Universidad de Costa Rica

Sede Regional del Pacífico

Comisión de Trabajos Finales de Graduación

Departamento de Filosofía, Artes y Letras

Sección de Lenguas Modernas

Final graduation project to obtain the Licenciatura degree in the teaching of English

The use of digital flashcards as a learning strategy to foster the mastery of vocabulary in oral production tasks through Task-Based an approach in a virtual EFL classroom in a group of seventh grade students at Esparza High school.

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I term, 2021

UNIVERSIDAD DE COSTA RICA

Tribunal Examinador acta 3-2021

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Defensa de tesis celebrada a las 13 horas del día 18 del mes de Junio del 2021, en la ciudad
de Puntarenas. Universidad de Costa Rica, Sede del Pacífico.

Acknowledgements

Dedicatory

I want to dedicate this research to God for blessing me and making this project possible, to my parents, uncle, and grandmother for their invaluable and unconditional support, love, and efforts. Moreover, thanks for inspiring me and giving me courage to achieve my goals.

Raquel Delgado Calvo

This project is dedicated to the center of my life God, and the most important people in my life: my parents, sisters, and husband who have been my support since the beginning of my studies. They have given me their love, patience, and courage to face and overcome all the difficult moments.

Tatiana Alvarado Rodriguez

To my parents, Gloria and Herberth who have always trusted me since day one of this stage. To my two brothers, especially my beloved and caring brother Diego who has passed away, but lives on my heart. To all of them, thanks for being around and helping me pursue my dreams to become the human being I am today.

Luis Villalobos Mendoza

In short, I am thankful for God's unconditional support as well as my family and friends' help during this academic experience. Also, I would like to thank my dear "Doña Aida" as I used to call her because while she was alive, she taught me the value of working hard which is a precious treasure I will keep forever.

Andreina Córdoba Espinoza

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Glossary

CEFLR…………………………Common European Framework for Language Reference

MEP……………………………………………………... Ministerio de Educación Pública

EFL……………………………………………………. English as a Foreign Language

L2…………………………………………………………… Second Language

TBA…………………………………………………....Task Based Approach

Abstract

This research encompasses the use of digital flashcards to foster the mastery of vocabulary in oral production tasks. To carry out this study, the researchers conducted different instruments in order to obtain the results, analyze the data, and verify if the objectives were fulfilled. The main aim is to analyze the effectiveness of digital flashcards as a learning strategy to improve the mastery of vocabulary; thus, to make students communicate better in the second language.

Key words: Digital flashcards, learning strategy, mastery of vocabulary, oral production tasks.

Resumen

Este estudio abarca el uso de flashcards digitales para fomentar el dominio del vocabulario en actividades de producción oral. Para el desarrollo de la investigación, los investigadores diseñaron diferentes instrumentos con el fin de obtener los resultados, analizar la información y verificar si se cumplen los objetivos. El objetivo principal es analizar la efectividad de flashcards digitales como estrategia de aprendizaje para mejorar el dominio del vocabulario y así, hacer que los estudiantes puedan comunicarse mejor en el segundo idioma.

Palabras claves: flashcards digitales, estrategia de aprendizaje, dominio de vocabulario, actividades de producción oral.

CHAPTER I

Introduction

This section provides a description regarding the background of the study, justification of the topic, statement of the problem, research question, objectives, and delimitations in order to understand the main aspects to be considered in this research study.

1.1 Background of the study

Learning English as a foreign language (henceforth EFL) successfully depends on many aspects one of them is the mastery of vocabulary. In this sense, the acquisition of vocabulary results fundamental as a means to reach a high proficiency level of language, which enables the learner to comprehend and generate effective communication. For this reason, language teachers should look for suitable teaching strategies that help students in the process of learning new vocabulary.

Referring to the Costa Rican context, English is one of the basic academic subjects taught in primary and secondary learning institutions since the acquisition of a foreign language is one of the academic goals established by Ministerio de Educación Pública (henceforth MEP), which is the institution in charge of the public primary and secondary education in the country. One of the goals set by this entity is to achieve an intermediate proficiency English level in its students once they conclude their high school studies.

In fact, Ministerio de Educación Pública (MEP, 2016) established in the English syllabus that:

The Costa Rican educational system is committed to achieving this goal of having bilingual citizens in two or more languages by means of a comprehensive, articulated

curriculum from kindergarten through high school. Given this mandate, the new curriculum has been sequenced so that learners reach a minimum level of English proficiency of A2 when completing primary education and B1 or B2 (depending on the study plans) when completing secondary education to the levels described by the (CEFR) Common European Framework of Reference for languages (p. 4).

In regard to the information above, the objective stated by MEP may be achieved through the implementation of creative and innovative strategies that enhance and maximize the teaching and learning process of a foreign language.

According to MEP (2016) "The students are social agents that use the target language to perform specific actions in real life contexts meaningfully" (p.25). Following the previous statement, learners take an active role and use vocabulary in real life. Additionally, MEP (2016) also states that "vocabulary, syntax, cohesive forms, and phonology are taught with the purpose of facilitating communication" (p.25). Therefore, it is essential that students acquire the necessary vocabulary to communicate effectively.

For instance, the main goal pursued by MEP in regard to the teaching and learning process of a new language is to make students be able to speak the English language fluently and accurately. Notwithstanding, one of the problems that has been acknowledged by the researchers of the actual study is the lack of English vocabulary that students in general have. Consequently, it is a weakness that limits the learning process of a language. For instance, Susanto (2017) states that "a learner with insufficient vocabulary size will not perform well in every aspect of language itself" (p. 183). Indeed, there are various international and national studies which have focused on attempting to find a solution to the common lack of vocabulary that students in high school have.

Furthermore, Hussaini, et al. (2016) examined the effects on the use of flashcards employed as a didactic resource to improve students' vocabulary skills in a group of Nigerian and Malaysian learners. The participants of that study were divided into two groups: one control group and one experimental group correspondingly. Furthermore, the results of this study showed a significant difference in the results obtained from a post-test applied to the two groups, in which those students who were taught through flashcards scored higher grades in vocabulary competence. Finally, the researchers concluded that flashcards can contribute to learning vocabulary effectively (pp. 20, 22). Similarly, in Jenangan, which is an island located northeast in Indonesia, Novitasari (2020) investigated the effectiveness of using English songs and flashcards to teach vocabulary to seventh grade students. The researchers concluded that employing English songs and flashcards is effective when teaching vocabulary to seventh grade students (p. 60).

On the other hand, a Costa Rican study carried out by Prieto and Salguera (2018) examined the implementation of songs as a useful strategy to foster vocabulary learning in the language classroom. These researchers argued that using songs in English contributed to the learning of vocabulary among a group of twenty-eight tenth graders. Specifically, the participants were 15 males and 13 females from Liceo Antonio Obando Chang in Barranca, Puntarenas. After the study ended, the researchers proved that utilizing songs in English successfully stimulates the development of this language because the vocabulary contained in the chosen lyrics is necessary for everyday life communication. This study evidences that there has been an issue related to the lack of vocabulary in the last years, which supports the current research's problem and encourages the researchers to look for more possible solutions to enhance the mastery of vocabulary in oral productions tasks, but by using flashcards.

Consequently, it can be claimed that the use of flashcards contributes to learning vocabulary; hence, language teachers need to be creative and innovative when preparing classroom activities. Likewise, they have to look for an appropriate methodology and learning strategies to make students feel interested in the language. In this sense, teachers can take advantage of these versatile resources that can be either digital or printed to create or adapt their teaching materials. This study proposes the use of digital flashcards as a pedagogical strategy for teaching English vocabulary, and aims to study the premise that flashcards contribute to increasing learners' general vocabulary in English.

1.2 Justification

In learning a foreign language, the lack of vocabulary becomes a serious problem specially to develop the speaking skill. In fact, the process of teaching and learning vocabulary is a continuous challenge for teachers, as well as for students. For instance, Astatia (2019) concluded in her study that the difficulties that teachers face when teaching vocabulary are related to the materials used, the strategies employed, and the students' interest in the subject (p. 56).

Furthermore, Astatia (2019) suggests that there are other aspects when teaching vocabulary; for example, having students who have not taken English classes before, and the challenge of memorizing vocabulary lists. This difficulty for memorizing might increase when students do not take extra time to study after class. Finally, the lack of confidence that some learners may have when being asked to use the target language also provokes some sort of learning obstacle (p. 56). In fact, this obstacle in learning is called the Affective Filter. According to Krashen (1982) "the Affective Filter hypothesis captures the relationship between affective variables such as: motivation,

self-confidence, and anxiety, and the process of second language acquisition by positing that acquirers vary with respect to the strength or level of their Affective Filters" (p. 38). In other words, negative feelings act as filters that hinder and obstruct language learning. Based on the authors ideas, there are different factors that are a challenge for vocabulary teaching and learning.

Students' lack of vocabulary might increase when teachers apply minimal focus on vocabulary teaching in the English as a EFL classroom. Also, based on a study conducted in Costa Rica by Castro (2017), the author argues that "vocabulary knowledge serves as a cornerstone for L2[1] acquisition and that it has a direct impact on students' learning of the second language. In fact, it is one of the key elements for language teachers and researchers tracking students' language progress" (p. 1). Since vocabulary knowledge is key for L2 acquisition and eventual learning of a second language, the input that students receive from their teachers has to be meaningful and relevant for the learners to ensure deep understanding of content. For that reason, it is important to provide learning opportunities in order to avoid demotivation during the learning process.

Consequently, the use of flashcards as a didactic resource can facilitate the process of language learning. This is a valid premise to carry out a study to examine the possible benefits that this strategy has in order to foster the mastery of vocabulary of seventh grade students. Also, flashcards could be interesting to students since they are a visual resource, and in this case, a digital medium which may be more appealing for pupils since they are immersed in technology nowadays.

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[1] L2 refers to the second or target language.

For this reason, the use of digital flashcards is proposed as a strategy to foster the increase of vocabulary and its use in oral tasks since it is a learning strategy which enables learners to acquire the necessary vocabulary for successful learning of the target language. Therefore, this study focuses on analyzing how digital flashcards may influence the learning of vocabulary in the virtual education currently implemented in schools throughout Costa Rica as a consequence of Covid-19 pandemic. Besides, it is important to highlight that there are no previous research studies regarding the use of digital flashcards to teach oral vocabulary in Costa Rica. Thus, the current research aims to cover this existent gap, and provides English teachers at Esparza High school and the selected population with a useful learning strategy to be applied in the academic English lessons.

Finally, this research contributes to the Costa Rican scenario because it is an innovative research study that may minimize the problem of the lack of vocabulary that students have when carrying out speaking activities. This project is designed to help the collaborating teacher with the possibility to use a different teaching strategy and provide the institution with a set of resources including a booklet of flashcards that were used during the fieldwork of this study. Similarly, it is expected that the participating students will improve their English proficiency, speaking skills and vocabulary mastery.

1.3. Statement of the problem

The main research problem is the lack of vocabulary in most EFL classrooms of public high schools. This kind of situation has been identified by the researchers of the current study, and by other observers or teachers from private and public institutions. For instance, the researchers know about the difficulties that learners face to communicate in the target language. This is a common issue that students face when

carrying out oral production tasks. For this reason, it is important that English teachers look for helpful teaching strategies that contribute to the acquisition of the language skills among students within a given context. In fact, MEP (2016) mentions in the English Syllabus that "teaching learning strategies are fundamental in the learning process in order to enable learners to become intentionally controlled, more independent and autonomous" (p. 48). Therefore, it is important to establish that the learning strategies a language instructor employs in the English classroom should be used to form independent learners.

Certainly, foreign language students have the challenge to recall and use vocabulary because it is part of the language learning process. Thus, the lack of vocabulary directly affects communication since students may have difficulties to understand messages or express their own ideas. In fact, there are several effects that may emerge when language learners have a limited amount of vocabulary. For instance, there may be some pupils who misinterpret the meaning of messages when teachers give them instructions, or in several cases, students usually avoid speaking in English due to their lack of vocabulary to express their ideas fluently and accurately.

Furthermore, the MEP has made an important effort to find out possible solutions to the lack of vocabulary by means of implementing different educational policies that are aimed to improve the English proficiency level that pupils have. Nonetheless, according to MEP (2017), "learners who receive English lessons in public elementary schools and high schools are not reaching the expected English proficiency levels after eleven or twelve years of instruction" (p. 6). It is clearly shown that students are not improving their English skills. Thus, educators should help students to achieve the expected proficiency level by adopting strategies that figure out these deficiencies.

Therefore, there is a necessity to enhance the teaching of this language in order to develop the students' linguistic skills successfully. In fact, one alternative for language learners to achieve such goal is to provide them with innovative and creative language teaching strategies for them to learn EFL vocabulary.

On the other hand, based on her research, Castro (2017) states that "…students' vocabulary size is linked directly to their ability to complete different tasks: from basic oral communication to reading novels in the target language. These and several other features of vocabulary lend paramount importance to vocabulary studies" (p. 1). It is evident that the mastery of vocabulary of the target language is necessary for students to be able to carry out different tasks; specifically, to communicate in basic classroom activities, which is the main purpose of this research. For this reason, the present research focuses on providing an alternative strategy to teach vocabulary and to facilitate the learning process by using flashcards.

1.4 Research Question

How can English teachers use digital flashcards as a learning strategy to increase the use of vocabulary in oral task activities?

1.5 Objectives

General Objective:

1. To analyze the effectiveness of using digital flashcards as a learning strategy for the mastery of vocabulary in oral production tasks through virtual EFL classrooms in one group of seventh grade students at a Public High school in the county of Esparza.

Specific objectives:

1. To identify the advantages of digital flashcards as a learning strategy for the improvement of vocabulary in oral production tasks through the implementation of the Task-Based approach in virtual EFL classrooms.

2. To determine the most effective digital flashcards techniques for the mastery of vocabulary through the different tasks employed in virtual classes.

3. To compare the effectiveness of the implementation of digital flashcards in one experimental and one control group of seventh grade students for the improvement of vocabulary mastery through the employment of the Task-Based approach in virtual classes.

4. To assess the students' use of vocabulary in virtual classes for the improvement of speaking skills through the implementation of oral production tasks during the academic English lessons.

1.6 Scope, delimitations, and limitations of the study.

1.6.1. Scope of the study

The expected outcome of this research is to provide the collaborating English teachers and the participating students from Esparza High school with an alternative learning strategy that could be used to improve the mastery of vocabulary in oral production tasks through virtual classroom in seventh grade.

1.6.2 Delimitations of the study

The researchers delimited the current study to two main groups from seventh grade from Esparza High school. Subsequently, the first group was one experimental group in which flashcards are used and the second group corresponds to one control group in which flashcards were not employed. The purpose is to determine how effective flashcards are based on a comparison of the two populations.

1.6.3 Limitations

First, in spite of the fact that at the beginning of the research proposal the researchers had considered a significant population (115 participants), the number of the participating students reduced to 19 students due to the conditions in which teachers are currently developing their classes because they have changed to virtual classes instead of attending to the high school. That is why the amount of participating students varies from group to group (13 learners of the experimental group and 6 pupils in the control group) it was impossible for the researchers to have a similar number of participants in both groups because of the difficulties learners had to connect online.

In fact, different factors affected students' active participation online. For instance, it is important to highlight that not all the population of students had a computer or any other digital device which allowed them to take part in this study. On the other hand, most of them (83%) did not have adequate internet access to connect online. However, these were issues that exceeded the researchers' control of the situation.

Additionally, the present research project highlights that there were two main limitations regarding the amount of class sessions to apply the flashcards techniques. For instance, Esparza High school sometimes arranged virtual classes every fifteen days to avoid overloading students with a lot of work. As a result, this situation reduced the

possibilities to schedule enough sessions for doing the research fieldwork. Also, the high school and MEP established some meetings and training for teachers; for this reason, researchers had few sessions to implement the proposed flashcards.

In spite of these limitations, the main purpose of this research is to provide the English Department of Esparza High school with a useful teaching strategy that allows English teachers and students to improve their teaching-learning process and fulfill the existing gap in the educational field regarding this topic and serving as a reference for future studies.

CHAPTER II

THEORETICAL FRAMEWORK

2.1 Key concepts defined

This section is intended to develop the theoretical concepts which are vital for the current research's understanding, and not only to define specific concepts but also to explain the importance of those concepts as the basis for the current project.

2.1.1 Flashcards

The use of flashcards is one important concept of analysis of this study. Therefore, it is necessary to provide a clear definition of this word and explain how this material contributes to the language learning process based on the perspectives from different authors. According to Aulia (2018), "flashcard is a paper containing a picture and a name for such picture" (p. 1). Similarly, Eslahcar and Khodareza (2012) point out that: "a flashcard or flash card is a set of cards bearing information, as words or

numbers, on either or both sides, used in classroom drills or in private study" (p. 137). According to the definitions depicted above, it can be stated that a flashcard is a visual material that may contain any kind of information at the front or back sides, and it can be used in class activities or as a means to study at home.

Also, Wahyuni and Handayani (2014) explain that:

Flashcard learning is not only as a medium, but it can be played as well. It can make students feel happy, not bored, raise motivation and stimulation of learning activities and even carry psychological effects on students in learning the English language (p. 50).

In this regard, flashcards can be defined not only as a didactic means to learn vocabulary. Also, flashcards are considered as a teaching resource which can be used to catch students' interest and create a friendly learning environment that promotes language learning success. In fact, according to Habibi (2017) "flashcards can also be the instrument to play a game" (p. 200).

Moreover, Byrd and Lansing (2016) point out that "flashcards provide a simple way for students to study and learn new vocabulary words and can be used by almost every student" (p. 3). In other words, it means that flashcards could be implemented as ludic activities in the English classroom. Similarly, Aulia (2018) states that flashcards are flexible didactic resources as they can be used in every level of education, from kindergarten to university students (p. 5). In this sense, there is not a specific school level to use flashcards, due to the fact that they can be used by almost all pupils. Sometimes, the use of pictures in the classroom is commonly associated with kindergarten learners; however, it can be a teaching resource of every single academic level.

Furthermore, Septarini (2016) has an interesting point of view and argues that flashcards can present variations in the teaching learning process depending on the theme of the lesson (p. 2). Therefore, it is clear that even though educators might apply flashcards in their classes, the activities they present may vary in order to raise students' interest in the topic.

On the other hand, Baleghizadeh and Ashoori (as cited in Byrd and Lansing, 2016) indicate that "the use of flashcards in vocabulary learning is still prevalent among foreign language learners" (p. 3). Concerning the previous quote, the use of flashcards could be a current and useful means to identify new words because teachers are still committed to use this material for language learning purposes. Likewise, Aulia (2018) explains that this learning strategy is adequate for beginning students as they have to acquire enough vocabulary at this level. In addition, the author emphasizes that by showing the flashcards to students, they will have clear understanding about the word studied because they can relate the word with the picture (p. 6).

In addition, it can be affirmed that flashcards have been used as a teaching strategy to learn vocabulary since this aspect is indispensable for learning a language. Nevertheless, the effectiveness of its implementation may vary from one population to another. For this reason, despite the fact that the use of these materials is not new, this study aims to analyze the extent to which flashcards may be functional as a teaching resource in the educational context of the determined population.

The researchers from this current study considered the contributions from the authors consulted regarding several concepts about flashcards in order to create their own definition. Indeed, flashcards will be herein defined as a cognitive scaffolding, and a useful learning strategy to teach any topic by using cards with images. These cards

could be presented in two different ways: picture-word, or picture-definition, and they may be used as a classroom tool to learn new vocabulary easily. In other words, a flashcard is a card that may have a single word or a definition, and it can be used for teaching vocabulary in the classroom.

2.1.1.2 Digital Flashcards

The concept of *digital flashcards* is vital in this study, not only its definition but also its use in a virtual class. In this sense, Kusuma, et al. (2018) explain that: "digital flashcards are defined as the flashcard by incorporating multimedia, data analytic and spaced repetition system that time the repeat access to cards so as to maximize memory retention" (para. 6). In other words, the authors refer to an online system that enables the creation of flashcards and promotes an improvement of vocabulary retention.

Moreover, Colbran, et al. (2014) point out that:

Digital Flashcards provide a further opportunity to revisit old learning activities from a new, and potentially exciting perspective. Like many Web 2.0 technologies, digital flashcards allow students to individually or collaboratively build a range of artifacts, or simply use those developed by others in different learning contexts (para. 6).

Following the previous idea, the use of digital flashcards is an innovative and creative learning strategy that allows students to work, individually or in groups, with their peers in diverse studying contexts. To sum up, for the purpose of the present paper, digital flashcards are understood as an illustration used for pedagogical purposes to teach vocabulary. Moreover, it can contain a picture to illustrate a word, phrase, definition or sentence.

2.1.2 The advantages of using flashcards in an EFL classroom

The pedagogical advantages of flashcards rely on the extent to which they might help students to learn vocabulary easily. Besides, another important fact to take into consideration is the possibility that by means of using these materials, learners could feel motivated and interested in the class. It is expected that with the use of flashcards, students may take a more active role in class activities and they would be more willing to speak. Also, for English teachers, the application of this learning strategy in class may result in a worthy option to present and practice the vocabulary interactively related to the topic studied in class.

As a matter of fact, Taghizadeh, et al. (2017) state that "using flashcards is a helpful tool and an effective technique for vocabulary learning" (p. 160). In turn, Septarini (2016) argues that flashcards are one of the most effective strategies in teaching and learning a foreign language (p 3). Therefore, it can be assured that flashcards promote learning of EFL vocabulary.

On the other hand, the MEP (2016) indicates in the English syllabus that "learners should be taught words, phrases, idioms, and colloquial language" (p. 46). In this sense, it highlights the importance of teaching vocabulary to learn a foreign language in order to convey meaning in multiple everyday-life scenarios.

Another benefit obtained from the use of flashcards is that it eases the memorizing process of complex vocabulary lists. In fact, according to Septarini (2016) in the results of her study about flashcards, she concludes that students feel motivated due to the use of pictures. As the author stated, flashcards have a positive impact on students' motivation since the use of these strategies facilitates the language learning

process through the implementation of authentic images (p. 9). Additionally, Sinchi and Sinchi (2011) argue that:

A.   Learning is enjoyable and the information is readily absorbed.

B.   The teaching-learning process through flashcards permits active classes.

C.   Learning with flashcards can be a fun and interactive educational experience for both children and teenagers.

D.   Using flashcards develops and improves retention of information and encourages the connection of knowledge.

E.   Learning with flashcards is quick, direct, and comfortable.

F.   Flashcards stimulate the mind to quickly look for references to identify flashed images.

G.   They allow to associate words with images.

H.   One of the most important advantages of using flashcards is they are easy and fast to reproduce (p. 19-20).

Thereby, the use of materials such as flashcards may differ from the traditional teaching sources that are present in a language classroom such as textbooks, dictionaries, or a whiteboard. Besides, flashcards may result more pedagogically appealing for learners because they can associate words with pictures which could contribute to a longer attention span regarding the content studied in the virtual class. Moreover, Habibi (2017) claims that "teaching English vocabulary by using flashcards as media does improve the students' vocabulary mastery" (p. 201). If flashcards are beneficial for learners in the language classroom as the author suggested, they could be applied as a learning strategy to foster oral production.

Finally, regarding the advantages of flashcards for students during the learning process, Eslahcar and Khodareza (2012) state that:

Using vocabulary flash card facilitates their involvement in the class work by sharing answers, trying to participate, paying attention, giving the examples, encouraging to take part in the lesson, participating as volunteers, interacting with each other in a low-risk, warm-up activity, utilizing the new words in the example, working on the vocabulary and pronunciation (p. 142).

Therefore, it should be clear that flashcards are more than just a useful strategy to facilitate learners with vocabulary. Besides, they are engaging didactic sources to foster the students' active participation in class and help pupils to interact among themselves. In addition, students are able to practice the target language during the class activities. Nevertheless, in spite of the fact that the researchers agree about the possible benefits of using flashcards to learn foreign language vocabulary, they also deemed it essential to point out that there are certain teaching downsides when using this didactic resource.

According to Sinchi and Sinchi (2011) "the biggest problem when using flashcards is that the activity quickly becomes boring when using over and over without varying the way in which the flashcards are applied" (p. 20). Despite such disadvantage, evidence shows that the results obtained regarding the implementation of flashcards are rather positive.

2.1.3 Virtual Classroom

Considering the importance of improving the English's immersion in this technological era, Charpentier (2013) shows the necessity to explore the use of technology in English classes as a core topic applied in Costa Rica. The object of analysis focused on the role of information, and communication technologies in the

learning of a L2. Consequently, the research demonstrated that despite their educational importance, technologies are not sufficiently incorporated in language classrooms. Finally, the results suggested that having internet access, as well as training teachers on how to use those technologies are aspects which must be considered in order to take advantage of technological resources in schools and high schools.

