy levels required for success in school and beyond (Biancarosa & Snow, 2016). Digital tools and media are available in most schools that teachers could harness now to improve vocabulary learning, tools that capture the interest of students and that provide scaffolds and contexts in which to learn with, and about, words more profitably (Berne & Blachowicz, 2018).

1.2 Objectives

General Objective

- To evaluate the effectiveness of the Knudge.me mobile application in the development of English vocabulary in students.

Specific Objectives

- To analyze the conceptual framework of Knudge.me app and vocabulary learning.
- To diagnose the English vocabulary level in students.
- To determine the level of students before and after the implementation of the Knudge.me mobile application in the development of vocabulary.

1.2.1 Description of the fulfillment of objectives

- To analyze the conceptual framework of Knudge.me app and vocabulary learning.

To carry out the first objective, the researcher had to investigate the benefits that Knudge.me App had for the students. In addition, to investigate the importance of learning vocabulary in the acquisition of English using mobile applications.

- To diagnose the English vocabulary level in students.

To achieve this objective, the investigator had to determine the students' vocabulary level before the application of the Knudge.me App using the pre-test. Furthermore, the researcher applied a post-test after the application of the mobile application. It allowed to find out the improvement of vocabulary level.

- To determine the level of students before and after the implementation of the Knudge.me mobile application in the development of vocabulary.

To accomplish the last objective, the researcher had to compare the results between the pre-test and the post-test. Also, the investigator numbered the positive effects of the Knudge.me App in the development of vocabulary inside the classroom using a student' survey. The results of the survey helped the researcher to figure out the advantages of this mobile application on students' vocabulary learning.

CHAPTER II

METHODOLOGY

2.1 Resources

2.1.1 Techniques and Instruments

The researcher used some techniques and instruments such as test and questionnaire in this research project. A test used as an instrument of the study to know the performance of the students in vocabulary. This test was taken from the Cambridge Exams (KET). The pre-test was applied to measure students' performance in English vocabulary, while the subsequent test was applied to measure improvement in students' vocabulary after treatment. The questionnaire used by the researcher contained five questions. It helped to identify the students' perception towards the use of the application of Knudge.me in the learning of English vocabulary.

“Key English Test (KET) as one of the Cambridge ESOL exams is a basic level qualification that shows that someone could use English to communicate in simple situations and has achieved a good foundation in learning English. KET is A2 level in the CEFR (Common European Framework)”(Şentürk, 2014). This test measured the vocabulary learning process of a group of students using the mobile app. The application of this test was useful and practical because it provided adequate confidence to students at the time of assessment, and the researcher had reliable, meaningful, and measurable data from test results. The test was taken through Google forms, and was a multiplechoice exam.

2.1.2 Questionnaire

"A questionnaire is a research instrument consisting of a series of questions for the purpose of gathering information from respondents." (McLeod, 2018). Through this instrument, this research collected information from students to analyze their opinions on Knudge.me App and its use in an educational curriculum. The questionnaire was online using the Google Forms tool.

2.2 Methods

2.2.1 Approach

A group of patterns regulates the world as it investigated objectively to get empirical results, which is a complete definition of the approach (Somekh & Lewin, 2004). To

explore social and behavioral relationships, this research was based on a post-linguist paradigm. This explains that scientific knowledge is based on the experience of the senses and could only be advanced through observation and experimentation related to the scientific method. This was about qualitative research, where the researcher used statistical techniques to extract data and avoid subjectivity and ideologies within the investigation.

2.2.1.1 Qualitative Approach

"The research project should be a reflective process operating at every step of a project" (Bickman & Rog, 2015). In this research, there were exercises of collection and analysis of information, a theory to develop, issues that served as a guide and threats of validity that helped to make decisions according to the development of the research. In addition, this dissertation followed an exploratory approach because the researcher asked for information about how mobile applications improve the vocabulary learning process. In the inductive view, the conclusions of the investigation were the results of the analysis of the data obtained during the use of the Knudge.me App by the students. It was a descriptive process because the researcher described the situation of students and teachers in the context of learning and teaching in the university community. In addition, the researcher took into account the dynamic realism of the teachers because some of them used different resources to facilitate the learning process of the students' vocabulary. It allowed the researcher to maintain a holistic view where the researcher showed an open attitude and looked at an inclusive understanding of the vocabulary learning process in the university's classrooms.

2.2.1.2 Quantitative approach

Thanks to this approach, this research studied the educational problem and the improvement of the vocabulary learning process, using measurable data obtained from students' research, a test of theories and strategies to obtain a solution to the problem (Tashakkori & Teddlie, 2018). It established a relationship between the use of Knudge.me App and the vocabulary learning process. In conclusion, this research analyzed, predicted the behavior of students and teachers before, during and after the application of the experiment.

The basic model of a research.

The modalities that were taken into account for the elaboration of this research were:

2.2.1.3 Field

In the elaboration of this work, it was necessary the communication with the students from 3rd year BGU and 2nd year BGU at Unidad Educativa “Augusto N. Martinez” because the experiment was based on them, so their knowledge, opinions, and the results of the study were the foundation of this research.

2.2.1.4 Level or Type of research

2.2.1.5 Descriptive:

This research work was descriptive because it explored the resources that teachers used in the classroom. After identifying the teachers' resources and which mobile applications were used in the curriculum, the researcher described the results of the use Knudge.me App in English subject to learn vocabulary and conclude, according to the results of the experiment.

2.2.1.6 Analytical:

It was analytical because the researcher analyzed the data obtained from the students' reports using IBM SPSS STATISTICS 25.

2.2.1.7 Experimental:

The research work was experimental because the researcher used a new mobile application, Knudge.me App in a group of students. To measure the results of that experiment, the researcher applied an adapted KET exam. In addition, the researcher measured the learning process of the students related to the app and the development of vocabulary.

