

UNIVERSIDAD HISPANOAMERICANA  
FACULTY OF EDUCATION

THESIS SUBMITTED TO OBTAIN THE LICENCIATE DEGREE FOR ENGLISH TEACHING

**The Impact of Implementing the Usage of Tablets as a Technological Resource in the Learning of English Language Process in Students of the 4th Level of Primary Education at Carmen Lyra Educational Center in San Carlos, Alajuela during the 1st Quarter 2023.**

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**Carrera: Licenciatura en la Enseñanza del Inglés**

**Estimado señor**

La estudiante Andrea Alvarado Durán, cédula de identidad 1-1456-0016 me ha presentado para efectos de revisión y aprobación, el trabajo de investigación denominado "*The Impact of Implementing the Usage of Tablets as a Technological Resource in the Learning of English Language Process in Students of the 4th Level of Primary Education at Carmen Lyra Educational Center in San Carlos, Alajuela during the 1st Quarter 2023*", el cual ha elaborado para obtener su grado de Licenciatura en la enseñanza del Inglés

He revisado y he hecho las observaciones relativas al contenido analizado, particularmente lo relativo a la coherencia entre el marco teórico y análisis de datos, la consistencia de los datos recopilados y la coherencia entre éstos y las conclusiones; asimismo, la aplicabilidad y originalidad de las recomendaciones, en términos de aporte de la investigación. He verificado que se han hecho las modificaciones correspondientes a las observaciones indicadas.

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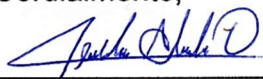
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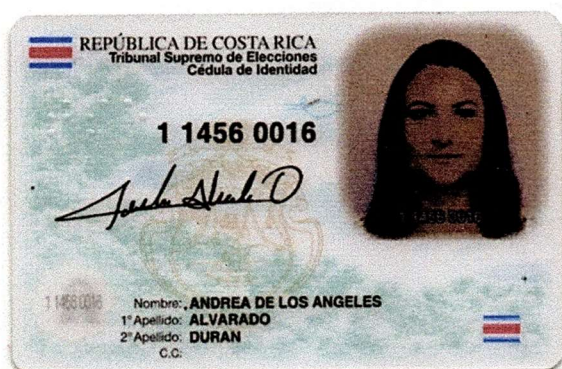
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## DEDICATORY

First, I want to express my gratitude to my husband for his constant encouragement throughout this journey. His continuous presence during the most difficult times, his unshakable faith in my faculties, and his tireless support have illuminated my path and pushed me forward. He supported me in every decision I made and every challenge I faced. I dedicate this thesis to him as a result. Your love and support have been a constant source of inspiration for me.

This thesis is also dedicated to myself as a testimony of my journey of self-discovery and growth. This dedicatory honor the second chances, the ability to transform difficulties into successes and as well as the self-confidence that pushed me beyond my comfort zones.

This dedicatory serves as a reminder that I have the strength to succeed, learn, and thrive.

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## ABBREVIATIONS

- **A.O.A:** *Action-Oriented Approach*
- **AI:** *Artificial intelligence*
- **AOA:** *action-oriented approach*
- **CEFR or CEF or CEFRL:** *Common European Framework of Reference for Languages*
- **DALF:** *Diplôme Approfondi de Langue Française (means French Language Learning Diploma)*
- **DELF:** *Diplôme d'Etudes en Langue Française (means French language studies diploma.)*
- **ESL:** *English as Second Language*
- **ICTs:** *Information and Communication Technologies*
- **ISTE:** *International Society for Technology in Education*
- **IT:** *Information Technology*
- **ITP:** *Institutional Testing Program*
- **LMS:** *Learning management systems*
- **M.E.P:** *Ministerio de Educación Pública*
- **NEA:** *National Education Association*
- **TestDaF:** *The test Deutsch als Fremdsprache (means test of German as a foreign language.)*
- **TOEFL:** *Test of English as a Foreign Language*
- **TPACK:** *Technological pedagogical content knowledge*
- **UNESCO:** *United Nations Educational, Scientific and Cultural Organization*
- **UTAUT2:** *Unified Theory of Acceptance and Use of Technology 2*

## ABSTRACT

During the first semester of 2023, this study investigated "the impact of implementing the usage of tablets as a technological resource in the learning of English language process." Over the course of six chapters, the main goal of the study was to show how using tablets could have affected the process of learning a second language, specifically English. Also looked at were the pros and cons of using tablets in this educational center, as well as how well the teacher and students could use these technological tools to learn a language.

Previous research had pointed out the possible benefits of using tablets as learning tools in a variety of educational settings. But this work focused on a detailed analysis of how using tablets affected fourth-grade English learning students at the Carmen Lyra school in San Carlos, Costa Rica. Also, the English teacher of that group worked closely with the researcher to get a better understanding of how the classroom worked and how the technology was used.

In the first chapter, the problem was set up and the reasons for the investigation were looked into. This study examined how the use of tablets as a technological resource affects English learning and formulated guiding research questions. Also, the topic was justified by pointing out how important it was in the current educational context and how important it was to understand how technology could affect learning a second language.

In the second chapter, the conceptual and theoretical framework for the study was set up by defining the main ideas like learning a second language, educational technology, and using tablets in the classroom. Also, previous studies that looked at the pros and cons of using tablets as learning and teaching tools were reviewed.

The research method was explained in the third chapter, which was called "Methodological Framework." In this chapter, "Type of Research" was defined as applied and cross-sectional research. Also, it was said that it was a micro study because it was aimed at a certain group of students and their teachers. It was explained that the study was qualitative and descriptive. Also shown was how data were collected through observation, focus group, and interview.

The results of the research were given in the fourth chapter. In this section, the data collected during the study were checked, and the impact of using tablets on fourth-grade students' English learning was evaluated. Both academic progress and what students and teachers thought about how tablets were used in the classroom were examined.

The fifth chapter was about the results. In this chapter, the findings were analyzed in detail and related to the theories that were reviewed in the theoretical framework. The good and bad things found during the study were observed, as well as the implications for teaching and recommendations for educational practice.

In the sixth and final chapter, a specific proposal was created to address the problems found during the investigation. This idea was based on the students and teacher outcomes. The goal was to improve the learning process using technology. Strategies and tips were given on how to use tablets in the English classroom more effectively.

In conclusion, this research gave detailed feedback of how using tablets as a technological resource would affect learning English. By focusing on fourth-grade students at the Carmen Lyra school in Costa Rica and working with the English teacher, a contextually relevant analysis was made. The final proposal gave practical advice to teachers who want to use or improve the integration of tablets in their classrooms. The goal was to speed up the process of learning English through the use of technology.

## RESUMEN

La presente investigación, tuvo lugar durante el primer semestre del año 2023, se enfocó en examinar "El Impacto de la Implementación del Uso de Tabletas como Recurso Tecnológico en el Aprendizaje del Inglés". A lo largo de seis capítulos, el estudio tuvo como objetivo principal demostrar cómo el uso de tabletas pudo haber influido en el proceso de aprendizaje de un segundo idioma, específicamente el inglés. Además, se exploraron tanto las ventajas como las desventajas que surgieron al emplear las tabletas en este contexto educativo y se analizó la capacidad de docentes y estudiantes para incorporar estas herramientas tecnológicas de manera efectiva en la adquisición del idioma.

Investigaciones anteriores habían señalado los posibles beneficios de utilizar tabletas como herramientas de aprendizaje en diversas áreas educativas. Sin embargo, este trabajo se centró en el análisis concreto del impacto del uso de tabletas en el aprendizaje del inglés por parte de estudiantes de cuarto grado en la institución educativa Carmen Lyra, ubicada en San Carlos, Costa Rica. Además, se colaboró estrechamente con la docente de inglés de dicho grupo para obtener una comprensión más completa de la dinámica del aula y la implementación de la tecnología.

En el primer capítulo, se planteó el problema y se exploraron los antecedentes que justificaban la investigación. Este estudio analizó el impacto del uso de tabletas como recurso tecnológico en el aprendizaje del idioma inglés e identificó preguntas clave para guiar esta investigación. Además, se justificó el tema enfatizando su relevancia en el contexto educativo actual y la importancia de comprender cómo la tecnología podía impactar la adquisición de una segunda lengua.

En el capítulo dos se estableció el marco conceptual y teórico para la investigación, definiendo conceptos clave como la adquisición de un segundo idioma, la tecnología educativa y el uso de tabletas en el aula. También se revisaron estudios previos que habían examinado la eficacia o desventajas de las tabletas como herramientas de enseñanza y aprendizaje.

El tercer capítulo, titulado “Marco Metodológico”, describió la metodología de la investigación. En este capítulo se definió el "Tipo de Investigación" como una investigación aplicada y transversal. Además, se mencionó que era un estudio micro, ya que se dirigía a un grupo específico de estudiantes y sus profesores. Se explicó la naturaleza del estudio, que era cualitativo y de carácter descriptivo. También se presentó la recopilación de datos a través de la observación, grupo focal y entrevista.

El cuarto capítulo presentó los resultados de la investigación. En este capítulo se analizaron los datos recopilados durante el estudio y se evaluó el impacto del uso de tablets en el aprendizaje del inglés por parte de los estudiantes de cuarto grado. Se examinaron tanto el progreso académico como la percepción de los estudiantes y la docente sobre la integración de las tabletas en el aula.

El quinto capítulo se centró en la discusión de los resultados obtenidos. En este capítulo se analizaron en detalle los hallazgos y se relacionaron con las teorías revisadas en el marco teórico. Se exploraron los aspectos positivos y negativos identificados durante el estudio, así como las implicaciones pedagógicas y las recomendaciones para la práctica educativa.

El sexto y último capítulo presentó una propuesta concreta dirigida a abordar las deficiencias identificadas a lo largo de la investigación. Esta propuesta se basó en los resultados obtenidos a través de la retroalimentación de los estudiantes y la docente. Se ofrecieron estrategias y pautas

para una implementación más efectiva de las tabletas en el aula de inglés, con el objetivo de mejorar el proceso de aprendizaje y maximizar el potencial de la tecnología.

En conclusión, esta investigación ofreció una visión detallada del impacto de implementar el uso de tablets como recurso tecnológico en el aprendizaje del inglés. Al centrarse en estudiantes de cuarto grado en la institución Carmen Lyra en Costa Rica, y colaborar con la docente de inglés, se proporcionó un análisis contextualmente relevante. La propuesta final brindó orientación práctica para docentes interesados en adoptar o mejorar la integración de tabletas en sus aulas, con el propósito de optimizar el proceso de adquisición del idioma inglés mediante el uso de la tecnología.

**CHAPTER I:**  
**RESEARCH PROBLEM**

## 1.1 PROBLEM STATEMENT

### 1.1.1 Background of the problem

Actual and Potential Pedagogical Use of Tablets in Schools was a study done by Rikala, Vesisenaho, and Myllari (2013) in Finland. Its goal was to look at how tablet technology could be used to teach and learn. According to the writers, tablets have had less of an effect on schools than teachers thought they would. But it was clear that there was a good effect on teaching and learning, as well as a shift in pedagogical views.

In this regard, the authors mention:

Rikala, Vesisenaho and Mylläri (2013)

One key finding of this study is that, in the Finnish context, the actual use of Tablet technology in schools was much lower than what the teachers estimated as the potential benefit. Thus, a significant gap currently exists between perceived and actual use of tablets in regard to pedagogical benefits. One approach toward addressing this gap would be to consider means to support innovative learning practices and their position within both the prevailing school cultures and the national guidelines for education (cf. Hobson, 2012; Norrena, 2013). Although the infrastructure and technical support for the appropriation of ICTs currently exist, and many teachers are aware of them, perhaps the problem is simply a lack of clear and tangible support by national educational guidelines. Should such vision and goals become concretized into clearly articulated guidelines and resource frameworks, the gap between what could be and what could be bridged within living classroom practice. (p.124)

The study previously mentioned is of interest for this research because it allowed to identify that the use of tablets in the educational context can be beneficial, however it is

necessary that teachers accept the challenge of implementing them and linking them with the training process of students.

Algoufi (2016) developed in the United States the research entitled Using Tablet on Education, which aimed to analyze the information and reflections of numerous executions of use of computer tablets in education to find out and advance further. This research showed that although important steps have been taken in the use of technologies in education, basic aspects such as system connectivity and user capacity influence the effects it can have on students and their training.

In this respect the author mentions:

Algoufi (2016)

However, studies revealed that the implementation of tablets can motivate learners to pay attention mostly to the theme. The employ of mobile tools in general help in developing student-based learning surroundings, where learners are accountable to carry on with their learning out of the classroom perimeters. Such an exercise would improve lifelong education capabilities also to the 21st-century proficiencies (Johnson, Brown & Becker, 2013). Universally, tablets help learners to discover, influence, and examine existing knowledge also to interact with their fellow learners and educators everywhere across the globe. Also, it is worth to note that the application of mobile apps on tablets offer an opportunity to have individualized and authentic schooling that takes care of each learner's necessity and mode. (p.118)

Algoufi's study is important because it showed that using tablets to teach students needs to be done in a way that makes it easy for them to get the most out of them. In addition to the above, it's important to note that using technology in the classroom can help students look at what they

already know and interact with their peers and teachers all over the world. This is important because students need to be able to meet current professional needs with the right training so they can face challenges all over the world.

Another of the studies under analysis was the one carried out by Mutlu in Turkey, entitled as Understanding Students' and Teachers' Approaches to Tablet Use in Turkish Secondary Schools: A Model Based Approach. This research tested the model called 'Unified Theory of Acceptance and Use of Technology 2' (UTAUT2) and applied into the scholastic environment in order to identify if it was appropriate to applied in education. The research focused on the prospects and insights of the learners and teachers on the use of tablets in education.

Mutlu (2016)

Thus, as it has been demonstrated throughout this thesis, the answer to this question is that teachers had negative opinions about tablets, and consequently they did not use them. Since it is not possible to offer any explanation on the ways the tablets would have been used, here, I expand the answer to this question by explaining why teachers chose not to use tablets. These findings are just as important as the positive results would have been because “Full integration of computers into the educational system is a distant goal unless there is reconciliation between teachers and computers. To understand how to achieve integration, we need to study teachers and what makes them use computers” (Marcinkiewicz, 1993, p.223), and knowing what makes them not use the technology is another way to improve our way to integration. In this regard, this study identified three main reasons behind teachers’ rejection of

tablets. These findings are consistent with the previous studies and complement their findings. (p.264)

Mutlu found that teachers had a resistance to changes consequently the use of tablets offered a substantial change in the classroom. The author mentioned that this is an inherent issue because teachers used to have a bad reaction to new things especially if it took them out of their comfort zone. The second was the frustrations caused by the lack of support and training, teachers struggled with the filters in school networks and the ban on YouTube. Finally, teachers did not agree that learners played games all time, games did not belong to school.

The research that was conducted in the United States by Nishizaki (2016) and titled *The Effects of Tablets on Learning: Does Studying from a Tablet Computer Affect Student Learning Differently Across Educational Levels* focused on the question of whether or not using tablet computers has an impact on the learning process that varies depending on the level of education being pursued.

With this study, it was possible to identify if the use of technology, in this specific case of tablets, had a significant effect on students, however this depended on the level at which they were, and the teaching-learning strategies used by the professor that were linked to this resource. In this line the author indicates:

Nishizaki (2016)

Regardless of the actual results of the proposed experiments, the current study conveys that there is still much that we don't know regarding the effects that using new technologies has on the efficacy of learning. As technologies continue to be integrated in the classroom, scientists and educators must

continue researching the possible effects that such implementations may have on the learning process. (p.30)

In Costa Rica, the thesis of Vargas (2021) concluded that the use of ICTs (Information and Communication Technologies) as a tool in the classroom had a positive result in the students who were learning English. The students showed more motivation, improving their pronunciation, less concern about applying the language. Likewise, the researcher concluded that it was a challenge for teachers but, in the end, it was a agreeable experience because teachers achieved the goal of students acquiring language skills and they were able to use technologies that they were not used to.

Chacón and Valerio (2020) developed research in Costa Rica and concluded that technological tools were only tools and should not be the only strategy to use in the classroom. Technological devices should be used as a support resource for mediation rather than as the primary source of the strategies. In reference to this research conclusion, there are many skills to develop in a student, some of them are fine and gross motor skills or handwriting that, although they can also be worked through technology, there are plenty of non- technological strategies that can be implemented. However, there must be an integration of ICTs to potentiate the development of skills.

Making mention of the same thesis, the researchers referred to the importance of integration, not just the inclusion of these technological tools. This is because it often happens that teachers use the ICTs without a specific purpose. Therefore, the use of these technological tools does not fulfill any function; the objective is to use these resources with some pedagogical intention.

Chacón and Valerio (2020) also concluded that there is a lack of teacher training regarding the use of technological tools. During their research, the teacher had to be in constant

training. Thanks to these trainings, the teacher carried out a more effective pedagogical mediation, integrating the device in the classroom and in the study programs too; as well as solving technological problems successfully.

#### **1.1.1.1 Research Statement**

Throughout the course of human history, education has been an important factor in the growth and development of nations. This is because education has historically contributed to the political, social, and economic advancement of populations. As a result, the introduction of the COVID-19 epidemic meant that the process of learning came to an end for a great number of people, and the likelihood of restarting face-to-face instruction in the foreseeable future was remote.