Nowadays, the Costa Rican scenario has changed due to the Covid-19 pandemic. Indeed, the Ministry of Public Education has implemented a series of modifications to the pedagogical curricula from different educative modalities, which include distance learning strategies carried out through the use of technology. For that reason, it is crucial to provide the necessary training to Costa Rican teachers to be able to face such challenging tasks. Clearly, this pedagogical undertaking requires time, financial resources from teachers and students, patience, collaborative work, and teachers and students' willingness to be part of it. Given the situations depicted above, the present study considers it indispensable to define virtual classroom as an educational scenario because this context will be used to conduct the fieldwork and apply the suggested techniques.

According to Parker and Martin (as cited in Abdullah 2012) the authors state that "virtual classrooms are online environments that enable students and instructors to communicate synchronously, by means of audio, video, text chat, interactive whiteboard, application sharing, instant polling, and other such features, as though they were standing face to face in a Classroom" (p. 213). The authors define this concept as a virtual setting; moreover, a virtual classroom is a learning place that allows communication between the student and the teacher. Besides, it is a means to carry out class tasks in different ways. Also, the authors indicate that virtual classrooms can be

interactive, and partially resemble the traditional ones. In short, it should not affect the teaching-learning process.

Additionally, Downing et al (as cited in Charpentier 2013) establish the definition of virtual learning environment as "a way of providing a teaching and learning environment online" (p. 452). In other words, it is a virtual means that permits the process of exchanging knowledge for learning purposes. Furthermore, Alves et al (2017) mention that "learning environments are based on the use of technology and digital resources are mediators in the learning process through the activities they allow to perform. The authors reported that it is because virtual environments facilitate interaction and interrelation of learners within a continuous communication process" (p. 518).

For instance, given the versatility of having virtual settings, the researchers will take advantage of the situation that represents that both learners and facilitators are using technological tools and platforms such as *Microsoft Teams,* which lets participants achieve their educational goals and promote effective online communication.

2.1.4 Microsoft Teams

Due to the worldwide outbreak provoked by Covid-19, the Ministry of Public Education in Costa Rica decided to implement a virtual platform to continue offering classes and cover the educational needs of students who are currently enrolled in the system, from kindergarten to high school level. For that reason, teachers at MEP received training on how to use this tool. Such training sessions were carried out during three consecutive weeks, which started in May 2020. The Ministry of Education along

with Fundación Omar Dengo were in charge of delivering those coaching sessions. For instance, *Microsoft Teams* is a virtual platform that grants educators a useful teaching resource to tackle the current issue.

According to what is displayed on *Microsoft Teams* (2019) "*Microsoft Teams* (*Teams*) is a shared workspace which brings much of the collaboration and also communication solutions within *Microsoft* 365 into a focused virtual working environment. Furthermore, it is stated that *Teams* integrate with other solutions from *Microsoft*, third-party vendors, and in-house development to facilitate faster and smarter working both within and outside of the organization" (p. 1). Based on the information depicted above, *Microsoft Teams* is a collaborative working system which allows the accomplishment of diverse tasks, duties, goals, and objectives due to its multifunctional gadgets. For example, having virtual classes, assigning homework, and conducting live presentations. Therefore, it is a valuable technological tool that English teachers can use to foster students' communicative skills.

2.1.5. Flashcards techniques

When teachers refer to flashcards, they likely associate the concept only with a picture on a paper. In fact, it is the most common teaching technique in which an educator would probably use them.

Furthermore, a technique is a concept which has been used in different contexts. Nonetheless, for the purpose of the current research, this concept will be related to point out aspects regarding teaching and learning processes. Indeed, the concept *technique* is defined by Zulfiqar (2012) as "a tactic or a way of learning undertaken by teachers in implementing the teaching and learning activities in order to obtain optimal results" (p.

3). For this author, this term is a means which can be employed to teach content and achieve certain learning goals. Therefore, it allows teachers to accomplish the learning objectives effectively.

Foremost, the current paper defines *technique* as a set of educational resources implemented by teachers to reach a specific learning goal. Furthermore, in this study, the researchers will refer to *technique* as the specific step by carrying out classroom activities with the implementation of flashcards.

According to Gelfgren, (as cited in Sarah, 2018) there are different types of flashcards that help students improve and enrich their vocabulary level. For example, quiz flashcards, role-play flashcards, synonym flashcards, opposite flashcards, association flashcards, numbers flashcards, times flashcards, and flashcards for dictation and reading. Based on the previous examples, teachers can employ several techniques for implementing flashcards in their classes as a learning strategy to increase students' vocabulary; it would depend on the teaching purpose teachers may have established.

On the other hand, concerning the layout and text distribution of flashcards, Gilsang (2018) justifies that "flashcards usually have the words in a target language on the front side, and their definitions on the back. The definitions can be given either in the target language or learners' first language" (p. 15). Thus, the author emphasizes that flashcards could include even the concept of words. Also, regarding the flashcards techniques Eslahcar and Khodareza (2012) mention that:

Vocabulary flash card or Word flash card is perhaps worth mentioning at this point, even though they are not actually pictures. However, being used in a similar way as picture flash card, they can often enrich the lesson. On top of that, those two can be indeed combined and applied together (p. 137).

There is also a type of flashcard that contains vocabulary instead of a picture. Nevertheless, it is necessary to highlight that the present research incorporates a combination of picture and word flashcards. In fact, the types of flashcards this study follows are 1) vocabulary flashcards and 2) definition flashcards; whereas the first flashcards are characterized by including the picture with the word in English, and the second ones that include the picture and words in English; in other words, their definitions without translations. Moreover, the two types of flashcards were created with the picture added on the front side, and the word or definition on the back side. These types of flashcards will be further described in the activities in chapter 3. The researchers chose the mentioned flashcards techniques because they were appropriate for the website used to create the flashcards (*GoConqr*) and it allowed the use of pictures.

2.1.6. Learning Strategy

One of the key words in this study is *strategy* since the emphasis of the current project is using flashcards as a learning strategy to foster the mastery of vocabulary in oral production tasks in an EFL classroom. According to Al-Banna (2014) a learning strategy is when students aim to achieve certain educational objectives by the implementation of a given self-didactic method. Based on the author's contribution, a learning strategy can be defined as a specific learning method chosen by students for reaching academic goals. In other words, it is what pupils follow in order to learn; therefore, it can be determined that it benefits students' self-regulation, self-evaluation, autonomy, metacognition, and so on.

Furthermore, as reported by O'Malley and Chamot (as cited in Zulfiqar, 2012) learning strategies are considered as internal cognitive or affective actions taken by the

teacher or learner to teach-learn both simple and complex material" (p. 2). Thus, a learning strategy is a response from students to acquire a given knowledge which can be employed and acquired at any academic level. Also, according to Noviyenty (2018)

Strategies in learning to speak English are one of the important factors to be recognized by students and it is also a part of speaking skill. Learning strategies should be developed in order to improve the students' ability in speaking English (p. 36).

 In other words, the learning strategies are not only part of learning a language, in fact, these strategies are valuable for learners to improve their oral communication performance.

On the other hand, Wenden (as cited in Lee, 2010) "suggests that learning strategies are the various operations that students use in order to embrace the target content" (p. 134). This clearly denotes that learning strategies are put into practice by each individual as means for self-assessment in order to accomplish proper comprehension of the topics, in this case, learning a foreign language. Moreover, for this paper, students' learning strategies are necessary to be applied in order to achieve the linguistic objectives proposed in an action plan designed by the researchers of the current study.

Besides, Celce-Murcia (as cited in Noviyenty, 2018) claims that learning strategies are those specific actions, behaviors, steps, or educative techniques such as encouraging oneself to tackle a difficult language task in which the learner improves his/her learning process (p. 36). In other words, learning strategies might be understood as the set of procedures that the person in charge of teaching uses to aim an educational goal. Also, they require specific instructional sources to enhance the acquisition of knowledge.

Similarly, Oxford (as cited in Lee, 2010) defines learning strategies as "those specific actions which are carried out by the learner in order to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations" (p. 134). The author indicates that learning strategies will include different educational stages, which can be transferred to different experiences to enrich the learning process. Thus, learning strategies are going to be covered by this current study through the use of flashcards techniques which are the particular chosen resources to achieve the project's objectives.

In short, for the purpose of this research, the use of flashcards will be interpreted as the type of educational resource or technique to be employed by the collaborating teacher of this study in the different proposed oral tasks. Furthermore, flashcards will be the vehicle to increase the EFL vocabulary repertoire of the participating students at Esparza High school.

2.1.7 English as a Foreign Language Vocabulary

English as a Foreign Language Vocabulary is one of the main components in learning a new language, especially because learners require plenty of vocabulary to express themselves fluently and convey ideas accurately. Following this idea, diverse authors have defined "foreign vocabulary". According to Septarini (2016) EFL vocabulary is the basis of communication. Briefly, the author states that individuals cannot easily communicate in a second language without knowing the vocabulary they aim to use. Therefore, vocabulary is an important element in learning a foreign language (p. 1). As the author highlights in the previous quote, it is the ground to transmit messages successfully. Specifically, this quote remarks the importance of

vocabulary in English as a Foreign Language because it facilitates meaningful and successful communication.

Moreover, Septarini (2016) defines vocabulary as a "list of words that have meaning, glossaries, and some words used in language, those words has [*sic*] meaning and convey some messages" (p. 3). Similarly, Giraldo, et al. (2016) point out that this concept develops with age, [*sic*] and serves as a useful and fundamental tool for communication and "gives the user the tools to create language and to communicate with others" (p. 11). Following this idea, this term is understood as a set of words that are oriented to convey messages and allow human communication.

In addition, Auliya (2016) highlights that vocabulary is a language component or sub-skill that must be taught to learners as vocabulary has a primary role in language teaching (p. 2). Also, Hussaini et al. (2016) indicate that vocabulary mastery refers to the acquisition of knowledge (p. 22). These statements state that vocabulary has to be learned since it is necessary for effective communication. Therefore, language teachers have to find techniques that help students to learn the necessary concepts they need to be able to communicate in the target language.

Furthermore, Gilsang (2018) argues that vocabulary is an indispensable part of language learning (p. 9). Teachers need to provide students with vocabulary to communicate and express their thoughts; otherwise, without sufficient vocabulary, ideas and messages cannot be conveyed. Likewise, Alpino (2017) emphasizes that:

The learning of vocabulary is an important part in foreign language learning. The meanings of new words are very frequently emphasized, whether in books or in verbal communication. Vocabulary is considered as central in language teaching and is of paramount importance to a language learner. Vocabulary is a basic of one learns a foreign language (p. 182).

Based on the author's view, learning vocabulary is essential for students to acquire a foreign language. Hence, it can be considered essential to learn new words from the target language in order to understand reading passages, and express ideas or thoughts orally. Briefly, vocabulary works as substantial input for learning a new language.

Likewise, Sujayanti (2017) explains that vocabulary is defined as a large numbers [*sic*] of words that students have to recognize, not only memorizing the form of the word; but also understanding its meaning (p. 12). In short, vocabulary builds a knowledge's platform that permits students of a Foreign Language to use what they learned in a meaningful manner. Therefore, pupils can take advantage of vocabulary as a useful tool to reach learning objectives.

On the other hand, the current research study is focused on vocabulary identification through pictures. In this case using flashcards are necessary to distinguish how vocabulary influences the learning process. According to Susanto, (2017) "teaching vocabulary using pictures connects [*sic*] students' prior knowledge to a new story, and in the process, it helps them learn new words. There are plenty of vocabulary sets that can be introduced by using illustrations or pictures" (p.187). In other words, the author highlights the importance of teaching vocabulary using visual aids as a means to help learners construct their own knowledge on a topic. For this reason, including images along with the process to learn new vocabulary is beneficial for the process of learning the target language especially if a topic with new vocabulary will be introduced.

To sum up, for this project, *vocabulary* has an essential role in communication and consists of a set of words with its corresponding meaning that language learners can use to express their thoughts and ideas when speaking English.

2.1.8 Vocabulary mastery

The ability to communicate effectively in a foreing language tightly depends on the amount of words and phrases acquired by the speaker. In fact, Rudianto and Hisni (2018) explain that "communication in a foreign language will fail if learners lack of vocabulary to express their ideas and thoughts [*sic*]" (p. 95).

Additionally, according to Nation (as cited in Wardani, 2015) it is expected that learners have to increase their vocabulary by around one thousand words a year (p. 132). Consequently, students have to acquire vocabulary due to the importance to communicate in the target language and improve their mastery of words.

On the other hand, the word *mastery* can be used and interpreted as Cambridge (2019) defines "great skill in a particular job or activity" (para. 3). Following this idea, *mastery* refers to the capacity a person has to perform a task or an assignment in a specific area or field with excellence.

Consequently, Andalas (2019) points out that vocabulary mastery refers to:

Vocabulary is an important part in language learning and teaching because without having knowledge of vocabulary, we cannot express our ideas and use the appropriate words in listening, reading, speaking and writing. Vocabulary mastery is easier than mastery of other components (grammar and phonology) (p. 182). The previous quote refers that vocabulary is vital to improving second language acquisition; in fact, the mastery of vocabulary eases the speaking skill to express thoughts which is one of the objectives that the current investigation aims to accomplish.

Furthermore, it is necessary to explain the concept of *vocabulary mastery*. According to Safirah (2016) *vocabulary mastery* is a gradual lexicon learning process. Furthermore, to reach a high command of vocabulary, a learner requires hours of study

to be able to use and understand everyday-life lexis. In this sense, vocabulary mastery is defined as a daily life skill to learn vocabulary and use it to increase a set of words; consequently, it allows students to comprehend the meaning of a language and communicate successfully. Moreover, Syarifudin, et al. (2014) states that:

Vocabulary mastery is one of the factors to master English as foreign language. It means that the students have the ability in understanding and using the word and meaning. The larger vocabulary the students master, the better they perform their language. By having a limited vocabulary, the students will find difficulties in mastering English skill (p. 2).

In regard to this idea, without an adequate vocabulary command, learners might struggle trying to communicate their ideas using the target language as well as understanding others' ideas. In fact, it will be a challenge to achieve a proficiency level of the language since it is the vehicle to communicate effectively.

Similarly, Safirah (2016) argues that "mastering vocabulary is one of the learners' needs to understand the language. In the English teaching-learning process, mastering vocabulary properly can help the students to understand the content lesson" (p. 12). According to the author, mastering words is essential for foreign learners to communicate in the target language. On the other hand, Cameron (as cited in Safirah, 2016) highlights that "learning a [*sic*] word is not an incomplete process. Furthermore, to master vocabulary is to learn new words, meaning, to increase lexicon" (p. 11). Consequently, the acquisition of proficient vocabulary is an important process in teaching-learning a foreign language.

Hence, the most accurate definition of *vocabulary mastery* for the purpose of this research is the total dominium of words that allow learners not only to understand

its meaning. Also, it permits them to use such concept in contexts through the performance of language tasks either written or oral. However, since the focus of the study is to foster students' oral production, the researchers will employ the concept regarding speaking skills.

2.1.9 Oral production

This research project takes into consideration the improvement of the oral skill through vocabulary mastery; for that reason, researchers consider it relevant to define what speaking skills mean to address this study properly. Abd (2006) indicates that "speaking is one of the four language skills (reading, writing, listening and speaking). Moreover, the author argues that "it is the means through which learners can communicate with others to achieve certain goals or to express their opinions, intentions, hopes and viewpoints" (p. 13). Specifically, the speaking ability is a vehicle for expressing messages and maintaining effective communication.

Likewise, Goh and Burns (as cited in Ramírez and Artunduaga, 2018) recognize that "speaking is a highly complex and dynamic skill that involves the use of several simultaneous processes—cognitive, physical and socio-cultural—and a speaker's knowledge and skills have to be activated rapidly in real time" (p. 52). Regarding this thought, the speaking skill is considered as an integral ability since it requires a quick response by the speaker to construct his/her ideas in the target language. For that reason, it is important to state that speaking involves aspects about the students' capability to learn the language. Concerning the development of speaking skills, authors such as Ur (as cited in Kuśnierek, 2015) states that:

…of all the four skills (listening, speaking, reading and writing) speaking seems intuitively the most important: people who know a language are referred to as

"speakers" of that language, as if speaking included all other kinds of knowing; and many if not most foreign languages learners are primarily interested in learning to speak (p. 73).

The author points out that a person who learns a new language tends to feel satisfied when he/she becomes a capable speaker, which is the aim of this study. Consequently, the relation of oral production with the present research lies on the acquisition of words or phrases through the use of flashcards. The research aim is to facilitate the communication in the target language through different tasks that will be carried out by the researchers in order to enhance the speaking skills.

2.1.10 Tasks

In regular classrooms, students are frequently assigned to perform different educational tasks in order to accomplish the objectives that the teacher has set in a lesson plan. For example, in the English class students are involved with tasks that are oriented to master the foreign language and put it into practice through the four linguistic skills namely listening, speaking, reading, and writing. According to Cambridge (2020) a task "is a piece of work to be done, especially one done regularly, unwillingly, or with difficulty" (para. 1). Regarding this quote, it refers to a given assignment which is usually complex. In other words, it could be a language activity with a specific level of difficulty for students to perform.

Another definition of task by Long (as cited in Mahdi, 2014) refers to this concept as "a piece of work undertaken for oneself or for others, freely or for some reward. Thus, examples of tasks include painting a fence, dressing a child, filling out a form, buying a pair of shoes" (p. 1274). According to the author, tasks can lead to a reward when the goal is accomplished. In other words, not only students but also

teachers undertake tasks in the educational environment to complete a learning process to gain experience to put into practice in new scenarios, whether those are academic, personal or professional.

Moreover, it is necessary to highlight the fact that language teaching tasks prompt students to reinforce what they have previously learned. In other words, tasks are used to increase the knowledge students might have, with the action of developing different class activities. Additionally, teachers rely on pedagogical tasks in order to approach the learning process of their pupils and make students capable to recognize language vocabulary, grammatical structure, among others while performing those tasks.

In addition, Breen (as cited in Mahdi, 2014) refers to the concept of task as a range of work plans which have the overall purpose of facilitating language learning from the simple and brief exercise type to more complex and lengthy activities such as group problem-solving or simulations and decision-making (p. 1274). Thus, it is possible to state that linguistic tasks that have a particular objective once performed can lead to a vast outcome whether or not planned by who undertakes the task to ease the language learning.

In addition, Willis (as cited in Mahdi, 2014) explains that the language task refers to "the communicative purpose or goal performed by the learner in order to achieve a linguistic outcome" (p. 1275). In this sense, tasks are focused on the accomplishment of an oral aim. Similarly, Ellis (as cited in Mekala & Shantha, 2017) points out that tasks are tools for providing opportunities for learners to use the target language (p.163). Therefore, it is clear that by using tasks in the English class might

students put into practice the skills of writing, reading, listening, and speaking to use the target language.

On the other hand, there are some characteristics of a task which should be described. For example, Ellis (as cited in Baleghizadeh and Derakhshesh, 2012) mentions that language tasks include a series of aspects. First, it is stated that the primary focus should be on meaning, which suggests that learners ought to be mainly concerned with processing the semantic and pragmatic meaning of an utterance. Second, the author suggests that there should be some kind of language gap, which has to be filled (i.e., a need to convey information, to express an opinion, or to infer meaning). Thirdly, it is important to consider that learners have to rely on their own resources (linguistic and non-linguistic) in order to complete the given activity.

This reinforces the idea that a language task requires clear pre-defined purposes; it is not only to carry out the activity per se, without having already established a language goal or a linguistic objective. A language task needs to be meaningful for learners, in other words, students must pursue a goal, and it could be to infer meaning, improve grammar, or develop oral and written linguistic skills.

In addition, according to Long (as cited in Sabah, 2018) tasks are the communicative functions in real-life interactions that require the L2 learners to use the L2 outside the classroom walls (p. 10). Concerning the author's idea, tasks are those communicative activities contextualized in real-life situations. Thus, tasks allow students to have contact with the outside of the classroom setting. For instance, learners participate in the creation of their Facebook profile while they are using flashcards with the vocabulary as supporting material. Therefore, students are getting involved in an activity they may feel identified with. Also, the teacher can create a learning

environment related to their personal context such as "show me your favorite place at home" and they may use pictures to develop the assigned task.

In fact, MEP (2016) points out that tasks: "they are defined as any purposeful action considered by an individual as necessary in order to achieve a given result in the context of a problem to be solved, an obligation to fulfill, or an objective to be achieved" (p. 26).

To sum up, for the present research tasks are exercises that are planned in order to comprehend and facilitate the acquisition of the foreign language.

2.1.11 Task-Based Approach or Action Oriented Approach

The fact that this study used the Task-Based Approach (henceforth TBA) is determined by two reasons. First, the Task-Based Approach involves tasks that enable learners to familiarize with the language, through virtual real-life learning situations. Second, this is a language teaching approach included in the study program proposed by the Ministry of Public Education for the teaching of English in third cycle, which is the target population in the actual study. Specifically, authors such as Samuda and Bygate (as cited in Ministerio de Educación Pública, 2016) state that TBA is one of the latest communicative language methodologies which emphasizes on what learners know and do to communicate successfully by completing specific duties, using general and specific language competences in meaningful contexts resembling real-life scenarios (p. 25). As noted above, TBA is an approach to language teaching that arises as a necessity to encourage the communicative skills through the use of a holistic methodology. Hence, it is the last approach proposed for reaching better learning outcomes, and it

allows students to learn in a different environment full of input that makes them feel identified and interested in their learning process.

Likewise, Córdoba (2016) indicates that the Task Based Approach "promotes and stimulates the integration of skills through completing daily-life activities that improve students' communicative competence because it offers learners the possibility of practicing the target language constantly" (p. 14). In other words, it provides a meaningful and holistic language learning opportunity given that the Task-Based Approach certainly encourages students to put into practice their oral skills through real-context assignments. Hence, the focus of TBA is primarily based on the task outcome rather than on the accuracy of prescribed language forms.

Similarly, Richards and Rogers (as cited in Córdoba, 2016) mention that this language approach enhances the creation of learning tasks that suit the needs of the learners and help them master the linguistic skills successfully by providing different class exercises to complete their work (p. 15). As stated by the authors, this is a beneficial approach that promotes effective learning results because it involves a variety of tasks that promotes the development of language skills taking into account the learner's academic demands.

Also, Ellis (as cited in Baleghizadeh and Derakhshesh, 2012) mentions that "Task-Based Language Teaching (TBLT) is one of the configurations of Communicative Language Teaching (CLT) which sets pedagogic tasks as the core unit of planning and language teaching practice. Therefore, Task-Based Approach focuses on classroom interaction, learner-centered teaching, and authentic language use" (p. 144). In brief, TBLT plays a relevant role because it takes into consideration the student as the protagonist of the learning and teaching process. Also, it supplies the option to

improve linguistic skills through contextualized academic duties that encourage pupils to participate.

Similarly, Ellis (as cited in Baleghizadeh and Derakhshesh, 2012) points out that Task-Based Approach should be implemented while teachers introduce and develop a topic for students to enhance the acquisition of L2 in the classroom by exposing learners to the target language. As a matter of fact, it is important to consider that the English class could be the only exposure to the target language that students in public high schools may have. That is why English teachers in Costa Rica should employ pedagogical tasks to stimulate the learning environment and reduce the students' anxiety while performing such tasks.

2.1.12 Common European Framework for Language Reference (CEFLR)

In order to evaluate the oral performance of students when using the Task-Based Approach, it is necessary to establish the different English proficiency bands that exist for grading the language mastery level. For this reason, a description of the Common European Framework of Language Reference (henceforth, CEFLR) has been included in this section to provide a brief definition about the CEFLR and the common reference levels in order to use it as a model on the evaluation of the students' vocabulary mastery level in spoken language. First, it is relevant to describe how the Common European Framework of Language Reference operates. According to the Council of Europe (n.d.):

The Common European Framework provides a common basis for the elaboration of language syllabuses, curriculum guidelines, examinations, textbooks, etc. across Europe. It describes in a comprehensive way what language learners have to learn to do in order to use a language for communication and what knowledge and skills they have to develop so as to be able to act effectively (p.1).

Hence, the Common European Framework of Language Reference is a guide to create study programs and academic curricula. Additionally, it includes a detailed description regarding the language skills and linguistic goals that language students have to achieve and classify according to a series of language parameters.

Moreover, the Common European Framework of Language Reference has established three main language proficiency levels from the lowest to the highest which are the basic user, independent user, and proficient user. In fact, according to the European Council (n.d.) it provides clarification regarding each of those levels as it is mentioned below:

Basic User

A1: The students can understand and use basic phrases such as familiar everyday expressions and can introduce himself/herself. Additionally, he/she can ask very simple questions related to personal information. For example, my name is...

A2: The learner can understand sentences and use expressions concerning very basic information regarding family and shopping. In addition, he/she can exchange simple and direct information, and describe aspects about his/her background in simple terms.