CHAPTER III

RESULTS AND DISCUSSIONS

3.1 Analysis and discussion of the results

This research project was carried out on 22 students, divided into 11 students in the experimental group with 2nd year BGU students (EG) and 11 students in the control group with 3rd year BGU students (CG). First, the pre-test was used to observe the level of vocabulary that both group of students have before the treatment. Knudge.me app was used for the experimental group for ten days and one hour per day as a treatment. Finally, the post-test was used with the experimental group to verify that the students learned vocabulary using the Knudge.me application.

3.1.1. Descriptive analysis of the pre-test and post-test results

In this section, the scores obtained in the pre-test of the KET exam were stated, and converted to the grades that were handled at the educational level. Table 3 shows these results from the control group and experimental group.

Table 1: Pre-test results of the KET exam of the control group and experimental group.

Student	Control		Student	Experimental	
	Total	Total/10		Total	Total/10
1CG	3 / 25	1,2	1EG	10 / 25	4
2 CG	9 / 25	3,6	2 EG	12 / 25	4,8
3 CG	25 / 25	10	3 EG	16 / 25	6,4
4 CG	13 / 25	5,2	4 EG	12 / 25	4,8
5 CG	9 / 25	3,6	5 EG	23 / 25	9,2
6 CG	16 / 25	6,4	6 EG	21 / 25	8,4
7 CG	10 / 25	4	7 EG	6 / 25	2,4
8 CG	10 / 25	4	8 EG	8 / 25	3,2
9 CG	17 / 25	6,8	9 EG	11 / 25	4,4
10 CG	14 / 25	5,6	10 EG	11 / 25	4,4
11 CG	10 / 25	4	11 EG	8 / 25	3,2

Source: Pre-test results of the KET exam

Author: Guerrero, K (2022)

As the table shows, control and experimental groups had scores less than seven that according to the school's teaching rules, is weak. There were few students with scores above 7 out of 10, suggesting that the academic level of English vocabulary is challenging and requires educational intervention.

On the other hand, in table 4 it could be observed the post-test scores converted to the grades that were handled at the educational level, of each student.

Table 2: Post-test results of the KET exam of the control group and experimental group.

Student	Control		Student	Experimental	
	Total	Total/10		Total	Total/10
1GC	5 / 25	2	1GE	23 / 25	9,2
2GC	7 / 25	2,8	2GE	20 / 25	8
3GC	25 / 25	10	3GE	19 / 25	7,6
4GC	20 / 25	8	4GE	25 / 25	10
5GC	12 / 25	4,8	5GE	25 / 25	10
6GC	20 / 25	8	6GE	25 / 25	10
7GC	12 / 25	4,8	7GE	25 / 25	10
8GC	16 / 25	6,4	8GE	15 / 25	6
9GC	23 / 25	9,2	9GE	23 / 25	9,2
10GC	18 / 25	7,2	10GE	25 / 25	10
11GC	12 / 25	4,8	11GE	24 / 25	9,6

Source: Post-test results of the KET exam

Author: Guerrero, K (2022)

Table 4 shows that scores improved positively with the use of Knudge.me App. In addition, students in the control group also had good grades. However, it was not possible to make significant differences without applying the relevant statistics that were presented in the following section.

3.1.3. Normality Test

To determine which statistics to use, parametric or non-parametric, the Shapiro-Wilk test was used, since it had observations of less than 50 (see table 5).

Table 3: Shapiro-Wilk normality test

Shapiro-Wilk Test		
	Statistical	<i>p</i>
Pre-test		
Control	,941	,537*
Experimental	,929	,402*
Post-test		
Control	,957	,738*
Experimental	,799	,009

Source: Shapiro-Wilk normality test

Author: Guerrero, K (2022)

Table 5 indicates that (p) standards were greater than .05, indicating that there was a normal distribution, and parametric statistics could be used as in the case of Student's (t).

3.1.4. Survey Question 1

Question 1: Knudge.me app was very easy to use

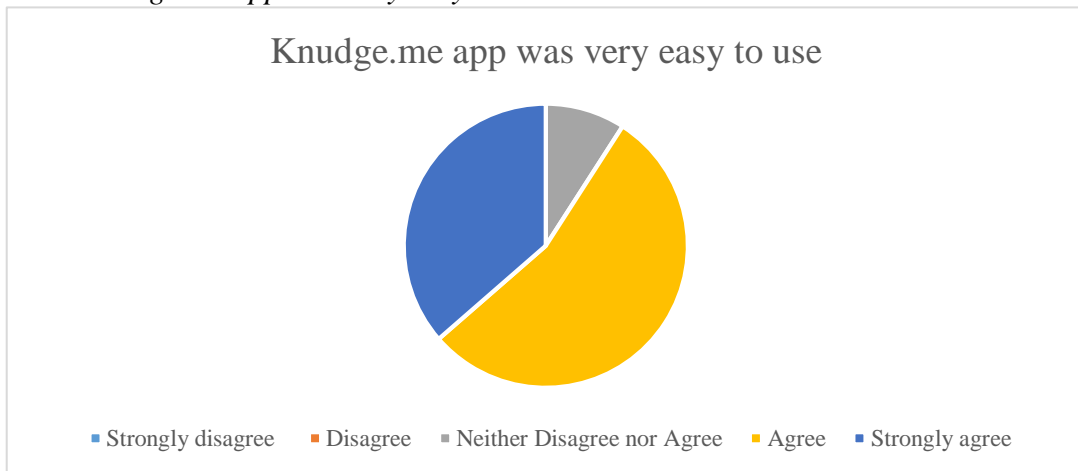
Table 4: Knudge.me app was very easy to use

Alternatives	Frequency	Percentage
Strongly disagree	0	0%
Disagree	0	0%
Neither Disagree nor Agree	1	9,1%
Agree	6	54,5%
Strongly agree	4	36,4%
Total	11	100%

Source: Question 1: Knudge.me app was very easy to use

Author: Guerrero, K. (2022)

Figure 1: Knudge.me app was very easy to use



Source: Question 1: Knudge.me app was very easy to use

Author: Guerrero, K. (2022)

Analysis and Interpretation

Figure 1 showed that students agreed that Knudge.me was an application easy to use, at 54.50%, followed by full agreement at 36.40%. A tentative explanation was that, as adolescents were in constant interaction with technology, it facilitated access to platforms and applications, expanding their skills in handling technological accessories. The numbers that the survey projects was corroborated by the data, none of them considered that it was a complex application to handle. It would be interesting to use the same application to other students and determine whether there are differences.