According to the United Nations Educational, Scientific, and Cultural Organization (UNESCO), the COVID-19 outbreak affected the schooling of at least 1,575,000 children in 188 countries. Education and training methods in learning communities changed, and public officials had to come up with ways to stop the disease from spreading.

Thus, public educational institutions in Costa Rica made the decision to continue teaching while using ICTs. Because of them, the advancement of educational activities may continue without endangering the integrity of all of the participants in the education sector. In order to maintain the integrity of the educational process, the Costa Rican Ministry of Education created standards on how to set up the academic and administrative organization of educational institutions.

The Ministry of Education of Costa Rica followed this line in the document "Guidelines for the support of the distance educational process" when it said that the COVID-19 pandemic's new social conditions prompted a reevaluation of the relationships, operations, and structure of both public and private organizations. As a result of this circumstance, education

systems all over the globe had to adapt quickly, requiring the development of innovative and resourceful methods that were crucial to the effective solving of several issues. (p.5)

The changes introduced in the educational context contemplated that by the end of the restrictions generated by the pandemic, many educational institutions strengthened the use of technological tools to support the educational process. Including these innovations was not easy because resistance can be foreseen by the teachers and students. In this regard, Azofeifa and Gonzalez (2020) propose the following:

Azofeifa and Gonzalez (2020)

The enormous resistance to change, to the new and innovative, scares them to a great extent magnitude and persist in the idea of staying as they are or just making minimum changes, this makes it difficult to advance new processes in an optimal way, hindering in this way the possibility of getting ahead with what society currently requires, hindering the ability to generate more creative people, with best ideas or renewed concepts and who seek to obtain original solutions. (p.20)

The study conducted by Hyseni & Hoxha (2020) revealed that students may exhibit resistance to change. They also confirmed that the transition of young people to virtual education can lead to a decline in the quality of instruction, teacher performance, and student knowledge and skills. Additionally, they mentioned how the fact that children were being taught at home throughout the distance learning process worried them, their parents, and the teachers who taught them. Certain elements are still unclear, such as evaluation, under-learning, and student overload.

In this line UNESCO Lima, in its document series Teaching and Learning Support Tools Module 1, Innovations in Education, (2016), clearly stated "All innovation involves

entering into unknown territory, which involves some risk, uncertainty, contradiction and conflict. Without disequilibrium or cognitive conflict, there is no learning” (United Nations Educational, Scientific and Cultural Organization, 2016, p.22) which clearly showed that innovation in education is necessary, however it may seem. a tedious, risky, counterintuitive process that produces adequate learning about students.

From this perspective, the use of technological tools such as tablets in the learning of a language that is not native can be an important challenge for educational institutions that decide to venture into this area. It is worth considering in this line what Azofeifa and Gonzalez (2020) express who mention that:

Azofeifa and Gonzalez (2020)

In the age of knowledge and information, traditional educational institutions become anachronistic in the face of actors in the contemporary educational process that link technology to education; However, for that link there are no recipes. It all depends on the context because technology is not everything.

(p.29)

Based on the above, even when the use of technologies is not everything, currently the use of ICTs in education is one of the transcendental changes that allows traditional education to be overcome, and with it, the incorporation of a more constructivist and critical training besides the use of ICTs in the classroom could achieve a disruption in education.

In this line, the use of tablets in the teaching and learning process can represent an important advance in educational innovation, however this must be valued from different perspectives to have clarity on the effects it can have on the teachers and students. In this line Miño (2015) mentions:

Miño (2015)

Tablets are potential tools for working with children and adolescents benefiting towards the improvement of learning with the realization of basic digital skills activities. The use of tablets in classrooms invites educational innovation by teachers towards their students who are identified by the advantages offered by these digital devices for their portability, long battery life, ease in its management, unfortunately in our country there are no programs enough to use this tool. (p.2)

Finally, it is worth considering what Sanchez (2019) raised about the incorporation of technologies in the educational process:

Sanchez (2019)

Some researchers have analyzed the impediments that are presented to teachers and schools. In fact, one's own beliefs, ability and Teacher attitudes are key to the application of ICT (Zyad, 2016). For the Therefore, it is essential that the training and digital literacy of teachers be improved to optimize your ICT skills. In schools the lack of time, of training of the professionals, the little availability and the scarcity of technical support are the main factors hindering innovation with ICT. For all Therefore, greater efforts should be made to promote educational policies that improve their digital literacy, together with greater technical support to consolidate the inclusion of technology in schools. (p.124)

### 1.1.2 Problematization

One of the objectives of the Costa Rican Ministry of Education, as stated by Arce (2019), is to provide educational experiences that foster the acquisition of competences and abilities that support learning and give students the resources they need to carry out their life projects.

In this line, educational institutions make their efforts to incorporate forms and mechanisms that allow students to develop the necessary skills. From this perspective a clear example of this has been the incorporation of technological tools that facilitate students to develop both their technological potential and the acquisition of specific skills according to the content of the subjects.

To popularize ICT learning models in school curricula we need to identify two different options, according to Moreira, Hernández- Rivero and Sosa-Alonso (2016), that involve traditional and innovative models of education. In this sense, it is worth mentioning that teachers use two models:

a) use the traditional teaching materials sometimes supplemented by ICT with minimal approach to students

b) highly integrate digital resources using traditional and digital materials that blend naturally and integrate innovative learning strategies that gradually promote an educational reform.

Tablets are one of the most popular products in education; attractive due to their high portability and potential innovation (Ricoy, Sánchez-Martínez, & Feliz-Murias, 2018).

However, there is still no standardized inclusion in the classroom, although it is a worthy alternative to rooting for textbooks. (p.36)

Camacho and Esteve (2018) highlighted the significance of tablets in the classroom given the variety of situations in which curriculum content is covered in class with elementary school students to develop various competencies. Similar to this, some schools have already used tablets into instruction in an effort to promote more active learning and encourage pupils to build academic material.

The Carmen Lyra educational center asked families to add tablets to their list of required school supplies by 2021. At that time Costa Rica continued in virtual classes. Moreover, the institution started certifying all students with TOEFL exams from Junior to ITP levels in the same year. Therefore, these two adjustments were implemented at the same time. The TOEFL Junior Standard measures the level at which school students have achieved academic and social English language proficiency. How could the institution certify students in the English language even though the world was going through a global education crisis as a result of the pandemic? Nowadays classes are presential and tablets were preserved even though they were not in virtual classes anymore for this scholar year.

Which of the learning models stated by Moreira, Hernández- Rivero, and Sosa-Alonso is the school using with the tablet, what correlation exists between the school's results and its level of technology-capable teaching staff? Do students believe that using a tablet in the English classroom is important? are the questions that emerges. For this reason, it is essential to design an inquiry procedure that enables an understanding of the effects of integrating tablet use as a technology tool in the process of learning English.

### **1.1.3 Justification of the problem**

According to Ditzler Hong and Strudler (2016), Information and Communication Technologies (ICTs) have become participatory and widespread among citizens, leading to their conceptualization as a mass phenomenon. In fact, they are part of our culture and environment and participate in many activities involving different generations. On the other hand, there is also the presence of ICT in the field of education with the potential to significantly change (Schilhab, 2017).

Within this context, the unstoppable development of technology carries with it the obligation to be constantly updated, and education processes are no exception. Access to new hardware and software tools establishes a constant challenge in education, which focuses on how to utilize tablets—specifically, how to use technology in the classroom—better.

It should be considered that digital technology has a lot of potential, especially the educational process in that it facilitates the transmission of information and the development of topics and contents, which are linked to innovation. This requires substantial changes in the pedagogical perspective and given the magnitude of this change and the organizational strategy to energize the educational institution.

In addition to technology, teachers must be up to date with different English learning processes that develop language skills. Students must attempt to manage the four communication abilities of speaking, writing, listening, and reading. through targeted real-life tasks. These abilities may be acquired using the action-oriented approach (AOA), one of the pillars of The Common European Framework of Reference for Languages (CEFR). The inductive method of teaching grammar is preferable because this is how people learns their native tongues. For a student, learning the rules on their own is more motivating than given

them. As a result, students will be more competent. Consequently, by combining technology with appropriate English language educational processes students will obtain the best results.

In practice, it is worth noting the efforts of some countries to integrate technologies on a large scale but not immune to failure due to lack of teacher training (Yelland, 2018); and lack of resources to successfully address students' digital skills. Overall, as Lugo and Ithurburu (2019) point out in relation to Latin America, it makes sense that the main driver of digital policy is the state. In Spain, the use of ICTs in the education system, for example at the general level, is regulated by organic law to improve Quality of education (LOMCE, 2013). In Costa Rica, the government talks about the importance of technology in the classroom, but there are still many schools without access to technology. In contraposition, schools that have access to ICT's, their use is not supervised to guarantee a quality management. That is why this thesis could work as a reference and encourage the integration of the tablet in education.

Having this in mind, this research was aimed to show how the use of tablets was implemented by teachers and the impact that it had on the educational process in students who were learning a second language, in this case English, a non-native language. Additionally, to inquire about the level of training and access to updates that teachers must obtain to achieve the best benefit from both: tablets as technological resources and the educational language process in students.

An interesting perspective that reinforces the above, can be evidenced in what Bonds-Raacke and Raake (2008) propose when considering that technology had an important influence on learning processes, in this line researchers wanted to understand the real impact that technological resources had on students. There are barriers that must be broken for both the students and the students to understand that these tools can be very useful in the training process if they are linked to the objectives of the particular class. (p.32)

In this line, education requires adapting to the challenges that professional and technological advances pose for the nine generations, an aspect that implies specifically in the Costa Rican context overcoming fears and breaking the gaps in the different educational levels of the country. About this Mutlu (2016) mentions the following:

Mutlu (2016)

First, teachers developed resistance to the change which tablets offered. This is in line with the ICT literature. Becta (2004) report suggests that teacher resistance to technological changes is an inherent issue, and Leander (2009) argues that one of the main reactions of teachers when new digital literacy practices come into question is total resistance against using the new version. However, Bingimlas (2009) emphasizes that resistance to change is an indication or result of other underlying problems, and the meaning teachers attribute to change could affect their behaviors (Tye & Tye, 1992). (p.72)

In addition to all the above, in February 2020, the Government of the Republic of Costa Rica announced the educational proposal called “Hacia la Costa Rica bilingue” traduced as Towards a Bilingual Costa Rica. This project was born through the national strategy Alliance for Bilingualism (ABi) which consists of including a second language from preschool to secondary education during their schooling. The goal of this strategy is to achieve bilingual education by 2040. Among the languages to be implemented English is included. The goal is that students must be able to understand, speak and write in this language.

In a press conference held on February 13th, 2020, the current president of Costa Rica at that time Carlos Alvarado highlighted that his goal was for learners to be able to speak in many real-world settings and scenarios, using all the necessary skills to be successful in this world (Alvarado, 2020). In the same conference, the current Minister of Education, at that

moment Guiselle Cruz (2020) mentioned that a bilingual person will have better job and study opportunities. As a result of this, students are facing the challenge not only of knowing but of mastering a second language and teachers of finding effective teaching-learning strategies to comply with this proposal in the established time.

Since the government wanted a true bilingual education in Costa Rica, not only to learn the basics of the language, but they also wanted students to be able to perform all the necessary skills that the use of a language represents. It is important that it be applied through the CEFL which is an international standard for describing the level of language skills acquired by those who have mastered the language. It is a standard indicator that certifies the level of oral, reading and listening comprehension as the level of written expression of a language.

After everything said above, the reason for this research is justified from the social relevance and convenience (Hernández et al., 2014), as it will enable assessment of whether the usage of tablets in English language instruction has any meaningful effects, also this research will benefit to the educational center in which this research is being carried out to reinforce or to make better decisions to optimize the use of the tablet in their English classes and also to reinforce or take better decisions related to the application of strategies that facilitate the developing of language skills in students.

This study can also be used to motivate teachers who teach English as a second language to improve their techniques with the tablet as a complementary tool, as well as motivate themselves be trained and updated in more effective ways of using it. Teachers and English educational institutions can also find this research as a base to improve the use of tablets aimed at the acquisition of the English language through the development of language communication skills as proposed by the Common European Framework of Reference for Languages.

## **1.2 FORMULATION OF THE PROBLEM**

### **1.2.1 Research question**

In 2020 Costa Rica and the rest of the world found themselves in a pandemic crisis due to SARS-CoV2. This caused schools to close and virtual education began to be used in a forced way. To carry out the virtual classes, the use of hardware such as tablets or computers was needed. By 2021, The Carmen Lyra educational center requested families to voluntarily include tablets in their school supply list. By 2022, the educational center officially included tablets in its list of materials. Added to this, in 2021 the institution began to certify elementary students with the Junior TOEFL test, so these two changes were carried out in the same period.

Currently, despite no longer being in virtual classes for this 2023, tablets were kept in the list of materials as well as the language certification through the Common European Framework of Reference for Languages.

Therefore, the question asked is **What is the impact of implementing the usage of tablets as a technological resource in the learning of English language process in students of the 4th level of primary education at Carmen Lyra Educational Center in San Carlos, Alajuela during the 1st quarter 2023?**

## **1.3 OBJECTIVES OF THE INVESTIGATION**

### **1.3.1 General Objective**

To analyze the impact of implementing the usage of tablets as a technological resource in the learning of English language process in students of the 4th level of primary education at Carmen Lyra Educational Center.

### **1.3.2 Specific Objectives**

- To inquire the level of technical training in technology of the fourth-grade teachers applied to English educational and pedagogical process.
- To determine how the use of tablets as a technological resource foster in the development of acquisition of English language skills.
- To generate a pedagogical proposal that optimize the development of English language skills by using the tablet as a tool.

## **1.4 SCOPE AND LIMITATIONS**

### **1.4.1 Scope**

This research focused on the study of the effects that the learning process had on students who were acquiring a non-native language, in this instance English, through the implementation of the tablet as a technological resource to aid in the process of teaching and learning. Therefore, the study focused specifically on students of the 4th level and the English teacher of primary of 4<sup>th</sup> grade at Carmen Lyra Educational Center during the first semester of the year 2023.

### **1.4.2 Limitations**

The sample size was one of the study's primary limitations. In this case, the participants were only the 4th grade students of the Carmen Lyra Educational Center, so the rest of primary school population was not part of this research. It was limited to this population because the levels of I cycle were students aged 7 to 9 years old where their criteria were not sufficiently developed. Their thoughts can be easily influenced by factors unrelated to the tablet, such as affinity for the teacher or feelings for the subject. In 5<sup>th</sup> and 6<sup>th</sup> grade this population is

excluded despite having developed criteria. The school recommended not working with these groups because their answers may be influenced by their behavior, their emotions and also to their mood as a consequence of the stage of development in which they were. A complete opposite scenario in 4<sup>th</sup> grade. Besides having criteria, the group was emotionally stable, they had good behavior and had a correct aptitude to school related things. By eliminating those fluctuating situations, the research could obtain more precise results.

The goal of this research, which is focused on learning English, all other subjects are excluded and limited only to the class where English is taught to with the purpose of acquire a second language. Other types of technological tools were also excluded. In Carmen Lyra English classes they used a TV and tablets, the tablet is the only device managed by students. Therefore, only the use of the tablet as a complementary tool for language learning was studied.

Another limitation for this investigation was the time. It did not cover the whole scholar year, it was limited to the first semester, 2023.

**CHAPTER II:**  
**THEORETICAL FRAMEWORK**

## **2.1 HISTORICAL CONTEXT**

### **2.1.1 Background of the organization and community**

#### **2.1.1.1 Carmen Lyra school**

According to research conducted by Villalta et al. (2005) in 2007, the educational center began its service to the community of Ciudad Quesada, San Carlos as Colegio Laboratorio San José. In 2013, the community expressed the lack of having a high quality bilingual educational institution. For this reason, they went to GACH Educational Group with this concern, requesting to open an educational institution that fulfilled these characteristics. GACH Educational Group is an educational corporation that provides high-quality services at all educational levels with technological support and a commitment to the psychosocial and ecological skills of its users. The main virtues and values of the company are reflected in its initials GACH, such as Ganar, Amar, Crecer y Humildad traduced in order as Win, Love, Grow and Humility. GACH corporation, who then had over 20 years of education experience, decided to take on the challenge. In 2014, the institution began to function with elementary or primary level only. It opened the groups from first through fifth grade. The next year, 2015, it opened the preschool level and sixth grade group. Additionally, it began with the third cycle of secondary or high school. The opening of these levels allowed the educational center, in 2015, to offer the three levels: preschool, elementary and high school. In 2017, the center received the official name of Carmen Lyra Educational Center. The mission and vision of the Carmen Lyra School in San Carlos, Costa Rica are as follows:

- **Mission:** The mission of the Carmen Lyra School is to provide a high-quality education that promotes academic excellence, social responsibility, and environmental stewardship. The school aims to prepare its students for a

lifetime of learning and to empower them to become active and engaged members of their communities.