Independent user

B1: At this level, students can understand situations carried out in school, work, leisure and can connect texts that are familiar with or regarding personal interest. Likewise, he/she can describe experiences, events, dreams and give opinions and reasons.

B2: Students can understand complex texts on concrete and abstract ideas and interact fluently and spontaneously. Additionally, can provide detailed and clear texts about different topics, as well as explain a viewpoint regarding an issue discussed.

Proficient user

C1: Students are able to understand longer texts and recognize implicit meaning. Moreover, they can express themselves fluently and be spontaneous without the necessity of searching obvious expressions and can use academic and professional language. Hence, he/she is able to develop well-structured text on difficult subjects using connectors and showing cohesion (p.24).

These language levels are explained in this research based on the parameters stated in the Common European Framework of Language Reference. Moreover, it is relevant to mention and contextualize the curriculum in Costa Rica that takes those parameters as a reference. According to Chaves and Granados (2017) the educational system in Costa Rica has general descriptors based on the Common European Framework of Language Reference Language proficiency bands. The current study takes into consideration the different language bands established by the Common European Framework of Language Reference to determine the participants' language band by means of a placement test which will be further explained in detail in the methodological section.

2.1.13 Oral task

This paper has been designed to apply flashcards techniques through the implementation of oral tasks. According to Ellis (as cited in Shantha & Mekala, 2017) the oral communicative tasks are designed to develop the spoken ability of students. Moreover, the authors suggest that "the objective of oral communicative tasks is to

enable the students to think and generate sentences on their own" (p. 163). Therefore, oral tasks are planned to work on the communicative ability and assess the progress of learners while they are producing. For the current research, the use of flashcards was proposed to help students in the oral activities by creating sentences. Likewise, oral tasks have a clear purpose, which is to utter thoughts and hence develop the speaking skill.

Considering the concepts related to the speaking skill previously provided by different authors, oral tasks are meant to be implemented by teachers to assess the student's speaking skills at the moment to complete an assigned oral test. As a matter of fact, teachers may design varied techniques and strategies to evaluate and effectively provide feedback to the student's performance in oral tasks. For instance, speaking activities should be promoted in the acquisition of new words; in this sense, the learning of a new language could be maximized. This is why the researchers of this study aim to apply the flashcards technique as a means to foster the mastery of words among seventh grade students from Esparza high school through oral tasks.

In fact, the oral task focuses on completing a given action using spoken skills. For instance, Joughin (2010) states that "oral assessment refers to any assessment of student learning that is conducted by the spoken word" (p. 3). In other words, the author emphasized the importance of spoken activities in order to complete an oral task, which depends on what the student is expected to communicate.

Particularly, this present study defines oral tasks by taking into consideration several authors' contributions about the meaning of task and speaking skill. Therefore, an oral task is herein defined as a spoken, dynamic, open-ended, planned, integrated, and meaningful task developed in learning environments for the mastery of words

contextualizing real-life situations. In addition, another purpose of an oral task is to present a specific subject in a concise and effective manner to deliver ideas that lead to the path to achieve an objective.

2.1.14 Multiple intelligence (visual learners)

Second language learning is a diverse process, mostly because students might have different learning styles; therefore, it is necessary to make an emphasis on this area. To begin, it is important to mention that it was Howard Gardner who developed a learning theory in 1983, which nowadays is still relevant in the fields of psychology and education. This theory is about multiple intelligences. Gardner (cited in Ghamrawi, 2014) explains that "there exist some intelligences that are relatively independent of one another, and that can be fashioned and combined in a multiplicity of adaptive ways by individuals and cultures" (p. 26). Regarding the previous quote, humans can use strategies to take advantage of these intelligences that, in general, individuals have in order to acquire knowledge effectively.

Besides, Gardner (as cited in Andronic and Andronic, 2016) establishes the following multiple intelligences: the verbal or linguistic intelligence refers to the intelligence of words; the math or logic intelligence is known as the intelligence of numbers and reason; the visual or spatial intelligence considers the intelligence through images, drawing and painting; the musical-rhythmic intelligence or intelligence of tone is developed with the rhythm and timbre; the body-kinesthetic intelligence is associated with the use of the body or movements; the interpersonal intelligence that makes reference to the social interaction; the intrapersonal intelligence that involves self-awareness, and the naturalistic intelligence that takes into account patterns of behavior (p. 100). Thereby, there are different intelligences based on each person's capabilities.

In addition, humans may develop one or more of these abilities based on their strengths. For instance, the current research is focused on the use of flashcards to foster the mastery of vocabulary in oral tasks. Seemingly, the two intelligences that will result more useful for learners are the verbal / linguistic and visual / spatial intelligence. This is due to the fact that the senses of sight and hearing are the ones in charge of processing oral and written information. In the case of the oral aspect, it will be possible by the interaction of the teacher and the classmates. Likewise, the written aspect will be carried out by the implementation of illustrated flashcards.

Consequently, considering this theory, learning styles were thought as an effort to find diverse ways to take advantage of multiple intelligences and help students' learning achievement. In fact, Pourhossein (2012) points out that "Gardner's research has shown that human cognitive ability is pluralistic rather than unitary and that learners of any subject will make greater progress if they have the opportunity to use their abilities in areas of strength to master the necessary material" (p. 106). If the cognitive capacity of human beings is diverse as Gardner suggested, different strategies can be then developed by teachers to allow students to get information and process it as new knowledge that is more suitable to them. In this sense, flashcards could be a successful means to internalize such knowledge.

On the other hand, Dun and Dunn (as cited in Ghamrawi, 2014) suggest that "learning styles can be understood as the way each learner begins to concentrate on, process and remember new and difficult information" (p. 27). It can be stated that the purpose of learning styles is to find a way to facilitate learners in the process of acquiring information by designing different strategies that best fit with their leading

multiple intelligences. For instance, reading books, playing physical games, listening to music, and in the case of this research, by the use of visual aids such as flashcards.

In brief, the concepts depicted above serve as the academic basis for the current study since it provides supporting data that works as a frame of reference to interpret the study's foundation. Besides, in order to contextualize the subject of examination, the researchers consulted different scientific databases such as: ProQuest, Sibdi, Redalyc, Dialnet, and Google Scholar that include similar studies regarding the topic of analysis that have been conducted in other countries and in Costa Rica with the aim to improve their knowledge on the problem.

2. 2 Literature review

This research paper is based on the most relevant previous studies conducted in Costa Rica and foreign countries. A thorough search of literature was carried out in order to provide the current study with a well-founded theoretical framework, which allows a major understanding of the topic. Foremost, this section describes the most important international and national studies regarding what has been done by other authors about the use of flashcards as a learning strategy.

2.2.1 International studies

The implementation of flashcards has been considered as a useful strategy in the language teaching-learning process, especially as a means to learn vocabulary and to foster speaking skills. In fact, Nadziroh (2010) developed an action research regarding the use of flashcards to improve vocabulary mastery in Bandungan, Indonesia. This study focused on whether the use of flashcards improved students' vocabulary mastery at fourth grade. The researchers employed different instruments such as written tests,

oral tests, and a series of observations as possible methods to gather information from a group of twenty-nine students of fourth grade. The author concluded that the utilization of flashcards contributed to the teaching of vocabulary and improved the mastery of words among learners.

In addition, in Ecuador, Sinchi and Sinchi (2011) examined the importance of using flashcards to learn basic English vocabulary in kindergarten learners. To achieve the objective of the study, the researchers applied games and activities through the use of speech and visualization by using flashcards as a means to encourage children to speak the target language and develop their speaking and listening skills. The researchers concluded that flashcards are one of the most effective and simple resources to teach English vocabulary. The authors state that flashcards are also a useful means to guide children's attention and retention, and they help to improve children's vocabulary by making learning enjoyable.

Moreover, Komachali and Khodareza (2012) developed a study in Iran. Their research inquired the effect of using vocabulary flashcards on undergraduate students' vocabulary knowledge. The authors aimed at increasing the students' knowledge of new words through the use of a seven-step flash card (VFC) as a model to boost the learning process. The study selected a quantitative method employing an experimental pilot study that includes the participation of nearly 50 pre-university female students (25 each group, one experimental and one control group). Those participants were divided into one experimental and one control group. In the case of the experimental group, the participants were exposed to the application of flashcards whereas students from the control group only received the routine instruction. In addition, the researchers applied a placement test of language proficiency, a pre-test and post-test, and a questionnaire.

Accordingly, the investigation concluded that there was a significant contribution from flashcards in teaching vocabulary to students, leading to a higher level of vocabulary improvement. The findings demonstrated that students got involved in class actively by sharing answers, participating, paying attention, providing examples, encouraging others to take part in the lesson, participating as volunteers, and interacting with each other Finally, the researchers suggest further investigation on the impact of other types of alternative flashcard techniques on language skills such as picture flash cards.

Furthermore, in Indonesia, Wahyuni and Handayani (2014) analyzed the criterion of success in teaching vocabulary by using flashcards. The research aimed to evaluate the implementation of flashcards to improve students' vocabulary mastery. The researchers conducted an action research project with the collaboration of a teacher, and they used both the qualitative and quantitative method. This study consisted of two cycles, each of which had different steps such as planning the action, implementing the action, observing the action, and analysis and reflection. The population consisted of 38 students from seventh grade at a junior high school in Kidiri. The researchers used the following instruments for data collection: an evaluation of vocabulary mastery test in which the participants had to make a procedure text, an observation checklist to evaluate the learners' participation during the activities of the two meetings per cycle, field note, and documentation. The researchers compared the results of both cycles. First, the results showed that from 38 students only 36 took the exam, 6 of them passed the test while 30 failed the exam. The percentage of approval was 17%; therefore, it meant that the criteria of success was not achieved. Then, the researchers applied an observation checklist in order to evaluate the students' activities and monitor the teaching learning process. The result of this instrument showed that 57% of learners were active during the activities in the teaching and learning process. In the second

phase, the study showed 32 students who passed the test and only 6 pupils failed. In this case, the results revealed 84% of success while the students' participation also increased to 80%. Therefore, the researchers concluded and provided evidence that the implementation of flashcards can improve the students' vocabulary mastery and their engagement in the teaching-learning process.

In addition, in Ecuador, Hidalgo (2015) conducted an action research project to analyze the effectiveness of using flashcards as a strategy to improve the English vocabulary among seventh grade students of basic education. It was carried out at Teniente Hugo Ortiz School during the school year 2013-2014. The study was applied to twenty-six students. Evidence showed that flashcards had a positive effect on the vocabulary acquisition. Moreover, the study demonstrated that students were motivated about learning new words after using this strategy. On the other hand, the author highlighted that students did not show interest in learning when textbooks and boards were used for teaching vocabulary and it was concluded that memorizing words represented a challenge. However, the students' perception changed completely after flashcards were implemented as a learning strategy.

Also, in Surakarta Wardani (2015) studied the strengths and weaknesses of teaching vocabulary to young learners using flashcards. The main objective was to describe the implementation of teaching vocabulary to young learners using flashcards. The author conducted a descriptive qualitative research in a population of 17 students of class B from BA Aisyiyah Kadilangu in the 2014-2015 academic year. The researcher applied an interview to the teacher and students, an observation, and a study of information. The researcher concluded that by using flashcards in the teaching-learning process made the students have fun during the class; in fact, most of the students

showed a positive response and acceptance towards learning vocabulary using flashcards. As a matter of fact, when interviewed, the students claimed that they enjoyed the learning process because it was easy for them to recall the new vocabulary using flashcards. Besides, the author found that when students were active and confident while using flashcards, they could produce a lot of activities.

Likewise, Hussaini, et al. (2016) examined the use of flashcards to improve students' vocabulary skills. The researchers used flashcards for teaching vocabulary in three stages of planning, presentation, and review phases. This study was carried out in a group of Nigerian and Malaysian students (one control group and one experimental group). They used flashcards with the experimental group while the control group was taught in the traditional way. The authors administered a pre-test and a post-test in the two groups to determine the learners' vocabulary skills when using flashcards. There was a significant difference in the post-test in the students who learnt through flashcards. The evidence showed that flashcards are vital materials for teaching, and they help students to improve vocabulary mastery. As the previous authors highlighted, the use of flashcards contributes to learn vocabulary effectively, and it is one of the studies that best fits with the present research.

Additionally, in Poland, Kaplan and Loranc (2017) put into practice the study about students' view on the helpfulness of multimedia components of digital flashcards in mobile-assisted learning vocabulary. Thus, the study pursued to compare the learners' perceptions of the helpfulness of different techniques to learn new vocabulary with digital flashcards. Fifty-nine participants were sent forty-eight digital flashcards that contained English nouns, and these were displayed on student's smartphones using the app called Ankidroid. The digital flashcard strategies used by the researchers showed on

the front side the target word, and the back side presented a relevant image representing the target word. Additionally, the researchers included flashcards with the pronunciation of the target word, the sound effect associated with the target word, and the combination of the two audio enhancements to vary the format of the flashcards. After ten days, participants were sent a survey in order to gather the data. It seemed that 66% reported using the flashcards about three times in ten days. Most learners (58%) reported feeling that studying vocabulary with the flashcards were effective and 51% of them reported that they found it engaging. In other words, the researchers concluded that most learners expressed positive feedback regarding the perceived effectiveness, and engagement towards the flashcards.

Similarly, in Japan, Ashcroft et al. (2018) investigated the effect of using digital flashcards on L2 vocabulary learning compared to using paper flashcards in English language undergraduate students at a large university in Japan. The researchers planned to compare the effects of the use of digital flashcards and paper flashcards. In fact, the study used a mixed-methods experimental design in a population of nearly 139 participants (with 64 male and 75 female), and their ages ranged from 18 to 24 years old. Besides, six dependent measures were administered to each participant through a pre-test and post-test, the first one to determine how many of the target words were already known by each participant, and the second one to indicate how many items had been learned through the two flashcards methods. Consequently, the research paper indicated that Japanese university students of lower levels of English proficiency have meaningfully higher vocabulary learning gains when using digital flashcards than when using paper flashcards. On the other hand, learners at higher levels of proficiency performed equally well using both study modes.

Likewise, in Korea, Reeser and Moon (2018) studied the efficacy of flashcard study methods, specifically independent versus teacher-led study, and their impact on vocabulary test scores. The paper took into consideration students enrolled in a required first-year English course. Eventually, the researchers wondered at determining the effect of digital flashcard use on vocabulary learning. Hence, the study presents results obtained from a mix method with three groups: two experimental and one control, around 56 participants. Certainly, it was necessary to apply a pre-test and a post-test instrument using a paired test to determine the p-value (point value). The period for the implementation of digital flashcards using Quizlet went around twelve weeks. As a result, the researchers concluded that both independent and teacher-led flashcard study proved to be effective methods by improving vocabulary test scores. Therefore, the obtained information and results support the integration of flashcards into language classes.

Equally, in Jenangan, Novitasari (2020) investigated the effectiveness of English songs and flashcards in teaching vocabulary at SMPN 1 Jenangan Ponogoro. The research was carried out in 7th-grade students and they were divided into four groups; in that sense, all groups were given a pre-test and post-test but only the two experimental groups were exposed to the English songs and flashcards technique in order to acquire English vocabulary. It used the quantitative method to collect the data needed throughout four sessions for the four groups which consisted of pre-test, first treatment, second treatment, and post-test. The researcher concluded that there was a significant difference in students' achievement between students who were taught by using English songs and flashcards (86.32%) and those who were not taught by using English songs and flashcards in teaching vocabulary in the seventh grade (71.64%) respectively.

2.2.2 National studies

Specifically, universities in Costa Rica have promoted research studies toward the improvement of learning English in different areas. Therefore, researchers have experimented through the use of different learning strategies, or tools. For instance, this current study considered its most relevant variables (visual intelligence, vocabulary, task-based approach, and speaking) to explore previous works that may contribute to its development. It is important to point out that there were no previous studies of flashcards about high schools in Costa Rica to take reference from. Even though the researchers accessed the digital database of the Library Luis Demetrio and Google Academic, they did not find any results.

In fact, at National University of Costa Rica (UNA, for its acronym in Spanish), Campus of Heredia, Cordero and Nuñez (2017) revised the correlation of the development of visual competences in linguistic performance. The study was focused on English learners of other majors who were students at the School of Literature and Language Sciences. Thus, the researchers aimed to identify the effects caused by the relationship between the development of visual competences, and the linguistic performance. To reach the goals of the current study, the implementation of a quantitative method was necessary through the use of some instruments such as questionnaires, and a checklist (for observations). The instruments were randomly applied to eleven groups whose participants were a total of 330 students from different majors at National University, enrolled in a course named Integrated English II. In detail, the researchers found out that teachers play a relevant role in motivating students when they include visual materials for learning a foreign language. Moreover, the authors recommended a change of perception on teachers and students about the

usefulness of visual materials to develop communicative and linguistic abilities. Particularly, it is highlighted that visual competence and linguistic abilities are not used effectively by the facilitator of the learning process, and they are relevant for language improvement. For this reason, the use of flashcards as visual resources may solve that issue to obtain better outcomes. Also, it was important to point out that it may be useful to give training to learners on taking advantage of visual resources.

Similarly, in Costa Rica, Elizondo et al. (2019) explored the impact that the Task-Based Language Teaching Approach had on eleven college students from the Mechanical Engineering major from the University of Costa Rica, specifically in the use of English for Specific Purposes (ESP) vocabulary and grammar structures. The main objective of this investigation was to focus on determining the impact of using tasks that provide real-life context on technical vocabulary and grammar structures. The research project aimed to gather information through the mix method using formal and informal interviews, questionnaires, a language diagnostic test, feedback sessions with course observers and evaluators, and the researchers' notes on students' performance. The study concluded that there was a meaningful impact on the students' use of technical vocabulary and grammar structures. Specifically, there is a correlation between this national study and the base of the current project because both use the Task-Based Approach for achieving specific learning goals.

For instance, in Pérez Zeledón, a region located in the south valley of Costa Rica, Araya and Gamboa (2019) studied the effects of pedagogical strategies for learning vocabulary in and outside the language classroom. The aim of the study was to provide insight in the ESL vocabulary acquisition. The authors implemented three different strategies to achieve the main objective. For instance, the role of cognate

recognition, affixation, and contextual information in foreign vocabulary acquisition. The population chosen was students from National University, Campus of Pérez Zeledón who studied English major. The results showed that learners considered the affixation strategy as a useless method for learning vocabulary. The participants claimed that knowing about prefixes and suffixes did not help them understand the meaning of words. However, they often used cognates and context in the classroom 30% to 40% of words that they were taught had identical meanings in their first language. Therefore, the researchers concluded that cognate recognition may be one of the first learning strategies that should be utilized for vocabulary acquisition since it closely enriches the target language.

2.2.3 Synthesis of the chapter

Based on the information provided through the chapter, it is evident that the use of either digital or printed flashcards is an engaging strategy to be applied when teaching new English vocabulary to preschoolers, school and high school graders, and even undergraduate students. Therefore, this strategy can be used at any academic level of learning regardless the age. Furthermore, it is necessary to point out that after a detailed revision of international and national studies, the researchers concluded that no previous studies were found to have used flashcards as a strategy to enhance new vocabulary in Costa Rica. In fact, the majority of the authors who were consulted have used flashcards for the improvement of different language areas such as reading, listening or writing, among learners, and only few of them have used flashcards to improve the speaking skills of their participants. As a result, the present study aims to identify the possible benefits of employing flashcards in a language classroom to

increase the mastery of EFL vocabulary in students from seventh grade at Esparza High school.

CHAPTER III

3. Methodology

3.1 Methodological Design

Firstly, the current search did a meticulous examination of previous national and international studies related to the target topic to achieve the research goals. In the same manner, the researchers have stated a fieldwork stage in which they analyze the effectiveness of using digital flashcards as a learning strategy to foster the mastery of words when carrying out oral production tasks in virtual EFL classrooms in two groups of seventh grade students at an Esparza High school.

The following chapter describes the research paradigm utilized for carrying out the present study. In addition, it states the methodological approach to be implemented, the sources of information from which the current study is based on, and the context of the study where the research takes place. Furthermore, this chapter contains a detailed description of the participants, the sample of the population to be the object of the research, the role of the researchers, variables, and categories of the study. Similarly, this section includes an exhaustive description of the research instruments to collect the information from the participants, and the procedure to be employed for the collection and analysis of the data.

3.2 Research paradigm

This research project was carried out using a mixed methodology. According to Molina (2016) the mixed research paradigm refers to the combination of both qualitative and quantitative methodology (p. 37). Likewise, Qazi, Adnan and Aamir (2015) state that mixed methods are used to achieve complementary results by using the strengths of one method to enhance the other in a single study (p. 104). Thereby, the authors pointed out that qualitative and quantitative methodologies work well together because they are complementary to each other. Hence, they permit extended outcomes. Moreover, the correlation between both paradigms fills any research gap.

Lastly, Dawadi (2017) points out that:

…when a researcher wants to generalize the findings to a population and develop a detailed view of the meaning of a phenomenon or concept for individuals, the advantages of collecting both close-ended quantitative data and open-ended qualitative data support to best understand a research problem (p. 6).

Therefore, the ensemble of both methodologies give the researchers the possibility to interpret valuable outcomes, and they contribute to provide strong findings. As a result, the study provides reliability, and it portrays integral results.

In regard to the qualitative research, Hernández et al. (2014) state that it is based on an interpretive perspective which is focused on understanding the meaning of actions and behaviors, especially those of human beings, with the purpose to interpret what is being observed. Thus, it is inferred that this type of research study is analytical and holistic because it takes into consideration everything. Therefore, it portrays detailed

information about events, observed behaviors, real situations, among others. Also, it is flexible when collecting data, and the provided results may be subjective (p. 9).

Furthermore, Lee and Ling (as cited in Ugalde and Balbastre, 2013) state that qualitative research has a variety of benefits; for instance, it is very useful because it explores and describes a phenomenon. Also, it makes easy the development of a research study with significant explanations (p. 183)

On the other hand, Hernandez et al (2010) argue that the quantitative approach uses data to prove hypotheses based on numerical measurement and statistical analysis in order to determine patterns of behavior and test theories. Also, Dawadi (2017) highlights that "using a quantitative method, concepts can be operationalized [*sic*] in terms of well-defined indicators, tracing trends and relationships, making comparisons, and using large and perhaps representative samples" (p. 6). Therefore, this project takes into consideration a numerical method because it helps to compare students' level of English with exact outcomes. For this reason, it becomes the complement of the qualitative methodology that aims to collect data from observed behaviors, perceptions, context, manifestations, among others.

Moreover, the current study follows a mixed methodology since it includes research instruments based on both the quantitative and qualitative paradigm simultaneously. For instance, the study used the qualitative method in order to include the examination of various aspects related to the qualities of the object of study while using flashcards. Therefore, the researchers carried out the investigation using research instruments such as survey and an observation checklist guideline.

On the other hand, the quantitative paradigm is employed by means of the implementation of a diagnostic test, and a proficiency test in order to assess the

vocabulary mastery level from the participants before and after the use of this learning strategy with flashcards techniques. In addition, it is necessary to highlight that the scores obtained from the tests were graded and represented in a language level band assigned based on the parameters stated by the Common European Framework of Language Reference. Specifically, the study took into account the achieved learning assessment in each allocation band. In fact, using the combination of the qualitative and quantitative paradigms will allow the researchers to gather the information needed to answer the research problem question, analyze it holistically, and provide a deeper discussion of the topic.

3.3 Research approach

The current research is designed based on the action-oriented approach whose main purpose is to foster the mastery of vocabulary in oral production tasks through the use of flashcards as a learning strategy in virtual EFL classrooms. Moreover, it is necessary to highlight that the application of flashcards was used only with the two experimental groups of seventh grade students from Esparza High school. On the other hand, there were two control groups who were observed in daily classes, so they were passive participants because they were only used as a reference to contrast the results obtained by the experimental groups who used flashcards in the different sessions.

According to Nicodemus and Swabey (2015) action research is an approach for investigating questions and finding solutions to problems that people confront in their everyday lives (p. 1). Indeed, this present study takes this approach as a reference to solve daily classroom situations, specifically the lack of vocabulary that learners usually have when they communicate in the target language.

In addition, regarding action research, Taggart et al (as cited in Mckay and Marshall, 2014) point out that action research is an effective approach for researchers who are interested in finding out about the interplay of humans, technology, information, and social-cultural contexts (p. 830). This approach provides the researchers with the possibility to enhance their own professional practice, to improve a given situation, and to elaborate a proposal for the stated problem. In other words, this approach provides an opportunity to come up with a possible solution to the lack of vocabulary through teaching strategies.

On the other hand, based on Craig (as cited in Nicodemus and Swabey, 2015), those studies that are focused on action research approach usually obtain data from sources such as observations, survey responses, interviews, and questionnaires. Likewise, action research studies involve three main stages for the development of the data analysis: pre-study planning, implementation of action, and post-study analysis. The pre-study planning consists of a previous data collection process to obtain a background regarding the topic before the implementation of the proposal of the study. Moreover, in regard to the implementation of action, it refers to the application of those activities and learning strategies to acquire information for the data analysis. Finally, the researchers apply the final instruments to obtain results, which allows to compare the pre-study and post-study. The current study considered the three stages mentioned above in order to carry out a more complete research.