3.1.5. Survey Question 2

Question 2: You enjoyed learning English with Knudge.me

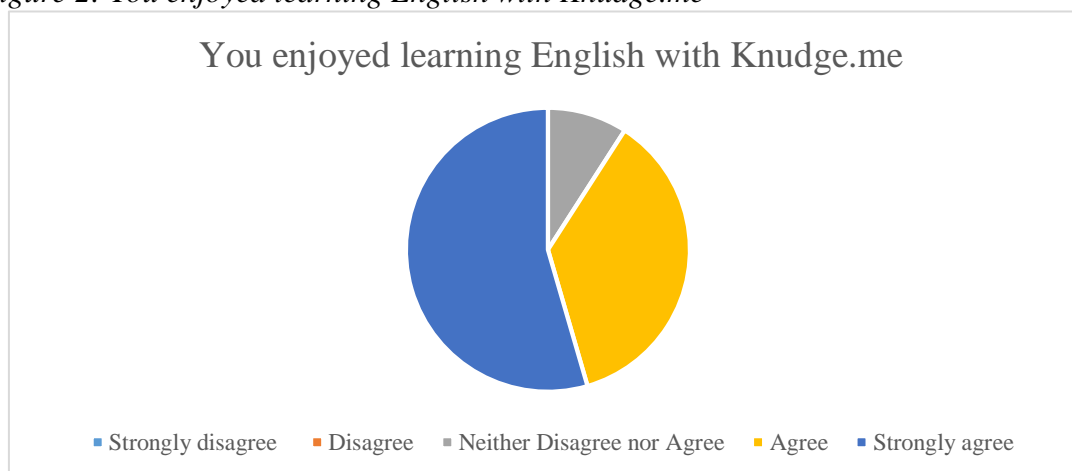
Table 5: You enjoyed learning English with Knudge.me

Alternatives	Frequency	Percentage
Strongly disagree	0	0%
Disagree	0	0%
Neither Disagree nor Agree	1	9,1%
Agree	4	36,4%
Strongly agree	6	54,5%
Total	11	100%

Source: Question 2: You enjoyed learning English with Knudge.me

Author: Guerrero, K. (2022)

Figure 2: You enjoyed learning English with Knudge.me



Source: Question 2: You enjoyed learning English with Knudge.me

Author: Guerrero, K. (2022)

Analysis and Interpretation

Figure 2 indicated that 54.50% of students agreed that they had enjoyed learning English with Knudge.me. This data was relevant, as it was an indication that the application had didactic and striking tools that capture the attention of adolescents. This became a key point, because students had fun while learn and improved English. It being a kind of game, and it could be said that it would change the vision of English, not seeing it as a difficult and boring subject, but rather interesting and fun.

3.1.6. Survey Question 3

Question 3: Knudge.me helped you learn new English vocabulary

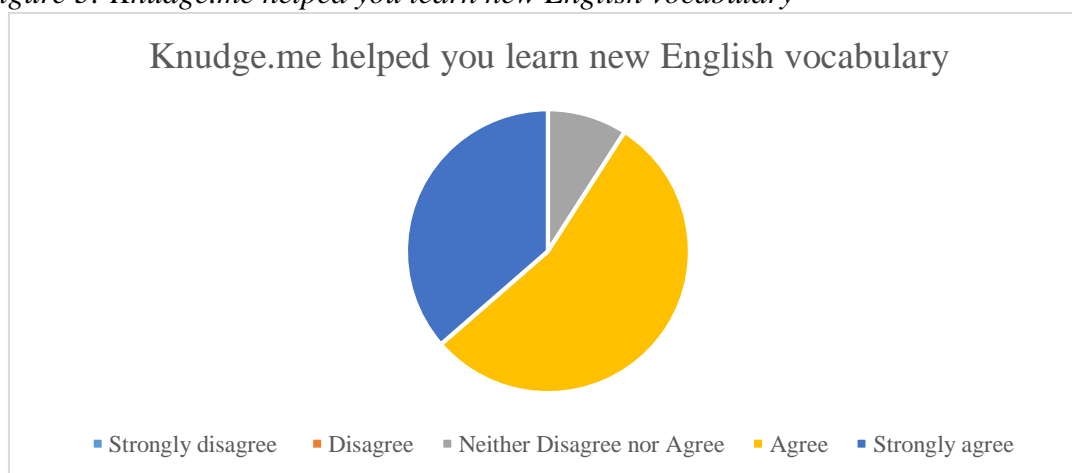
Table 6: Knudge.me helped you learn new English vocabulary

Alternatives	Frequency	Percentage
Strongly disagree	0	0%
Disagree	0	0%
Neither Disagree nor Agree	1	9,1%
Agree	6	54,5%
Strongly agree	4	36,4%
Total	11	100%

Source: Question 3: Knudge.me helped you learn new English vocabulary

Author: Guerrero, K. (2022)

Figure 3: Knudge.me helped you learn new English vocabulary



Source: Question 3: Knudge.me helped you learn new English vocabulary

Author: Guerrero, K. (2022)

Analysis and Interpretation

Figure 3 showed that 54.50% of students mention agreeing with the application, having learned new vocabulary in English, followed by agreeing in 36.40%. In fact, it could be corroborated with the improvement of the pre-test and post-test scores of the experimental group, finding significant differences (see table 12). It could be concluded that the application contributes favorably to the acquisition of new vocabulary in English.