- Vision: The vision of the Carmen Lyra School is to be a leading institution in the region for promoting academic excellence, social responsibility, and environmental sustainability. The school aims to provide a safe and nurturing learning environment where students can develop their skills and talents to their full potential. The school also seeks to be a center for innovation and research in education, contributing to the development of new approaches and best practices for teaching and learning. (pp. 160-161)

Currently, the institution is located 300 meters south and 200 meters east of the Municipal Palace, Ciudad Quesada, Alajuela, Costa Rica, and has a population of about 200 students, distributed in the three levels.

#### **2.1.1.2 Ciudad Quesada City**

In Costa Rica's province of Alajuela, Quesada is a district of the San Carlos canton. The canton of San Carlos' capital is in Quesada. Even though the official name is Ciudad Quesada, San Carlos is more frequently used to refer to this city. Ciudad Quesada has the highest population in San Carlos. Before July 8th, 1953, it was called Villa Quesada. Quesada is 144 km<sup>2</sup> in size and 656 meters above sea level. Its land's topography is mostly lanky, making it ideal for the cultivation of pastries, grains, among other things. The weather varies from being warm to being cold. In the last 20 years, Ciudad Quesada has experienced tremendous urban growth, with new neighborhoods and residences being established to the point that space is becoming limited as the city's growth moves northward. This district is composed of the following communities: Corazón de Jess, San Ramón, Concepción, San Gerardo, Dulce Nombre, Cedral, La Tesalia, Sucre, Ron Ron, San Isidro, San José, San Vicente, San Luis, San Juan, and

Tesalia. Nowadays, Ciudad Quesada has an extensive number of financial organizations, supermarkets, commercial centers, and commercial companies, among others. (Municipalidad de San Carlos, 2021)

## **2.2 THEORY-CONCEPTUAL CONTEXT**

### **2.2.1 Use of technology on education**

The use of technology for learning has become increasingly common in recent years, as new tools and platforms have been developed to enhance and support the educational experience. From online courses and virtual classrooms to educational apps and games, technology has opened new opportunities for engagement, collaboration, and personalized learning.

Aldossry (2022) states that technology in education refers to all the tools that can be used to enhance the learning process of students. Although usually from the popular understanding within the main devices that are visualized in the educational processes are interactive whiteboards, computers, tablets, smart phones, among others, however the author states that it is not limited to these devices, but within this perspective it is extended to any technology that can be implemented in an educational context. (p.57)

Students are provided with innovative new methods to study and engage with the content they are learning thanks to the increasing use of technology in the classroom. One study conducted by the National Bureau of Economic Research found that introducing technology into the classroom led to substantial increases in both the levels of student performance and student attendance. (Jacob, Lefgren, & Moretti, 2007).

The usage of online learning platforms like Coursera, Udacity, and edX is one example of technology in education. These platforms provide students with access to high-quality

educational information from major institutions across the world. According to a research, students who attended online classes did equally as well, if not better, than those who completed traditional in-person courses. (Zheng, et al., 2015).

The usage of educational applications is yet another kind of technology that may be seen in educational settings. These applications provide kids a method to study that is both enjoyable and interesting, and they can be altered to meet the specific requirements of each individual learner. According to the findings of one research, kids who participated in educational app activities in the classroom had better levels of engagement and increased their abilities in reading and mathematics. (Beck, 2014).

In general, technology has the ability to completely transform the educational system by giving students access to novel and creative methods to learn and connect with the material they are studying. Nevertheless, it is essential to give serious consideration to the role that technology plays in education and to make certain that it is implemented in a manner that improves the educational experience of students.

The historical examination of the use of technology in education stretches back to the discovery of the printing press in the 15th century. This innovation made it possible to manufacture books and other printed materials on a large scale, which in turn made education more broadly accessible. The educational experience was significantly improved in the 19th century when it became commonplace in classrooms to make use of teaching aids such as chalkboards, textbooks, and other instructional tools.

Nevertheless, the 20th century was the first one in which technology started having a more major influence on the educational system. Access to educational material that extends beyond the limits of the traditional classroom was made possible with the introduction of

broadcasting technologies like radio and television in the early 1900s. These technologies made it possible for educational programs to be disseminated to a larger audience.

Education reached a new level of technological sophistication with the introduction of computers in the middle of the 20th century. In the 1960s and 1970s, computers were used largely for research and the processing of data. However, by the 1980s, they had become more accessible and economical, which led to their utilization in classrooms as well as the creation of educational software.

Yahya Lal (2008), in his historical account of the use of technologies in educational settings, argues that the first model of basic language used for writing and the creation of educational programs was produced at the University of Dartmouth in the year 1958. This model was used for both the production of educational programs and the writing of educational materials. In later years, this approach was adopted by a large number of educational institutions throughout this time period. This would eventually provide the foundation for what would be known as computer-assisted education in the future. (p.52)

According to Al-Mughira (1998), in the early 1960s, Stanford University and IBM collaborated to design the first complete computer-assisted training program for students. This curriculum was offered at Stanford University. The Computer Curriculum Foundation was established by both of these organizations, with the goals of achieving their mission, commercializing it, and monitoring it. When it was first released in 1972, this software offered 700 distinct finishes, which could be found in any one of 400 different places. It was used in a broad variety of educational settings across the world. (p.66)

The introduction of the internet and the World Wide Web in the 1990s pushed in a new era of connection and information availability in the educational sector. Because of the

increasing number of online courses and virtual classrooms, students now have access to a wider variety of options for learning and working together.

The use of various forms of technology into educational settings has seen significant development and expansion in the 21st century. The growing number of mobile devices such as smartphones and tablets has made it possible to have learning experiences that are more adaptable and individualized. Additionally, the application of artificial intelligence and machine learning has made it possible to explore new avenues for individualized and adaptive education in the classroom.

Al respect Oyewale (2021) mentions the following:

Oyewale (2021)

Technology is rapidly changing the way we live and work. The field of education is no exception. In fact, during the late 1990s, modern technologies were being invented and designed almost monthly. Technology was abuzz and education was the primary target for those eager researchers who wanted to see if their product could transform education as we know it. Almost a decade later, the novelty of educational technology has somewhat worn off. Many schools are struggling to make ends meet, cutting costs wherever possible. Financial struggles are still a reality today for many schools, yet even for those schools with limited financial resources, educational technology is still a prevalent part of education today. (p.44)

According to the CEO Forum (2001) the incorporation of educational institutions in the digital age has meant that students can develop the skills and resources that are necessary for them to succeed in their professional lives. About this Oyewale (2021) mentions the following:

### CEO Forum (2001)

According to the CEO Forum, educators are encouraged to make the best use of available technology in order to benefit our nation's schools, surrounding communities, and most importantly, our students. Today's students need to be taught twenty-first century skills that they will need in order to thrive in the future. Some of these skills include digital literacy, inventive thinking, effective communication, teamwork, and the ability to create high-quality projects. In order to do and reach this lofty goal, educators need to focus technology on the key building blocks of student achievement. Those building blocks include assessment, alignment, accountability, access, and analysis. Just as educators should consider the building blocks of student achievement, it is also important that they consider the many facets of education. One vital aspect to reflect on is how students learn. When teachers know how their students learn best, real authentic learning begins to take place and students are prepared and equipped for their future. (p.44)

According to Driscoll (2002), the incorporation of technology into the classroom has not been an easy process; on the contrary, it has required a significant amount of work on the part of teachers. This is the point in the passage when the author discusses the four overarching principles that should guide teachers as they incorporate technology into regular education:

- a. Contextualized learning: The process of acquiring knowledge and skills, in its most effective form, occurs within the framework of a specific environment. The contextual environment gives important educational information, consequently creating a conducive atmosphere for its growth and development.

- b. Active learning: The fundamental principle of education is always immersed by enthusiasm and engagement. It succeeds when learners get beyond their role of passive students and become enthusiastic, engaged learners.
- c. Social learning: A collective scenario is the highest level of learning, which passes beyond the barriers of personal isolation. Through dialogue, interaction, and group investigation, students create a cooperative environment where they take part in the group.
- d. Reflective learning: It is essential to keep in mind that the use of technology is not sufficient to provide genuine education. However, making effective use of the technologies that are now accessible has the potential to both improve and disrupt education in today's classrooms.

It's important to stress that technology alone isn't enough to help people learn in a real way. But, if used wisely and well, the collection of available tools has the power to change and improve the way education is done in today's schools (p. 44).

Technology is used in education in many different ways, with a wide range of tools and apps that help teach and learn in many different ways. Here are some of the many ways technology is used in education.:

- a. Learning management systems (LMS): Schools and universities use LMS systems like Blackboard and Moodle to run online courses and give students access to course documents, class talks, and tests.
- b. Educational apps and games: There is a variety of educational software, including apps and games, that can be downloaded into mobile devices such as smartphones and tablets. These applications and games make learning more enjoyable while also facilitating the retention of information.

- c. Virtual and augmented reality: Virtual and augmented reality technologies are used to create realistic learning experiences that give students a better way to explore and learn in a way that is more interesting and involved.
- d. Digital textbooks and e-books: Students now have access to a more adaptable and mobile method of reading educational materials in the form of digital textbooks and e-books, which enables them to study and learn whenever and wherever they want.
- e. Online collaborative tools: Students are able to work together on their projects and assignments thanks to online technologies such as Google Docs and Microsoft Teams, which are accessible independent of the students' locations or class schedules.
- f. Adaptive learning software: Adaptive learning software makes use of machine learning algorithms to customize the educational experience for each student by adapting the curriculum to their specific requirements and preferred methods of learning. As a result, adaptive learning software enables more efficient and successful learning.
- g. Video conferencing and webinars: Teachers and students are able to communicate in real time via the use of video conferencing and webinars, which enables distant learning and the creation of virtual classrooms.
- h. Artificial intelligence and machine learning: Artificial intelligence (AI) and machine learning technologies may be used to evaluate student data and give insights into students' learning habits and progress. This enables instructors to tailor education and provide targeted help to students. (Driscoll,2002 pp.73-77)

Being able to access materials and information is one of the biggest advantages of technology for education. Students may study at their own speed and in accordance with their own interests and requirements thanks to the internet and digital libraries, which provide them with access to a multitude of knowledge and educational resources from anywhere at any time. Through the offer of immersive and interactive learning experiences, technology may also improve motivation and engagement. For instance, educational games and apps could be used to reinforce ideas and foster critical thinking abilities while also making learning more entertaining and demanding.

Another area in which technology might be helpful for learning is collaboration. Students may collaborate on group projects and assignments using virtual classrooms and online platforms, which fosters communication and cooperation skills despite geographical limitations.

Another benefit of using technology in education is personalized learning. For instance, adaptive learning software may modify the course material and speed to fit each student's unique learning preferences and stage of development, resulting in a more customized and successful learning environment.

However, there are also particular issues and problems associated with using technology for education that need to be carefully thought out and handled. These include concerns about digital citizenship, online safety and privacy, and the possibility that technology could replace conventional instructional techniques.

Technology starts to play a bigger part than just as an extra. accessory. We are at the beginning of a new era in which technology enriches the search for knowledge and provides access to viewpoints that go beyond the tangible and into the meaningful. These signals of a

new era in which technology permeates education and influences minds of learners and their destiny, by going beyond of a simple utilization of technology. (Oyewale, 2021, p. 45).

### **2.2.2 English education**

A rigorous process of language acquisition and the development of academic skills is often included in English instruction for primary school children. Students in elementary school who do not speak English as their first language often participate in a number of different classes, training programs, and language immersion experiences in order to enhance their English ability and academic writing abilities.

One study by Flowerdew and Li (2007) found that successful English language learners tend to exhibit several key characteristics, including a willingness to take risks, a desire to communicate effectively, and a commitment to continuous improvement. These learners are also often highly motivated and have a deep sense of academic purpose. (p.56)

Another important aspect of English education for elementary students is the development of critical thinking and analytical skills. Elementary students are often required to analyze complex academic texts, author research papers, and engage in debates and discussions about academic topics. One study by Karabiyik (2010) found that a successful English language learner in an academic context should be able to understand the content of academic texts, ask critical questions, and evaluate and synthesize information.

In general, teaching English to primary school students is a difficult and time-consuming endeavor that calls for complete dedication, consistent effort, and a commitment to continuous learning and improvement. Through careful study and practice, elementary students can acquire the language and academic skills necessary to succeed in their chosen fields.

English education for elementary students involves a range of characteristics that are important for successful language acquisition and academic writing. One study by Hyland and Jiang (2019) identified several key characteristics of successful English language learners in academic contexts, including:

- a. Strategic competence: Successful language learners can use a range of strategies to manage their learning, such as setting goals, planning, and monitoring their progress, and seeking feedback from teachers and peers.
- b. Communicative competence: Successful language learners can use English to communicate effectively in academic settings, such as participating in discussions, presenting research, and drafting academic papers.
- c. Discourse competence: Successful language learners have a good understanding of the conventions of academic discourse, such as how to structure an argument, use citations, and write for specific audiences.
- d. Cognitive competence: Successful language learners can think critically and analytically about academic content, such as evaluating arguments, synthesizing information, and connecting different ideas.
- e. Social and cultural competence: Successful language learners can navigate the social and cultural norms of academic settings, such as interacting with professors and peers, understanding academic hierarchies, and adapting to different academic cultures.

Overall, these characteristics highlight the importance of language proficiency and a range of academic and social skills essential for success in scholarly settings.

Learning English is a difficult and involved process that incorporates a variety of aspects including individual learner characteristics, language competency, cultural background, and the learning situation. English language acquisition is a complicated and diverse process.

One comprehensive study by Lightbown and Spada (2013) examined the process of second language acquisition, including English, among non-native speakers. The authors identified several key factors that influence the success of language learning, including:

- a. Age: Younger learners tend to acquire languages more easily and with greater fluency than older learners, although adults can still learn a new language effectively with the right instruction and practice.
- b. Input: Learners need exposure to a range of language input, including spoken and written language, to develop their language skills.
- c. Feedback: Learners benefit from receiving feedback on their language use from teachers and peers to improve their accuracy and fluency.
- d. Motivation: Learners who have a desire to learn the language, whether as a result of personal interest or external motivations such as academic or job aspirations, often have higher success when it comes to the acquisition of the target language.
- e. Learning strategies: Learners who can use a range of effective learning strategies, such as setting goals, using cognitive and metacognitive strategies, and practicing regularly, tend to be more successful in their language learning.

The authors also note that language acquisition is a dynamic and ongoing process involving interaction between learners and their environment, and between different linguistic and cognitive systems.

An additional factor that has to be considered is the learning process of a non-native language in students. The process of English language learning for non-native students is a complex and multifaceted process that involves a range of factors, such as individual learner characteristics, language proficiency, cultural background, and learning context. One study by Ellis (2008) identified five stages in the process of English language acquisition:

- a. Pre-production stage: Learners at this stage have a limited comprehension of the new language and may have some level of reluctance when it comes to speaking or interacting in English.
- b. Early production stage: Learners at this level begin to build fundamental communication abilities in English, such as the ability to convey their thoughts and requirements via the use of straightforward words and phrases.
- c. Speech emergence stage: At this point, students start using longer, more complicated phrases and have longer English dialogues.
- d. Intermediate fluency stage: At this point, students are able to communicate well in the majority of social and academic settings and have a strong command of the language.
- e. Advanced fluency stage: At this level, students have the ability to use English in a variety of academic and professional contexts with near-native fluency.

While these stages provide a useful framework for understanding the process of language acquisition, it is important to note that individual learners may progress through these stages at different rates and in diverse ways, depending on a range of factors such as motivation, language aptitude, and learning context.

Additionally, non-native scholar students have particular difficulties while studying English as a second language. One study by Wang and Wen (2020) investigated the English learning experiences of Chinese graduate students studying in the United States. The study identified several factors that influenced the success of these students in their English language learning, including:

- a. Motivation: The students who were most successful in their language learning were highly motivated to learn English, both for academic and professional reasons.

- b. Language proficiency: Students who had a higher level of English language proficiency when they arrived in the United States tended to make faster progress in their language learning.
- c. Interaction: More interaction between non-native English speakers and native English speakers was associated with higher language learning outcomes for students.
- d. Cultural background: Students who were more familiar with American culture and values tended to have an easier time adjusting to the cultural differences and integrating into the academic and social environment.
- e. Learning strategies: Students who used a range of effective learning strategies, such as setting goals, using cognitive and metacognitive strategies, and practicing regularly, tended to make greater progress in their language learning. (p.25)

The research emphasizes how crucial it is to provide non-native scholar students with a supportive learning environment and use appropriate teaching strategies in order to promote their success in learning the English language.

Aldossry (2022) offers a thoughtful viewpoint regarding the use of technological resources, emphasizing that these tools are inadequate and pointless if fundamental factors like teacher training, device preparation before use in a learning environment, and student and teacher input are ignored. Determining the effectiveness of its usage with pupils requires considering these factors. (p.59)

Along the same lines, Aldossry (2022) believes that it is crucial that teachers understand the applications or tools that will be used in conjunction with the technical instruments. According to this viewpoint, the author asserts that in order to use apps and tools in the classroom, teachers need to already have a method for evaluating them that is more user-friendly and accessible.