3.4 Sources of information

For the construction of the theoretical section, the researchers consulted different thesis, dissertations, online books, journal articles, and books in order to have a clearer understanding of the topic being studied and to support the present study with

reliable and scientific data. Furthermore, the primary sources of information regarding the fieldwork consist of seventh grade students from two groups (one experimental with thirteen students and one control group with six students) connected during virtual classes and the two collaborating teachers from Esparza High School.

3.5 Context of the study

The present study is carried out at Esparza High school (its proper name), which was founded in 1965. This institution belongs to the eighth school district of the province of Puntarenas, and it is located in Espíritu Santo town, next to La Fábrica de Cerámica in the province of Puntarenas. According to Gómez, (personal communication, July 28, 2020) this academic institution is in charge of Msc. Soto, and it has officially registered approximately 1225 students during this 2020 school year. This institution holds a total of 40 groups distributed in five grades that go from seventh to eleventh grade. Moreover, there are four teachers from the English Department who teach academic English in the third cycle, and one teacher in charge of the conversational English course taught for tenth and eleventh graders.

Also, Gómez, (in personal communication, July 28, 2020) mentions that Esparza High school emerged out of the need of the people from Esparza to have an educational learning center in the area. Moreover, he indicates that in the past, people from Esparza who wanted to obtain a degree in secondary education had to attend Liceo José Martí (its proper name) in Puntarenas. As a result, parents of students from Esparza organized and created a local committee named *Comité Pro-Liceo* in order to find a solution to that problem.

The high school is located in the county of Esparza. However, students are from the surrounding districts of Esparza. This institution offers a day and a night shift. Moreover, the number of students per group varies from twenty-five to thirty-five individuals per group approximately. Furthermore, it is important to state that due to the interest of the principal of the institution and the willingness of the school personnel to participate in the study, the researchers decided to carry out their academic project at Esparza High school. In fact, this institution constantly embraces research students, as well as student-teachers from the University of Costa Rica to carry out their teaching practicum. Also, this high school was selected because the institution was actively working through *Microsoft Teams* with synchronous classes and the administration was willing to let researchers work with students.

3.6 Participants

The population selected for this research project consisted of one control and one experimental group of seventh grade from Esparza High School, Circuit 08, Puntarenas, Costa Rica. The participants were from different ages (from twelve to fifteen). Besides, they were students who come from different areas of Esparza such as San Jerónimo, Macacona, San Rafael, San Juan, and Caldera. Moreover, this study considered the public high school system with its corresponding English study program. Particularly, at the beginning the researchers received a list with 115 students to work with (there were 60 girls and 55 boys currently enrolled in seventh grade); however, there were circumstances that reduced the number of participants to 19 learners. For instance, there were some pupils with low economic incomes, lack of internet accessibility, lack of technological devices, lack of willingness to work virtually, and little parental support. Evidence of this situation is the fact that nearly half of the

students are from scenarios 3 and 4[2], and they do not have internet connection, or access to a mobile phone. However, the chosen sample had access to the internet, and they were able to work on *Microsoft Teams*.

The research project considered the participation of two English teachers who actively worked in the process of implementing digital flashcards. They were two females. First, the collaborating teacher in charge of the experimental group worked for nearly 18 years with primary school students, and the last two years with high school students. Also, she has a master's degree in education. Second, the collaborating teacher in charge of the control group has approximately worked for 9 years, and she holds a licentiate degree in English teaching.

3.6.1 Sample

The current project is based on Zoltan's principles (as cited in Eide, 2010), in which the researcher considers the paper's necessities. For instance, the chosen population was selected considering two main aspects. First, it is important to state that the administration of the selected institution is willing to collaborate with the University of Costa Rica, its labor of investigation, and the teaching practicum. Secondly, seventh grade students need to expand their vocabulary to face the national standard examination *Prueba de dominio Lingüístico* (this is the name of the test in spanish). This evaluation is one of the tests that composes FARO exam which in Spanish stands for *Fortalecimiento de Aprendizajes para la Renovación de Oportunidades* and based

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[2] Scenario 3: This is a classification established by MEP for Distance Learning during the current Covid-19 pandemic regarding students who have technological devices, but they do not have any internet access to do the academic tasks.
Scenario 4: This is a classification established by MEP for Distance Learning during the current Pandemic Covid-19 regarding students who do not have any technological devices neither internet access to do the academic tasks.

on MEP (2019) this exam was created to provide a report of the skill level of each of the students.

Also, this population was selected because at a beginner level, it is convenient to teach vocabulary to set the ideal proficiency English background that will be improved throughout the remaining grades. In this sense, students have to acquire enough vocabulary to communicate effectively.

3.6.2 The Role of the Researchers

The researchers of the current study had to work as observers who portray results based on collecting data. Thus, they did not apply flashcards techniques through fieldwork in order to avoid subjective outcomes. As a result, the project obtained reliable results. First, they constructed the theoretical framework related to the target topic in which they collected reliable information to support the investigation. Then, researchers developed a training session with the teacher in charge of the experimental groups to explain to her how to apply the digital flashcards with the students in the following sessions. This training was carried out via *Microsoft Teams*. After that, researchers observed and evaluated the participating students during the fieldwork process of six consecutive sessions through *Microsoft Teams* on virtual classes while the collaborating teacher employed the flashcards. Furthermore, instruments were applied to the participating students in every stage of the research. Finally, after the fieldwork ended the researchers analyzed the data collected, the results, and proposed conclusions and recommendations regarding the study for future readers or professionals in the field.

3.7 Research Instruments

For the current study, the researchers deemed it essential to elaborate and apply different types of instruments, each of which was designed with the aim to collect and register information collected from the fieldwork stage. Furthermore, the project needed to make a data analysis process to come up with valid results that allow to establish valid generalizations. First, the researchers created one survey to be applied to the collaborating teachers and another survey to be answered by the participating students. According to Sajjad (2016) "surveys provide a means of measuring a population's characteristics, self-reported features and observed behavior, awareness of programs, attitudes or opinions, and needs" (p. 244).

The survey for the collaborating teachers has six closed-ended questions, and six open-ended questions to identify the teaching strategies applied in virtual classes and also, recognize the knowledge they have regarding the teaching methodologies used in their classes. Moreover, a survey was emailed to the collaborating teachers to collect data about the teaching strategies and methodology used in virtual classes. On the other hand, the survey to the participating students was designed to gather information of students' perception about the use of digital flashcards after their implementation during the observation sessions. This survey consisted of seven closed-ended questions, and one opened-ended question which were uploaded on *Microsoft Teams* platform. This stage was carried out after the six sessions with the participants in which digital flashcards were implemented.

Similarly, the researchers observed the use of flashcards during the virtual classes to register the information provided by the students while they were participating with flashcards techniques. According to Sajjad (2016) observation is a

systematic data collection approach. Additionally, it is important to point out that researchers use their senses to examine individuals' behaviors in natural settings or naturally occurring situations when applying the instrument (p. 240). In other words, the researchers are able to obtain reliable information from real contexts that support the study's goals. Therefore, for this research objective its application allows researchers to determine scientifically with indicators the effectiveness of flashcards application. Particularly, this research project employed one observation checklist instrument as a means for identifying specific classwork aspects; in fact, there are nine descriptors to assess the use of vocabulary during the application of oral tasks in an English class taught by using flashcard strategies. In addition, the observation checklist was applied to the control group and the experimental group.

Finally, the researchers elaborated an interview guideline to be applied to the participants of the study. According to Golfred (2017), an interview is an interaction in which oral questions are posed by the interviewer to elicit oral responses from the interviewee. Specifically, with the research interview, the author suggests that the researchers have to identify a potential source of information and structure the interaction in a manner that will provide relevant information to them for their subject (p. 3). The interview guidelines that will be applied in the current research contains six questions, two for each aspect of the studied content. For evaluating the students' linguistic performance in the interview, the researchers used a language rubric to get a numerical grade which will be then compared to a language band using The Common European Framework Language of Reference to determine the language proficiency level achieved. This oral test was applied twice. Firstly, it is used to identify students' level of English. Secondly, the test interview is used for comparing the students' progress after the application of digital flashcards. The first test was applied before the

fieldwork started. Furthermore, it has to be clear that the interview was created by the researchers and delivered to the participants through *Microsoft Teams*.

3.8 Data collection process

In order to collect and analyze the data, a variety of techniques were implemented. First of all, the researchers conducted a workshop session with the collaborating teacher in charge of the experimental group in order to train her on the implementation of flashcards as a strategy to foster the acquisition of EFL vocabulary. This collaborating teacher received the corresponding training regarding the use of two different flashcards techniques; image-word and image-sentence respectively, to be implemented in her virtual classes as part of fieldwork in this study. This session was developed in a *Microsoft Teams* meeting a week before the flashcards implementation stage began.

Secondly, the researchers applied the first survey (see Appendix A), which was addressed to the two collaborating teachers in charge of the experimental and control groups to explore the teaching strategies used by these teachers in their virtual classes. Also, the survey allowed the researchers to identify the teachers' knowledge regarding the methodology they use. Additionally, the instrument (survey) was sent through a Google Form by email.

Thirdly, it was considered necessary to identify the students' English placement level when they performed oral tasks. For that reason, the researchers determined to apply a diagnostic test (see Appendix D) to the experimental and control groups. As a means to conduct the tests, the researchers carried out an interview to the participating students in which they were asked a series of questions in which their oral performance

was then graded through language placement test. Particularly, the results obtained from this instrument were taken into consideration to compare the grades from both groups and then compared with the results from the proficiency test interview that was applied after the implementation of flashcards strategies. Hence, such comparison allowed the researchers to recognize the effects of using digital flashcards, as a technique to increase students' vocabulary mastery in oral tasks.

Furthermore, the researchers referenced the CEFLR by means of a rubric to grade the participants' performance during the interviews to get results and compare. For this purpose, participants were met to take the test individually every ten minutes through the platform of *Microsoft Teams*, and the post-test was carried out in the same manner. For instance, the pre-test interview was applied during the first session with participants, and before the virtual classes for the digital flashcard implementation. Then, the post-test was developed in the last virtual class after the fieldwork with the flashcard strategies commenced.

The purpose to incorporate the CEFLR on the proposed study is to set standardized language parameters for evaluating students' level of English during the diagnostic test and proficiency test after applying the flashcards techniques. The researchers took as a reference the following average scores in order to grade the diagnostic test and proficiency test separately and verify the English proficiency level according to the grades obtained on the tests.

Chart # 1

Correlation of English level of the participating students.

English level according to the CEFR scale.	Language band assigned following the parameters stated by the CEFR.
0-12	A1
13-30	A2
31-50	B1
51-84	B2
85-94	C1
95-100	C2

Note: The previous chart was used to grade the diagnostic test and proficiency test separately. Own creation based on the parameters established by the CEFR (https://rm.coe.int/16802fc1bf, 2020).

Based on this information, the researchers can compare results obtained from the experimental and control groups. Therefore, it tracks the acquisition of vocabulary gained in each group by the implementation of flashcards techniques.

Fourth, researchers carried out the activities in the virtual classroom by using the digital flashcards in the experimental group. In this sense, the present study implemented a checklist sheet (see Appendix B) for conducting the observations while the students were participating in the different speaking tasks through the use of digital flashcard strategies. This collection method was applied for evaluating the students' use of vocabulary and its comprehension, as well as the students' interest and participation in the activities, and vocabulary mastery. The virtual sessions took place in four meetings through *Microsoft Teams*. Therefore, while learners were participating, the

researchers took notes with the checklist in order to identify the established aspects to evaluate the students' participation in the oral activities with flashcards.

Finally, researchers applied the second survey to gather students' point of view about the virtual class activities that they had performed throughout all the virtual sessions. In other words, this survey was applied to the participating students after the implementation of the strategies. In the last session, the applied instrument inquired about the students' perception regarding the use of digital flashcards as a learning strategy for mastering words in oral production tasks during their virtual lessons (see Appendix C). The survey consisted of eight open and closed items. In addition, emails were sent to students to complete the questions via *Google Forms* during the sixth week.

3.8.1 Activities to be implemented with the participating students

As part of the action research guideline during the training session, the researchers explained to the teacher in charge of the experimental group how to implement four different speaking activities to foster oral production through the use of digital flashcards. These activities are commonly used in the classroom; however, they were adapted in a way in which learners could develop more oral production. The following activities were used by the collaborating teacher to achieve the aim of this study which was meant to foster the mastery of vocabulary in oral production tasks.

It is necessary to highlight that this study proposed the use of digital flashcards to foster the mastery of vocabulary through oral productions tasks. As it was defined in chapter II, MEP (2016) states that: "Tasks can be non-communicative or communicative language activities that make demands upon the learner's knowledge,

skills, and abilities" (p. 26). However, the researchers used the term activities in this section because tasks will be understood as a language activity with a specific level of difficulty for students to perform.

A. Storytelling

The researchers used both digital flashcards techniques (image and word) to make learners say a sentence and create a short story related to the topic. Students are going to have a limited time to think and then say a meaningful sentence. Moreover, learners should pay attention to their classmates and follow their classmate's idea and be creative, but they must use the vocabulary on the flashcard. The idea is to use flashcards in order to facilitate the oral production of students. This activity can be used with any kind of vocabulary. However, for the purpose of this research, it was used with the topics proposed by MEP.

B. Memory Game

The researchers used digital flashcards of image and sentence to make learners find the image and the sentence related to that word. The collaborator teacher asked them to participate randomly. The purpose of this activity was that learners chose two digital flashcards by saying the number that each of the flashcards had been assigned. If the student was able to match it or not, she/he should say a different sentence using the vocabulary included in the digital flashcards. The group who got more pairs of flashcards was the winner. For this task, the students were divided into two groups, and the team who matched more pairs and created the most sentences correctly was the winner. Memory games usually emphasize more in memorization exclusively; however, the purpose of this activity is to use flashcards in order to facilitate the oral production

of students. In this sense, vocabulary can be recognized by using flashcards of image-sentence type and pupils can create and produce different meaningful sentences.

C. Matching

The researchers used the word-sentence type of flashcard because students had to match the image to its corresponding sentence. The collaborator teacher asked them to participate randomly. If the learner was able or not able to match a pair of flashcards, she/he had to say a different sentence. However, the learners who did not associate the flashcards and said the sentence grammatically correctly lost a point. The participant who obtained most of the points was the winner. In this activity, individuals were willing to participate because it was like a competition. Additionally, teachers can use digital flashcards to foster oral production.

D. Jeopardy

Researchers used Factile (an online resource to design Jeopardy games) to adapt the virtual flashcards technique of image-word to include twenty vocabulary words from the self-study guides that the teacher from the experimental groups needed to go through. The vocabulary was divided into categories and the teacher divided the class into two groups. Students from each group had a turn to select a category of numbers from one to five which showed a digital flashcard, so they had 30 seconds to say the word and describe the picture by saying a sentence. Firstly, the teacher asked questions such as: *what do you see on the flashcard? Can you create a sentence using the word you see on the flashcard?* to know if the student recognized the word that the image represented. Secondly, the students were required to create a sentence using the word on the image they previously guessed. The team that scored more points was the winner.

3.9 Data analysis process

3.9.1 Diagnostic test to the participating students

In particular, the researchers used an interview as a diagnostic test in order to assess students' mastering of vocabulary and their corresponding level of English. It was previously done with the implementation of flashcards strategies. In this case, the researchers employed the parameters of the Common European Framework of Language Reference to obtain an average grade. As a result, that information was used to compare the diagnostic test with the proficiency test. Hence, the researchers could identify if there were differences between the initial results and the final outcomes. This research tool has six questions related to content developed in the self-study guide.

3.9.2 Training sessions

The training session consisted of explaining to the teacher in charge of the experimental group the proposed digital flashcards techniques such as image-word and image-sentence to be implemented in six virtual classes. In this session, researchers discussed the flashcards techniques with the teacher. Also, the researchers showed her the activities such as storytelling, memory game, matching and jeopardy using the flashcards techniques mentioned, and they provided the materials to the teacher for every class based on the topics students were studying. The training session was carried out on Monday, August 3rd, 2020. Therefore, once the training session was delivered to the teacher of the experimental group, researchers took the role of observing the experimental group and collected the necessary data of the outcome while using flashcards throughout the sessions.

On the other hand, it is necessary to mention that the flashcard technique of image-definition was adapted into image-sentence because the target vocabulary covered in class was better adapted to activities, in which the teacher could use image-sentence. Therefore, the flashcards techniques used by the teacher in the virtual classes with the experimental group were changed for image-word and image-sentence. Furthermore, it is important to state that there was a picture on the front side and the word or the sentence on the back side. Finally, the collaborating teacher used both flashcards techniques to teach the vocabulary.

Moreover, it is valuable to mention that the digital flashcards were created by using an app named *GoConqr* (an online resource) to create this kind of material. Also, the activities such as the memory game were designed by PowerPoint presentation, and in the case of the Jeopardy through Factile, which is an online resource to elaborate this type of game which serves as a useful means to carry out an oral class activity.

3.9.3 Survey

The researchers designed and emailed a survey to the collaborating teachers. Moreover, the survey consisted of six closed-ended questions, and six open-ended questions which were addressed to identify the teaching strategies that the teachers use in virtual classes and the knowledge they have regarding the methodology commonly used in their classes.

3.9.4 Observations

The researchers assigned four virtual sessions where they observed the experimental group and the control group. During the sessions for the experimental groups, researchers checked the response from the students when the teacher developed

her classes with the digital flashcards, jeopardy, the matching game, and storytelling. In fact, these activities were planned based on the guidelines proposed by Ministerio de Educación Pública (MEP).

On the other hand, the control group was observed throughout four sessions. In short, the researchers limited themselves to identify the strategies implemented by the teacher in order to apply the pre-test and post-test to compare the results from the experimental and control group. The researchers analyzed the data collected from the observation checklists (see Appendix B & C), surveys (see Appendix A & D), and interviews (see Appendix E & F).

3.9.5 Interview to the participants

In the case of this instrument, the researchers applied a final interview (see Appendix F) to recognize the level of English achieved by the participating students in an oral activity, which was carried out after the procedure of the fieldwork with digital flashcards had ended. Thus, it allowed the researchers to do a comparison between the results provided by the diagnostic test based on an interview (see Appendix E), and the proficiency test.

CHAPTER IV

4. Results and Discussion

This section is aimed to provide a thorough analysis from the qualitative and quantitative input collected after the application of the research instruments to the participants from an experimental and a control group from seventh grade at Esparza High school. Indeed, after carrying out the different instruments with both groups, the

researchers gathered relevant information about the use of digital flashcards and their remarkable influence upon the students´ oral participation in the English virtual classes.

Also, this section includes all the fieldwork at Esparza High school, and it is organized in the same order in which the instruments were administered during every session. Firstly, the researchers conducted the training session for the collaborating teacher of the experimental group. Secondly, the researchers applied the survey for both teachers to gather their point of view. Third, the researchers carried out the diagnostic test (interview), the sessions with the participants, the proficiency test (interview), and the questionnaire. Finally, the researchers added the comparative chart with an analysis to contrast the findings obtained in the fieldwork, the objectives proposed in this study, and theory previously mentioned to support the research.

4.1 Training session

This section describes the explanation given to the collaborating teacher of the experimental group about the materials and activities to implement in the virtual classes and the role of the researchers in each session. The researchers of this study provided a training session to the collaborating teacher in charge of the experimental group, which was carried out via *Zoom*, on August 4th, 2020. This training session lasted one hour and thirty minutes from 4:30 pm to 6:00 pm. This training was delivered to the collaborating teacher in order to show the didactic materials to be employed with the participating students to develop the study's fieldwork stage. Moreover, the researchers gave the collaborating teacher from the experimental group the links of different digital flashcards that contained the corresponding speaking activities that are proposed in this study: memory game, jeopardy, matching, and storytelling. Furthermore, the researchers conducted a detailed explanation about the proper use of didactic materials

for virtual classrooms to this teacher; for example, it was intended that the teacher used two types of flashcards strategies in this study: image-word and image-sentence. Likewise, the researchers gave the materials to the collaborating teacher for the application of the communicative activities in the virtual classes. In addition, the researchers and the collaborating teacher agreed to organize the virtual class with the participating students on *Microsoft Teams* by using the provided digital resources of this current research project.

During this session, the collaborating teacher was assigned the role of a facilitator who was in charge of delivering the class, and she had to put into practice the flashcards strategies (image-word/image-sentence) with the participating students. Simultaneously, the researchers clarified their role as mere observers to provide any necessary support during the application of the activities proposed in the study. For example, some of the tasks that were performed by the researchers included sharing the screen or sending the link of the digital flashcards to be used in class. Interestingly, at the end of this session, the teacher expressed that the training gave her confidence as she was now capable of comprehending how to use the didactic materials suggested by the researchers.

4.2 Survey applied to the collaborating teachers

This instrument included six open-ended questions related to the methodology, pedagogical strategies, and methods that teachers used in the virtual classes. On the other hand, the survey had six closed-ended questions related to virtual apps, the use of digital flashcards, and the virtual learning environment. The purpose of those questions for the study is to give the researchers a clear perspective of the teaching strategies that

the collaborating teachers use, the knowledge regarding the methodology they have, and their opinion towards what affects the students' lack of vocabulary (see Appendix 1).

This survey was applied to the teacher of the experimental group and to the teacher of the control group on August 4th 2020, on the same week that the training session was conducted. This instrument was sent via email, and it was designed by the researchers using *Google Forms* in order to facilitate the collection of the data. Consequently, this instrument provided valuable information regarding the different pedagogical strategies and language methods that the collaborating teachers employed in their virtual classroom. Finally, the survey addressed the teachers' point of view regarding the most common linguistic weaknesses that foreign language learners usually present in the learning of the speaking skill.

For instance, the collaborating teachers were asked about the issues in which the lack of vocabulary may affect the student's oral performance; the teacher of the experimental group indicated that one of the issues is the need of confidence students regularly have. For instance, this teacher points out that learners may feel intimidated or unable to express their feelings or thoughts when they are asked to use the English language with their peers. On the other hand, the teacher of the control group believes that one of the problems that may interfere with the acquisition of vocabulary is the fact that students do not practice the target language constantly. Furthermore, this teacher indicates that the Covid-19 is a negative situation which does not allow learners to have a daily interaction among partners and teachers, and it directly impacts authentic communication in the English class.

Likewise, the collaborating teachers were asked whether they have used flashcards as a teaching strategy before. As a matter of fact, both teachers confirmed

that indeed they have used flashcards as teaching strategies in their classrooms. Nevertheless, they claimed to have used printed flashcards, not digital flashcards. On the other hand, teachers pointed out that they had not used flashcards for students to learn new vocabulary as a pedagogical language strategy to improve their speaking skills.

Moreover, the teacher of the experimental group mentioned that the implementation of virtual apps containing digital flashcards to teach EFL courses is useful for teachers as they are catching tools to engage students in the learning process. Similarly, the teacher of the control group agrees that virtual apps represent a suitable option for the participating students in the learning process, and they become more interesting and enjoyable. In this sense, based on the participants' opinion, it can be suggested that language teachers and students should take advantage of online resources to teach and learn a foreign language using digital materials, as it has been demonstrated that they produced positive results.

Besides, regarding the use of virtual apps that the teachers use to teach classes, both collaborating teachers claimed that they employ Microsoft Teams given that it is the official means of communication established by MEP. However, the teacher of the experimental group pointed out that she also uses other digital platforms, such as *WhatsApp* and *Zoom* app to communicate with her students. Likewise, the teacher of the control group mentioned that she also utilizes *Google Classroom,* which is a common application employed by learners, nowadays. Thus, it seems that they are taking advantage of technology and promoting effective communication with students through different technological means.

On the other hand, in regard to the language teaching methods employed by the participating teachers in this study, the collaborating teachers employed different language methodologies to teach English in virtual classes. It is necessary to mention that the researchers asked the teachers about their methodology to know whether or not they have used the Task-Based approach that is the focus in this study. For instance, the teacher of the experimental group implements the Action Oriented Approach, whereas the teacher from the control group mentioned that she teaches her classes using the Modeling and Feedback Method. The last one consists of giving students a previous example about what they have to do and providing them with positive incomes and comments about aspects to improve. Seemingly, the results obtained in this survey reveal that both teachers have their own language teaching method to teach English, which might interfere in the students' English Oral proficiency level. In fact, MEP (2017) points out that: "the curriculum maintains an eclectic view but favors the Action-Oriented Approach among the other pedagogical views" (p. 31). In other words, the Action-Oriented Approach could benefit the students' oral production since it has priority within other communicative language methodologies.