3.1.7. Survey Question 4

Question 4: You were motivated learning new vocabulary with Knudge.me

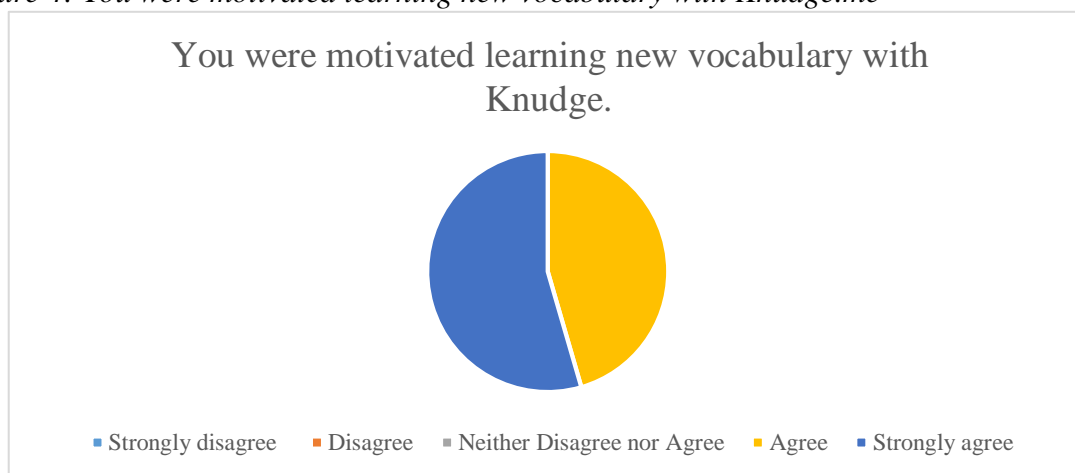
Table 7: You were motivated learning new vocabulary with Knudge.me

Alternatives	Frequency	Percentage
Strongly disagree	0	0%
Disagree	0	0%
Neither Disagree nor Agree	0	0%
Agree	5	45,5%
Strongly agree	6	54,5%
Total	11	100%

Source: Question 4: You were motivated learning new vocabulary with Knudge.me

Author: Guerrero, K. (2022)

Figure 4: You were motivated learning new vocabulary with Knudge.me



Source: Question 4: You were motivated learning new vocabulary with Knudge.me

Author: Guerrero, K. (2022)

Analysis and Interpretation

Figure 4 showed that 100% of students agreed (45.50%) and strongly agreed (54.50). They were motivated to learn English using apps. A tentative explanation was that the proper use of technological tools could favor the teaching and learning processes of adolescents, who are looking for didactic media, which capture their attention and contribute to knowledge. That media should be employed, as it contributed to the motivation and learning of the English language. In addition, through educational applications, technology could be used properly and the better use of students' free time could be increased.

3.1.8. Survey Question 5

Question 5: You liked Knudge.me better than regular homework

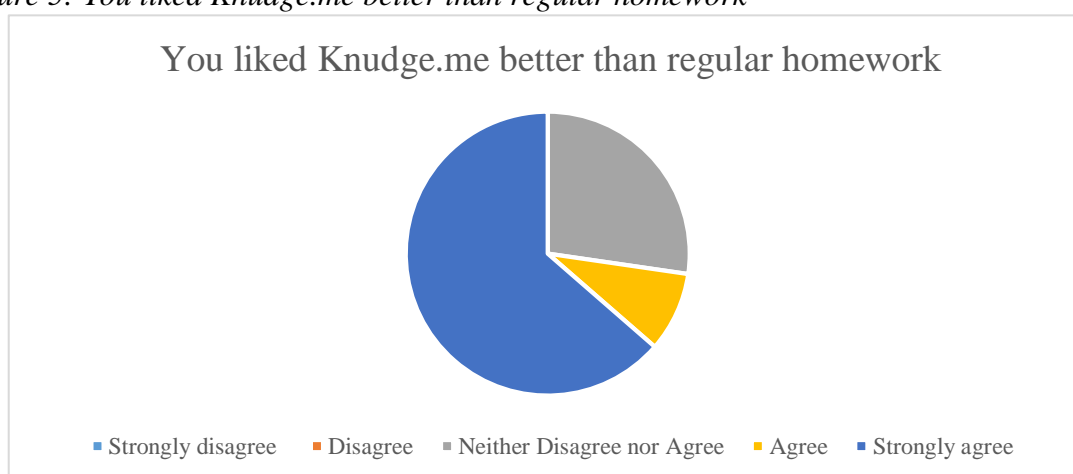
Table 8: You liked Knudge.me better than regular homework

Alternatives	Frequency	Percentage
Strongly disagree	0	0%
Disagree	0	0%
Neither Disagree nor Agree	3	27,3%
Agree	1	9,1%
Strongly agree	7	63,6%
Total	11	100%

Source: Question 5: You liked Knudge.me better than regular homework

Author: Guerrero, K. (2022)

Figure 5: You liked Knudge.me better than regular homework



Source: Question 5: You liked Knudge.me better than regular homework

Author: Guerrero, K. (2022)

Analysis and Interpretation

As could be seen in figure 5, 63.60% of students totally agreed to use the application Knudge.me instead of the regular task. For teens, it was more entertaining and striking to use digital tools than to study in notebooks and traditional education. These factors possibly relieved the need to implement applications that allowed improving and increasing the vocabulary of English in order to maintain attention and concentration, added to the motivation to learn. As well as, it modified the perception regarding the subject of languages. Teachers should be trained and acquire better digital teaching methods from their classrooms.

3.2. Hypothesis verification

The purpose of this section was to compare the results obtained between the control and experimental groups, between the two tests applied in both groups, pre-test and post-test, in order to determine statistically if Knudge.me App, helped students to acquire English vocabulary.

To do this, the hypothesis study was described below:

H0: The application Knudge.me App, does not improve vocabulary.

H1: The application Knudge.me App, improves vocabulary.