### 2.2.3 English teaching

In recent years, there has been a rise in the frequency with which teachers of English as a second language make use of various forms of technology. Warschauer and Matuchniak (2010) conducted a research to evaluate the effect that technology has on the acquisition of English language skills. and found that technology can have a positive effect on language learning outcomes. The study identified several ways in which technology can support English language teaching, including:

- a. Increased access to authentic language input: Technology allows learners to access authentic language input from a range of sources, including videos, podcasts, and online materials, which can enhance their language learning experience.
- b. Personalized learning: By giving personalized feedback, responding to learners' needs and preferences, and providing a variety of learning activities, technology may be utilized to personalize learning experiences.
- c. Collaboration: Technology can facilitate collaboration and communication between learners and teachers, and between learners, which can promote language learning and enhance intercultural understanding.
- d. Increased motivation: Technology can increase learners' motivation by providing engaging and interactive learning experiences, such as gamified learning activities and immersive virtual environments.
- e. Enhanced language production: Technology may help learners produce language by allowing them to practice their speaking and writing abilities using voice and text recognition technology, as well as offering rapid feedback on their language usage.

Overall, the study highlights the potential of technology to enhance English language teaching and learning, although the authors caution that technology should be used in a

pedagogically sound way and should not be seen as a replacement for effective teaching practices.

Levy and Stockwell (2006) conducted a research on the use of technology in English language instruction and discovered various areas in which technology might improve the teaching and learning process, including:

- a. Authentic language input: Technology provides access to a wide range of authentic language input, including videos, podcasts, and online resources, which can enhance learners' language skills.
- b. Differentiated instruction: Technology may be utilized to provide differentiated education that is adapted to the requirements of individual students, as well as adaptable lessons and feedback.
- c. Collaborative learning: Technology can facilitate collaboration between learners, promoting the development of language skills through communication and interaction.
- d. Interactive learning activities: Technology can provide engaging and interactive learning activities, such as gamified learning activities and simulations, that promote learners' motivation and involvement in the learning process.
- e. Increased learner autonomy: Technology can help learners become more independent by giving them access to self-directed learning tasks and tools and giving them chances to self-evaluate and analyze. (p.192)

The writers point out that the successful use of technology in teaching English requires effective teacher training and support, as well as the development of appropriate digital materials and resources.

In order to teach English with technology, teachers need to know both how to teach and what to teach. They also need to know a lot about technology. One study by Karsenti and Collin (2013) found that English language teachers need to have several important tech skills, including:

- a. Technical skills: Teachers must know how to use and troubleshoot a range of tech gadgets and devices, including computers, interactive whiteboards, and software applications.
- b. Digital literacy skills: Teachers must be able to effectively navigate and evaluate digital resources, such as online databases and websites, and incorporate them into their teaching practices.
- c. Information and communication technology (ICT) pedagogical skills: The ability to successfully use technology into instruction is a must for teachers, including designing, delivering technology-enhanced learning activities, and assessing student learning through technology.
- d. Collaborative skills: Teachers must be able to collaborate with colleagues, administrators, and technical staff to exchange resources and techniques, as well as to successfully use technology, and to share resources and strategies. (p.537)

Also, teachers that include the usage of various technologies into their lessons exhibit a range of characteristics that support effective technology integration. One study by Ertmer, Ottenbreit-Leftwich, and York (2013) identified several key characteristics of teachers that successfully use technology into their teaching practices, including:

- a. Technological pedagogical content knowledge (TPACK): Teachers who have a strong understanding of the use of technology to assist specific learning objectives and

pedagogical approaches are more likely to successfully use technology into their teaching exercises.

- b. Collaboration and sharing: Teachers who collaborate with colleagues and share resources and strategies are more likely to successfully use technology into their teaching strategies, as they can learn from each other and support each other's development.
- c. Belief in the value of technology: Teachers who believe that technology can enhance learning and support student achievement are more likely to successfully use technology in their teaching practices.
- d. Comfort with technology: Teachers who are comfortable using technology and can troubleshoot technical issues are more likely so they can effectively use technology in the classroom. (p.180)

While technology can offer many benefits in the classroom, teachers often face challenges in implementing technology effectively. One study by Sang, Valcke, Van Braak, and Tondeur (2010) identified several challenges that teachers face in the implementation of technology in their teaching practices, including:

- a. Limited access to technology: Teachers may not have access to the necessary hardware, software, or internet connectivity to successfully incorporate new technologies into their existing methods of teaching.
- b. Limited knowledge and skills: Teachers may lack the essential technical, pedagogical, and subject understanding to properly incorporate technology into their teaching methods.
- c. Resistance to change: Some teachers may not like change and may be afraid to try out new tools and ways of teaching.

- d. Time constraints: Teachers may not have much time to discover and try out new tools, especially if they have a lot of classes to teach and other management duties.
- e. Lack of support: Teachers may lack support from colleagues, administrators, or IT staff, which can hinder the effective implementation of technology in their teaching practices. (pp. 125-127)

#### **2.2.4 Active methodologies and IT**

The integration of technology in education has opened up new possibilities for active learning methodologies. According to Muñoz-Carril et al. (2019), "active learning methodologies focus on engaging students in the learning process, encouraging them to participate actively in their own education" (p. 422). Technology can be a valuable tool in this process, as it can facilitate collaboration, interaction, and the creation of multimedia materials.

One example of an active learning methodology that incorporates technology is the flipped classroom model. According to Bishop and Verleger (2013), "the flipped classroom is a model that shifts the delivery of content outside of the classroom, allowing for more time in class to focus on interactive and collaborative activities" (p. 2). Outside of the classroom, technology is utilized to transmit material, such as video lectures or online readings, freeing up classroom time for interactive and collaborative activities.

Another example of an active learning methodology that incorporates technology is project-based learning. According to Carvalho and Goodyear (2014), "project-based learning involves students in the creation of a project that is designed to solve a real-world problem, and encourages them to work collaboratively to develop their own solutions" (p. 116). Technology can be used in project-based learning to facilitate collaboration and communication among students, as well as to create multimedia materials to showcase their solutions.

Furthermore, another active learning style that may use technology is game-based learning. According to Van Eck (2015), "game-based learning involves the use of games to support the learning process, providing an engaging and interactive environment for students to develop their knowledge and skills" (p. 1). Technology is used to deliver and facilitate game-based learning, providing students with a fun and interactive way to learn and develop their skills.

### **2.2.5 Students in English classes**

Non-native English students face a variety of challenges in the classroom, including difficulties with understanding and communicating in English, cultural differences, and academic expectations. According to Jiang and Dewaele (2019), non-native English students may experience anxiety, frustration, and self-doubt when learning English in an academic context. Some specific challenges that non-native English students may encounter in the classroom include:

- a. Language barriers: Non-native English speakers may have difficulty understanding lectures, participating in class discussions, and completing written tasks in English. This might lead to feelings of inadequacy and dissatisfaction.
- b. Cultural differences: Non-native English students may also experience cultural differences that affect their ability to participate in classroom activities. For example, they may be hesitant to speak up in class or may have different expectations regarding appropriate classroom behavior.
- c. Academic expectations: Non-native English students may also struggle with the academic expectations of the classroom, such as the need to critically analyze and synthesize information, participate in group projects, and author research papers. (pp. 123-124)

To address these challenges, Jiang and Dewaele recommend that teachers take a student-centered approach to teaching, incorporating strategies such as active listening, providing opportunities for self-reflection, and creating a supportive learning environment. They also suggest that teachers provide opportunities for students who do not speak English as their first language to practice their language skills, such as through small group discussions and peer feedback.

When learning English as a second language, non-native English speakers have different characteristics and situations. According to Matsuda and Cox (2017), non-native English students may exhibit the following characteristics:

- a. Linguistic diversity: Non-native English students come from a wide range of linguistic backgrounds and may speak different languages, which can influence their English language learning.
- b. Language proficiency: Students who don't speak English as their first language may have different levels of English ability, from beginner to experienced.
- c. Cultural diversity: Non-native English students also come from diverse cultural backgrounds, which may affect their learning experiences and expectations.
- d. Motivation: Non-native English students may have diverse levels of motivation to learn English, which can impact their engagement and progress in language learning.
- e. Identity: Non-native English students may also struggle with their identity as a non-native speaker, particularly if they experience discrimination or marginalization based on their language or cultural background. (p.19)

To effectively support non-native English students, Matsuda and Cox recommend that teachers and institutions take a culturally responsive approach to teaching, which recognizes and values the linguistic and cultural diversity of non-native English students. This may

include using inclusive pedagogies, giving students chances to share their cultural views, and making the classroom a friendly and helpful place to learn.

As technology continues to play an increasingly significant part in the educational process, it has become more vital for instructors to have technical training in technology. This is especially true in the English educational system. According to the findings of a research that was carried out by Mtebe and Raisamo (2014), in order for teachers to make successful use of technology in the English language classroom, they need to possess the appropriate technical skills and knowledge to properly integrate technology into their lessons.

The study found that teachers can make better use of technology in the classroom if they have technical training in it. Through technical training, teachers can learn how to use technologies like learning management systems, online resources, and video tools to improve their teaching and help students learn (Mtebe & Raisamo, 2014).

Also, professional training can help teachers keep up with the latest technology trends and changes, which is important to make sure they are using the best and most useful tools and resources in their teaching (Kopcha, 2012).

However, technical training alone cannot guarantee efficient technology utilization in the English language classroom. Teachers require continual assistance and opportunity to use their new skills and knowledge (Mtebe & Raisamo, 2014).

As it has already been established, the motivation of students is one of the most important challenges that teachers have in the training process. From this perspective, Aldossry (2022) suggests that teachers can use methods to get students involved in the learning process. The author says that even though the student thinks the class activities are important, they are more likely to feel excited and driven. On this, it's important to note that students have different levels of motivation, but it's very important that the teacher can figure out the level of

motivation of the learner through the tasks they do. So, using technology can be a keyway to get students to pay attention, which makes them want to learn more. On this Aldossry (2022) mentions:

Aldossry (2022)

Introducing technology such as tablet devices to students can be beneficial for their learning and motivation. Therefore, one of the expected results of this research is that the iPad intervention could improve the level of motivation of students and encourage their engagement in the classroom. In fact, technology and the teacher can work together to motivate students, having a positive effect.

(p.61)

## **2.2.6 Physical, cognitive, and socio-emotional development of 4th grade boys and girls**

Fourth grade is a critical stage in a child's development as it is a time when they undergo significant physical, cognitive, and socio-emotional changes. Understanding these changes can help parents, teachers, and caregivers provide the necessary support for the growth and development of children.

### **2.2.6.1 Physical Development**

Physical development during the fourth grade is marked by continued growth and maturation. According to Santrock (2016), fourth graders typically grow about 2-3 inches in height and gain 4-7 pounds in weight. By this age, children have developed fine motor skills, such as handwriting, using scissors, and tying shoelaces (Santrock, 2016, p. 230). Children in fourth grade are also more physically active and enjoy participating in sports and other outdoor activities (Machado, DaCosta, & de Oliveira, 2020, p. 164).

However, there may be differences in physical development between boys and girls. Girls tend to develop earlier than boys, and this trend continues into the fourth grade (Santrock, 2016, p. 230). Boys, on the other hand, tend to have more muscle mass and strength, which can influence their physical activities and interests (Machado et al., 2020, p. 164).

#### **2.2.6.2 Cognitive Development**

Cognitive growth is the change in how a person thinks, solves problems, and makes decisions. In the fourth grade, a child's thinking skills get more complicated and advanced. Piaget's theory of cognitive development says that children are in the concrete operational stage at this point (Santrock, 2016, p. 272). This means that they can think rationally about real things and events and understand ideas like conservation, classification, and the order of things (Santrock, 2016, p. 272).

Fourth graders also develop their language skills and become more proficient in reading and writing. They can read and understand longer and more complex texts and can write coherent paragraphs and essays (Santrock, 2016, p. 271). Furthermore, they develop better memory skills and can recall events and information from the past (Machado et al., 2020, p. 165).

#### **2.2.6.3 Socio-emotional Development**

Socio-emotional development refers to the changes in social and emotional behaviors and relationships. Fourth-grade children become more aware of their emotions and those of others, and they start to develop a sense of empathy and compassion (Santrock, 2016, p. 311). They begin to understand and follow social rules and norms and learn to cooperate and work in groups (Santrock, 2016, p. 311).

However, children in this stage may also experience emotional and social challenges. According to Machado et al. (2020), fourth-grade girls are more likely to experience anxiety

and depression than boys (p. 165). They may also start to experience peer pressure and social comparison, which can affect their self-esteem and identity formation (Santrock, 2016, p. 313). Boys, on the other hand, may exhibit more aggressive behavior and tend to engage in physical fights (Machado et al., 2020, p. 165).

According to the International Society for Technology in Education (ISTE) standards, fourth-grade kids should be able to use tech to communicate, collaborate, and solve problems (ISTE, 2016). This indicates that students at this age are capable of developing their cognitive abilities, including their ability to use technology effectively. But it's crucial to remember that even while kids could possess some fundamental technological abilities, they still require guidance and support from adults to use technology in a responsible and effective way.

ISTE (2016) further notes that "Fourth-grade students should be able to use technology to communicate, collaborate, and solve problems" (p. 33). This highlights the importance of integrating technology into the educational process for this age group. When introducing technology to fourth-grade students, it is important to provide them with age-appropriate instruction and guidance. This can include teaching them basic digital literacy skills, such as how to use a keyboard and mouse, as well as how to use software applications and web browsers.

Teachers can use technology to help fourth-graders learn, in addition to showing them how to use it. The National Education Association (NEA) says that "technology can help make learning more meaningful and fun for students" (NEA, 2017, para. 1). For example, technology can be used to give students access to a wide range of educational tools, such as digital texts, online learning platforms, and educational apps. Technology can also be used to help students learn together. For example, Google Docs and online conversation boards can be used by students to work on projects and tasks together.

However, it is important to strike a balance between technology use and other forms of learning. NEA (2017) suggests that it is important to incorporate a variety of learning experiences, including hands-on activities, group work, and outdoor learning, in addition to technology-based activities. By giving kids a lot of different ways to learn, teachers can help ensure that they are developing a well-rounded set of skills and knowledge.

### **2.2.7 Students' use of technology in English classes**

The use of various forms of technology by students in English classrooms has grown much more common in recent years. According to the findings of a research that was conducted by Warschauer and Matuchniak (2010), the use of technology by students in the process of learning the English language may have both beneficial and bad effects.

Positively, technology may provide kids real language resources and native speaker communication possibilities. Additionally, technology can facilitate individualized and differentiated instruction that is tailored to students' specific needs and interests. Finally, technology can promote collaboration and communication among students, enabling them to work together on group projects and engage in peer-to-peer learning.

But there are also things that could go wrong when using technology to learn English. For example, students may become overly reliant on technology, which can limit their ability to develop other important skills such as critical thinking and problem-solving. Additionally, technology use can be distracting and may interfere with students' ability to concentrate on the task at hand. Finally, not all students have equal access to technology, which can exacerbate existing inequalities and limit some students' ability to fully participate in technology-enhanced learning activities.

To effectively integrate technology into English language learning, Warschauer and Matuchniak (2010) that teachers carefully consider the goals and outcomes of technology use

and take steps to address any potential negative impacts. This could mean showing and helping students figure out how to use technology well and properly, and designing learning activities that balance the benefits of technology use with the need for developing other important skills.

Also, It is critical to note that the neuroscience of elementary students on technology in classes is a growing area of research that explores how technology affects the brain and learning processes. One study by Rosen et al. (2013) found that having laptops in class hurt students' ability to learn, with laptop users performing worse on tests and retaining less information than those who took notes by hand. This suggests that technology can be a distraction that interferes with cognitive processes involved in learning. (p.189)

Another study by Kirschner and Karpinski (2010) looked at using Facebook for school-related purposes and found that multitasking with social media negatively affected academic performance. Participants who used Facebook while studying had lower exam scores and took longer to complete assignments than those who did not use Facebook. The authors suggest that the constant interruption of social media use can lead to reduced focus and attention. (p.145)

On the other hand, some research suggests that technology can enhance learning when used appropriately. For instance, a research by Mayer and Moreno (2002) discovered that learners who received multimedia instruction that included both visual and auditory information performed better on tests than those who received only visual or auditory information. This suggests that technology can be a powerful tool for presenting information in a way that engages multiple sensory channels. (p.178)

Additionally, a study by Fiorella and Mayer (2015) found that students who used a web-based learning tool that provided immediate feedback on quiz answers had higher exam scores than those who did not receive feedback. This suggests that technology can be used to facilitate active learning and improve student outcomes. (p.190)

Overall, the neuroscience of elementary students on technology in classes is a complex and multifaceted area of research. While some studies suggest that technology can be a distraction that interferes with learning, others suggest that technology can be a powerful tool for enhancing learning when used appropriately. Further research is needed to understand how several types of technology affect the brain and learning processes, and how best to integrate technology into educational settings to support student success.

#### **2.2.7.1 Definition and description of what a tablet is.**

A tablet is a portable computing device that is larger than a smartphone, but smaller than a laptop. According to Smith and Johnson (2017), "A tablet is a flat, thin mobile computer with a touch screen display, circuitry and battery in a single unit" (p. 45). Tablets are typically designed for personal and educational use, with the ability to deliver educational content, increase student engagement, and personalize learning experiences. The first mass-market tablet was the iPad, released by Apple in 2010, and since then, other companies have released their own versions of tablets.