In addition, the collaborating teachers were asked about the pedagogical strategies they use to teach new vocabulary to students through online platforms. For instance, the researchers found certain differences in regard to the teachers' responses to this question. The teacher of the experimental group highlighted that she uses videos downloaded from YouTube that contain the target vocabulary for teaching the new content. On the contrary, the teacher of the control group argued that she provides learners with a list of words or key concepts that are included in the worksheets for students to have a prior idea of the meaning of the vocabulary to be taught before they complete the self-study guideline.

In other words, the researchers can affirm that none of the collaborating teachers have employed digital flashcards as a language learning strategy to teach new vocabulary. In this sense, it could be assumed that the implementation of digital flashcards would be a meaningful and appealing learning strategy for students to be able to recall new words and help them improve their oral production of a foreign language.

On the other hand, the researchers also inquired the collaborating teachers in regard to their opinion about if virtual resources catch more students' attention than printed materials. In this case, the teacher of the experimental group believes that virtual resources are more appealing for pupils as they can associate meaning with pictures by using technology. However, the teacher from the control group believes that virtual resources are not more interesting for students given that they can also learn vocabulary by using creative printed materials. As a result, it can be argued that the collaborating teachers disagree from each other in this particular case. In turn, the researchers consider that such divergence may affect the performance of both groups due to the differences in teaching both groups are exposed to. As a matter of fact, as it has been pointed out by Colbran, et al. (2014) "digital flashcards provide a further opportunity to revisit old learning activities from a new, and potentially exciting perspective" (para. 6). However, the teacher of the control group did not believe that virtual resources may have a positive impact on students because she considers that printed materials can provide more positive results.

Another inquiry contained in the survey applied to the collaborating teachers was about how virtual classes have influenced their students to learn new vocabulary. For instance, the teacher of the experimental group argues that pupils participate in virtual classes actively. She also adds that since students are not exposed to carry out an

oral task in front of their peers in a traditional classroom, they show more confidence and work more enthusiastically. Moreover, they can activate their microphones to participate orally. According to this teacher, virtual classes are quite a positive and comfortable scenario in which students feel safe in their own setting (e.g., home, residence).

In contrast, the teacher of the control group mentioned that learners tend to search more about the studying topics or contents when they take online classes. Hence, they have previously completed the practices granted by the instructor and have looked up the meaning of the unknown vocabulary they are studying. In this question, it was evidenced that even though the teachers had different points of view, both agreed that the virtual scenario has positively influenced students.

On the other hand, the teachers agreed regarding the use of digital flashcards as teaching strategies. As a matter of fact, the evidence contained in the survey stated that both teachers had not used digital flashcards prior this study. Therefore, based on the responses provided by the teachers, the researchers were able to analyze the application of this strategy and compare and contrast the language effects regarding the implementation of digital flashcards. Additionally, this coincidence between teachers' answers allowed the researchers to establish possible comparisons regarding the influence that such implementation might have on students who are taught using such materials, as opposed to those who are merely taught using traditional teaching strategies including decontextualized lists of vocabulary.

Also, the collaborating educators were asked about how often they teach virtual classes to the students given the conditions provoked by the Covid-19 outbreak. In this case, the researchers determined an important limitation that students in this high school

are facing. For instance, both teachers agreed that the learners take English classes only once a week; therefore, the institutional organization has significantly impacted on students' exposure to the target language as there is significant reduction of the quantity of hours for learners to receive virtual classes. Consequently, this inconvenience represents a major issue for the development of this research study. Additionally, this problem brings a negative impact upon the expected mastery of vocabulary that students should have. This results from the lack of time students have to truly use and practice the language to interact with their teachers and classmates in a real-life context.

Finally, the researchers inquired about how the current virtual scenario has influenced the students' language learning process. First, the collaborating teacher of the experimental group affirmed that the learners who attend the online sessions show more comprehension in solving homework as they are able to clarify their questions or doubts with the instructor. In this sense, she claims that this educational modality facilitates students to understand the instructions provided by the teacher and easily complete the tasks assigned by the educator. In contrast, the teacher of the control group stated that the virtual classes have helped students to use technology as a meaningful tool of learning, rather than only a means for entertainment or leisure. This is because she used to perceive that students only utilize technology to play video games or chat with their friends. Notwithstanding, both collaborating teachers acknowledged that, in spite of such significant change provoked by Covid-19, pupils have accurately adapted to the current teaching conditions and they have continued with the learning process.

4.3 First session

During this session, the researchers applied an individual interview with each of the students from the experimental and control groups to determine their English

proficiency level through a detailed examination of certain language features such as pronunciation, fluency, vocabulary, content, and grammar. In fact, this interview was carried using *Microsoft Teams*. The same means was used for the next sessions. The instrument was conducted first with students from the experimental group and then with the learners from the control group.

It is important to mention that the four researchers were present in the session. One of them conducted the interview to the participating students of both groups while the other three researchers were in charge of taking notes regarding the oral performance of the test takers. After each learner finished the diagnostic test, the researchers evaluated and graded the students' oral performance using the corresponding rubric for this test (see Appendix E, Chart 4).

On the other hand, the researchers correlated the obtained grades with the parameters stated for this instrument (see Appendix G) considering the language bands and linguistic achievements stated on the Common European Framework for Language Reference to assign each student a specific level of language mastery from A1 to C2 according to their scores obtained. Then, the researchers organized the English band per student to have a clearer perspective of obtained results (see Appendix G, Chart 11). The same methodology was used to assess and organize the data in the post-test.

4.3.1 Diagnostic test applied to the participating students

A total of 19 pupils (10 males and 9 females) participated in the diagnostic test, 13 students from the experimental group and six pupils from the control group. Furthermore, in order to illustrate the language bands obtained by the participating students in this study, the researchers have included a graph that depicts the language

mastery level these students currently achieved during the application of the diagnostic test.

Graph 1

Results of the diagnostic test applied to the participating students.

Results of the diagnostic test applied to the participating students.
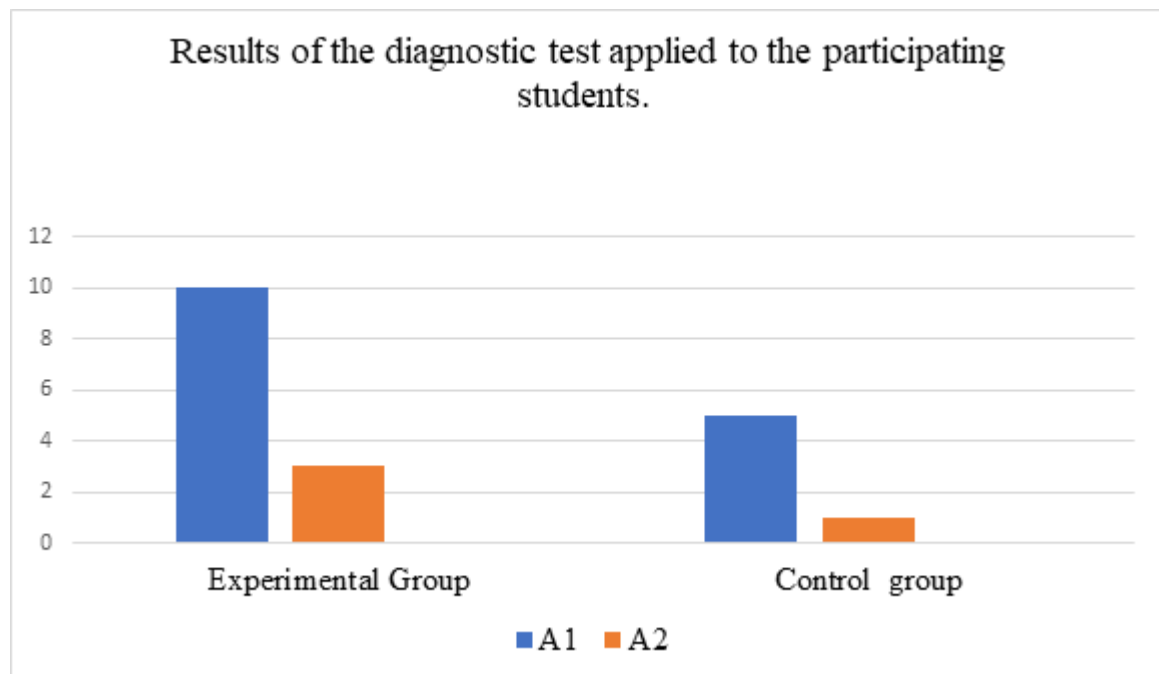
Note: Results of the diagnostic test applied to the participating students. Own creation.

The graph above shows the obtained results in both groups. In brief, 77% of pupils have an A1 band with basic knowledge of the language, and it means a low English proficiency level. However, it will be analyzed individually per each group.

4.3.1.1 Diagnostic test applied to participants of the experimental group

First of all, it is important to mention that the experimental group is composed of a total of 37 individuals who have internet access to take the online classes. However, only 15 pupils connected to the first online session. Unfortunately, two learners declined to take part in this study. Therefore, the final sample of participants of

this group corresponds to 13 individuals: 46% of the participants were males (six students) whereas 54% corresponded to female participants (seven students). Additionally, it is important to state that the diagnostic test was conducted during the first session.

Moreover, the application of this diagnostic test lasted two hours and fifteen minutes approximately. As a matter of fact, the participating students were called at different times to take the test with the researchers. The participants' interviews were scheduled every 10 minutes, and the average time per student was from 8 to 10 minutes. The collaborating teacher helped the researchers logging in the pupils to the session. The following chart depicts the results obtained by the students and the language level band that was assigned to each participant based on the grade obtained.

Chart # 2

Results obtained by the participating students from the experimental group in the diagnostic test and Language Proficiency Level Allocation.

Results obtained by the participating students from the experimental group in the diagnostic test and Language Proficiency Level Allocation.		
Participating Students	Grade obtained in the oral test interview.	English proficiency level band assigned according to the parameters established by the researchers based on the oral performance features suggested by CEFLR.
Student A	28	A1
Student B	20	A1
Student C	20	A1
Student D	24	A1
Student E	36	A2

Student F	24	A1
Student G	34	A2
Student H	28	A1
Student I	20	A1
Student J	32	A1
Student K	20	A1
Student L	28	A1
Student M	36	A2
MEAN		A1

Note: Results by the participating students from the experimental group and Language Proficiency Level Allocation. Own creation.

Based on the information contained in the previous chart, the overall English proficiency level of the class corresponds to A1. In fact, in graph #1 the results reveal that 77% of the students (10 individuals) have a language band that corresponds to an A1 English level. According to the Council of Europe (n.d) students with an A1 level are speakers who can transmit simple words and phrases such as basic greetings and limited personal information; for example, "*my name is…*", "*my cell phone number is...*", *I like / dislike ....*". However, these learners understood the questions; for example, "*What's your cellphone number?*", but they did not answer with complete sentences, they only could produce simple words such as the number itself.

On the other hand, 23% of these participants (3 individuals) possess a language level A2. Hence, those participants can express likes and dislikes in sentences with precise but not extended vocabulary. For instance, "*I like potatoes*", "*I dislike carrots*".

Therefore, the results obtained by the participants suggest that there is a significant gap regarding the current speaking mastery the students of both levels have. Also, the desirable English level mastery stated on the MEP syllabus (2016) which corresponds to a higher speaking ability (i.e., an advanced B1 or a basic B2 at the end of the academic year) in which learners can communicate routine tasks requiring a simple and direct exchange of information on familiar and routine matters using simple sentence structures. However, it is evident that these pupils barely produce short phrases, but not complete sentences to communicate ideas.

In other words, pupils from the experimental group present a low English proficiency level, which might be the result of the teaching strategies that the collaborating teacher or previous teachers have employed in the English classes. That is why the strategies proposed in this study are aimed at increasing the mastery of the English language of such learners. Nevertheless, it is important to mention that given the current virtual conditions promoted by MEP and the established schedules in which lessons are carried out, these learners never have the opportunity to use the language daily as in face-to-face classes. This is due to the fact that the administration of the institution where this study takes place has established a specific schedule in which English lessons are delivered every fifteen days. Therefore, students only receive two hours of English class a month, as opposed to the previous scenario before Covid-19, in which students took English classes for almost eight hours a month. As a result, the oral production of the target language among these learners has significantly decreased. For that reason, the necessity to provide learners with useful speaking activities which help them develop their oral skill is evident. Foremost, this project suggests digital flashcards as a means to improve the foreign language teaching and learning process.

4.3.1.2 Diagnostic test applied to participants of the control group

A total of six learners participated in the diagnostic test. In fact, 33.33% of the participants were females (two students) and 66.67% corresponded to male participants (four students). The number of participating students varies from group to group due to the social, economic, and technological conditions. For that reason, it was materially impossible for the researchers to have a similar number of participants in both groups.

In addition, in order to determine the language proficiency band of the participating students from the control group, the researchers employed the same methodology that was applied with students from the experimental group to carry out this diagnostic test (i.e., the application of an interview). Indeed, the test-takers were scheduled every 10 minutes in a virtual session with the collaborating teacher along with four researchers. In this case, the application of the diagnostic test lasted approximately one hour and fifteen minutes (8 to 12 minutes per student). After the application of the interview, the researchers evaluated every learner's oral performance by using a rubric they created for this research purpose (see Appendix E, Chart 9). Then, they organized the results obtained by the participants and classified them, based on the parameters stated by the CEFLR as it is shown in Chart 3. The following chart displays the results obtained by these participants.

Chart # 3

Results obtained by the students from the control group in the diagnostic test and English Proficiency Level Allocation.

Results obtained by the students from the control group in the diagnostic test and English Proficiency Level Allocation.		
Students	Grade obtained in the oral test interview.	English proficiency level band assigned according to the parameters established by the researchers based on the oral performance features suggested by CEFLR.
Student A	40	A2
Student B	28	A1
Student C	20	A1
Student D	28	A1
Student E	20	A1
Student F	32	A1
Overall class level of English	A1	

Note: Results obtained by the students from the control group and English Proficiency Level Allocation. Own creation.

As it can be observed in Chart 3, the grades obtained by the participants of the control group are similar to those obtained by the students from the experimental group. Indeed, the overall class English proficiency level is the same (A1 low beginner). Yet, it is expected that with the implementation of this study project, the students from the experimental group will show significant progress when comparing the grades on a post test.

Also, Chart 3 illustrates the language mastery level students from the control group currently have. Furthermore, it indicates that the control group showed that 83% of the students (five individuals) possess a language level A1. As it was mentioned before, these are speakers who express simple phrases such as common greetings and

limited personal information. In contrast, only 17% of the participating students (one individual) from this group reached an upper low level of mastery (A2). It means that those participants can express likes and dislikes with precise vocabulary. Therefore, as in the case of students from the experimental group, pupils of the control group have revealed a generally low English oral proficiency level. In fact, the researchers consider that the low mastery of the target language among the participants might be the result of the teaching strategies that the teacher uses in the virtual classes, and in some cases, it can also be traced to the lack of interest for learning a foreign language among certain students.

As a matter of fact, the previous results display the necessity to put into practice alternative communicative strategies that help learners to improve their oral production. For that reason, this project is attempting to analyze the effectiveness of digital flashcards to improve the speaking skills among learners.

4.4 Second session

4.4.1 Flashcards Application

4.4.1.1 Experimental Group

The second session was carried out during the second week of August. The collaborating teacher started the lesson by greeting the students and called the roll to report those students who were connected. Furthermore, she introduced the researchers to the class and explained the research purpose regarding the use of the digital flashcard as a foreign language learning strategy. After that, the teacher explained the Self-Study Guideline that was to be covered for that specific session, and it was related to personal information, likes and dislikes. In addition, she asked several questions to the students

such as *what do you see on the flashcard? Do you like to eat pizza? What drink is this?* Nevertheless, the researchers observed that only 46.15% of the participants (six students) answered correctly these questions, which were regarding the topics of *junk vs healthy food and drinks*. For instance, when students were asked what *drinks, meats, or fast food,* they observed on the flashcards the learners answered: *coke, orange juice, coffee, water, fish, chicken, hamburger, hot dog, and sandwich*. Moreover, it was observed that flashcards were useful to create questions and get students involved in the activity. Also, it can be claimed that the implementation of digital flashcards contributes to understanding of the vocabulary among students.

However, it is necessary to indicate that there were other flashcards with illustrations of *wine* and *pork* which students were unable to identify. Therefore, the teacher had to pronounce the word out loud, and it was noticed that two students asked the teacher for repetition. This finding suggests that learners were interested in learning about the topic as they were focused on being able to identify the accurate pronunciation of those words. Regarding the question: *do you like to eat pizza?* The researchers noted that students limited their answers to a simple: "*yes, teacher*" or they even replied in Spanish utterances such as: "*a mí me gusta teacher*", "teacher, *es mi comida favorita*".

An interesting finding obtained from this observation is that even though learners showed understanding of the question spoken in English, some of their answers were uttered in their mother tongue (i.e., Spanish). This finding suggests that even though some pupils' answers were in Spanish, students' listening skills have been developing properly, as they are able to understand the messages and answer questions. Nonetheless, the results also evidenced that the oral performance in the target language

by these learners is still limited. Moreover, it is essential to state that the collaborating teacher constantly encouraged all of the students to participate in these activities.

On the other hand, regarding the use of grammar and students´ pronunciation in the target language, the researchers perceived that students had difficulties producing complete and coherent sentences. Also, they usually answered the questions by employing isolated words only. Additionally, during the application of the memory game speaking activities, students were asked to create short sentences. In fact, it was observed that they had difficulties to utter grammatically correct sentences. For example, it was observed that they omitted the subject, the verb, or the complement of a sentence. This shows that students had difficulties creating a complete sentence (Subject+ Verb+ Complement). For instance, some of the responses provided by the participants were: *"I happy", "he tall and heavy", "my mother beautiful" "is shorts"* *"I two brother"*. Therefore, the researchers deemed it essential to use appealing materials that encourage students to participate in these activities in order to develop their oral skill since it was evident that students were interested in learning about accurate pronunciation.

Likewise, in regard to the students' pronunciation, it was evident that 84.61% of students had difficulties pronouncing certain words in isolated cases. To illustrate this point, the researchers phonologically transcribed some of the mispronounced, which included: /kok/ (coke) , /panapəl/ (pineapple), /warərmelɔn/ (watermelon), /tɪn/ (thin), and /mI/ (my). Moreover, during the implementation of the memory game speaking strategy, the teacher asked students to state their opinion regarding the material being presented. Interestingly, a total of 23.07% of students (three individuals) considered the material was appealing for them as it was colorful and meaningful. Seemingly, one of

the participants argued that activities were interesting for him, given that when the teacher asked: *do you like this material?* He agreed and said, *"I like teacher".* In fact, the researchers perceived that the use of digital flashcards during this session was useful since students were able to recognize target vocabulary. However, it was also evident that students showed difficulties when asked to create complete sentences.

Finally, the students played a Memory Game about image-word ,and image-sentence in which they had to match a given word that was written on the flashcard with its corresponding sentence or image displayed on a separate digital card. Then, they had to create a new sentence by using the vocabulary studied in class, including words such as *thin, heavy, grandparents, brothers, sister, tall, short, happy, father, mother.* In this case, the students were able to create utterances such as *"my tall", "grandparents shorts" "sisters is and thin".*

Regarding the students' participation, it can be said that not all the students participated actively in the activities, but more than half of the learners (seven students) were engaged. Additionally, none of the students turned on the cameras. It was evident that flashcards as a learning strategy had a positive effect on getting learners involved in the class. As a matter of fact, students were asked about the correct pronunciation of some words and requested to repeat them again, correctly. Moreover, they made positive comments about the use of flashcards and its usage contributed to producing almost complete sentences. This statement is related to Eslahcar and Khodereza's though (2012) regarding the positive influence of using flashcards:

> Flashcard facilitates their involvement in the class work by sharing answers, trying to participate, paying attention, giving the examples, encouraging to take part in the lesson, participating as volunteers, interacting with each other in a

low-risk, warm up activity, utilizing the new words in the example, working on the vocabulary and pronunciation (p. 142).

This shows that digital flashcards are appealing to them, help them to develop oral skills, and to motivate learners to participate.

Also, the researchers were able to identify several aspects regarding the participants' behaviors in this study during this session with the experimental group. For instance, in regard to the use of the target language 46.15% of the individuals (six students) were more likely to use the target vocabulary presented by the teacher. This means, some pupils were able to reproduce some words taught through the use of flashcards during the class. Furthermore, among the vocabulary employed by the participants, the researchers determined words such as *happy, tall, heavy, short, thin, mother, brother, coke, orange juice, pineapple, watermelon, sandwich, water, coffee, fish, orange, hamburger*. On the other hand, the results reveal that during this session a total of 53.84% of the learners (seven students) participated in each class activity. These results portrayed that not all the students were completely involved with the tasks proposed. However, it is remarkable that only two students were not participating in the activity. Additionally, some of their tone of voice sounded enthusiastic when they spoke and the feedback received from pupils about the material presented was significantly positive, which demonstrates that the use of flashcards was engaging and thus, most of the individuals showed interest in the learning process. In this sense, it is important to emphasize that teachers should have encouraged learners to participate through the use of materials such as flashcards, as the goal pursued in the class is to foster authentic opportunities for learners to use the target language.

4.4.1.2 Control Group

First, the collaborating teacher greeted students and called the roll. Then, the teacher explained the first and second Self-Study Guideline to the students. The teacher shared her screen and explained the study topics and the target vocabulary that were related to contents such as *personal information, family members, likes and dislikes*. Moreover, she asked different questions to the attendees including: *do you have brothers and sisters? What is your favorite food? Do you like to eat fruit and vegetables? Which ones? Where do you live? What do you like to do?* For these questions, two students participated actively and one of them produced grammatically correct and complete sentences. Actually, regarding the question, what *do you like to do?* He answered, *I like to play video games*. Additionally, another student replied, *play video games*.

On the other hand, concerning their likes and dislikes, students provided answers such as "*My favorite is apple and watermelon*", "*pear", "hamburger", fried potatoes*. Moreover, it is important to mention that two students answered those questions using Spanish expressions such as: "*sí tengo un hermanito*", "teacher, *la piña*". Moreover, it was shown that students who participated in this activity presented certain grammar and pronunciation inaccuracies. For example, they had difficulty especially pronouncing "pear", "grapefruits" "cabbage" and they even evidenced difficulty to use simple vocabulary in English including: *pineapple* (isolated word) and *I have one brother.*

It was noticed that 33.33% of the students (two students) did not participate for unknown reasons or used vocabulary in Spanish (Spanglish or complete sentences in Spanish) when answering some questions. Moreover, only two learners showed interest

in the class because their tone of voice showed enthusiasm. However, the rest of the learners were just listening, and none stated positive comments about the activities developed.

4.5 Third session

4.5.1 Experimental group

This session took place during the first week of September. In this session, the collaborating teacher started the class by answering questions or doubts that students might have from the two previous Self-Study Guidelines. Furthermore, the teacher explained due dates for previously assigned homework. Once all the doubts were clarified, the teacher began to develop the third Self-Study Guideline by sharing the screen through *Microsoft Teams* to show the digital flashcards related to the topic *Enjoying life*. Firstly, the teacher asked the students what they saw on the image with the purpose of testing the language background knowledge of the students since they were supposed to review the Self-Study Guidelines at home, beforehand.

Then, the teacher introduced a reading about food and daily routines in which she suggested that students read the entire text to familiarize with the context of the situation depicted in the topic, and then discard true cognates. Also, the teacher asked students to do the reading twice or three times if necessary. Thereby, the teacher read out loud the entire writing for the students to listen to the pronunciation. Moreover, the teacher asked students to infer the gist of each paragraph by making pauses, explaining it slowly, and giving examples.

Later on, the teacher continued with the implementation of digital flashcards that contained images of daily routines and asked the following questions: *what is she*

doing on the scene? Where do you think the action is taking place? What do you like to do after school? It is fundamental to point out that these questions were based on the flashcards that the teacher showed the students. Additionally, students were requested to describe as many details they saw in the digital flashcard as possible.

Afterwards, by presenting these questions, the teacher promoted interaction among the students. Interestingly, they mentioned that the digital flashcards were attractive as they contained colorful pictures and images. In fact, 40% of the participants were able to identify the action being portrayed in the digital flashcard. Moreover, they were able to produce phrases like *take a shower, eat lunch, watch movies,* or *watch Netflix*. Also, they were able to recognize vocabulary related to food depicted in digital flashcards. For example, in one of the digital flashcards, which showed kinds of beverages pupils were able to identify words like coke, tea, coffee, water, orange juice. Also, 30.77% (4 students) made sentences such as: *my favorite drink is coke, or my favorite drink is orange juice.*

Furthermore, they also identified different vocabulary regarding fruits and vegetables such as watermelon, pineapple, carrot, tomato, apple, orange, and banana which showed healthy food in another digital flashcard presented by the teacher. Similarly, pupils referred to their favorite food when they saw the digital flashcard about fast food and junk food including fries, hot dog, hamburger, and sandwich. In this case, 38.46% (five students) were able to use the target language and expressed their personal thoughts among the examples provided by the participants were: *my favorite fast food is hamburger, my favorite is hot dog,* or *I like fries.*

Meanwhile, the teacher continued with the explanation of the fourth Self-Study Guidelines related to the study unit titled Getting back to nature. First, she started to

explain the difference between the quantifiers *there is* and *there are* by providing examples of singular and plural nouns. Later, she reinforced this topic by using the digital flashcards that contained examples of one tree and a bicycle in a house in order to use the quantifier *there are*. Similarly, there was also a set of digital flashcards that showed a garden surrounded by butterflies. The goal pursued by the teacher was to have students practice those quantifiers.