First, an analysis of the pre-test and post-test results was performed, using the average standard deviation of the KET test results, in both groups and the contrast of the t-test (see Table 5).

Table 9: Comparison of the pre-test and post-test of the KET test of the control group and the experimental group.

TEST	Groups				Contrast t
	Control (n= 11)		Experimental (n = 11)		
	M	SD	M	SD	
Pre-test	5,56	2,69	4,40	1,36	1,281, 0,220
Post-test	6,18	2,57	8,47	1,86	-2,396, 0,026*

Source: Shapiro-Wilk normality test

Author: Guerrero, K (2022)

In the pre-test, there were no significant differences between both groups, since the value of p is greater than 0.05, indicating that there were similarities between the groups, although the experimental group presented the lowest score M = 4, 40, there were no discrepancies between the groups. However, when analyzing the post-test between the groups, it could be observed that there were no similarities between the two. The p = .026 value was less than 0.05, showing statistically significant differences. It was worth mentioning that in the post-test, the experimental group presented better scores M = 8.47 in relation to the control group, who did not use the application Knudge.me App. Therefore, it could be concluded that the application Knudge.me App influenced the acquisition of vocabulary in students. Statistic that could be corroborated with table 6.

Table 10: Test of paired samples of the pre-test and post-test of the KET examination of the control group and experimental group

Paired sample statistics						
Groups		Pre test		Post test		Contrast T
		M	SD	M	SD	
Control	(n= 11)	5,56	2,69	6,18	2,57	-,540, 0,601
Experimental	(n = 4,40 11)	4,40	1,36	8,47	1,86	-6,53, 0,000**

Source: Shapiro-Wilk normality test

Note: * It means $p < , 05$; ** It means $p < , 01$.

Author: Guerrero, K (2022)

Similarly, it could be seen that there were no significant differences in the control group between the pre-test ($M = 5.56$) and post-test ($M = 6.18$), since the value of p is greater than $0, 05$. While in the experimental group, those who used the application, significant differences were found between the pre-test ($M = 4.40$) and post-test ($M = 8.47$), presenting better scores, the same as in the subsequent evaluation. When students used the tool, they exceed a score of seven, becoming a very good score, according to the educational rules of the institution.

Based on table 4 and 5, the null hypothesis is rejected and the alternative hypothesis was accepted: the application "Knudge.me" improved vocabulary, finding statistically significant differences between the control and experimental groups $t = -2.396$; $p < .05$, and also in the pre-test and post-test of the experimental group $t = -6.53$; $p < .01$. Concluding, students who used the application improved their level of English vocabulary.

CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

After applying the treatment, analyzing the results obtained in the pre-test, post-test, and the survey, it could be concluded that:

- Due to the results obtained, Knudge.me app was effective in the students learning process. Taking into account the results of the pre and post-test there was an evidence of a significant increase in the acquisition of vocabulary in students. It is worth mentioning that the experimental group obtained highest scores than the control group.
- After the investigation carried out in the theoretical framework, different benefits were found for student's learning vocabulary using the technological devices and applications as Knudge.me. In addition, students increased their English vocabulary playing "Space Pursuit" game that was in the app. Moreover, some authors mention the importance of learning English vocabulary with mobile devices. Additionally, these authors proposed to incorporate this learning method as new strategy.
- After having diagnosed the vocabulary level of the students using the KET exam as a pre-test, it was obtained that the students of the control and experimental group had a low level of vocabulary, which did not allow them to communicate in a fluent and effective way. Furthermore, it was evidenced an increase of the vocabulary with the use of the Knudge.me app in the experimental group.
- Comparing the results obtained using the KET exam for the pre-test and post-test. It could realize that the use of the Knudge.me app was very important since the students of the experimental group increased the level of English exponentially. While the students used the application, they were motivated to learn more vocabulary that is English. In addition, they felt confident to use the application because it was easy to handle and it helped them with the meaning of the words they did not understand.

4.2 Recommendations

- This research project recommends using the Knudge.me app for high school or college students. The activities in the app had proper vocabulary for this population. In addition, the experimental group, after using the application and through a survey showed interest on it. Students gave positive points, such as students liked the application and felt motivated to learn more vocabulary that is English.
- It recommended that teachers use applications like Knudge.me or similar for both teaching and learning. Therefore, it is necessary to implement technology as a strategy for education. It would facilitate the improvement for students to increase their vocabulary level. However, it could be consider as a new strategy to catch the students' motivation while learn English.
- It recommended using appropriate tests for each level of English that the students have. For example, in this research project, the KET exam was for high school students, which showed true data in both the pre and post – test about the English vocabulary.

C. REFERENCE MATERIALS

Bibliographic references

- Arteaga, C. (2021). Uno de las TIC para el aprendizaje del inglés en la Universidad Autónoma de Aguascalientes. *Apertura*, 3(2), 1-13. Retrieved from <https://www.redalyc.org/pdf/688/68822737007.pdf>
- Barahona, N. (2017). *Applications (app/aplicaciones móviles) en el proceso enseñanza-aprendizaje del idioma inglés en estudiantes de noveno año de educación general básica de la Unidad Educativa "Los Shyris", D.M. Quito, periodo 2016* [Dissertation, Universidad Central del Ecuador]. Repositorio Digital de la Universidad Central del Ecuador. Retrieved from <http://www.dspace.uce.edu.ec/bitstream/25000/9068/1/T-UCE-0010-1591.pdf>
- Barrera, H. & Barragán, T. (2017). Las competencias lingüísticas español inglés en el sistema educativo ecuatoriano. *Revista Electrónica Formación y Calidad Educativa*, 5(2), 33-42. Retrieved from <https://docplayer.es/61513618-Las-competencias-linguisticas-espanol-ingles-en-el-sistema-educativo-ecuatoriano.html>
- Beltrán, M. (2017). El aprendizaje del idioma inglés como lengua extranjera. *Revista Boletín Redipe*, 6(4), 91-98. doi: 10.36260/rbr.v6i4.227
- Bickman, L. & Rog, D. (2019). *The SAGE Handbook of Applied Social Research Methods*. SAGE Publications. Retrieved from https://books.google.com.ec/books?id=m4_MAwAAQBAJ&printsec=frontcover&hl=es&source=gbs_ge_summary_r&cad=0#v=onepage&q=2015&f=false
- Brown, H. (2017). *Principles of Language Learning and Teaching* (5th ed.). Pearson.
- Couldese, V. & Castillo, M. (2021). Criterios para evaluar aplicaciones para el aprendizaje de idiomas. *Revista Científica en Ciencias Sociales*, 3(1), 34-48. Retrieved from http://www.upacifico.edu.py:8040/index.php/PublicacionesUP_Sociales/article/view/113
- Castello, D. (2015). *First Language Acquisition and Classroom Language Learning: Similarities and Differences*.