The American Heritage Dictionary (n.d.) defines a tablet as "a flat slab or plaque suited for or bearing an inscription". This definition reflects the origins of the word tablet, which derives from the Latin term *tabula*, meaning "a board, plank, or tablet" (Web Search Result, n.d.). In modern usage, however, the term tablet refers to a portable electronic device that can be used for a variety of purposes.

Are often used for personal and entertainment purposes, such as browsing the internet, watching videos, playing games, and reading books. They are also used in workplaces and educational settings to increase productivity and facilitate communication. Johnson and Smith (2018) note that "Tablets can be used as a teaching tool in classrooms, enabling students to access educational content, collaborate with peers, and complete assignments" (p. 23).

This Tablets are different from laptops in several ways. Laptops typically have a keyboard and a larger screen, which makes them more suitable for productivity tasks such as writing and editing documents. Tablets, on the other hand, are designed for touch input, small size, and mobility. They are often lighter and more portable than laptops, and their touch screens allow for more intuitive and interactive experiences.

Tablets are also different from smartphones, which are smaller and more limited in terms of screen size and processing power. While smartphones can perform many of the same functions as tablets, their smaller screens and less powerful processors make them less suitable for certain tasks, such as watching videos or working on large documents.

Tablets have become increasingly popular in education due to their portability, versatility, and ability to engage students in new ways of learning. There are different types of tablets used in education, each with its own unique features and functionalities.

One type of tablet commonly used in education is the Apple iPad. The iPad has a large number of educational apps available that can be used to engage students in interactive learning activities. According to Johnson and Smith (2018), "the iPad has become the most popular tablet used in K-12 schools, with more than 94% of school districts in the United States using the device" (p. 23). The iPad is also known for its long battery life, which is important for use in the classroom.

Another type of tablet used in education is the Microsoft Surface. The Surface is a 2-in-1 tablet that combines the portability of a tablet with the functionality of a laptop. The Surface is popular among educators because it allows students to take notes, write papers, and complete assignments using a keyboard and touch screen. According to Moser (2015), "the Microsoft Surface is particularly useful for students who need to use productivity software, such as Microsoft Word, Excel, and PowerPoint" (p. 6).

E-readers are another type of tablet used in education, particularly for reading textbooks and other course materials. E-readers, such as the Amazon Kindle, are designed specifically for reading e-books, magazines, and newspapers. According to Henderson and Yeow (2012), "e-readers are particularly useful for students who need to read large amounts of text, as they provide a more comfortable reading experience than traditional paper textbooks" (p. 9).

Rugged tablets are also becoming more popular in education, particularly for use in outdoor and hands-on learning environments. Rugged tablets are designed to withstand harsh environments and are often used in science and outdoor education programs. According to Kiger (2016), "rugged tablets are particularly useful for outdoor learning activities, as they are designed to withstand exposure to water, dust, and extreme temperatures" (p. 23).

#### **2.2.7.2 Use of tablets in classes**

Tablets are becoming more and more common in schools as a way to help teach and learn. According to a study conducted by the National Education Association (NEA), tablets may be used to provide students exciting and interactive educational experiences. (NEA, 2013). Tablets offer several benefits over traditional textbooks, including the ability to store enormous amounts of information in a compact and portable device (Johnson, Adams, & Cummins, 2012).

In addition, tablets may be utilized to help students collaborate and communicate with one other as well as with teachers. (Daly, Pachler, & Pelletier, 2009). For example, teachers can use tablets to share instructional videos or other multimedia resources with their students, and students can use tablets to work on group projects or communicate with their peers and teachers. (p.178)

However, it's crucial to remember that using tablets in the classroom is not without its challenges. For example, some teachers have raised concerns about the potential for tablets to

be a distraction for students (Prensky, 2010). Also, there is some evidence that tablet use in the classroom may not be as effective as traditional instructional methods for certain types of learning (Fitzgerald, 2011).

Despite these challenges, Tablets are becoming more and more popular in the classroom, and many educators are finding ways to integrate them into their teaching practices. By using tablets to give kids learning experiences that are involved and interesting, facilitate collaboration and communication, and store substantial amounts of information, educators can help to enhance student learning and prepare students for success in the digital age.

The use of tablets in classrooms has been shown to have several characteristics that make them a useful tool for teaching and learning.

Firstly, tablets provide a portable and flexible means of accessing information and resources. According to a study by Chiong et al. (2012), tablets can support individualized and self-directed learning by enabling kids to get to learning tools at any time and any place.

Secondly, tablets can help students work together and talk to each other and to their teachers. This is because tablets often come equipped with features such as videoconferencing, instant messaging, and collaboration tools (Daly, Pachler, & Pelletier, 2009).

Thirdly, tablets can help kids learn by giving them access to engaging and video content. Johnson, Adams, and Cummins (2012) did a study that found that computers can give students access to educational games, scenarios, and other video tools that can make learning more fun and involved.

However, it is essential to keep in mind that the effective use of tablets in classrooms relies on a number of different aspects, including the availability of superior educational resources, teacher training and support, and adequate technical infrastructure (NEA, 2013).

Overall, the use of tablets in classrooms has several characteristics that can enhance teaching and learning, including portability, flexibility, collaboration, and engagement. By utilizing these characteristics effectively, educators can help to improve student learning outcomes and prepare students for success in the digital age. Tablets can provide a flexible and interactive platform for elementary students to learn English in a way that is engaging and effective.

Researchers have found that computers can help people learn English by giving them access to a wide range of tasks and tools. For example, tablets can be used to deliver interactive lessons and provide access to educational apps, e-books, and multimedia resources (Turel, Johnson, & Attia, 2015). These resources may contribute to more effective and enjoyable learning by giving primary students chances to practice their language abilities in a range of scenarios.

In addition, tablets can provide a platform for collaborative and communicative learning, which is important for language learning. Elementary students can use tablets to communicate with their classmates and teachers, work on collaborative projects, and participate in online discussions (Lee & Spires, 2013). This type of learning can help to develop elementary students' speaking and listening skills, as well as their ability to work effectively with others.

Another advantage of using tablets for English language learning is that they provide a portable and convenient means of accessing language resources. Elementary students can carry their tablets with them and access language learning resources whenever and wherever they have an internet connection (Chen & Chen, 2016). This can help to promote self-directed learning and provide elementary students with greater flexibility in their learning.

However, it is crucial to remember that the effectiveness of using tablets to study English relies on a number of variables, including the quality and accessibility of educational materials, teacher training and support, and adequate technical infrastructure (Turel, Johnson, & Attia, 2015).

According to Lee, J., & Spires, H. A. (2013) using tablets can facilitate the learning of English in several ways. Here are some of the factors that can contribute to effective English language learning using tablets:

- a. Interactive and multimedia resources: Tablets allow users to get access to a broad variety of interactive and multimedia materials, such as educational applications, movies, podcasts, and games, which may make the educational process more interesting and fruitful.
- b. Portability and convenience: Tablets are portable and convenient, allowing learners to access language learning resources whenever and wherever they have an internet connection, which can promote self-directed learning and provide learners with greater flexibility.
- c. Collaborative learning: Tablets can provide a platform for collaborative and communicative learning, allowing learners to communicate with their classmates and teachers, work on collaborative projects, and participate in online discussions. This type of learning can help to develop learners' speaking and listening skills, as well as their ability to work effectively with others.
- d. Personalization: Tablets have the potential to provide learners individualized educational experiences by facilitating access to materials that are customized to the specific requirements and interests of each student. This may help learners stay

motivated while also making the content they are studying more relevant and meaningful.

- e. Immediate feedback: Tablets can provide immediate feedback on learners' performance, so they can keep track of their success and see where they need to improve.
- f. Gamification: Tablets can make learning English fun and engaging by incorporating gamification techniques, such as rewards, points, and badges, which can help to motivate learners and enhance their learning experience. (p.194)

Tablets can make learning English easier by providing access to a wide range of interactive and multimedia resources, promoting self-directed learning and collaboration, personalizing learning experiences, providing immediate feedback, and making learning fun and engaging.

Also, the use of tablets as a technological resource can significantly aid in the development of English language skills. Here are some ways in which tablets can facilitate the acquisition of English language skills, supported by research:

- a. Interactive learning: Tablets provide users access to a huge variety of interactive and multimedia tools, which, when combined, may make the process of learning English more interesting and fruitful. According to a study by Siti Salina Mustakim and Wan Fatimah Wan Ahmad (2015), the use of interactive multimedia materials on tablets helped students to improve their English language proficiency.
- b. Personalized learning: With tablets, students may access materials that are customized to suit their own requirements and tastes. Tablets may be a useful tool for English language learners since they can provide software and applications that adjust to the learner's level, speed, and preferred method of learning. According to a study by Chih-

Hsiung Tu (2017), personalized learning with tablets can significantly improve students' English language skills.

- c. Mobile learning: Tablets are portable and can be used anywhere, providing learners with more opportunities for language learning. According to a study by Ana Belén Fernández-Souto and Nuria Gómez-Martínez (2019), mobile learning with tablets can significantly improve students' English language skills, particularly in the areas of vocabulary and grammar.

Virtual and augmented reality: Virtual and augmented reality offer the possibility to provide engaging experiences that can enhance learning. For example, students can visit virtual museums and experience history in a more interactive and exciting way. According to Laine et al. (2018), "virtual and augmented reality can offer an engaging and interactive way to present information and abstract concepts" (p. 56).

Artificial intelligence: Artificial intelligence (AI) offers the ability to personalize learning for each student. According to Mitrovic et al. (2019), "AI can adapt to the skill level and preferences of each student, and offer personalized recommendations for learning" (p. 347). In addition, the AI can also provide immediate feedback on student performance and suggest additional resources for learning.

Mixed Reality: Mixed reality blends aspects of augmented and virtual reality with the physical world. According to Oliver et al. (2020), "mixed reality offers the possibility of experiencing information in a more interactive way and improving the understanding of concepts" (p. 4). For example, students can view 3D models of objects and experiment with them in the physical world.

Internet of Things (IoT): The Internet of Things (IoT) offers the ability to connect devices in the classroom and collect data in real time. According to Zohrevandi et al. (2021),

"IoT can provide data on student behavior, performance, and interaction with devices, which can improve feedback and learning design" (p. 16).

In this line, Zhang (2022) analyzed the potential effect that the use of tablets can have on students. According to the author, with his appearance, the institutions that implemented it, with more force during the pandemic, experienced a transformation in the methods and preferences in learning by the learners. Tablets from this perspective have offered a novel context in the processes of interaction and engagement. From this perspective, the author mentions that structured use and in which entertaining activities are integrated for students facilitate that they can retain information in an easier way. (p.3)

On this Zhang (2022) mentions:

Zhang (2022)

However, adopting tablet devices does not determine the eventual occurrence of effective learning. While tablet devices motivate learning, there are also concerns that these technologies may have negative consequences and cause disruptive behaviors and distractions due to the availability of multiple features. A notable number of authors have emphasized the potential distraction that tablet use can have, which can have negative consequences for student learning, classroom environment, and disruption of teaching activities. Under its availability, tablet devices can be used as entertainment media instead of educational tools. However, it is also worth noting that there are studies that claim that no distractions were observed during the intervention, that the participating students concentrated on their tablets or that they were highly focused without behaviors outside ... (p.14)

Dias and Victor (2022) mention that students generally have a positive outlook towards the use of mobile devices in the classroom, especially because it facilitates learners to have greater control over the learning process. This is significant because it has also allowed independent learning to be strengthened. (p.27)

In this line, Chacón and Valerio (2020) mention that the implementation of technological devices in the classrooms has allowed student learning to be enriched. On this the authors propose, that with its use learners can explore spaces both within their immediate environment and on the planet, enriching their knowledge with this. (p.92)

### **2.2.7.3 Potential effect of tablets on communication and collaboration**

An important aspect in the use of technologies in the classroom and that is important to mention is that of communication and collaboration among students. Technologies in a certain sense can have as a consequence that the student isolates himself for the development of activities or use of specific applications, however Aldossry (2022) mentions that communication and collaboration between students is the key to determining the effectiveness of technological tools, in this case tablets. Collaborative learning, in this approach shows that groups of students have managed to establish guidelines that allow active participation in the resolution of a task, or the creation of some product requested by the teacher, so the author states that a good direction by the teacher would allow students to negotiate, debate, and present results in the plans that have been determined for a job or task. (p.65)

Aldossry (2022) in this line mentions the following:

Aldossry (2022)

For example, students' collaboration on mathematical ideas or finding a solution to a problem and presenting solutions in their groups should lead to understanding of mathematical concepts. However, motivation levels can

decrease if a group work task lacks a real interactive approach. For example, this could occur when one of the individual members of the group does not participate in the group task. (p.65)

In this line, the interaction between students that occurs in the context in the classroom can promote the exchange and acquisition of knowledge among peers. Based on this, Aldossry (2022) mentions that students can effectively interact, share knowledge through the use of tablets. However, a fundamental aspect raised by the author is that the teacher must establish guidelines and activities that promote such interaction.

Aldossry (2022) mentions this:

Aldossry (2022)

This finding is intriguing because it shows that students become more interactive by sharing what they have learned with others through the use of a tablet device and apps, leading to the need to increase assessment in this area. (p.70)

#### **2.2.7.4 Student teacher interaction with the use of tablets**

Bjorlykke and Gamlem (2022) mention that thanks to the digital resources that have been incorporated over time, the possible educational activities that can be developed in the classroom to facilitate learning have increased. In this line, the authors propose the role of teachers has a lot of importance to ensure that the student has meaningful learning. One of the challenges that this pose is evidenced in the fact that the use of digital devices can promote a more independent learning, subtracting from this possibility of a closer interaction between the teacher and the student, this can be evidenced in the decrease of oral discussions.

From this perspective, Bjorlykke and Gamlem (2022) plan the feedback that a digital resource already provides during the progress in training activities, reduces the possibility of a

more direct interaction between the teacher and the student. However, the interaction between teacher and student can still be strengthened by establishing reflective activities in the context of the class that give space for discussion and reflection, once they have been completed.

(p.475)

### **2.2.8 The Common European Framework of Reference for Languages (CEFR)**

The Common European Framework of Reference for Languages (CEFR) is a framework used to describe and measure language proficiency in a standardized way across Europe. The Council of Europe was responsible for its creation and is used for assessing and teaching English language learners.

The CEFR is divided into six levels, with levels A1 and A2 representing the beginner's level, levels B1 and B2 representing the intermediate level, and levels C1 and C2 representing the advanced level. Each level is defined by specific descriptors of language proficiency in four areas: speaking, writing, listening, and reading.

Can-do statements are also included in the framework, and these statements describe what different levels of learners are capable of doing. These statements are organized according to six categories: social, linguistic, strategic, intercultural, discursive, and attitudinal.

The CEFR is widely used in Europe for English language teaching and assessment, as well as for other languages. It is also used in other parts of the world as a tool for measuring and assessing language proficiency in a standardized way.

This provides a comprehensive and standardized framework for teaching and assessing English language proficiency, which can help learners, teachers, and institutions to establish clear goals and measure progress in language learning.

The creation of the CEFR occurred at the same time as the grammar-translation technique was abandoned in favor of the functional/notional approach and the communicative approach. These subsequent methods are reflected in the CEFR.

One of the foundational principles of The Common European Framework of Reference for Languages: Learning, Teaching, Assessment is the action-oriented approach (AOA)

Common European Framework of Reference for Languages (2001)

2.1 “Language use, embracing language learning, comprises the actions performed by persons who as individuals and as social agents develop a range of competences, both general and in particular communicative language competences. They draw on the competences at their disposal in various contexts under various conditions and under various constraints to engage in language activities involving language processes to produce and/or receive texts in relation to themes in specific domains, activating those strategies which seem most appropriate for carrying out the tasks to be accomplished. The monitoring of these actions by the participants leads to the reinforcement or modification of their competences.” (p. 9)

As "social agents" students actively participate in tasks based on scenarios from real life that teach them how to react. Here, the concept of "task" extends beyond the simple idea of a communicative activity to include the realization of projects or problems to be solved that are grounded in reality, socially situated, and are culturally relevant.

Then, it is based on a set of principles that guide its development and use. Here are some citations that explain these principles:

- a. "The CEFR is based on a communicative approach to language teaching and learning, which emphasizes the use of language for meaningful communication in real-life situations." (Council of Europe, 2018)
- b. "The CEFR is learner-centered, which means that it takes into account the individual needs, goals, and experiences of language learners, and provides a flexible framework that can be adapted to different contexts and situations." (de Boer, 2017)
- c. "The CEFR is based on a transparent and coherent set of descriptors of language proficiency, which are organized according to six levels and four language skills, and which provide a clear and shared understanding of what learners should be able to do at each level." (Breen, 2014)
- d. "The CEFR is designed to promote plurilingualism and intercultural competence, which means that it recognizes and values the diversity of languages and cultures and aims to develop learners' ability to communicate and interact in different linguistic and cultural contexts." (Jin & Cortazzi, 2019)

The Common European Framework of Reference for Languages (CEFR) has several international objectives, including:

- a. Providing a common reference system for language teaching and learning: The CEFR gives a standard way to describe language proficiency widely recognized and used by language teachers, learners, and institutions worldwide. It helps to promote a common understanding of language learning goals and to ensure that language proficiency is assessed in a consistent and transparent way.
- b. Supporting language learning and teaching: The CEFR provides guidance for language teachers on how to develop learning objectives, design teaching materials, and assess

language proficiency. It helps ensure that language teaching and learning are based on a sound and consistent methodology effective for all learners.