Then, she asked students questions about marvelous places from Costa Rica that were close to the county of Esparza such as National Parks, rivers, mountains, valleys, and volcanoes. Furthermore, the teacher discussed with students how to handle trash when they visit those locations. Moreover, students provided suggestions regarding how they could contribute to reducing the carbon footprint when visiting those places. Then, three students responded that they gathered their garbage and put it into the wastebasket. They used expressions such as: *"use the garbage", "I put the trash en el basurero", "mother use bag"*. When students mispronounced a word, the collaborating teacher repeated the sentence the student tried to say in the correct grammar form (subject + verb + complement).

Finally, the teacher presented the Jeopardy game (see Appendix H) that contained vocabulary from the third and fourth Self-Study Guidelines to recap all the digital flashcards that had been shown. After that, the collaborating teacher put into practice the image-word and image-sentence techniques. Moreover, she decided to divide the group into two teams (i.e., girls and boys). Then, she encouraged them to participate in the activity by selecting different categories including daily routines, food, nature, and quantifiers. Some of the linguistic difficulties that the students demonstrated isolated words, since the students were not able to create complete sentences. Besides,

when they tried to make complete sentences, they either missed the subject or the adjective. The results obtained in this session reveal that 30.77% of the participants (four students) *always* used the target vocabulary in each class activities, whereas 69.23% of the individuals from this group (nine students) *sometimes* used the target vocabulary. Moreover, regarding the participation of students, 30.77% of the subjects (four students) *always* participated in each activity, whilst 69.23% of the pupils (nine students) participated *sometimes*. It tends to be that the same percentage of students were constant in participation and usage of the target vocabulary. Therefore, based on the results obtained from the observation in this virtual session, it can be assured that students are motivated to participate when visual and colorful aids are used in the virtual classes. In other words, by using these flashcards students got engaged with the target topics and vocabulary to be taught. Also, they gained confidence when they saw other classmates participating in the activities.

On the other hand, the researchers identified that nearly one student was *always* able to produce complete sentences when using the vocabulary given. In contrast, 61.54% of the learners (eight students) *sometimes* used the vocabulary provided by the teacher to produce sentences. In fact, it was noticed that only 30.77% subjects (four students) rarely produced a complete sentence. Based on the information collected, the researchers inferred that the students were not used to put into practice the vocabulary given in word banks because they had trouble expressing complete sentences using the appropriate grammar structure when participating in oral tasks. Thus, this might also be because students do not usually practice their oral skills in high school or because they did not practice when they were in school, and then the teacher had to face this linguistic lag in a complex academic year due to Covid-19.

Likewise, concerning the extent to which students were capable to produce complete and coherent sentences using the vocabulary provided by the teacher, only 7.69% of the subjects (one student) *always* used the vocabulary given by the teacher in expressions such as *I like to watch Netflix after school, my favorite fast food is hot dog* and *I take a shower every day*. This evidence reflected that 92.31% (twelve students) of the participants from this group faced difficulties to produce complete and coherent sentences to express their thoughts.

In addition, another aspect that was observed was whether or not students showed interest in learning through the teacher's activities. Thus, 38.46% learners (five students) *always* showed interest in the activity. Therefore, these five students constantly commented on the questions that the teacher asked. Additionally, regarding the capability of learners to identify the meaning of the vocabulary words that were included on the flashcard, a total of 23.08% participants (three students) *always* recognized the meaning of the image-word flashcard.

Moreover, regarding the use of vocabulary given in oral tasks, 92.31% of the subjects (twelve students) *sometimes* used the vocabulary shared during the virtual session, which suggests that digital flashcards are a suitable resource to achieve oral tasks.

Similarly, the confidence of the students while speaking English evidenced that 61.54% participants (eight students) *sometimes* felt confident while speaking in English. Researchers perceived that learners felt confident speaking when the teacher interacted with them by sharing her own experiences and thoughts about her favorite food and her daily routine every day. It was perceived that students felt comfortable by using the digital flashcards to create a sentence with the vocabulary that was presented during the

session. In other words, having the option to use digital flashcards as a support material gave the pupils the confidence to speak in the class activity.

In addition, concerning to whether or not students communicated in the second language during the class activities, 92.31% individuals (twelve students) *sometimes* communicated in the target language. Researchers inferred that digital flashcards could be employed in English lessons since they contribute to induce the students to constantly use the target language and improve memory retention of English vocabulary. This conclusion supports the argument by Sinchi and Sinchi (2011) who stated that "using flashcards develops and improves retention of information and encourages the connection of knowledge" (p. 19-20).

Another aspect observed was the vocabulary mastery. During the third session the researchers found that 84.62% individuals (eleven students) *sometimes* showed mastery of the vocabulary. Therefore, it is important to point out that students were comfortable when they saw the images and tried to say the word in English to produce a sentence. This evidence supported the argument by Habibi (2017) who claimed that: "teaching English vocabulary by using flashcards as media does improve the students' vocabulary mastery" (p. 201).

4.5.2 Control group

This virtual session took place on September 1st, 2020. First, the teacher shared information about due dates of previous assignments and explained the third Self Study Guideline which was related to the topic food and table manners. Afterwards, she asked the following questions: *What is your favorite fruit? How often do you eat fast food? How does your morning start?* Then, she explained the reading that involved the study

topic *daily routines* and *food*. In addition, she encouraged learners to participate by asking questions about their daily routines and favorite food.

During the session, it was perceived that in the class activities 50% of the pupils (three students) *sometimes* used the vocabulary. In fact, students mixed sentences using the given word by the teacher in English and the rest of the sentence in Spanish which rapidly was corrected by the teacher.

Moreover, participation was another aspect to consider in each class activity, where 50% of the subjects (two students) *rarely* participated. Evidently, it can be inferred that these two students did not participate since they were distracted due to excessive dead air during the virtual session so the teacher decided to ask another student due to the fact that the time was limited in the virtual session.

On the other hand, in regard to producing complete sentences by using the words presented by the teacher, just 50% individuals (three students) *rarely* used the vocabulary given. Therefore, based on the data collected from the participants during the observation, it is widely agreed that students were not able to produce sentences since they lacked support material, other than exercises from the Self-Study Guide.

Additionally, showing interest in learning through the teacher's activities was another aspect taken into consideration; accordingly, 33.33% individuals (two students) *sometimes* seemed to be interested. This highlighted that students' attention was caught at times; however, it was not consistent throughout the virtual session by the teacher's activities. As a matter of fact, students made questions about upcoming homework and extra-class projects which showed the low level of interest in the current topic.

In reference to identifying the vocabulary meaning through the Teacher's activities, 50% of the individuals (three students) *rarely* identified the vocabulary. One possible explanation is the lack of activities and visual aids that prevented the students from identifying vocabulary since the observation checklist guide showed a low rate of participation from the students during the session, which is vital for language learning. This data supports the argument by Gilsang (2018) who argued that "vocabulary is an indispensable part of language learning" (p. 9).

Related to the use of the vocabulary given in oral tasks, only 66.66% subjects (four students) *rarely* used it. This suggests that the participants did not find it appealing to get themselves involved in the oral tasks proposed by the teacher, especially since the teacher only used the activities on the Self-Study Guide that show large text with a lot of words that the students struggle to pronounce and produce using the target language. In addition, when the pupil's interest is not triggered this can interfere with the ability to speak in English. Moreover, this idea was supported by Goh and Burns (2018) who stated that "speaking is a highly complex and dynamic skill that involves the use of several simultaneous processes—cognitive, physical and socio-cultural—and a speaker's knowledge and skills have to be activated rapidly in real time" (p. 52).

The following aspect to consider was whether or not the students showed confidence while speaking English; so 50% of the participants (three students) were *rarely* confident. In fact, students did not show confidence due to the fact that they spoke more in Spanish than in English which suggested that students felt more attached and comfortable spoken in their mother tongue.

Concerning whether or not students communicated in the foreign language during the class activities, 66.66% of the participants (four students) *rarely* spoke in the target language. The observation checklist guide applied to the control group alludes that the students were not prepared to communicate in the target language because they lacked enough exposure to the vocabulary by creative activities.

Finally, regarding whether or not students showed vocabulary mastery during the whole class, just 16.67% of the participants (one student) *sometimes* showed a mastery of vocabulary when used the words explained during the virtual session. Researchers concluded that the teacher focused on the exercises proposed by the Self Study Guide based on a bank of words to fill up incomplete sentences and texts for reading comprehension which does not help the students to speak in the target language. Additionally, the teacher did not implement games or activities using visual aids to improve students' mastery of vocabulary by leading them to identify vocabulary with images or any other technique to ease the learning and identification of new vocabulary. This finding supports the argument stated by Rudianto and Hisni (2018) which explains that "communication in a foreign language will fail if learners lack of vocabulary to express their ideas and thoughts [*sic*]" (p. 95).

To sum up, the data collected reveal a low rate of participation among these students. However, it is important to consider several aspects that may have affected the learner's willingness to take part in the activities for example technical inconveniences with their equipment, and shyness to speak in English when the researchers were observing. On the other hand, it was clear that the teacher of this group did not include any additional activity to practice the vocabulary contained in the Self-Study Guidelines which may have motivated students to practice the target language.

4.6 Fourth session

4.6.1 Experimental group

This session was held on September 8th, 2020. The collaborating teacher carried out the class using the study content titled: *"Getting back to nature"* which was studied previously on the fourth self-study guideline. Through this topic, the teacher reviewed certain grammar aspects, including the use of there is/there are. For example, *there is a river in Miramar, there are beaches in Puntarenas, there are volcanoes in Costa Rica.* Thus, the teacher used the flashcards to recall what students learned about natural marvels (volcanoes, rivers, beaches, national parks, and so on). Furthermore, she introduced the *future tense be going to,* by asking students to create future plans using the vocabulary depicted on the flashcards.

It is essential to highlight the fact that for reviewing the study content, the teacher employed the digital flashcard resource proposed and named by the researchers as "matching". In fact, by using this material, the teacher was able to promote the mastery of vocabulary among the learners. For instance, the displayed material contained images students had to match with their corresponding name in the target language.

Therefore, the researchers used an observation checklist that provided various results related to the students' performance while flashcards resources were used in a context of oral activity. Firstly, considering the use of the target language, 53.8 % (seven out of thirteen) students *sometimes* were able to use the English in all class activities while only 15.4% (two out of thirteen) pupils were not involved at all in class. Hence, nearly 84.6% of the participants tried to implement the target vocabulary in

different class activities. For instance, Eslahcar and Khodareza (2012) recalled different advantages of flashcards' use considering that these materials promote the students' involvement in class work. For this reason, the researchers concluded that findings showed learners used the target language while they were using new words, sharing answers, or giving examples in class as it is mentioned by the authors.

Secondly, in regard to participation in all class activities, 53.9% of the students *always, or sometimes* participated, 30.7% of them *rarely* participated, and only 15.4% of learners were *never* involved in class. In other words, it can be concluded that more than the half of population took part during the implementation of the flashcard technique. According to Wahyuni and Handayani (2014), flashcards stimulate the mastery of vocabulary, and encourage students' activeness in the learning process (p. 58). Therefore, the observation checklist demonstrated that learners were motivated and involved in class while the collaborating teacher developed the activities.

Regarding the production of complete sentences using provided vocabulary, the data notably presented negative results because more than 76% of participants could not create complete sentences while the teacher was carrying out the activities with flashcard materials. Therefore, production of grammar structures becomes a challenging goal because sometimes pupils study vocabulary, but they do not know how to use it to create sentences. In other words, both vocabulary and creation of sentences are important aspects to foster communication. This affirmation is clearly supported by MEP (2016) that states "vocabulary, syntax, cohesive forms, and phonology are taught with the purpose of facilitating communication" (p.25). To sum up "matching" is an activity that uses vocabulary, and it provides students with material to communicate in possible oral situations.

Besides, considering the interest of the experimental population for learning vocabulary by flashcards, the data obtained from the observation checklist showed that eight students (61.5 %) were *very interested* in the developed activities. In other words, 61,5% of participants were *sometimes* willing to learn while the collaborating teacher was portraying flashcards. Hence, the "matching" activity caught the attention of 84.6% of students even though they were interested in different manners because more than half population were *sometimes* interested in the activity presented, but the rest percentage varied from *rarely* to *never.*

The current analysis considers the identification of vocabulary's signifiers through flashcards. Thus, data collection reflected that 61.6 % of the total population was able to infer the signifier. This finding can be supported by the argument stated by Finocchiario and Bonomo (cited in Montes, 2018) "visual aids entail the images that a teacher can use to aid the student understand a topic easily" (p. 6). In other words, resources with images are useful for enhancing students' comprehension. Hence, flashcards provide visual support to infer the meaning and consequently achieve linguistic goals.

Based on the findings obtained in the survey regarding use of vocabulary in oral tasks, the utilization rate ranged in two major parameters being *rarely* 46.2%, and *sometimes* 38,4% the most prominent results. Therefore, the students included the vocabulary in oral activities, but they were not applying it as much as it was intended. For that reason, it is recommended for future studies to explore the causes that produce the lack of vocabulary in oral tasks.

In addition, the data collected from the observation session revealed that fostering confidence among language learners is quite a challenging task for the teacher.

For example, it was found that 46.2% participants demonstrated they felt confident when participating because they interacted without fear of making mistakes. Also, they asked how to say something in English when they did not know. In other words, almost half of the population felt comfortable to speak   in proposed activities. Based on Sinchi and Sinchi (2011) flashcards facilitate comfortable learning processes. For that reason, the researchers think about this facility as an advantageous aspect that flashcards have because they let students to get involved in class activities.

Besides, regarding the use of the foreign language in the proposed activities, it was found that 61.6% students were not capable of communicating themselves in foreign language while the rest of participants (38.4%) could speak in English. Particularly, Goh and Burns (as cited in Ramírez and Artunduaga, 2018) recognized that "speaking is a highly complex and dynamic skill that involves the use of several simultaneous processes—cognitive, physical and socio-cultural—and a speaker's knowledge and skills have to be activated rapidly in real time" (p. 52). Therefore, the development of speaking skill requires a continuous process for obtaining successful results. This research project concluded that flashcards can be useful materials to promote oral production, but teachers need more sessions to get the expected goals.

Furthermore, during the fourth session, it was observed that only 38.4% of pupils did not master vocabulary at all. On the contrary, 61.6 % of participants were able to use vocabulary without problems when they identified the pictures by naming them, and they answered questions guided by the teacher while she was developing the "matching" flashcard activity. As described, Taghizadeh, et al (2017) state the importance of flashcards for vocabulary mastery: "using flashcards is a helpful tool and an effective technique for vocabulary learning" (p. 160). Therefore, teachers can

multiply the benefits while learners are participating in activities that are linked with theirs real context.

In brief, the use of "matching" as flashcard activity showed various aspects pointed out by Sinchi and Sinchi (2011) about the advantages of using flashcards. For instance, this kind of resource promotes participation because it is considered enjoyable, funny, and an interactive tool for educational processes. Thus, "matching" as a flashcard strategy contributes to students' participation showing that 50% of learners participate in this activity. Also, the writers ratified about the fast learning because flashcards allow to infer meaning through association with images. Consequently, the fourth session with "matching" gave learners the opportunity to link the visual material to deduce meaning.

4.6.2 Control group

During this session, the control group's teacher took GTA#5 (Guía de Trabajo Autónomo, Spanish acronym) as a reference to make a review of the scenario *"Getting back to nature"* as well as clarifying doubts of how they had to solve the different tasks. First, the teacher shared the screen to show them some images taken from Self-Study Guide (natural marvels: river, beach, mountain, etc.) and she asked them, *what is this?"* Secondly, the teacher mentioned some questions related to future plans through the use of the future tense form "be going to".

The evidence taken from observation data collection instruments showed that 50% students used very frequently the target language in class activities while the other 50% of participants *rarely* and *never* used the language. It means half of the population

was actively involved in class because they applied the learned content through class exercises, but the rest of the population did not.

Specifically, Aziz, Quraishi, & Kazi (2018) focused on negative aspects that definitely influence classroom participation, "being in a new school atmosphere, nervousness, less content knowledge, anxiety about humiliation, or language problem" (p. 212). In other words, the lack of participation can be the result of the new reality caused by Covid-19, as it is mentioned by the authors a new environment is a factor that affects the students' involvement in class activities. Undoubtedly, pupils are not accustomed to learning in a virtual context because they can face unexpected academic or personal situations. Besides this, virtual classes require different activities, grouping, learning techniques, timing, willingness, commitment, creativity, and other aspects to carry out the class, and promote participation indeed.

As a result of the class observation, it was found that 100 % of students were not prepared or they did not handle grammatical structures to produce complete sentences by themselves because learners just participated saying single phrases. Thus, Leong, & Masoumeh (2017) highlighted various key components that may influence students' production "English speaking is not an easy task because speakers should know many significant components like pronunciation, grammar, vocabulary, fluency, and comprehension" (p. 35). With this information in mind, the researchers concluded that English demands the mastery of linguistic aspects, and its deficiency can carry out negative results. Therefore, it is a challenging task the teacher must take into account to work through the provision of useful strategies.

Additionally, participants were observed to identify their level of interest while they were involved in teacher's activities; consequently, the researchers found that 50%

of the population were interested in classroom activities, but the rest of the participants *rarely* or *never* demonstrated any attentiveness to the class. Also, the findings indicated that only 16.66% of students showed confidence when speaking in Foreing language. In the same line, learners demonstrated little effort and willingness while they were communicating in a second language. For instance, they did not try to participate even though the teacher provided examples. Also, 66% students *rarely* or *never* recognized vocabulary meaning that was used in the given oral tasks. This situation can be caused by a variety of factors such as lack of vocabulary, shyness, insecurity, problems with technological devices and poor connection, lack of meaningful material, and so on. This conclusion is supported by the contribution of Win (2018) that mentions "Occasionally, applying pictures, games and activities related to their real lives and creating a warm learning environment are useful for teachers to persuade learners not to be stressed and pressure" (p.225). Considering the author's idea, the use of visual resources and activities contextualized to real situations such as images encourage students to learn more easily, and to take part in class.

4.7 Fifth session

4.7.1 Experimental group

The researchers had the fifth session for applying flashcard strategies, which took place on September 16th, 2020. The session deal with a general review of previous GTA #5; for that reason, the researchers decided to implement "storytelling" activity. The researchers used this flashcard strategy as the last one for promoting vocabulary mastery in oral tasks.

The collaborating teacher showed students the digital flashcards with vocabulary in order to give students necessary input to apply their knowledge in oral production activities. Through the presentation of the material, the teacher asked them questions such as *What is this?, Do we have this natural marvel in Costa Rica?, Mention examples of natural marvels, Then they answered, It is a volcano , Yes We do, Arenal, Irazú, Poás volcanoes*. After this activity, she gave them instructions for the next activity in which she implemented the strategy flashcard image-word with the storytelling activity.

Specifically, the collaborating teacher showed a set of digital flashcards image-word that pupils used as reference to create sentences. After that, learners made a story with those sentences. Previously, the collaborator facilitated an open phrase, for instance, *In Costa Rica…* then learners continued the story adding the sentences using flashcards as supporting materials. As a result, the researchers of this study could observe that students took advantage of provided resources to participate during the development of the class. Therefore, participants created short stories with their sentences such as *In Costa Rica, there are volcanoes, rivers, beaches, mountains, islands. My favorite beach is Conchal beach. Puntarenas has Caldera, and Puntarenas beaches. I love nature/ My family lives in Esparza, sometimes we visit the San Jeronimo river. My sister doesn't like the beach, but my grandma loves it. In a small town called Arancibia, there are marvels, rivers, waterfalls, beaches, insects, trees, flowers, butterflies. I like my town.*

Through the development of the class, the researchers observed to evaluate different aspects, and they could conclude that there were advantageous results. For example, 69.2% of the sample population were willing to participate with confidence to

use the target language in context of oral tasks. For instance, they tried to participate by giving ideas, and asking when they were not sure about a word. In other words, those observed behaviors on students allowed the researchers to concluded that pupils participated actively ass Liu and Gao (cited in Xingcui, 2011) mentioned

> Active learning allows students to learn in the classroom with the help of the instructor and other students, rather than on their own. Classrooms where learning activities are varied give these students the opportunity to excel. Students become involved in their learning rather than disinterested. Involved learners enjoy school and become lifelong learners. (p. 7)

This author's contribution reinforces that flashcards are suitable resources to foment pupils taking part in class. As a result of this active participation, students are practicing what they learned previously.

Moreover, 53.8% of participants had almost always the initiative to create complete sentences, and 61.5% of pupils were able to recognize the meaning of vocabulary in flashcards. This aspect could be seen because learners demonstrated vocabulary mastery during the activity. Finally, regarding the interest, it was observed that 77% of the whole population were interested in learning through the use of flashcards; this indicator could be perceived in a set of students' behaviors such as curiosity, active participation, interaction, interest, and positive comments about the activity (*Teacher, I like this activity*). Wahyuni and Handayani (2014) confirm that flashcards increase students' motivation, and they boost the learning process. Hence, pupils are competent to be involved in class activities proposed by the teacher.

In summary, based on the observations, storytelling promoted the participation of students to master vocabulary and apply their knowledge in oral production tasks.

The implementation of flashcards may be a useful tool to provide prompts that work as scaffolding for the learning process. Consequently, it offers students the opportunity to acquire new knowledge by using a simple strategy. As explained by Byrd and Lansing (2016) "flashcards provide a simple way for students to study and learn new vocabulary words and can be used by almost every student" (p. 3). It is important to mention that the resources usually provide successful results when the facilitator teacher uses them properly and it motivates students to apply what they learn in proposed activities.

4.7.2 Control group

During this class, the teacher made a general review of GTA #5 in order to clarify doubts. In short, she started solving the exercises with the students by asking them about the natural marvels they could find in their communities.

The observation checklist allowed the researchers to recognize that 50% of pupils were interested and involved in class activities. However, the researchers observed that participating in English classes is a challenge because the teachers must motivate students constantly to get involved in class activities using English vocabulary.

On the other hand, there were lowest percentages (around 33,3%) in indicators such as recognition of meaning through activities, and entire communication in English. In other words, pupils mastered vocabulary and they used it in context, but they already need a lot of support to have an effective performance in oral production activities.

For that reason, it can be taken into consideration the contribution of Win (2018) that claims, "students are attracted to motivate their learning with teacher's teaching technique" (p. 228). Hence, these findings illustrated that the learning process

is a challenge, and it requires a variety of methods as well as constant contextualization and motivation to achieve linguistic goals.

4.8 Sixth session

4.8.1 Proficiency test interview

During this session, the researchers applied the final individual interview with each of the students from the experimental and control groups to identify their oral level of English after the implementation of the fieldwork stage of this study. In fact, this interview was carried out on September 18th, 2020, by using *Microsoft Teams* in one session with the experimental group and another session with the control group.

Furthermore, it is important to recall that a total of 19 students who participated in the diagnostic-test also took part in this post-test; it means 13 learners from the experimental group and six pupils from the control group. Foremost, it is necessary to indicate that the same methodology conducted during the application of the diagnostic test was applied to carry out this post-test. In addition, the graph below shows the language proficiency level achieved by the students from the experimental and control group after the fieldwork stage had ended.