- Castillo, D. & Moya, J. (2013). *Propuesta metodológica para la enseñanza de vocabulario de una lengua extranjera (inglés) en el ciclo 2 del Colegio Marco Tulio Fernández*. [Disertation, Universidad Libre]. Retrieved from <https://repository.unilibre.edu.co/bitstream/handle/10901/8202/Propuesta%20metodologica%20para%20la%20ense%C3%B1anza%20de%20vocabulario%20de%20una%20lengua%20extranjera%20%28ingl%C3%A9s%29%20en%20el%202.pdf?sequence=1&isAllowed=y>
- Castro, S., Guzmán, B. & Casado, D. (2017). Las Tic en los procesos de enseñanza y aprendizaje. *Laurus*, 13(23), 213-234. Retrieved from <https://www.redalyc.org/pdf/761/76102311.pdf>
- Chávez, M., Saltos, M. & Saltos, C. (2019). La importancia del aprendizaje y conocimiento del idioma inglés en la enseñanza superior. *Revista Científica Dominio de las Ciencias*, 3(3), 759-771. doi: [10.23857/dc.v3i3.mon.707](https://doi.org/10.23857/dc.v3i3.mon.707)
- Granada, L., Espinoza, E. & Mayon, S. (2019). Las TICs como herramientas didácticas del proceso de enseñanza-aprendizaje. *Revista Conrado*, 15(66), 104-110. Retrieved from <http://scielo.sld.cu/pdf/rc/v15n66/1990-8644-rc-15-66-104.pdf>
- Ilhan, İ. (2019). The Efficacy of Context Clue Strategy Instruction on Middle Grades Students' Vocabulary Development. *RMLE Online Research in Middle Level Education*, 42(1), 1-15. doi: [10.1080/19404476.2018.1554522](https://doi.org/10.1080/19404476.2018.1554522)
- Karakoç, D., & Köse, G. D. (2017). *JOURNAL OF LANGUAGE AND LINGUISTIC STUDIES The impact of vocabulary knowledge on reading, writing and proficiency scores of EFL learners. Journal of Language and Linguistic Studies* (Vol. 13). Retrieved from www.jlls.org
- Klímová B., Berger A. (2018) Evaluation of the Use of Mobile Application in Learning English Vocabulary and Phrases – A Case Study. In: Hao T., Chen W., Xie H., Nadee W., Lau R. (eds) *Emerging Technologies for Education*. SETE 2018. Lecture Notes in Computer Science, vol 11284. Springer, Cham

- Lhan, Í. (2019). The Efficacy of Context Clue Strategy Instruction on Middle Grades Students' Vocabulary Development. *RMLE Online*, 42(1), 1-15. doi: [10.1080/19404476.2018.1554522](https://doi.org/10.1080/19404476.2018.1554522)
- Lecourtois, E. & Vázquez, E. (2013). Uso del software educativo ¿necesidad o placencia? *EduSol*, 13(42), 37-44. Retrieved from <https://www.redalyc.org/pdf/4757/475748681004.pdf>
- Llumiquinga, M. (2020). *Relación entre m-learning y aprendizaje de inglés de estudiantes nativos digitales* [Master dissertation, Universidad Tecnológica Indoamérica]. Repositorio Digital de la Universidad Tecnológica Indoamérica. Retrieved from <http://repositorio.uti.edu.ec/bitstream/123456789/1521/1/PROYECTO%20DE%20INVESTIGACION%20LLUMIQUINGA%20SIMBA%20MARIAMARIA%20FERNANDA.pdf>
- López, M. (2017). Uso de las TIC en la educación superior de México. Un estudio de caso. *Apertura*, 7(7), 63-81. Retrieved from <https://www.redalyc.org/pdf/688/68800706.pdf>
- Mackencie, C., Triana, M., Alcazar, M., Navarrete, R. & Navarrete, R. (2019). Influencias de software educativo como herramienta informática, en perfeccionamiento del proceso de enseñanza aprendizaje del idioma inglés. *Revista Magazine de las Ciencias: Revista de Investigación e Innovación*, 4(2), 85-94. Retrieved from <https://revistas.utb.edu.ec/index.php/magazine/article/view/648>
- Maldonado, K., Vera, R., Ponce, L. & Tóala, F. (2020). Software educativo y su importancia en el proceso enseñanza-aprendizaje. *UNESUM-Ciencias: Revista Científica Multidisciplinaria*, 4(1), 123-130. Retrieved from <http://revistas.unesum.edu.ec/index.php/unesumciencias/article/view/211/169>
- Mancero, W. & Veloz, L. (2017). Algunas nociones acerca de las competencias en el idioma Inglés. *Polo del Conocimiento*, 2(6). doi: 10.23857/pc.v2i6.276
- Márquez, J. & Márquez, G. (2018). Software Educativo o recurso educativo. *Varona. Revista Científico Metodológica*, (67), 1-6. Retrieved from http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1992-82382018000200013&lng=es&tlng=en.