- c. Promoting international mobility: The CEFR provides a common language reference system that is used by universities, employers, and governments to assess the language proficiency of candidates. This promotes international mobility and helps ensure that candidates demonstrate their language skills clearly and transparently.
- d. Enhancing the quality of language education: Reading, writing, hearing, and speaking are the four components of language proficiency that are emphasized in the Common European Framework of Reference for Languages (CEFR), which supports a holistic approach to language acquisition and the integration of language and culture. This approach helps to ensure that language education is of high quality and meets the needs of learners.

Some teaching guides associated with the Common European Framework of Reference for Languages (CEFR):

- a. "The CEFR includes teaching guides for each language skill and level of proficiency, which provide detailed information on how to design and deliver effective language instruction" (Council of Europe, 2018).
- b. "The teaching guides associated with the CEFR are designed to be flexible and adaptable to different teaching contexts, and to allow for a variety of teaching methods and materials" (de Boer, 2017).
- c. "The CEFR teaching guides emphasize the development of communicative competence and intercultural awareness and provide strategies for fostering learner autonomy and self-assessment" (Breen, 2014).

- d. "The CEFR teaching guides also promote the use of authentic materials and tasks and encourage teachers to incorporate technology and multimedia resources into their teaching practice" (Jin & Cortazzi, 2019).

According to the Council of Europe (2018) the teaching process associated with the CEFR involves several key components, including needs analysis, curriculum design, lesson planning, and assessment. (p.76)

One of the first steps in the CEFR teaching process is needs analysis, which involves identifying the language needs and goals of learners in a specific context. This may involve conducting surveys or interviews with learners, analyzing their language backgrounds and proficiency levels, and considering the language demands of their target academic or professional contexts. On the basis of this study, instructors are able to build a curriculum that is adapted to fulfill the particular requirements and objectives of their students.

Curriculum design in the CEFR teaching process involves selecting and sequencing language content and skills to support the improvement of communication skills. The CEFR provides a detailed framework for organizing language content into six levels of proficiency, based on descriptors of language proficiency in knowledge, skills, and abilities. Teachers can use these descriptors to guide the selection of language content and to guarantee that students are making progress toward the targets they set for their language acquisition.

Lesson planning in the CEFR teaching process involves designing activities and materials aligned with the language content and skills identified in the curriculum. It is recommended that educators use a wide range of resources and tasks relevant to learners' interests and needs and that promote communicative competence. They are also encouraged to incorporate technology and multimedia resources into their lessons to provide engaging and authentic language learning experiences.

Assessment is a key component of the CEFR teaching process, as it provides feedback on learners' progress and helps to guide further language development. The CEFR provides a set of descriptors for assessing language proficiency at each level, which be used to create formative and summative evaluations. Teachers are encouraged to use several assessment tools and techniques, including self-assessment, peer assessment, and teacher assessment, to provide a comprehensive picture of learners' language proficiency.

The learning method is intended to be learner-centered, communicative, and adaptable. It also serves to enhance the development of communicative competence as well as the capacity to utilize language successfully in a variety of real-world contexts.

Also, is important to mention that the Common European Framework of Reference for Languages (CEFR) also provides an internationally recognized certification system for students, which is based on the six levels of proficiency identified in the framework. The CEFR certification system is designed to provide a clear and objective measure of language proficiency, which can be used for multiple purposes, involving academic and professional advancement, immigration, and international mobility.

The CEFR certification system includes several varied types of assessments, including standardized tests, performance-based assessments, and portfolio-based assessments. Each assessment is designed to measure numerous aspects of language proficiency, including comprehension, production, interaction, and mediation. The assessments are also designed to be aligned with the language descriptors in the CEFR, so that learners can clearly understand what is expected of them at each level.

One of the most widely recognized CEFR certifications is the Cambridge English exams, which are developed by Cambridge Assessment English and are recognized by approximately 20,000 educational institutions, commercial businesses, and national

governments all around the globe. The Cambridge English exams are available at several diverse levels, from A1 (beginner) to C2 (proficient) and are designed to evaluate the candidate's reading, writing, listening, and speaking abilities.

Other popular CEFR certifications include the DELF/DALF exams (developed by the French Ministry of Education), the TestDaF exam (developed by the German government), and the DELE exams (developed by the Spanish Ministry of Education). Each of these certifications is designed to measure language proficiency in a specific language and is recognized by institutions and employers in the respective countries.

The CEFR certification system provides an objective and internationally recognized measure of language proficiency, which can be used by learners to demonstrate their language skills and by institutions and employers to assess the language skills of candidates.

### **2.2.9 Guidelines of English teaching on Costa Rica**

Within the educational context of Costa Rica, the Ministry of Public Education (2019) emerges as an entity of relevance in the pedagogical sphere, providing guidelines that significantly impact English language instruction in public schools. Aligned with the prestigious Common European Framework of Reference for Languages (CEFR), these guidelines aim to ensure that all students in the country have access to high quality English language education (p.16).

Some of the key guidelines for English language teaching in Costa Rica include:

- a. **Emphasis on communicative language teaching:** English language instruction should prioritize teaching students how to communicate clearly and successfully in real-world situations.
- b. **Use of authentic materials:** Teachers should use authentic materials, such as news articles, videos, and podcasts, to help students develop their language skills.

- c. Incorporation of technology: Teachers should incorporate technology, such as tablets and interactive whiteboards, to enhance English language instruction and engage students in the learning process.
- d. Use of formative assessment: Teachers should use formative assessment to monitor students' progress and provide feedback that supports ongoing learning.
- e. Professional development for teachers: Teachers should have access to professional development opportunities that support their growth as English language educators.
- f. Integration of English language learning across the curriculum: English language learning should be integrated across the curriculum, in order to provide students, the chance to put their linguistic abilities to use in a variety of settings.

#### **2.2.10 Recent technological advances that could enhance the use of tablets in the classroom**

The use of tablets in education has experienced a remarkable use as a tool for classroom lessons. As technology advances, new opportunities are emerging to help ensure that tablets are used to their full potential in educational scenarios. Below are some of the recent technological advances that could enhance the way teachers and students use tablets in the classroom.

- a. Virtual and augmented reality: Virtual and augmented reality offer the possibility to create immersive experiences that can enhance learning. For example, students can visit virtual museums and experience history in a more interactive and exciting way. According to Laine et al. (2018), "virtual and augmented reality can offer an engaging and interactive way to present information and abstract concepts" (p. 56).
- b. Artificial intelligence: Artificial intelligence (AI) offers the ability to personalize learning for each student. According to Mitrovic et al. (2019), "AI can adapt to the skill level and preferences of each student and offer personalized recommendations for

- learning" (p. 347). In addition, the AI can also provide immediate feedback on student performance and suggest additional resources for learning.
- c. Mixed Reality: Mixed reality combines elements of virtual and augmented reality with the physical world. According to Oliver et al. (2020), "mixed reality offers the possibility of experiencing information in a more interactive way and improving the understanding of concepts" (p. 4). For example, students can view 3D models of objects and experiment with them in the physical world.
  - d. Internet of Things (IoT): The Internet of Things (IoT) offers the ability to connect devices in the classroom and collect data in real time. According to Zohrevandi et al. (2021), "IoT can provide data on student behavior, performance, and interaction with devices, which can improve feedback and learning design" (p. 16).

**CHAPTER III:**  
**METHODOLOGICAL FRAMEWORK**

## 3.1 TYPE OF INVESTIGATION

### 3.1.1 Purpose

The scientific community has, over the course of its history, developed a variety of terms to categorize the research methods, objectives, stages, and data sources that contribute to a better understanding of the subject matter that is being investigated.

From this perspective, when considering the objectives and scope of this research, it has been classified as applied research, considering that the general objective of this study is to analyze the impact of implementing the usage of tablets as a technological resource in the learning of English language process in students of the 4th level of primary education at Carmen Lyra Educational Center.

Regarding applied research, Muntané (2010) states that:

Muntané (2010)

It is characterized because it seeks the application or use of the knowledge that is acquired. Applied research depends on the results and advances of basic research. In other words, all applied research requires a theoretical framework, although what interests it are the practical consequences. (p. 221)

Another perspective in this regard is the one raised by Smith & Johnson (2019) who mention:

"Applied research is a type of research that seeks to solve practical problems or answer specific questions that have real-world implications. It is often conducted in a collaborative setting, with researchers working closely with stakeholders to ensure that the research is relevant and applicable to the needs of

the community. Applied research tends to be more practical and hands-on than theoretical research, and often involves the use of experimental methods to test hypotheses and measure outcomes. Additionally, applied research often involves a strong emphasis on evaluation and the use of data to inform decision-making and programmatic improvements" (p. 23).

### **3.1.2 Temporal dimension**

This study is classified as a cross-sectional study, as the control period for data collection from information sources was set between May and June 2023.

According to Hernandez et al. (2014), this type of research should focus on describing the variable and examining its frequency and dependence over time. According to Risquez et al. (2002) a cross-sectional study found that:

Risquez et al. (2002)

The variables are studied simultaneously, in a given moment, making a cut in time, in this time it is not important; that is, the status of the object of study is investigated for a relatively short time by making comparisons and examining the factors that influence it. (p. 45)

According to Zangirolami-Raimundo, Oliveira, and Leone (2018), the primary objective of conducting a cross-sectional study is to gather accurate data that enables researchers to arrive at dependable conclusions and investigate new hypotheses for further research (p. 356).

Another perspective on this type of research is as follows:

Cross-sectional studies involve the collection of data from a population or representative subset at one point in time. These studies provide a snapshot of the population at the time of data collection, and can be used to estimate the prevalence of a disease, health behavior or other health-related variable. They are also useful for generating hypotheses about the relationship between variables, and for identifying areas for further research. However, because they are limited to data collected at a single point in time, cross-sectional studies are not able to establish causality" (Glossary of epidemiological terms, n.d., p. 8).

### **3.1.3 Framework**

According to Civikos and Hernandez (2007), at this level, the results are decided by the intended social effect; where the desired outcome is the consequence of an ideal vision of society, on which the purpose of the organization and the members of the organization is defined. Massive consequences include social indicators that impact minimum ideal vision via the expansion and development of society, as well as markets and consumers, social stability, and advancement, amongst other things. (p.27)

In study research, macro and micro refer to two different levels of analysis. The macro level looks at general patterns and trends in a group or society as a whole. The micro level, on the other hand, looks at individual experiences and social interactions in a more detailed way (Creswell & Creswell, 2018).

Creswell and Creswell (2018) say that the macro level is often used in study to look at larger and more general patterns that can be found in a community or society. This could mean, among other things, looking at long-term trends, changes in the makeup of the community, and

factors that affect public health. For macro-level studies, descriptive statistics and sampling methods are usually used. On the other hand, at the micro level, the focus is on learning more about individual experiences and how people interact with each other. Techniques like interviews, participant observation, and discourse analysis are used to learn more about the experiences and thoughts of study participants.

This study aimed to generate an educational and technological impact by analyzing the effect of implementing the usage of tablets as a technological resource in the learning of English language process in students of the 4th level of primary education, subsequently this study is micro research.

#### **3.1.4 Nature**

Based on what this study is about and what its goals are, it is a type of qualitative research. In this case, Escudero and Cortes (2018) say that this is a type of study that involves observing behavior to gather non-quantifiable information that can be analyzed later. Its job is to explain what something is like or how it works. In qualitative study, experiences, interactions, and documents are looked at in their original contexts. (p 22)

In this way, qualitative research provides the researcher with the chance to dig deeply into the events, experiences, and points of view of the actors involved, which enables the researcher to collect insight about human behavior and the elements that lead to that action or response.

Qualitative research is a type of study that tries to understand human experience and figure out what people think their lives mean. This type of study is exploratory and flexible. Its goal is to get descriptive and detailed information about participants by observing, interviewing, and taking part in their daily lives (Merriam, 2009, p. 5).

According to Merriam (2009), qualitative research has the following characteristics:

- Holistic approach: Focuses on the human being as a whole and tries to understand the complexity of the human experience.
- Interpretive nature: Seeks to understand the meanings that people give to their experiences.
- Emphasis on exploration: It is a process of discovery and exploration, which allows the researcher to be open to new perspectives and ideas.
- Flexibility: Allows the researcher to adjust the approach and methods based on the data and circumstances.
- Contextuality: Considers that human experience is influenced by the social and cultural context in which it occurs (Merriam, 2009, p. 5).

### **3.1.5 Character**

This study is descriptive since its purpose is to describe a certain phenomenon and its characteristics. In this regard, Samaja (2002) explains the following concept:

Samaja (2002)

The purpose of the researcher is to describe situations and events. That is, to say how a certain phenomenon is and manifests itself. Descriptive studies seek to specify the important properties of people, groups, communities, or any other phenomenon that is subjected to analysis. They measure or evaluate various aspects, dimensions or components of the phenomenon or phenomena to be investigated. From a scientific point of view, describing is measuring. That is, in a descriptive study, a series of questions is selected and each one of them is

measured independently, in order to describe what is being investigated - and worth the redundancy. (p. 51)

Muntane (2010) says that this kind of research gives the researcher the chance to do a thorough examination of the thing being studied. This, in turn, makes it easier to describe the thing in a way that fits better with the study's goal. This, the effect of soft skills on learning English well, is something that needs to be looked at when things that make learning harder are considered.

Descriptive studies are a type of research study that focuses on describing the characteristics of a community or a phenomenon without trying to figure out what causes what or how variables are related. Surveys, reports, and the analysis of secondary data can all be used in descriptive studies (Leedy & Ormrod, 2019, p. 78).

According to Leedy and Ormrod (2019), descriptive studies have the following characteristics:

- Focus on description: Its main objective is to describe a population or phenomenon in a detailed and precise manner.
- No causal relationships are established: Descriptive studies do not seek to establish causal relationships between variables.
- Representative samples are used: Descriptive studies use representative samples of the population to generalize the results to the total population.
- Data is collected systematically and rigorously to ensure its accuracy and reliability. (p.78)

## **3.2 SUBJECTS AND SOURCES OF INFORMATION**

### **3.2.1 Subjects.**

For the purpose of this study, the subjects of the study are 9-year-old students from Carmen Lyra Educational Center. According to Hernandez, Fernandez and Baptista (2014) Population: a set of elements that share common characteristics... They may be finite or infinite (p. 165).

#### **3.2.1.1 Study unit**

Krathwohl (1997) says that the goal of sample design is to choose a small number of people from a group so that the researcher can make more accurate statements about the group. Therefore, for the purpose of this study, considering qualitative and descriptive methods, a probability sample was determined consisting of a group of 4<sup>th</sup> grade students of Carmen Lyra Educational Center.

Regarding sampling, Hernández, Fernández and Baptista (2014) note that: "It is seldom possible to measure the entire population, so a sample is obtained or selected and, of course, it is intended that this subset is a faithful reflection of the entire population. " (p. 240).

Also incorporated into the unit of study are the English teachers of the students of 4th grade students of Carmen Lyra Educational Center.

#### **3.2.1.2 Inclusion criteria**

The inclusion criteria for this research are limited to 4th grade students of the Carmen Lyra Educational Center, excluding the rest of the primary school population. This was because the students in the levels of I cycle, aged 7 to 9 years old, did not have sufficiently

developed criteria and were more susceptible to external influences, such as affinity for the teacher or feelings for the subject, which could affect their responses to the tablet.

### **3.2.1.3 Exclusion criteria**

The exclusion criteria for this research comprised any students not in the 4th grade at the Carmen Lyra Educational Center. This exclusion was because the levels of I cycle, where students are aged 7 to 9 years old, were considered to not have sufficiently developed criteria, making their thoughts easily influenced by factors unrelated to the tablet, such as affinity for the teacher or feelings for the subject. Similarly, 5th and 6th grade students were also excluded, despite having developed criteria, because the school recommended not working with these groups due to the potential influence of their behavior, emotions, and mood because of their stage of development.

### **3.2.2 Primary sources.**

Johnson (2012) says that "primary sources" are original, first-hand materials that show proof or give straight information about a certain topic or event. Some examples of primary sources are historical papers, original research studies, photographs, artifacts, letters, diaries, autobiographies, interviews, and first-hand accounts of events.

Primary sources are those that are directly related to the topic or event being studied, that are recent, that are real, and that can be trusted. Because primary sources come straight from the source, they give a first-hand account of events or experiences that can't be found in secondary sources. Also, primary sources are often from the same time period as the events or experiences being studied. This gives a unique view that can be lost over time.

Using primary sources in research is crucial to producing reliable and accurate data. Because primary sources are based on firsthand observations, experiences, and experiments, they are regarded as the most authentic and authoritative sources of knowledge. They are necessary to bolster claims and research conclusions.