Graph 2

Results of the proficiency test applied to the participating students.
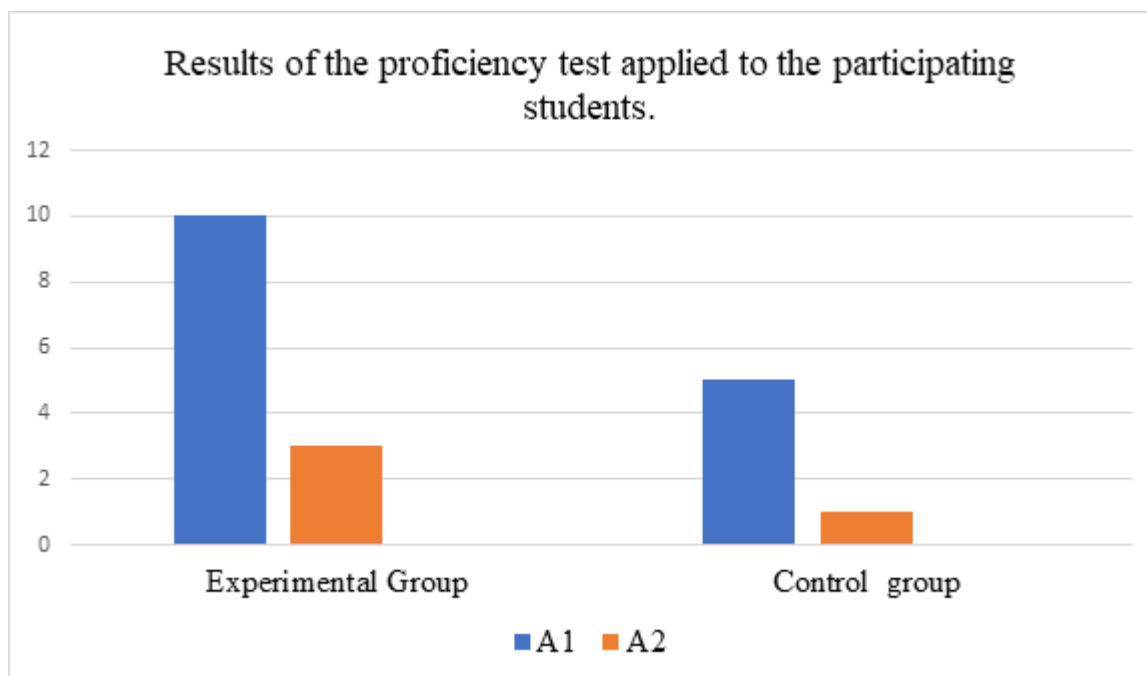
Notes: Results of the proficiency test. Own creation.

4.8.2 Proficiency test applied to participants of the experimental group

The proficiency test was conducted to 13 students, in which 46% of the subjects were males (six students) whereas 54% corresponded to female participants (seven students). Moreover, the application of this post-test lasted two hours and twenty minutes approximately, and it was applied by the four researchers. As a matter of fact, the participating students were called at different times to take the test with the researchers. For instance, the following chart shows the results obtained by the students and the language level band that was assigned to each participant based on the grade obtained.

Chart # 4

Results obtained by the participating students from the experimental group in the proficiency test and Language Proficiency Level Allocation.

Results obtained by the participating students from the experimental group in the

proficiency test and Language Proficiency Level Allocation.

Participating Students	Grade obtained in the proficiency test.	English proficiency level band assigned according to the parameters established by the researchers based on the oral performance features suggested by CEFLR.
Student A	32	A1
Student B	24	A1
Student C	22	A1
Student D	28	A1
Student E	40	A2
Student F	24	A1
Student G	36	A2
Student H	30	A1
Student I	24	A1
Student J	32	A1
Student K	22	A1
Student L	32	A1
Student M	40	A2
MEAN		A1

Note: Results obtained by the participating students from the experimental group and

Language Proficiency Level Allocation. Own creation.

As it can be seen in *chart #4*, the overall class oral proficiency level of English corresponds to A1. In fact, as it is depicted in *graph 2*, the results reveal that 77% of the students (ten individuals) have a language band that corresponds to an A1, whereas 23% of these participants (three individuals) possess a language level A2. In other words, the results obtained in this test reveal that the language proficiency band from the participants did not vary after the sessions were conducted. Nonetheless, the researchers were able to identify a significant advance in the participants' vocabulary mastery during the activities in each session. For instance, the learners were able to say complete sentences using the studied vocabulary in class.

In sum, it can be affirmed that despite the fact that students from the experimental group showed a low beginning English level, the results obtained in their proficiency test show an improvement in the students' spoken vocabulary repertoire because based on the grades obtained, the participants showed a better ability to communicate in the second language. The researchers detected that some learners learnt the words because they could say complete sentences. At the end, it can be the result of the strategies proposed in this study, which were created to promote the use of digital flashcards to learn vocabulary.

For that reason, it can be assured that the use of flashcards indeed provides learners with valuable learning strategies to communicate in the target language. That is why this project proposes the implementation of digital flashcards as a means to foster vocabulary mastery among language learners through oral task activities.

4.8.3 Proficiency test applied to participants of the control group

The proficiency test applied to the students from the control group was carried out on September 18th, 2020 with the participation of six learners; 33,33% of the participants were females (two students) and 66,67% corresponded to male participants (four students). In addition, in order to determine the language band of the participating students from the control group, the researchers employed the same procedure that was applied in the diagnostic test (i.e., the application of an interview). The following chart displays the results obtained by these participants.

Chart # 5

Results obtained by the students from the control group in the proficiency test and English Proficiency Level Allocation.

Results obtained by the students from the control group in the proficiency test and English Proficiency Level Allocation.		
Students	Grade obtained in the proficiency test.	English proficiency level band assigned according to the parameters established by the researchers based on the oral performance features suggested by CEFLR.
Student A	40	A2
Student B	30	A1
Student C	22	A1
Student D	28	A1
Student E	22	A1
Student F	32	A1

Overall class level of English	A1

Note: Results obtained by the students from the control group and English Proficiency Level Allocation. Own creation.

Similarly, in the diagnostic test the participants obtained an overall English level of A1. The chart above depicts that 50% of the students (three learners) maintained the grades obtained in the diagnostic test. On the other hand, it was also determined that 50% of the participants increased their overall final scores, but still have a low proficiency language level. Furthermore, *graph 2* illustrates the language mastery level students from the control group obtained after the application of this instrument. Nonetheless, it does not evidence an upgrade on the participants' language proficiency level when compared with the results obtained in the diagnostic test. Indeed, the results reveal that 83% of the students (five individuals) still possess a low language level. However, one of the participants from this group reached an upper low level of mastery (A2). The researchers consider that the obtained results were influenced by several factors. For example, the teaching strategies that the teacher employed in the virtual classes because she used the classes mainly to clarify learners' doubts instead of teaching them. Also, the material influenced the vocabulary learning because the teacher did not use any extra resource to support the teaching process. The lesson was only based on the study guideline. Another reason can be traced to the lessons students received; this lesson was shorter than the classes with other teachers, which did not allow students to be exposed to sufficient language examples, practices, and question clarification.

Consequently, the previous results show the necessity for the teacher to put into practice alternative strategies that help learners to improve their oral production. It is

necessary to mention that comparing the results obtained in both interviews: diagnostic test and proficiency test students of the control group did not present a significant improvement in their oral production. In fact, these learners showed less ability to communicate in the target language than students from the experimental group. For that reason, this project suggests the teachers use digital flashcards as a means to improve the speaking skills between learners.

4.9 Survey directed to the participating students of the experimental group

This instrument was sent via email to the participating students from the experimental group. Also, it was designed by the researchers using *Google Forms*. Consequently, the instrument allowed the researchers to identify the perception of the students about the digital flashcards used during the virtual sessions. First, the researchers inquired the participants about their opinion regarding the implementation of digital flashcards in the virtual English classes, which were taught by their teacher. In this case, 69.2% of the students reported a very high level of acceptance, which suggests that this type of material could be employed in other high school institutions for the teaching of languages as it is appealing to students. This finding supports the argument by Sinchi and Sinchi (2011) who claimed that the teaching-learning process through flashcards allows active classes. Equally, the researchers asked the students how interested they felt in learning vocabulary through digital flashcards. In fact, 76.9% of the participants pointed out a high level of interest in learning vocabulary through this means. This finding shows that digital flashcards could be used as an authentic didactic resource for the teaching of new vocabulary by triggering students´ interest.

Additionally, the researchers asked the subjects if they believe that the use of digital flashcards is an effective strategy for learning English vocabulary. As a matter of

fact, 100% of the learners agreed that digital flashcards are effective, which reveals that this strategy can be shared and recommended to teach vocabulary in the target language. This finding is supported by Taghizadeh et al. (2017) who claimed that "using flashcards is a helpful tool and an effective technique for vocabulary learning" (p. 160). Then, the participating students were asked why they think this strategy is effective for learning English vocabulary. In this sense, the participants emphasized that it was easy for them to remember the vocabulary when it was associated with images, and it helped to recall the words almost instantaneously.

Furthermore, the researchers interrogated the learners how feasible it was to learn new vocabulary through the use of digital flashcards. In this case, 84.6% of the students claimed great ease to acquire new vocabulary. Therefore, the researchers conclude that digital flashcards could be used at other institutions within the same school district due to its versatility when teaching and learning different vocabulary. This conclusion was supported by Byrd and Lansing (2016) who claimed that "flashcards provide a simple way for students to study and learn new vocabulary words and can be used by almost every student" (p. 3).

Moreover, the researchers asked the participants about their opinion regarding the use of digital flashcards as a strategy to foster the acquisition of vocabulary in oral activities. Not surprisingly, 92.3% of learners reported that the implementation of digital flashcards was helpful in oral activities. Therefore, based on data collected from the participants, it can be stated that digital flashcards facilitate the mastery of vocabulary. Furthermore, it was found that this type of materials encourages students to participate in oral activities as they feel confident when using this digital resource.

Additionally, students were inquired why they considered digital flashcards could have helped them use new vocabulary in oral activities. In fact, 69.9% of students concluded that the display of images presented in the digital flashcards facilitated them to recall a word. Also, 30.1% of the students argued that this digital material eased the learning of challenging vocabulary that they normally forget or that was difficult to learn.

On the other hand, the researchers asked the participants about their point of view regarding their command of English vocabulary with the use of digital flashcards. In this case, 92.3% of the subjects agreed that this strategy highly contributed to gain a greater command of English vocabulary. For this reason, it can be inferred that the use of digital flashcards provokes a positive response among pupils when conducting different oral tasks.

In addition, the learners were inquired if they consider that the use of digital flashcards is a creative way to learn the English language. Unanimously, 100% of the participants concluded that using digital flashcards is a very creative way to learn a foreign language. That is why it is then inferred that this type of material could be employed in English lessons since they contribute to maintaining students interest in speaking activities. Accordingly, the influence of two digital flashcards techniques was examined (i.e., image-word and image-sentence) and used by the teacher during the virtual sessions for learning new vocabulary.

An outstanding 92.3% of the participants agreed that the technique image-word significantly helped them during the virtual activities. In contrast, only 7.7% of the subjects pointed out that the technique image-sentence contributed to the acquisition of the target vocabulary. Therefore, the results obtained suggest that students have a

positive perception towards learning the target vocabulary when they constantly see visual aids such as digital flashcards. Furthermore, it is clear that the image-word technique is more effective and more appealing for language learners in terms of the acquisition of English vocabulary. The evidence supported by Susanto (2017) who claimed that "teaching vocabulary using pictures connects students' prior knowledge to a new story, and in the process, it helps them learn new words (p.187)".

Finally, the participants declared about the use of digital flashcards as a means for learning vocabulary. Additionally, the students assured that using digital flashcards favored the learning of the vocabulary more efficiently as opposed to traditional vocabulary learning tasks, in which they have to read extended word banks repetitively, without being even able to use the vocabulary in spoken language. In fact, the participants' responses highlighted the fact that by employing digital flashcards, their oral vocabulary repertoire is expanded; hence, it facilitated the comprehension of the task assignments described on the Self-Study Guidelines. Finally, it can be assured that the information collected from the participating students reveal that digital flashcards are pedagogically engaging and facilitate the vocabulary acquisition process that foreign language learners require to become English competent users.

4.10 Comparative Chart

In this section, the researchers will show a brief analysis by comparing the findings obtained in the fieldwork, the objectives proposed in this study, and theory previously mentioned to support the research.

4.10.1 Diagnostic test and Proficiency test interview

Based on the results obtained in the diagnostic test and proficiency test carried out in both groups, the researchers found that by implementing the use of digital flashcards as a learning strategy with the students of the experimental group, they improved their mastery of vocabulary in oral production tasks. For instance, the learners were able to say complete sentences using the vocabulary learnt in class. As it was mentioned by Habibi (2017), "teaching English vocabulary by using flashcards as media does improve the students' vocabulary mastery" (p. 201). Therefore, it answers one of the research objectives, which aimed to assess the student's use of vocabulary in virtual classrooms for the improvement of speaking skills through the implementation of oral production tasks during the academic English lessons.

As it is depicted in *chart #6*, there is a slightly higher improvement in the students' oral production after the use of digital flashcards as a learning strategy. This chart allows us to compare the grades obtained by the participants in the application of both instruments. Although they did not achieve to change the English proficiency level band, the participants' ability to communicate in the second language increased.

Chart # 6

Results obtained by the participants of the experimental group in the diagnostic test and proficiency test interview and Language Proficiency Level Allocation.

Participating Students.	Grade obtained in the diagnostic test.	Grade obtained in the proficiency test.	English proficiency level band assigned in the diagnostic test according to the parameters established by the researchers based on the oral performance features suggested by CEFLR.	English proficiency level band assigned in the proficiency test according to the parameters established by the researchers based on the oral performance features suggested by CEFLR
			Results obtained by the participants of the experimental group in the diagnostic test and proficiency test interview and Language Proficiency Level Allocation	
Student A	28	32	A1	A1
Student B	20	24	A1	A1
Student C	20	22	A1	A1
Student D	24	28	A1	A1
Student E	36	40	A2	A2
Student F	24	24	A1	A1
Student G	34	36	A2	A2
Student H	28	30	A1	A1
Student I	20	24	A1	A1
Student J	32	32	A1	A1

Student K	20	22	A1	A1
Student L	28	32	A1	A1
Student M	36	40	A2	A2
MEAN			A1	A1

Note: Results obtained by the participants of the experimental group in the diagnostic test and proficiency test and Language Proficiency Level Allocation. Own creation.

Therefore, the results obtained were significant for the present research because they reveal that digital flashcards are a useful learning strategy which was the aim of this project.

4.10.2. Survey applied to the collaborating teachers

Based on the answers provided in the survey, and the objective previously proposed to identify the teaching strategies used by the collaborating English teachers in charge of seventh grade at Esparza High school on virtual classes, and the knowledge they have regarding the methodology they apply, it was found that both teachers use their own pedagogical strategy, for example, one of them uses videos and the other implemented lists of words in her classes. Moreover, it is important to mention that even though they have used printed flashcards, they have not used digital flashcards to teach.

Regarding the strategies provided, it is shown that both use different methods to teach, one of the collaborating teachers uses a traditional strategy and the other uses a more visual strategy. According to Fish, et al (2016) "Educational technology,

specifically in the area of visual aids, has dramatically enhanced teaching and learning" (195). In this sense, it is important to implement interesting strategies that help to improve oral skills and to achieve the objective which is learning. As it is mentioned in the theoretical framework, Noviyenty (2018) explains that:

> Strategies in learning to speak English are one of the important factors to be recognized by students and it is also a part of speaking skill. Learning strategies should be developed in order to improve the students' ability in speaking English (p. 36).

On the other hand, it was identified that teachers use Action Oriented Method and Modeling and Feedback Method. One of the collaborators implements the methods recommended by MEP for this level and the one that contributes to practice an oral skill. As it was stated in the theoretical framework and argued by Cordoba (2016) "Task Based Approach promotes and stimulates the integration of skills through completing daily-life activities that improves students 'communicative competence because it offers learners the possibility of practicing the target language constantly" (p.14). Following this statement, this method is suitable to develop oral skills due to the fact students are exposed to the language.

4.10.3. Researchers' Observation Checklist Guide

According to collected data from observation checklists and their correlation to theory and proposed objectives, various aspects regarding the advantages of flashcards and effectiveness can be recognized, as well as their corresponding effectiveness.

In particular, it was found that flashcards have positive effects when students are learning English. For instance, the experimental group's learners were able to express

ideas, and they mastered more vocabulary when using flashcards as supporting resources during classes. In other words, pupils answered questions, shared information, and mentioned words while the teacher was presenting the flashcards. Also, this kind of resource improves retention of vocabulary so that students could use the learned content to include it in sentence structures, and short passages. Moreover, sometimes participants demonstrated confidence while using the proposed material because they were willing to take part in class, and they expressed joy while they were participating. In the same line, the researchers inferred that the teacher in charge of the experimental group promoted a dynamic, interactive, participative, and active class by taking advantage of the flashcard's resource.

Those findings are supported by Sinchi and Sinchi (2011) who pointed out some advantages of flashcards, such as: they are enjoyable materials, permit easy acquisition of vocabulary, enhance fun and interactive educational experiences, and they are active sources, and so on. Based on the authors affirmations, it can be argued that the results from fieldwork through observations confirmed the theory; as a result, flashcards may be determined as useful materials which provide different advantages to teaching and learning processes. At the same time, the objective was verified because flashcards improve the mastery of vocabulary in oral production tasks through the implementation of the Task-Based approach in virtual EFL classrooms.

In the same manner, as a result of flashcard implementation sessions, the researchers observed that there is a gap between the control and the experimental group's performance during the class observations. For example, the experimental group demonstrated that there are positive outcomes when the teacher implements attractive material as digital flashcards that encourage the students' learning improvement.

On the contrary, the collected data taken from the control group showed that students rarely took part in class activity. Also, they showed passive participation because there were not enough factors that encouraged the learning process. This argument is supported by Win (2018) who stated "some students could feel bored doing the same activities in the classroom. If they are not interested in activities, they would not progress much in their language learning" (p. 230). Therefore, teaching methods, educational materials, and their effective application may determine the progress of students' learning. For this reason, the researchers and teachers should take into account the advantages of materials such as digital flashcards which have demonstrated their meaningful contribution to foster the mastery of vocabulary.

In brief, the previous results defined the effectiveness of flashcards when they are implemented in order to stimulate the acquisition of vocabulary to put it in practice through oral tasks.

4.10.4. Experimental group's survey

Based on the student´s opinions gathered from the experimental group, it is concluded that the most effective digital flashcard technique for the mastery of vocabulary is the image-word technique, which suggests that students found it more effective in the process of learning English vocabulary. In fact, this technique also allows the pupils to achieve oral tasks in a dynamic and effective manner when visual aids, such as digital flashcards, are used allowing the participants to improve retention of the vocabulary when associating words with images. The evidence found from the survey supports the argument stated by Sinchi and Sinchi (2011) who claimed that "using flashcards develops and improves retention of information and encourages the connection of knowledge" (p.19-20).

Consequently, the survey helped to identify the advantages of digital flashcards as a learning strategy for the improvement of vocabulary in oral production tasks through the implementation of the Task-Based approach in virtual EFL classrooms. Likewise, it can be stated that the advantages of the digital flashcards used in the experimental group stimulate students' minds to relate the image with the word in English. Also, it creates an active class environment that encourages students to participate and get involved in the oral tasks in an easy and fast way to produce English vocabulary. Additionally, another advantage is that the vocabulary is learned by the students when providing knowledge in real-time to rapidly use it to share ideas and thoughts using English vocabulary. This evidence supports the advantages of flashcards proposed by Sinchi and Sinchi (2011) who stated that "the learning is enjoyable; the information is readily absorbed" (p. 19-20).

CHAPTER V

5. Conclusions

The results evidenced that the use of digital flashcards help to foster the mastery of vocabulary in oral production tasks. In this study, the participants improved their ability to communicate in the second language. This improvement was not quite noticeable in the English level band, but the students could show an increase of vocabulary when expressing their ideas. Therefore, this study becomes a significant research in the field of language teaching in the Central Pacific Region of Costa Rica.

On the other hand, digital flashcards are a useful strategy for teachers as well. For instance, the type of flashcards can be chosen depending on the cognitive target, linguistic skill, pedagogical preference, and language purpose defined by the instructor.

Also, flashcard materials may be used as supporting resources for introducing a given study topic, reinforcing a content, or practicing a specific micro skill.

Additionally, results obtained showed the effectiveness of the image-word technique since the students of the experimental group felt more confident to express their ideas using the vocabulary acquired through the digital flashcards.

Particularly, in this present study, the image-word flashcard helped students to express ideas because they associate the visual aid with a concept. In other words, this kind of visual material stimulates students to observe, compare, make connections, judge, and interpret. Consequently, flashcards benefit the student's capability to communicate orally in a foreign language.

The researchers concluded that flashcards contribute to an active learning process. Therefore, they promote interactive and dynamic classes where students feel comfortable to participate in the proposed activities. Besides, the researchers observed that students from the experimental group participated more often than participants of the control group. This could be the result of using flashcards as a supporting source in the teaching and learning process of the experimental group.

Results revealed that the experimental group showed better results in learning vocabulary than the control group. There was a significant improvement in the oral production after using the digital flashcards than the traditional classes conducted by the teacher from the control group.

The project showed that most of the students have a basic level band that corresponds to A1 which is not the established by MEP; however, the participants achieved to improve their mastery of vocabulary after using digital flashcards. As a

result, some pupils could communicate successfully during classes and in real life scenarios.

Teachers agreed that there is a gap in achieving a mastery of vocabulary since the main problem identified was the lack of vocabulary to communicate in the foreign language. The use of digital flashcards during the sessions contributed positively to students' participation and interest in learning about correct pronunciation and vocabulary.

Two methods were identified when applying to teach English lessons. One of the teachers used the Action Oriented Approach while the teacher from the control group employed the Modeling and Feedback Approach. However, none of the educators used the Task Based Approach employed in this study.

The study revealed that the collaborating teachers have never used digital flashcards to teach. In this sense, the app *GoConqr* was an innovative and a suitable option in the learning process. Therefore, the implementation of technology is also an important part of improving teaching methodologies. In fact, Jameison et al. (as cited in Ghavifekr and Rosdy, 2015) mention that "the use of technology in education contributes a lot in the pedagogical aspects in which the application of ICT will lead to effective learning with the help and supports from ICT elements and components" (p. 175).This is particularly necessary since teachers need and should be innovative and up to date with tools because they work with a generation of language learners who are surrounded by technological devices, digital applications and learning challenges.

The training session was also important in this study because it was beneficial for the teacher of the experimental group. This session helped the collaborating teacher to learn about the project, the use of digital flashcards, and the proposed activities and

how to apply them with the students. Sometimes, teachers do not use digital material due to lack of confidence and training.

5.1 Recommendations

The following recommendations are proposed by the researchers for future studies that involve the use of digital flashcards as a learning technique of the target language.

A) As researchers, we recommend applying this learning strategy for future studies, but in a different context. In other words, we encourage teachers to use digital flashcards in face-to-face classes not only in virtual classrooms with the purpose of determining if better results are achieved in regard to the students' grades, interest, motivation, participation, level band, and mastery of vocabulary.

B) As a result of the research carried out, it is recommended to use flashcards for a longer term to identify more reliable outcomes related to the benefits provided by this kind of educational material, and if the level band improves.

C) The researchers suggest the use of image-word flashcards to build a digital word bank that contains the vocabulary of the topics being taught to any person who is in the process of learning a second language as an input to enhance the production of sentence structures. The use of this flashcard technique gives students the opportunity to have adequate input to orally communicate in a foreign language.

D) Another suggestion could be to explore other types of flashcards and different techniques to find out which one is more effective to teach and practice vocabulary or a certain type of skill or micro skill.

E) The researchers suggest teachers to use digital flashcards with different groups since this study only considered one group for the implementation of this learning strategy. The willingness to participate and communicate in the foreign language could vary from one group to another. Therefore, the results aimed to achieve might be more beneficial.

CHAPTER VI

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7. Appendices

Appendix A

Survey directed to the collaborating teachers

Universidad de Costa Rica
Facultad de Educación
Escuela de Formación Docente
Departamento de Educación Secundaria

Proyecto de tesis para optar por el grado de Licenciatura en la enseñanza del inglés

General objective: To identify the teaching strategies used by the collaborating English teachers in charge of seventh grade at Esparza High school on virtual classes and the knowledge they have regarding the methodology they apply.

Description of the instrument: The present survey has the purpose to identify the teaching strategies teachers use in virtual classes and the knowledge they have regarding the methodology they use. This information is exclusively for the development of a thesis research project for the degree of Licenciatura de la Universidad de Costa Rica; therefore, it will only be used for academic purposes and will be confidential. Thank you in advance for your cooperation.

General Instructions: Write an (x) over the letter that represents your answer to the following questions and write your opinion in the space provided.

1. In your opinion, what issues may the lack of vocabulary affect the oral performance of students?

_____
_____
_____
_____

2. Have you ever used flashcards as a teaching strategy?

(A) Yes

(B) No

3. What do you think about using virtual apps to teach English as a Second Language?

_____
_____
_____
_____

4. What virtual app(s) do you use in your classes? You can check several options.

(A) Whatsapp	(D) Zoom
(B) Google Classroom	(E) Woot it
(C) Microsoft Teams	(F) Other(s) (specify): _____

5. What language teaching method(s) do you use in virtual classrooms?

_____
_____
_____
_____

6. What kind of pedagogical strategies have you used to teach new vocabulary online?

_____
_____
_____
_____

7. Do you consider that virtual resources have caught more students' attention than printed material?

(A) Yes

(B) No

(C) Both

8. How have virtual classes influenced the students to learn new vocabulary?

_____
_____
_____
_____

9. Do you use digital flashcards in your virtual classes?

(A) Yes

(B) No (move on to question #11)

10. How often do you use digital flashcards to teach vocabulary to seventh grade students at Esparza High school?

(A) Always

(B) Almost Always

(C) Sometimes

(D) Rarely

(E) Hardly ever

(F) Never

11. How often do you have virtual classes with the students?

(A) All weekdays

(B) Once a week

(C) Twice or more than twice a week

(D) Every fifteen days.