- Mateus, Y. & Ortiz, A. (2020). *El software educativo como estrategia para el aprendizaje de vocabulario en inglés de nivel A1 en un instituto* [Disertation, Universidad Libre]. Repositorio Institucional Unilibre. Retrieved from <https://repository.unilibre.edu.co/bitstream/handle/10901/5572/Tesis.pdf?sequence=1>
- McLeod, S. (2018). *Questionnaire: Definition, Examples, Design and Types*. SimplyPsychology. Retrieved from <https://www.simplypsychology.org/questionnaires.html>
- Miranda, C. & Romero, R. (2019). Un software educativo como una herramienta pedagógica en la mejora de las habilidades de lectoescritura utilizando el método ecléctico. *Revista Tecnología, Ciencia y Educación*, (13), 172-186. Retrieved from <https://dialnet.unirioja.es/servlet/articulo?codigo=6936271>
- Mora, M., García, M., Martínez, L. & Alvis, H. (2016). *Una mirada reflexiva sobre la aplicación del "blended learning" en la clase de Inglés. Logros y desafíos en la educación de adolescentes* [Paper presentation]. I Jornadas Nacionales de Investigación en Ciencias Sociales de la UNCuyo, Universidad Nacional de Cuyo. Retrieved from https://economicas.bdigital.uncu.edu.ar/objetos_digitales/9958/moragarca-garca-otros.pdf
- Nordquist, R. (2020). *Linguistic Competence: Definition and Examples*. Glossary of Grammatical and Rhetorical Terms. Retrieved from <https://www.thoughtco.com/what-is-linguistic-competence-1691123>
- Núñez, D. & Montes, J. (2021). *El uso de apps para el aprendizaje del inglés a través del modelo B-Learning* [Paper presentation]. 4TO Congreso Nacional de Investigación sobre Educación Normal, CONISEN. Retrieved from <https://conisen.mx/Memorias-4to-conisen/Memorias/1492-631-Ponencia-doc-.pdf>
- Olivares, C. (2018). *Uso de aplicaciones digitales para la enseñanza del idioma inglés en estudiantes de Licenciatura de la Universidad De La Salle Bajío* [Paper presentation]. Segunda Jornada Institucional de Diálogos Docentes, Universidad de la Salle Bajío. Retrieved from

https://bajio.delasalle.edu.mx/apoyos/documents/2a._jorn_dia_doc_lic_2017.pdf#page=118

- Ortiz, A. (2015). Las nuevas tecnologías, centradas en Call y el desarrollo profesional docente. *Cuadernos de Lingüística Hispánica*, (6), 101-111. Retrieved from <https://www.redalyc.org/pdf/3222/322240662010.pdf>
- Pacheco, F., & Parra, L. (2017). THE DUOLINGO APP AND THE DEVELOPMENT OF VOCABULARY SKILLS IN STUDENTS OF NINTH-GRADE LEVEL OF ELEMENTARY SCHOOL AT UNIDAD EDUCATIVA AMBATO (Vol. 1, Issue 1) [Universidad Técnica de Ambato]. <https://doi.org/10.1016/j.sbspro.2015.04.758>
- Padilla, D., Martínez, M., Pérez, M., Rodríguez, C. & Miras, F. (2018). La competencia lingüística como base del aprendizaje. *International Journal of Developmental and Educational Psychology*, 2(1), 177-183. Retrieved from <https://www.redalyc.org/comocitar.oi?id=349832317019>
- Pulido, R. & Muñoz, B. (2011). La competencia discursiva y el texto oral en lengua extranjera: un estudio de caso. *Lengua y Habla*, (15), 128-140. Retrieved from <https://www.redalyc.org/pdf/5119/511951371004.pdf>
- Rasinski, T. & Rupley, W. (2019). *Vocabulary Development*. Editorial Office.
- Razdar, M., & Orouji, M. (2018). *Improve English: Word games*. *ROSHD Journal of Foreign Language Teaching* (Vol. 33). Retrieved from <https://www.researchgate.net/publication/328163724>
- Rizzo, F., & Pérez, A. (2018). Importancia del uso de las Tics en los docentes. *Espirales Revista Multidisciplinaria de Investigación*, 2(23), 43-48. doi: 10.31876/re.v2i23.393
- Rodas, F. & Rodas, E. (2021). Lenguaje, aprendizaje de lenguas extranjeras, inglés e interculturalidad: una perspectiva ecuatoriana. *INNOVA Research Journal*, 6(3), 1-16. doi: 10.33890/innova.v6.n3.2021.1726
- Rodríguez, C. (2015). Competencias comunicativas en idioma inglés: La influencia de la gestión escolar y del nivel socioeconómico en el nivel de logro educativo en L2-

- inglés. *Perfiles educativos*, 37(149), 74-93. Retrieved from <https://www.redalyc.org/pdf/132/13239889005.pdf>
- Sánchez, L., Crespo, G., Aguilar, R., Bueno, F., Benavent, R. & Valderrama, J. (2015). *Los adolescentes y las tecnologías de la información y la comunicación. Plan Municipal de Drogodependencia*. Retrieved from <https://digital.csic.es/bitstream/10261/132633/1/TICPadres.pdf>
- Şentürk, F. (2013). *Washback effect of KET Exam in learning English as a foreign language* [Disertation]. ÇAĞ Üniversitesi. Retrieved from <https://acikbilim.yok.gov.tr/handle/20.500.12812/71999>
- Söylem, Y. ;, Dilsel, ;, İletişimsel, Y. ;, Yeterlik, Y. ; E., Algıslı, İ., & Eylemi, İ. (2017). TYPES OF COMPETENCE IN LINGUISTICS: A REVIEW OF PROCESSES AND THEIR IMPLICATIONS IN HUMAN PERCEPTION AND ACTION. https://doi.org/10.1501/Dtcfder_0000001508
- Somekh, B. & Lewin, C. (2014). *Research methods in the social sciences*. SAGE Publications. Retrieved from <https://books.google.com.ec/books?id=Trfg5iWB22MC&printsec=frontcover&hl=es#v=onepage&q&f=false>
- Teddle, C. & Tashakkori, A. (2019). *Foundations of Mixed Methods Research: Integrating Quantitative and Behavioral Sciences*. SAGE Publications. Retrieved from https://books.google.com.ec/books?id=c3uojOS7pK0C&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false
- Tovar Rodrigo. (2017). The importance of vocabulary knowledge in the production of written texts: a case study on EFL language learners. Retrieved December 22, 2020, from https://www.researchgate.net/publication/316148312_The_importance_of_vocabulary_knowledge_in_the_production_of_written_texts_a_case_study_on_EFL_language_learners
- Ussua, M. (2011). Aprendizaje de lenguas extranjeras y su relación con el contexto. *Cuadernos de Lingüística Hispánica*, (17), 107-116. Retrieved from <https://www.redalyc.org/pdf/3222/322227523009.pdf>