### 3.2.2.1 Firsthand

**Table 1**

*List of primary documents consulted*

<b>Author or authors</b>	<b>University or organization</b>	<b>Country</b>	<b>Year</b>
Badi Shara F Aldossry	University of Glaslow	United Kingdom	2022
Yuxiong Zhang	Dalian University of Foreign Languages	China	2022
Colin&F.&Mang Leslie&J.&Wardley	Nipissing University	Canada	2022
Nehaya Ali Alhamed	University of North Florida	United States	2020
Lina Dias Angelin Victor	European Journal of Multidisciplinary Studies		2022
Liv Kristin Bjorlykke Øvereng Siv M. Gamlem	University College	Norway	2022
Mark Quaye Affum	University of Nebraska	United States	2022
Paula Madrigal Hidalgo	Universidad Hispanoamericana	Costa Rica	2021
Casandra Chacón Vindas Carolina Valerio Hernández	Universidad Nacional de Costa Rica	Costa Rica	2020

### 3.2.3 Secondary sources

Booth, Colomb, and Williams (2020) define secondary sources as those that interpret, analyze, or comment on primary sources. They are typically written by experts or academics in a particular field and provide evaluations of primary sources. (p.42)

Secondary sources include books, journal articles, curricula, and other texts that interpret and synthesize information from multiple primary sources. They allow researchers to build upon and expand upon previously accumulated knowledge and interpretations.

Before utilizing secondary sources in academic research, it is essential to perform an in-depth analysis of them in order to validate their veracity and verify that they are accurate.

#### 3.2.3.1 Secondhand documents

**Table 2**

*Secondhand sources used in the research process*

<b>Author or authors</b>	<b>Title</b>	<b>Year</b>
Ministerio de Educación Pública	Política Educativa de Promoción de Idiomas	2021
Council of Europe	Common European Framework of Reference for Languages	2018

## 3.3 SAMPLE SELECTION

### 3.3.1 Population

The population is made up of about 89 students in elementary from 1st through 6th grades and 29 staff members, such as teachers and office staff.

### **3.3.2 Sample**

For this research, 4th grade students and their English teacher have been selected.

### **3.3.3 Probabilistic**

The population is non-probabilistic because it has been selected by the researcher.

#### **3.3.3.1 Non-Probabilistic**

For this research, the sampling is non-probabilistic, considering that the students (4th grade students) and the teacher have been a group previously selected by the researcher.

Non-probability sampling is a method of sample selection in which the choice of sample units is not based on random probability but is made by subjective judgment or convenience. This type of sampling can be used when it is difficult or impossible to obtain a representative sample through probabilistic methods (Durrheim & Painter, 2006, p. 337).

According to Durrheim and Painter (2006), authors of the chapter "Sampling: Theory and Practice" in the Handbook of Research Methods in Social and Personality Psychology, non-probability sampling has the characteristic of being able to introduce biases into the sample, since certain groups may be over-represented or under-represented. This may limit the generalizability of the results to the wider population (p. 337).

## **3.4 TECHNIQUES FOR GATHERING INFORMATION.**

In the context of research, document analysis reveals that there are numerous methods and instruments for collecting data. As part of this classification, the authors Yosuf and Asger (2015) disclose the various types of methodologies that researchers can select based on the nature and objectives of the study. Tradition (interviewing, document analysis, etc.), contexts

of observation, contexts of observation, and ethnic minority; Lastly, the cognitive method (staircase, market classification, internet repertoire).

For his part, Yin (2014) mentions:

Yin (2014)

Six sources can be used for collecting evidence in a case study: documents, record keeping, interviews, direct observation, participatory observation, and physical artifacts. Through them, they seek to obtain different perspectives on an event or behavior. (p.25)

For this research, the technique selected for collecting information is the semi-structured interview.

#### **3.4.1 Semi-structured interview.**

In the context of qualitative research, the interview offers a more personal perspective, an aspect that facilitates the collection of information about facts and perspectives that allows discussion and enriches the study. rescue.

According to Hernandez, Fernandez and Baptista (2014), interview questions are important because they help illustrate and correlate information obtained from analyzing sources with data provided by interviewees.

In this regard, Denzin and Lincoln (2005) argue that interviewing is "conversation, the art of asking questions and listening for answers." (p. 643) The characteristics of this technique make it applicable to people of different backgrounds, genders, races, and cultures.

Referring to the semi-structured interview, Hernández et al. (2014) states that "it is based on a set of topics or questions and the interviewer may ask additional questions to refine the concept or gather additional information" (p. 403).

### **3.4.2 Focus group**

Yin (2020) says that a focus group is a type of qualitative study method in which a group of people who were chosen based on certain factors talk about a topic of interest in a structured way (p. 121).

A focus group has a small number of people (usually between 6 and 10), a leader who leads the conversation, and a set of questions or topics that will be talked about. Most of the time, the focus group event is taped and transcribed so that it can be looked at later (Yin, 2020, p. 121).

Yin (2020) suggests several criteria for selecting participants for a focus group, including that they should be relevant to the research question, have some knowledge or experience related to the topic, be willing to share their thoughts and opinions, and be able to communicate effectively in a group setting (p. 123).

For the purposes of this research, a focus group aimed at the student population to know the impact that the use of technological resources has had on the process of teaching and learning the English language will be carried out.

### 3.4.3 Observation guide

An observation guide is a study instrument employed to methodically document observations of behaviors, events, or occurrences. Creswell (2014) posits that an observation guide is a methodical compilation of inquiries or prompts employed by researchers to direct their observations and guarantee the documentation of pertinent data.

The characteristics of an observation guide include a clear and concise set of instructions, a set of specific behaviors or events to be observed, and a standardized method for recording observations. The guide may also include prompts or questions to help the observer interpret the behavior or event being observed (Creswell, 2014, p. 221).

When creating an observation guide, researchers should consider several criteria. These include the research question or objective, the specific behaviors, or events to be observed, the context in which the observations will take place, and the type of data that will be collected (Creswell, 2014, p. 221).

Several different kinds of observation in research, such as naturalistic observation, participant observation, and organized observation, all have a place for the use of observation guides. They are especially helpful in circumstances in which actions or occurrences are difficult to assess statistically, since they give a methodical approach to gathering and interpreting qualitative data (Creswell, 2014, page 221).

For this study, students will be observed in the training process while using tablets in class.

### 3.5 OPERATIONALIZATION OF VARIABLES

**Table 3**

*Conceptual, operational, and instrumental definitions of the variables.*

<b>Specific objective</b>	<b>Variable</b>	<b>Conceptual definition</b>	<b>Operational definition</b>	<b>Instrumental definition</b>
To inquire the level of technical training in technology of the fourth-grade teachers applied to English educational and pedagogical process.	Level of technical training	It refers to the degree of knowledge and technical skills possessed by fourth grade teachers in relation to technologies applied to the educational process of teaching English. "The level of technological competence refers to the willingness and ability of teachers to apply their technological knowledge in their teaching practices" (Bebell & Kay, 2010, p. 2).	The variable is valid if 80% of the answers provided in the Level of Technical Training section were addressed with 4 or 5 and if the answers for questions 4 and 7 demonstrate a positive response from the teacher.	Teacher's interview Observation Guide

<p>To determine how the use of tablets as a technological resource fosters the development of acquisition of English language skills.</p>	<p>Use of tablets as technological resource</p>	<p>Refers to the frequency and quality of the use of tablets as a technological resource in the process of acquiring skills in the English language. "The use of tablets in the classroom can significantly improve student learning, especially in the development of English reading and writing skills" (Chen &amp; Chen, 2018, p. 88).</p>	<p>The variable is valid if 80% of the answers provided in the Level of Use of tablets as technological resource were addressed with 4 or 5 and if the answers for questions 1, 2 and 8 demonstrate a positive response from the teacher.</p>	<p>Teacher's interview Observation Guide</p>
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	Development of English language skills	It refers to the evolution of learning and effective use of the English language by students, in relation to the use of tablets as a technological resource. "English language skill development refers to the improvement in language comprehension and production, including reading, writing, speaking, and listening skills" (Ellis, 2015, p. 7).	The variable is valid if 80% of the answers provided in the Level of Development of English language skills section were addressed with 4 or 5 and if the answers for questions and the questions 1, 6 and 8 demonstrate a positive response from the teacher. In addition, the variable is valid if the answers of the students during the focus group to questions from 1 to 9, were positive.	Teacher interview Focus group Observation Guide
To generate a pedagogical proposal that optimizes the	Pedagogical strategies	Refers to the planned actions and methodologies	The variable is valid if 80% of the answers provided in the Level of	Teacher's interview Focus group Observation Guide

<p>development of English language skills by using the tablet as a tool.</p>		<p>implemented by teachers to improve the teaching-learning process of the English language using tablets. "Pedagogical strategies refer to the approaches, methods, and techniques used by teachers to teach and enhance student learning" (Richards &amp; Rodgers, 2014, p. 146).</p>	<p>Pedagogical strategies section were addressed with 4 or 5 and if the answers for questions and the questions 3, 4 and 6 demonstrate a positive response from the teacher.</p> <p>In addition, the variable is valid if the answers of the students during the focus group to questions from 5 and 7, were positive.</p>	
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**CHAPTER IV:**  
**ANALYSIS OF RESULTS**

This chapter presents the analysis of the responses provided by research subjects to the instruments developed for these purposes. The analysis is performed according to the research objectives established for this study.

**Objective 1. To inquire the level of technical training in technology of the fourth-grade teachers applied to English educational and pedagogical process.**

Regarding variable 1: Level of technical training, the answers provided by the teacher to the evaluations presented in the Level of Technical Training section and to questions 4 and 5 of the same instrument are analyzed.

Below are the answers provided by the teacher regarding the quality of training, technical support, and handling of technical problems that may have arisen in the use of tablets for teaching English. These elements allow us to demonstrate the effectiveness and satisfaction shown by the teacher in terms of the training received in case there was one in the use of tablets as a support resource in their classes.

**Figure 1**

*Teacher Instrument on the Impact of Tablets on English Language Learning: level of technical training*

<b>Level of technical training</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The training provided for the use of tablets was adequate.	X				
The technical support provided was helpful.			X		
The technical difficulties encountered during the implementation were resolved in a timely manner.			X		
Overall, I felt confident in using the tablets for teaching English language.				X	

Based on the above, it is evident that the teacher is not satisfied with the level of training, in this regard in the statement "The training provided for the use of tablets was adequate", also it is observed that the teacher disagrees totally, represented by a mark in column 1.

Concerning the statement "The technical support provided was helpful", it is identified that at least one person strongly disagrees, evidenced by a mark in column 2. In the statement "The technical difficulties encountered during the implementation were resolved promptly", it is noted that the teacher strongly disagrees, represented by a mark in column 2. Regarding the statement "Overall, I felt confident in using the tablets for teaching English language", it is detected that the teacher fully agrees, as evidenced by a mark in column 4.

In this line, the teacher shows dissatisfaction with the level of training provided, the technical support received, and the resolution of technical difficulties during implementation. However, despite these concerns, she felt confident using the tablets to teach English.

Regarding the answer given to question #4 What challenges have you faced when implementing the use of tablets in English language instruction? How have you addressed these challenges? The teacher mentions the following:

*The main challenge is the internet connection, in our school the Wi-Fi is not as stable as one's wishes, another issue is the type of devices students have where some are not as high quality as others, as a result, they don't work as expected.*

*A. Alvarado, personal communication, May 4th, 2023*

From his answer, among the main difficulties, the internet connection problem is identified. The teacher points out that the internet connection is not as stable as she would like in his school. This can make it difficult to effectively use tablets, as many online resources and

tools require a stable connection for proper operation. And on the other hand, the variety of student devices. The teacher mentions that students have diverse types of devices, some of which may not be of high quality and may not work as expected. This may result in compatibility issues or limitations on access to certain applications or features.

For question #7. Have you received sufficient technical training and support to effectively use tablets in English language instruction? If not, what additional support would you need? the teacher indicates the following:

*I haven't, it would be great to get training with tips, tools, apps, and websites to improve classwork with tablets. F. González, personal communication, May 4th, 2023*

On the question as to whether she had received sufficient training and technical support to effectively use tablets in English language teaching, the teacher indicated that she had not received sufficient training. In addition, she mentions that it would be beneficial to receive training that provides tips, tools, applications, and websites to improve classwork with tablets.

These responses highlight the importance of providing adequate support to teachers when implementing new technologies in the classroom, including specific training and resources that address technical and pedagogical challenges that may arise. This will help teachers make the most of the potential of tablets in teaching English and overcome the barriers they may face.

The above could be envisioned in the observation made in the class since the teacher specifically did not mention the use of tablets in her lesson plans, she only mentioned activities to do on platforms like Kahoot and YouTube, and she pasted their corresponding links. Specifically, she created a Kahoot game that was shared with the students during the class and

the tool they used to play it was the tablet. According to the lesson plan the game was designed to review the material they had learned in class.

In addition to the Kahoot game, the teacher also shared a video that the students could watch on their tablets. This video had the purpose of providing additional information on the topic they were studying and allowing the students to gain a deeper understanding of the material.

The teacher did not mention other ways to use the tablet in her lesson plan, but she allowed the students to use their tablets as a dictionary and to practice their writing skills on them. All these other activities were proposed by the students through the development of the class.

**Objective 2. To determine how the use of tablets as a technological resource fosters the development of acquisition of English language skills.**

For objective 2, the following analysis variable use of tablets as a technological resource was determined. For this, the answers provided in the Level of Development of English language skills section and the answers for questions and questions 1, 6, and 8 for the same instrument are analyzed. Also, with the answers of the students during the focus group to questions from 1 to 9.

The answers provided by the teacher to the statements related to the use of tablets as technological resources are evidenced. In this line, these statements aim to evaluate the perception of the participants about the use of tablets in the teaching of the English language. The first variable focuses on the ease of use of tablets in the classroom, which can affect the effectiveness and efficiency of teaching with this technological resource.

The second variable focuses on the impact of tablets on students' engagement and motivation in learning English, which can influence their academic performance. The third variable assesses how tablets have improved teacher delivery of English content, which could affect student learning. The last variable assesses whether the use of tablets has provided opportunities for differentiation in English language instruction, which could be beneficial in meeting students' individual learning needs and styles.

**Figure 2**

*Teacher Instrument on the Impact of Tablets on English Language Learning: Use of tablets*

<b>Use of tablets</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The tablets were easy to use in the classroom.				X	
The tablets enhanced the students' engagement in English language learning.					x
The tablets helped me to deliver English language content more effectively.					X
The use of tablets provided opportunities for differentiation in English language instruction.			X		

The answer provided by the teacher on the use of tablets in teaching English, analyzing the answers can be evidenced that the tablets were easy to use in the classroom. The participant indicates that the tablets were easy to use in the classroom. This response was positive, as the ease of use of tablets can be crucial for their successful adoption in the educational environment. The simplicity in the operation and navigation of tablets can allow teachers to focus on the teaching-learning process and take full advantage of the functionalities of the devices.

Related to the statement the tablets enhanced the students' engagement in English language learning. The participant highlights that the use of tablets increased students' participation in learning English. This response is encouraging, as student engagement is critical to an effective learning process. Tablets can provide a more interactive and motivating learning experience, offering multimedia resources, educational apps, and interactive activities that engage students more actively.

About the statement, the tablets helped me to deliver English language content more effectively. The participant says that tablets have helped him deliver English-language content more effectively. This response suggests that tablets have improved language teaching, possibly by providing additional digital resources, interactive tools, and access to authentic online materials. This can have a positive impact on the quality of instruction and student understanding.

Finally, with the statement the use of tablets provided opportunities for differentiation in English language instruction. The participant notes that the use of tablets has provided opportunities for differentiation in English language instruction. This means that tablets have made it possible to adapt and personalize teaching to individual students' needs. Tablets can offer a variety of apps and tools that can be tailored to cater to different learning styles, skill levels, and specific student needs, which is beneficial for differentiated instruction.

When analyzing the answer given by the teacher to question # 1 Do you feel that the use of tablets has increased student autonomy and independence in their learning of English? the answer provided by the teacher was:

*I do, they have more independent work time and many of the platforms they use are user friendly, so it's easier for them to work independently. F. González, personal communication, May 4th, 2023*

Based on the above, it is evident that the teacher mentions that students have more time for independent work and that many of the platforms they use are easy to use, which makes it easier for them to work autonomously. This implies that students can perform activities and tasks on their own, without depending on the direct direction and guidance of the teacher.

Increasing students' autonomy and independence is an important goal in education, as it promotes their ability to make decisions, solve problems, and be responsible for their learning. The use of tablets can provide tools and resources that allow students to access educational content, interact with interactive activities, and search for information autonomously.

In addition, the mention that the platforms used are user-friendly implies that students do not encounter significant technological barriers or technical difficulties that limit their ability to work independently. This is important, as an intuitive, easy-to-use interface can empower students and allow them to take full advantage of the possibilities of tablets in their learning.

Regarding question #2, have you observed any improvements in student English language skills since the implementation of tablets? If so, please provide examples, the teacher replied as follows:

*I have; especially in skills like reading and writing because they need to use these skills in order to work and be able to complete practices and exercises. F. González, personal communication, May 4th, 2023*

Based on the above, it can be inferred that students need to use the skills generated in the class to perform their tasks and complete the practices and exercises assigned to them by the teacher. From this perspective, the teacher's response suggests that the use of tablets has provided students with additional opportunities to practice and improve their reading and writing skills in the context of English class. Using tablets, students can access a variety of interactive materials and activities that promote the practice of these foundational skills.