(E) Once a month

(F) Other (specify): _____.

12. How have virtual classes influenced the students learning' process?

_____
_____
_____
_____

Appendix B

Researchers' Observation Checklist Guide

Universidad de Costa Rica
Facultad de Educación
Escuela de Formación Docente
Departamento de Educación Secundaria

Proyecto de tesis para optar por el grado de Licenciatura en la enseñanza del inglés

General objective: To assess the students' use of vocabulary in oral tasks through EFL virtual classes in one experimental group of seventh grade students from Esparza High school.

Description of the instrument: This checklist was designed to assess the students' use of vocabulary in oral tasks through EFL virtual classes in an experimental group of seventh grade students from Esparza High school.

General Instructions: The collaborating teacher applies the flashcards techniques and activities while the researchers check the aspects to be assessed from each student in every task.

Chart # 7

Observation Checklist Guide.

Aspects to be observed: The participating students...	Always	Sometimes	Rarely	Never
1. Use the target vocabulary in all the class activities.				
2. Participate in each class activity.				
3. Produce complete sentences using the				

vocabulary given.				
4. Show interest for learning through the use of flashcards.				
5. Identify the vocabulary meaning through the use of flashcards.				
6. Use the vocabulary given in the oral tasks.				
7. Show confidence while speaking English.				
8. Communicate in the second language while using flashcards.				
9. Show vocabulary mastery during the whole class.				

Note: Observation Checklist guide to assess the students' use of vocabulary in oral tasks. Own creation.

Comments and observations

_____
_____
_____
_____

Researchers' Observation Checklist Guide

Universidad de Costa Rica
Facultad de Educación
Escuela de Formación Docente
Departamento de Educación Secundaria

Proyecto de tesis para optar por el grado de Licenciatura en la enseñanza del inglés

General objective: To assess the students' use of vocabulary in oral tasks through EFL virtual classes in one control group of seventh grade students from Esparza High school.

Description of the instrument: This checklist was designed to assess the students' use of vocabulary in oral tasks through EFL virtual classes in a control group of seventh grade students from Esparza High school.

General Instructions: The researchers check the aspects to be assessed from each student in every oral task applied by the collaborating teacher.

Chart # 8

Observation Checklist Guide

Aspects to be observed: The participating students...	Always	Sometimes	Rarely	Never
1. Use the target vocabulary in all the class activities.				
2. Participate in each class activity.				
3. Produce complete sentences using the vocabulary given.				

4. Show interest for learning through the teacher activities.				
5. Identify the vocabulary meaning through the teacher activities.				
6. Use the vocabulary given in oral tasks.				
7. Show confidence while speaking English.				
8. Communicate in the second language during the class activities.				
9. Show vocabulary mastery during the whole class.				

 Note: Observation Checklist guide to assess the students' use of vocabulary in oral tasks. Own creation.

Comments and observations:

_____
_____
_____
_____
_____
_____

Encuesta dirigida a los estudiantes

Universidad de Costa Rica
Facultad de Educación
Escuela de Formación Docente
Departamento de Educación Secundaria

Proyecto de tesis para optar por el grado de Licenciatura en la enseñanza del inglés

Objetivo General: Determinar la efectividad del uso de «*flashcards digitales*» (en un grupo experimental) como estrategia de aprendizaje para fomentar un mayor dominio de vocabulario en las actividades de producción oral en las clases de inglés de un grupo de séptimo año del colegio de Esparza, Puntarenas. *Entiéndase por flashcards digitales como aquellas tarjetas digitales con vocabulario que comprenden dos técnicas tales como: imagen más palabra o imagen más oración en el idioma inglés.

Descripción del instrumento: La presente encuesta tiene el propósito de determinar la efectividad del uso de «flashcards digitales» (en un grupo experimental) como estrategia de aprendizaje para fomentar un mayor dominio de vocabulario en las actividades de producción oral en una clase de inglés. *Entiéndase por flashcards digitales a aquellas tarjetas con vocabulario que comprenden dos técnicas tales como: imagen más palabra o imagen más oración en el idioma inglés. Esta información es exclusivamente para el desarrollo de un proyecto de investigación de tesis para el grado de Licenciatura de la Universidad de Costa Rica; por lo tanto, solo va a ser usada con fines académicos y será de carácter confidencial. De antemano, gracias por su colaboración.

Instrucciones generales: Haga una (x) para responder cada una de las preguntas y escriba su opinión en los espacios.

1. ¿En la escala de 1-100, qué tanto le gustaron las clases virtuales de inglés impartidas por la docente en las sesiones que se utilizaron flashcards digitales (tarjetas digitales)?

(A) Nada 1% - 10%

(B) Muy Poco 11% - 30%

(C) Poco 31% - 60%

(D) Mucho 61% - 90%

(E) Muchísimo 91%-100%

2. ¿En la escala de 1-100, qué tan interesado(a) se sintió al aprender vocabulario por medio de la estrategia de «flashcards digitales»?

(A) Nada 1% - 10%

(B) Muy poco 11% - 30%

(C) Poco 31% - 60%

(D) Mucho 61% - 90%

(E) Muchísimo 91%-100%

3. ¿Considera usted que el uso de «flashcards digitales» es una estrategia efectiva para aprender vocabulario en inglés? Justifique su respuesta.

(A) Si

(B) No

¿Por qué?

_____

_____

4. ¿Qué tanto se le facilitó aprender nuevo vocabulario a través del uso de «flashcards digitales»?

(A) Nada 1% - 10%

(B) Muy Poco 11% - 30%

(C) Poco 31% - 60%

(D) Mucho 61% - 90%

(E) Muchísimo 91% - 100%

5. ¿Considera usted que el uso de flashcards digitales le ayudó a utilizar más vocabulario en las actividades orales? Justifique su respuesta.

(A) Si

(B) No

¿Por qué?

_____

_____

6. ¿Considera usted que con el uso de las «flashcards digitales» tiene usted un mayor dominio/comprensión del vocabulario en inglés?

(A) Si

(B) No

7. ¿Considera usted que el uso de «flashcards digitales» es una forma creativa para aprender el idioma inglés?

(A) Si

(B) No

8. ¿Cuál de las dos técnicas de «flashcards digitales» utilizadas por su profesora durante las clases virtuales le ayudó más en el aprendizaje de vocabulario en inglés?

(A) Imagen+palabra.

(B) Imagen+oración.

9. ¿De qué manera cree usted que le ayudó el uso de «flashcards digitales» en el aprendizaje de vocabulario?

_____
_____
_____
_____

Interview for the participating students

Universidad de Costa Rica
Facultad de Educación
Escuela de Formación Docente
Departamento de Educación Secundaria

Proyecto de tesis para optar por el grado de Licenciatura en la enseñanza del inglés

Student`s name: _____   Date: _____

Total points: 25   points Obtained: _____   Final Grade: _____

<u>**General Objective:**</u> To assess the students' use of vocabulary previous the use of digital flashcards as a learning strategy in oral production tasks to improve their speaking skills.

<u>**Description of the instrument:**</u> The present interview will be administered in order to assess the students' use of vocabulary before the use of digital flashcards as a learning strategy in oral production tasks to improve their speaking skills.

<u>**General Instructions:**</u> Researchers will ask each participating student from the control and experimental group three questions from three contents studied in previous sections. They will use the rubric below to evaluate learners during the interview.

Questions

Here I am

1- Personal information - preferences

- How old are you?
- What do you like to do?
- Mention the name of 3 healthy foods and 3 junk foods?

2- Family members

- How many brothers and sisters do you have?
- What is your mother's name?
- What is your father's name?

3- Daily Routines

- Mention 3 daily routines.
- What is your favorite hobby?
- What time do you wake up on Mondays?
-

Chart # 9

Rubric for evaluating the use of studied vocabulary during the interview.

	Descriptors					
*AE Aspects to Evaluate	**Excellent** **5**	**Very Good 4**	**Good** **3**	**Regular** **2**	**Need Improvement 1**	**Total Points**
Pronunciation	Student always pronounces correctly.	Student almost always pronounces correctly.	Student sometimes pronounces correctly.	Student rarely pronounces correctly.	Student hardly ever pronounces correctly.	
Grammar	Student always uses grammar structures orally in a correct way.	Student almost always uses grammar structures orally in a correct way.	Students sometimes uses grammar structures orally in a correct way.	Student rarely uses grammar structure orally in a correct way.	Student hardly ever uses grammar structures orally in a correct way.	
Vocabulary	Student always applies vocabulary studied in class in oral context.	Student almost always applies vocabulary studied in class in oral context.	Student sometimes applies vocabulary studied in class in oral context.	Student rarely applies vocabulary studied in class in oral context.	Student hardly ever applies vocabulary studied in class in oral context.	
Content	Student always includes the content learned in previews classes in spoken tasks.	Student almost always includes the content learned in previews classes in spoken tasks.	Student sometimes includes the content learned in previews classes in spoken tasks.	Student rarely includes the content learned in previews classes in spoken tasks.	Student hardly ever includes the content learned in previews classes in spoken tasks.	
Fluency	Student always speaks fluently.	Student almost always speaks fluently.	Student sometimes speaks fluently.	Student rarely speaks fluently.	Student hardly ever speaks fluently.	
Total points obtained						

Note: This rubric is used for evaluating the mastery of vocabulary during an interview. Own creation.

Appendix F

Interview for the participating students

Universidad de Costa Rica
Facultad de Educación
Escuela de Formación Docente
Departamento de Educación Secundaria

Proyecto de tesis para optar por el grado de Licenciatura en la enseñanza del inglés

Student`s name: _____   **Date:** _____

Total points: 25   **points Obtained**: _____   **Final Grade:** _____

General Objective: To assess the students' use of vocabulary after using digital flashcards as a learning strategy in oral production tasks to improve their speaking skills.

Description of the instrument: The present interview will be administered in order to assess the students' use of vocabulary after the use of digital flashcards as a learning strategy in oral production tasks to improve their speaking skills.

General Instructions: Researchers will ask each participating student from the control and experimental group three questions from three contents studied in previous sections. They will use the rubric below to evaluate learners during the interview.

Questions

Here I am

1- Personal information - preferences

   ● What is your favorite food? Why?
   ● What is your address and cellphone number?
   ● What healthy habits do you like to do?

2- Family members

   ● What are you like?
   ● Describe 3 family members
   ● Which is your favorite natural place in Costa Rica to go with your family?

3- Daily Routines

- What time do you get up on weekends?
- What do you do in the mornings?
- What is your favorite kind of movie?

Chart # 10

Rubric for evaluating the use of studied vocabulary during the interview.

	Descriptors					
*AE Aspects to Evaluate	**Excellent** **5**	**Very Good** **4**	**Good** **3**	**Regular** **2**	**Need Improvement** **1**	**Total Points**
Pronunciation	Student always pronounces correctly.	Student almost always pronounces correctly.	Student sometimes pronounces correctly.	Student rarely pronounces correctly.	Student hardly ever pronounces correctly.	
Grammar	Student always uses grammar structures orally in a correct way.	Student almost always uses grammar structures orally in a correct way.	Students sometimes uses grammar structures orally in a correct way.	Student rarely uses grammar structure orally in a correct way.	Student hardly ever uses grammar structures orally in a correct way.	
Vocabulary	Student always applies vocabulary studied in class in oral context.	Student almost always applies vocabulary studied in class in oral context.	Student sometimes applies vocabulary studied in class in oral context.	Student rarely applies vocabulary studied in class in oral context.	Student hardly ever applies vocabulary studied in class in oral context.	
Content	Student always includes the content learned in previews classes in spoken tasks.	Student almost always includes the content learned in previews classes in spoken tasks.	Student sometimes includes the content learned in previews classes in spoken tasks.	Student rarely includes the content learned in previews classes in spoken tasks.	Student hardly ever includes the content learned in previews classes in spoken tasks.	
Fluency	Student always speaks fluently.	Student almost always speaks fluently.	Student sometimes speaks fluently.	Student rarely speaks fluently.	Student hardly ever speaks fluently.	
Total points obtained						

Note: This rubric is used for evaluating the mastery of vocabulary during an interview. Own creation.

English Level Bands Allocation

Instrument for the researcher to evaluate the English level band of participants based on the CEFLR.

Universidad de Costa Rica
Facultad de Educación
Escuela de Formación Docente
Departamento de Educación Secundaria

Proyecto de tesis para optar por el grado de Licenciatura en la enseñanza del inglés

General Objective: To evaluate the students English proficiency level band assigned according to the parameters established by the researchers based on the oral performance features suggested by CEFLR.

Description of the instrument: The present instrument will be administered in order to evaluate the students' English proficiency level band assigned according to the parameters established by the researchers based on the oral performance features suggested by CEFLR.

General Instructions: Researchers will use the chart below to evaluate learners after the pre and post interview in order to make a comparison with the obtained results and determine the effectiveness of digital flashcards for improving vocabulary mastery in oral tasks.

A. A1= 0-12

B. A2= 13-30

C. B1= 31-50

D. B2= 51-84

E. C1= 85-94

F. C2= 95-100

Chart # 11

English Proficiency Level Allocation.

Students	Grade obtained in the oral test interview.	English proficiency level band assigned according to the parameters established by the researchers based on the oral performance features suggested by CEFLR.
Student A		
Student B		
Student C		
Student D		
Overall class level of English		

Note: English Proficiency Level Allocation results. Own creation.

Appendix H

Flashcards material

GTA 1

https://www.goconqr.com/es-ES/flashcard/24619688/Family-Members

https://www.goconqr.com/es-ES/flashcard/24474981/Personal-Information

GTA 2

https://www.goconqr.com/en/flashcard/24477739/Likes

https://www.goconqr.com/en/flashcard/24477484/Characteristics

GTA 3

https://www.goconqr.com/es-ES/flashcard/24712058/Food

https://www.goconqr.com/es-ES/flashcard/24713468/Daily-Routines

GTA 4

https://www.goconqr.com/es-ES/flashcard/24713649/Marvels

https://www.goconqr.com/es-ES/flashcard/24713813/Nature-

https://www.goconqr.com/es-ES/flashcard/25401847/Getting-Back-to-Nature

Activities

Memory game

(PowerPoint presentation)

Jeopardy

https://www.playfactile.com/kd4t4sv1p2

https://www.playfactile.com/kdria1sja0

Matching

https://www.liveworksheets.com/vg1143390vy

Chart # 12

Chronogram for the application of digital flashcards.

	# Session	**Date**	**Material (GTA)**	**Flashcard Strategy**	**Name of Activity**	**Mean**	**Time**
Experimental group	Training Session	August 4th	Flashcards/ Links	Image-Word Image-Sentence	-Explanation: use of flashcards materials -Organization of virtual class	Zoom meeting	1 hour
	Session #1: Diagnostic Test	August 7th	Question from instrument	Oral interview	Diagnostic Test	Teams Platform	
	Session #2: Flashcard Application	August 11th	GTA#1 and GTA #2	Flashcards (Image-Word Image-Sentence) Memory Game (Image-sentence)	Memory Game	Teams Platform	1 hour 30 minutes
	Session #3: Flashcard Application	August 31st	GTA#3 and GTA #4	Flashcards (Image-Word Image-Sentence) Jeopardy (Image-Word)	Jeopardy	Teams Platform	1 hour 30 minutes
	Session #4: Flashcard Application	September 8th	GTA #5	Flashcards (Image-Word Image-Sentence) Matching (Image-Word)	Matching	Teams Platform	1 hour

	Session #5: Flashcard Application	September 16th	GTA #5	Flashcards (Image-Word Image-Sentence) Storytelling (Image-Sentence)	Storytelling	Teams Platform	1 hour 30 minutes
	Session #6: Post-test	September 18th (morning)	Question from instrument	Oral interview	Post-test	Teams Platform	
Control group	Session #1: Diagnostic Test	August 6th	Question from instrument	Oral interview	Diagnostic test	Teams Platform	
	Session #2: Class Observation	August 10th	Checklist for researchers	--------------	---------------	Teams Platform	1 hour
	Session #3: Class Observation	September 1st	Checklist for researchers	--------------	--------------	Teams Platform	1 hour
	Session #4: Class Observation	September 7th	Checklist for researchers	--------------	--------------	Teams Platform	1 hour
	Session #5: Class Observation	September 17th	Checklist for researchers	--------------	--------------	Teams Platform	1 hour
	Session #6: Post-test	September 18th (In the afternoon)	Question from instrument	Oral interview	Post-test	Teams Platform	

Note: Chronogram for the application of digital flashcards. Own creation.

Chart # 13

Chronogram for the extra period.

Cronograma de Actividades (periodo de Prorroga)	
Actividad	**Periodo de realización**
Enviar versión final de proyecto a las lectoras para revisión.	13 de diciembre de 2020
Los lectores devuelven el proyecto con las revisiones del trabajo.	1 febrero de 2021
Los estudiantes devuelven el proyecto con las correcciones del trabajo a los lectores para una revisión final.	15 de febrero de 2021
Los lectores devuelven el proyecto enviado para la revisión final.	21 marzo de 2021
El proyecto debe estar revisado y aprobado para que la directora sugiera los trámites para la solicitud de la defensa de tesis a Dirección.	30 de abril de 2021
Solicitud de Defensa de la tesis al comité de TFG.	14 de mayo 2021
Entrega de los empastes de lujo.	Mayo de 2021
Preparación de la presentación de la defensa.	Mayo de 2021

Note: Cronograma de actividades (periodo de prorroga). Own creation.

Appendix K

UNIVERSIDAD DE COSTA RICA | Escuela de Formación Docente Escuela de Lenguas Modernas | Licenciatura en la Enseñanza del Inglés como Lengua Extranjera

Jueves 23 de julio, 2020

SOLICITUD DE AUTORIZACION

MSc Rosemary Soto Ovares
Directora Liceo de Esparza
Dirección Regional de Educación de Puntarenas, Circuito 08

Respetable señora,

Bajo mi condición de Director de la propuesta de investigación titulada: "Tarjetas digitales: una estrategia de aprendizaje útil para fomentar el dominio de las palabras en las tareas de producción oral utilizando el enfoque basado en tareas en un aula virtual de inglés como lengua extranjera de sétimo año, modalidad *Memoria de Graduación*, presentado por los estudiantes Andreina Córdoba Espinoza, cédula 603800276; Jennifer Tatiana Alvarado Rodríguez, cédula 115490927; Raquel Delgado Calvo, cédula 604260611, y Luis Fernando Villalobos Mendoza, cédula 304400835. Todos ellos, estudiantes del Programa de Licenciatura en la Enseñanza del inglés como Lengua Extranjera, de la Universidad de Costa Rica, Sede Regional del Pacífico. Respetuosamente, solicito su autorización para que los estudiantes anteriormente mencionados realicen su trabajo de investigación en el Liceo de Esparza, durante el segundo semestre del presente año, específicamente durante el periodo comprendido desde 3 de Agosto al 11 de Setiembre. Para poder llevar a cabo su trabajo académico, los estudiantes requieren aplicar diversos instrumentos de investigación en el grupo de estudiantes de sétimo año a cargo de las profesoras M.Sc. Patsy Campos Chacón (colaboradora de los dos grupos experimentales) y Licda. Melissa Peña Bejarano (colaboradora de los dos grupos control), quienes, amablemente, han mostrado su disposición de poder colaborarnos con nuestra investigación, siempre y cuando cuenten con el Visto Bueno de su parte para poder realizar el estudio, durante las lecciones de inglés académico, de los estudiantes del escenario 1, es decir, aquellos estudiantes que trabajan de forma

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sincrónica, durante al menos un trimestre. El trabajo a realizar es indispensable para optar por el grado de Licenciatura en la Enseñanza del Inglés; además considero que este proyecto reúne los requisitos necesarios y méritos suficientes para ser ejecutado. El objetivo de la investigación es: analizar la efectividad del uso de tarjetas digitales como estrategia de aprendizaje para fomentar el manejo de palabras cuando se aplican tareas de producción oral en una clase de inglés como lengua extranjera en estudiantes de séptimo año.

Cabe mencionar que los datos suministrados por los participantes de la institución, en nuestra investigación, serán tratados en todo momento con discreción y no se expondrá en ningún aspecto ni a la institución, ni al personal docente, ni la identidad de las personas estudiantes, por cuanto el fin del estudio es proponer estrategias para el mejoramiento de la enseñanza del idioma inglés, en esta importante institución, y no pretende en ninguna medida exponer aspectos que puedan ser mejorados.

De antemano le agradezco su colaboración y apoyo en el proceso de formación profesional de estos estudiantes, le adjunto, además, una fórmula de consentimiento informado, que contiene detalles específicos sobre la propuesta de investigación, para que por favor la firme en caso de contar con su valiosa aprobación. Cualquier consulta o duda al respecto, no dude en contactarme.

Saludos cordiales,

Dr. Jorge Andrés González Porras.

Director del proyecto de investigación
Universidad de Costa Rica.
Cédula: 206370503
Tel: 88936114
Correo electrónico: jorge.gonzalez.porras@ucr.ac.cr

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CONSENTIMIENTO INFORMADO

Con el fin de ofrecer un panorama confiable y transparente acerca del proyecto de investigación que se desea llevar a cabo en el Liceo de Esparza, se hace de su conocimiento las distintas pautas procedimentales que se han definido previo a su implementación. Por lo que respetuosamente, adjuntamos un resumen de aquellos aspectos más relevantes, que están contemplados en el informe escrito de nuestra investigación, a fin de poder aclarar cualquier duda que pudiese suscitar.

Objetivo General de la Investigación:

1. Analizar la efectividad del uso de tarjetas digitales como estrategia de aprendizaje para fomentar el manejo de palabras cuando se aplican tareas de producción oral en una clase de inglés como lengua extranjera en estudiantes de séptimo año.

Rol de los investigadores, en el entorno virtual.

Realizar siete intervenciones pedagógicas en función de observadores pasivos en clases virtuales por medio de la plataforma Teams, con el fin de valorar el desempeño de los estudiantes en las actividades propuestas por los investigadores utilizando las tarjetas visuales como estrategia de aprendizaje. Además, después de las intervenciones complementar los datos con información obtenida a través de la aplicación de instrumentos de investigación (dirigidos a estudiantes y docentes a cargo de los grupos) tales como encuestas, listas de verificación, y entrevistas sobre las actividades realizadas.

Incidencia del estudio de investigación en la institución educativa.

Los beneficios consisten en proveer al docente a cargo de los grupos experimentales y grupos control una guía de material didáctico digital con flashcards y actividades de producción oral, con el fin de mejorar el dominio del idioma inglés en los estudiantes, reforzar los contenidos abordados en las Guía de Aprendizaje Autónomo (GTA) 1,2,3,4 de los grupos experimentales y al mismo tiempo para que estos recursos puedan ser utilizados en la enseñanza de los contenidos en futuras generaciones.

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Confidencialidad:

El proceso de investigación será estrictamente confidencial. Es decir, los datos personales de los participantes se mantendrán en total anonimato, en todo momento. Asímismo, los resultados del proyecto, serán manejados con total discreción académica, una vez que se realice el análisis de la información y cuando la investigación sea publicada.

Participación de las personas estudiantes y docentes colaboradores.

La participación de estos actores es totalmente voluntaria.

Autorización final.

He leído toda la información descrita en esta fórmula antes de firmar. Se me ha brindado la oportunidad de hacer preguntas y éstas han sido contestadas en forma adecuada. Por lo tanto, acepto participar como facilitador de la población estudiantil en el presente estudio.

Firma de la Directora del centro educativo:

DIRECCION REGIONAL DE ENSEÑANZA
Puntarenas
Circuito. 08- Coo ...
DIRECCION
Liceo de Esparza Puntarenas

Le agradecemos el apoyo que pueda brindarnos.

Atentamente,

- Andreina Córdoba Espinoza, # de cédula 603800276, # de teléfono. 62460683, correo electrónico: acordobaespinoza@gmail.com
- Jennifer Tatiana Alvarado Rodríguez, # de cédula 115490927, # de teléfono: 85098236, correo electrónico: jennifer.alvarado812@gmail.com
- Raquel Delgado Calvo, # de cédula 604260611, # de teléfono: 87194516, correo electrónico: rakeldelgadocalvo@gmail.com
- Luis Fernando Villalobos Mendoza, # de cédula 304400835, # de teléfono: 89260172, correo electrónico: luisfvm89@gmail.com

Estudiantes del programa de Licenciatura en la Enseñanza del Inglés, Escuela de Lenguas Modernas, Sede del Pacífico, UCR.