- Villalonga, C. & Marta, C. (2015). Modelo de integración educomunicativa de “apps” móviles para la enseñanza y aprendizaje. *Pixel-Bit Revista de Medios y Educación*, (46), 137-153. Retrieved from <https://www.redalyc.org/pdf/368/36832959014.pdf>
- Zambrano, D. & Zambrano, M. (2019). Las tecnologías de la información y las comunicaciones (TICS) en la educación superior: consideraciones teóricas. *Revista Electrónica Formación y Calidad Educativa*, 7(1), 213-228. Retrieved from <http://refcale.ulead.edu.ec/index.php/refcale/article/view/2750>
- Zambrano, E., & Encalada, E. (2018). “QUIZLET APP AND THE ENGLISH LANGUAGE VOCABULARY LEARNING” [Universidad Técnica de Ambato]. <https://repositorio.uta.edu.ec/jspui/handle/123456789/29097>

Annexes

Annexe 1: KET Vocabulary practice

Name:

Date:

Age:

Gender:

The objective of this test is to know your English vocabulary learning.

Difficulty level: A2 / Elementary

This test contains 25 questions which focus on vocabulary and language used at KET Level (A2).

Choose the correct answer

1

Did you enjoy the _____ From London to Tokyo?

- flying
- fly
- flight
- flew

2

At the end of the course all the students must _____ an exam.

- stand
- run
- walk
- sit

3

Could I have a _____ ticket to Oxford, please, coming back today?

- return
- round
- double
- long

4

Ahmet comes from Egypt so his first language is _____

- Arabian
- Arabia

- Arab
- Arabic

5

Are you ready to _____ your meal now, sir?

- demand
- ask for
- order
- explain

6

Joe _____ his bicycle to work every day.

-
- drives
- goes
- gets
- rides

7

Could you _____ In this form for me, please?

- make
- note
- fill
- wrote

8

Could you _____

- Spanish? talk tell say
- speak

9

All the children at that school have to _____ a uniform.

- use
- wear
- carry
- put

10

My sister earns 200 _____ a week.

- cash
- dollars
- money
- notes

11

How much do these tomatoes

- _____? price cost charge
- pay
- 12

We're going back home the day after _____ .

- tomorrow
- yesterday
- tonight
- today

13

We had a very good football _____ last night.

- game
- kick
- time
- play

14

Could I help you _____ your homework?

- work
- make
- do
- turn

15

Mark _____ a lot of great photos on his holiday.

- did
- took
- put
- had

16

When I went through customs, nobody _____ my passport.

- checked
- controlled
- looked
- watched

17

I'd like to work _____ and learn about a different country.

- foreign
- abroad
- strange
- another

18

Don't _____ to post my letters for me.

- forget
- remember
- mind
- matter

19

My video recorder isn't _____ could you repair it for me?

- making
- going
- doing
- working

20

You need _____ to make an omelette.

- fish potatoes apples
- eggs

21

This maths problem is too _____ for me.

- hard
- noisy
- empty
- heavy

22

Could you help me _____ a new dress for the party?

- try
- choose
- decide
- look

23

My mother is a very good _____ .

- cooker
- cooking
- cook
- cookery

24

I bought some milk at the little shop on the _____ .

- bus stop
- corner of our street
- traffic lights
- end of the road

25

We must _____ the football match on TV this evening.

- look
 - see
 - watch
 - listen
-

Annexe 2: QUESTIONNAIRE

Name:

Date:

Age:

Gender:

The objective of this survey is to know your perception about Knudge.me App

Choose the best option you consider

1. Knudge.me app was very easy to use

- Strongly Disagree
- Disagree
- Neither Disagree nor Agree
- Agree
- Strongly Agree

2. You enjoyed learning English with Knudge.me

- Strongly Disagree
- Disagree
- Neither Disagree nor Agree
- Agree
- Strongly Agree

3. Knudge.me helped you learn new English vocabulary

- Strongly Disagree
- Disagree
- Neither Disagree nor Agree
- Agree
- Strongly Agree

4. You were motivated learning new vocabulary with Knudge.me

- Strongly Disagree
- Disagree
- Neither Disagree nor Agree
- Agree
- Strongly Agree

5. You liked Knudge.me better than regular homework

- Strongly Disagree
- Disagree
- Neither Disagree nor Agree
- Agree
- Strongly Agree

Document Information

Analyzed document	GUERRERO KAREN 1-4.docx (D126670660)
Submitted	2022-01-31T17:02:00.0000000
Submitted by	
Submitter email	gkaren017@gmail.com
Similarity	4%
Analysis address	cristinadjordanb.uta@analysis.orkund.com

Sources included in the report

SA	UNIVERSIDAD TECNICA DE AMBATO / FINAL TESIS MISHEL GALORA.pdf	 3
	Document FINAL TESIS MISHEL GALORA.pdf (D125547814)	
	Submitted by: mgalora3429@uta.edu.ec Receiver: cristinadjordanb.uta@analysis.orkund.com	
W	URL: https://vtu.ac.in/pdf/naac/1.4/actiontaken.pdf	 2
	Fetchd: 2021-10-31T20:43:15.4830000	