Finally question #8: Do you feel that the use of tablets has increased collaboration and communication among students in English language learners? The answer provided by the teacher was the following:

*Not really, when using the tablet, they mostly have individual work to do which decreases their social skills. F. González, personal communication, May 4th, 2023*

The answer provided by the teacher shows that she does not feel that the use of tablets has allowed students to be more collaborative and communicative during language learning. It is also inferred that during the use of the tablets, students focus mainly on individual work, an aspect that can affect their social skills. In her experience, the teacher and based on her response, the use of tablets has not encouraged greater interaction between students or promoted collaborative communication. The focus on one-on-one work with tablets may have limited opportunities for students to engage in more interactive collaboration and communication activities.

With respect to the variable development of English language skills, the answers provided by the teacher to the section of the instrument level of Development of English language skills section, which aimed to evaluate the impact of the use of tablets in various

aspects of the development of the English language of the students, are analyzed. including general competence, listening skills, speaking, reading, writing, and autonomy in English practice. The answers provided by the teachers to the variables raised are presented below.

**Figure 3**

*Teacher Instrument on the Impact of Tablets on English Language Learning: Development of English language skills*

<b>Development of English language skills</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The use of tablets had a positive impact on students' English language proficiency.				X	
The tablets helped students to develop their listening and speaking skills in English.					X
The tablets helped students to improve their reading and writing skills in English.					X
The tablets provided opportunities for students to practice English language skills independently.					X

Regarding the statement "the use of tablets had a positive impact on students' English language proficiency." The teacher indicates to agree with this statement, considering that the use of tablets has had a positive impact on some aspects of English language learning, however as previously established by the teacher some social skills have been diminished due to this.

In the statement "the tablets helped students to develop their listening and speaking skills in English.", the teacher indicates that she agrees very much with this, considering that from her perspective, tablets have been beneficial for the development of students' listening and oral expression skills in English.

Finally, when analyzing the statement "The tablets provided opportunities for students to practice English language skills independently." the teacher says she strongly agrees considering that from her experience, tablets have provided students with opportunities to practice English language skills independently.

On the other hand, when analyzing the answers provided by the teacher to the open questions posed in the instrument, namely in question 1 Do you feel that the use of tablets has increased student autonomy and independence in their learning of English? her reply was as follows:

*I do, they have more independent work time, and many of the platforms they use are user friendly, so it's easier for them to work independently. F. González, personal communication, May 4th, 2023*

Based on the answer provided by the teacher, it can be inferred that she does perceive an increase in the autonomy and independence of students in their learning of English due to the use of tablets. From this perspective, it is evident that students have more time for independent work and that in this line the platforms they use are easy to use, which makes it easier for them to work independently. This response suggests that the use of tablets has provided students with the opportunity to work at their own pace and take control of their learning.

Mentioning that the platforms are user-friendly, the teacher indicates that students can use the tablets easily and without requiring constant supervision. This supports the idea that students can work autonomously and develop independent learning skills.

Regarding question #6: How could the use of tablets be further optimized in English language instruction at the 4th grade level? The answer provided by the teacher was:

*By improving the Wi-Fi connectivity which leads to a faster and better way of working. F. González, personal communication, May 4th, 2023*

The teacher's answer to the question is detailed and precise. The teacher mentions three main aspects: the need to incorporate more educational applications that allow personalizing the teaching and practice of the language; the importance of having better technical support to solve technical problems; and the need to have a more stable and faster Internet connection to be able to use digital tools more effectively.

These suggestions demonstrate that the teacher has identified some of the most important challenges in the implementation of technology in the classroom and is looking for practical solutions to improve the teaching and learning process.

Finally, question #8 of the teaching instrument stated the following: Do you feel that the use of tablets has increased collaboration and communication among students in English language learners. In this regard the teacher mentioned the following:

*Not really, when using the tablet, they mostly have individual work to do which decreases their social skills. F. González, personal communication, May 4th, 2023*

Based on their response, it can be inferred that in their experience, the use of tablets tends to promote more individual work, which can decrease students' social skills.

This response reveals a legitimate concern about the impact of tablet use on social interactions and collaboration among students. It is important to note that while tablets can

provide individualized resources and activities, also critical to foster opportunities for teamwork and communication in the classroom. To improve collaboration and communication among students when using tablets, the teacher might consider implementing specific strategies.

Following this perspective, the answers provided by the students to 9 questions were analyzed, which aimed to analyze the perception and experience of the students regarding the use of tablets in English classes. These questions showed information on the benefits learners acquired in the training process, areas for improvement and aspects such as motivation and learning, and the advantages of using tablets in the language learning process.

Additionally, given the answers provided by the students, an additional question was posed that had the purpose of inquiring about the use of programs or applications on tablets that allow them to improve their pronunciation of words in English.

**Table 4**

*Focus group instrument: questions and answers*

<b>Q u e s t i o n</b>	1. How do you feel about using tablets in your English language class?	2. Do you think using tablets has helped you learn English better?	3. What do you like the most about using tablets in class?	4. What do you think could be improved about using tablets in class?	5. Do you feel more motivated to learn English when using tablets compared to traditional methods?	6. How do you think tablets can help you with your English language learning process?	7. Have you noticed any differences in your English language learning since using tablets?	8. How do you think tablets can help you in your future education?	9. Do you have any suggestions for how tablets can be used more effectively in English language learning?	Do you currently use a program on your tablet to correct word pronunciation?
<b>P a r t i c i p a n t  1</b>										

<p><b>P a r t i c i p a n t 2</b></p>	<p>I like it because it is a different, more modern way of learning; as participant 2 mentioned, we also learn to use the tablet.</p>		<p>The ability to open Google and enter applications makes it more useful.</p>	<p>It could be improved that some students are distracted by games and do not complete their work; the teacher should be more vigilant.</p>			<p>I used to speak very little English, I didn't have much vocabulary, and I didn't know the meaning of the words. Then, since second grade, we started using tablets, and since then, we have used many applications on tablets that help us learn the language more.</p>		<p>It would be beneficial if they gave us access to more engaging, interactive exercises on the tablet where we could practice our English.</p>	<p>It has helped me in some ways. On the good side, we have fewer complications because everything is completed faster. On the negative side, you could learn incorrectly due to a minor spelling error.</p>
<p><b>P a r t i c i p a n t 3</b></p>	<p>I like it because it is a very useful device that teaches you more than a book.</p>	<p>It has helped us learn more about the topics we are interested in.</p>	<p>I like that it has more applications and other features than the book.</p>	<p>Using a tablet can be dangerous at times because students are distracted by other things.</p>						<p>I think it's fine; I use an app called Duolingo to learn English and other languages.</p>

<p><b>P a r t i c i p a n t 4</b></p>		<p>It allows us to learn faster because we spend less time correcting our mistakes . Also, it helps me learn faster than the book.</p>		<p>Students' vigilance should be increased while using the tablet.</p>	<p>The tablet motivates me, and it makes learning more enjoyable and faster.</p>			<p>As participant 5 said before, the tablet will help me in the future to learn new languages, improve my writing, avoid making spelling mistakes, and learn many other things.</p>	<p>In order to learn English more quickly, it would be beneficial to use more apps, watch more English-language videos without advertisements, read more on our tablets, write more on them, and have the tablets correct us when we make mistakes in spelling.</p>	
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<p style="text-align: center;"><b>P a r t i c i p a n t 5</b></p>	<p>I like it because we use technology in the classroom while learning English.</p>	<p>It helps us learn faster because it corrects words we say incorrectly, making it easier because those words can be repeated .</p>	<p>The teacher can give us many app names to help us learn English.</p>	<p>The internet should be improved to save time.</p>	<p>I am more motivated to learn because the tablet is unusual, fun, and modern.</p>	<p>It helps me learn a lot of vocabulary; for example, when I didn't know a word, the word appeared in several exercises on the tablet platform until I learned it.</p>	<p>As participant number two said before, it was very difficult for me to pronounce words and understand them, but since we started using the tablets, I now know more about the meaning of words and pronounce them better.</p>	<p>I can see the progress in the case of my sister when she was in school and had to look for information in the book to carry out some tasks or some project. It was very difficult for her to search for information because the information was very limited. Now that she is in high school, for a project she used the tablet, allowing her to interview a scientist from the United States, so I believe the example of my sister</p>	<p>I think that some apps should be made for tablets that do not contain many ads or use some apps that are much easier to understand and that measure how much one knows and continue from there. I have an app for talking with people from other countries, and I believe that if you talk to people from other countries, such as the United States, whose language is English, you can learn new things from them, or they can learn new things about us.</p>	<p>No, the Oxford Discover platform gives us several options to choose from sentences that we must repeat, we choose the option, and the platform plays an audio and then we speak, that's when it tells us if it's good or bad and we can repeat it. It has many applications that can be used to learn English and other languages. The tablet is easier for me because it is faster to learn. The disadvantage is that a system error causes you to learn incorrectly, and it is difficult to learn it again.</p>
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								that the tablet will help me in the future to search for information or accomplish more difficult tasks that I would not be able to achieve by looking it up in the book. I also think that the tablet could help a lot in future education, especially since now many things are done digitally, so I could learn many things in the future through the tablet.		
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<p><b>P a r t i c i p a n t  6</b></p>	<p>I like it because it makes the class feel more personal; we use a personal tablet, so the other students can't see my work.</p>		<p>What I like about the tablet is that you don't have to wait in line like you do with books, which wastes time.</p>	<p>If there is a problem, teachers shouldn't avoid it and handle it as soon as possible.</p>	<p>The tablet facilitates learning, improves performance , and makes the class more interactive.</p>	<p>for me, the tablet does help me in learning English because with it I can learn faster than with the book or with the teacher, the information in the book is very limited, but on the other hand, on the tablet, there is much more information than I can search.</p>		<p>I believe that tablets will eventually replace books because they allow us to write and search for information. With the tablet, we can write, and we do not only need the notebook since the tablet allows us to do this.</p>	<p>Right now, we are only using one application, which is Oxford Discover. We could use many more applications to learn the English language, make it more entertaining, and have a much larger vocabulary. Thus, we would have many applications that would help us learn the language in addition to the teacher and the book.</p>	<p>I believe it is beneficial because, in addition to having a teacher to guide us, we also have the tablet, which reinforces the subject and makes it easier for us than the book.</p>
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<p>P a r t i c i p a n t  7</p>				<p>It should be improved so that teachers can download an app or something to track where their students are.</p>	<p>I like using the tablet to learn English because of the variety of activities available.</p>	<p>The tablet helps me greatly expand my vocabulary by looking for words that I don't know, so I learn that new vocabulary</p>	<p>Yes, I have noticed a lot of change since I started using the tablet, for example, the use of applications has helped me learn English a lot, such as Duolingo or Oxford Discover.</p>		<p>As a suggestion, tablets could be used more by watching YouTube or watching movies in English, this makes children learn English better through listening, but as participant 5 said, it would be good to eliminate the ads. The teacher could look for games in which we could practice our English in addition to Oxford Discover so that we could play while we learn.</p>	<p>It has helped me to learn better because the teacher may have explained something in a way that you did not understand, and with the tablet, you can look for another explanation that you understood better.</p>
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<p><b>P a r t i c i p a n t 8</b></p>	<p>It is very useful for me because we learn in a different way than when we use the book.</p>		<p>What I like is that we can learn in a fun and modern way.</p>		<p>There is more information on the tablet.</p>	<p>It has helped me a lot to learn English, especially because the platforms are very useful, and the translator app, as participant 7 mentioned, helps a lot to learn a new vocabulary and its meaning.</p>		<p>In addition to the fact that the tablet helps us learn new languages and correct our misspellings and all that, the tablet also helps us learn about the use of new technologies , so he considered that tablets give us double learning.</p>	<p>Just as there are physical books on paper, there are also digital books that can be found on Wattpad, so you can look for digital books in English that can be read or used in class to learn even more English. As other participants have stated, looking for games is important, but it would also be beneficial to look for more platforms that contain many more exercises where English is practiced much more, which is both educational and enjoyable. That they are not only to read and respond but also to play games or do something fun.</p>	<p>The use of the tablet has helped me a lot since the program we use is quite useful because it is a program in English to learn to write words correctly and how to say them.</p>
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<p><b>P a r t i c i p a n t 9</b></p>	<p>The tablet is fine; it is easier to use in class and provides more privacy.</p>		<p>I like how simple it is to find information.</p>	<p>make tablet usage more enjoyable.</p>	<p>The tablet motivates me to learn English because it is more fun than books.</p>					<p>I don't think it has helped me. Teachers know how to explain, so I say it hasn't helped me. So, the only thing that has helped me is that if I can't find something in the book, like the definition of a word, I look it up on the tablet. The tablet is much easier to use. The disadvantage is that you require internet access, and networks can fail. It also depends on the energy source and the charger. The book does not need those requirements.</p>
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<p><b>P a r t i c i p a n t  1 0</b></p>	<p>I like using tablets in English class because it makes me feel more comfortable, it's more private, and the Oxford Discover program that we use in English classes is good.</p>		<p>What I like about the tablet is how quickly you can find what you need.</p>	<p>There should be more vigilance over the content on the Internet. We can also use the tablet for more enjoyable practices.</p>	<p>Yes, the tablet motivates me to learn English because it makes the class funnier.</p>	<p>In my case, the tablet represented a change in me; previously, I did not know how many words were pronounced or written; with the tablet's assistance, I learned about those words that I did not know</p>	<p>As I mentioned in the previous question, I have noticed the change a lot.</p>	<p>I believe the tablets will be extremely beneficial to my future education. For example, right now, tablets are greatly assisting us in learning English, which I consider to be a more universal language now because other countries, even if they do not speak it, are aware of it. As a result, if I had the opportunity to study in another country, learning the language now on the tablet would prepare me</p>	<p>We can watch more videos in the English language, and as participant number 8 said, it would also be good to read digital books in English. The math teacher uses many tablet games that we play to learn about the subject, making it much more entertaining to learn. Therefore, the English teacher should look for many games where we can learn English. This way, it would be much more enjoyable for us to continue learning. The tablet is frequently used for things unrelated to English; we are not learning English; for example, when we have free time, we use applications or other things that do not teach us the language. During that time, we could play games or use other fun applications to practice the language, such as Bamboozle or Kahoot, which have</p>	<p>I see that it's easier than books, so in my opinion, if I must choose, I prefer to use tablets. I say that it works.</p>
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								for future education abroad.	many English-language games.	
<b>P a r t i c i p a n t  1 1</b>			What I like about it is that it provides more information than a book could and that it helps a lot to learn new topics.		It motivates me because we don't have to write as much as we used to.					I think it has helped me because I learned new words in English easier and faster.
<b>P a r t i c i p a n t  1 2</b>	I like to use it because it gets us out of our routine.				I like the activities in the book, so I prefer it.					I believe it can be useful at times, but teachers are always required. Some platforms may contain issues. There was a misspelled word during a platform practice. We waited almost an entire lesson for the teacher to confirm and correct the error. That is why, if you are not aware of it, you may learn things incorrectly.

<p>P a r t i c i p a n t  1 3</p>					<p>The tablet motivates me more to learn through activities and applications.</p>					
<p>P a r t i c i p a n t  1 4</p>			<p>I like that it saves a lot of time.</p>	<p>inappropriate content for children may appear, and teachers must have a surveillance system or some form of internet blocking.</p>						<p>It has helped me somewhat; there are apps that can be used to learn, but we always need the teacher's knowledge. The tablet can help you learn to read faster in English and say words you didn't know how to say before.</p>

Note: responses were transcribed, and some were translated into English from the focus group.

When analyzing the answers given by students to question 1, participant 2 likes the use of tablets in English class because it is a different and more modern way of learning. In addition, he mentions that they also learn to use the tablet as a tool. This indicates that the participant values innovation and the incorporation of technology into the learning process. For his part, participant 3 emphasizes that he likes the use of tablets because he considers them a very useful device that teaches more than a book. Here, the participant recognizes the additional benefits provided by the technology compared to traditional methods.

In this line, participant 5 indicates that he likes the use of tablets in English class because it allows them to use technology while learning. This suggests the participant perceives a connection between technology use and language learning improvement. On the other hand, participant 6 values the use of tablets in the English class because he feels that it makes the class more personal. When using a personal tablet, the participant mentions that other students cannot see their work, which provides greater privacy. This indicates that the participant appreciates individuality and the protection of their personal space during learning.

The answer provided by participant 8 shows that for this the use of tablets is very useful because it allows a different learning than books. This response suggests that the participant values the variety of teaching and learning methods, recognizing that the use of the tablet provides a distinct educational experience. Participant 9 finds the tablet fine and prefers it because of its ease of use in class and the privacy it provides. Here, there is an appreciation for the practicality and confidentiality offered by tablets.

For participant 10, he expresses that for multiple reasons why he likes to use tablets in English class. He mentions that he feels more comfortable, that the experience is more private, and highlights the quality of the Oxford Discover program they use in English classes. These

responses indicate a generalized positive perception of the use of tablets, related to comfort, privacy, and the quality of the content provided. Finally, participant 12 enjoys using tablets in English class because he considers that it breaks with the routine. The assessment of variety and novelty in learning suggests that the participant finds motivation and stimulation in the incorporation of technology in the classroom.

Regarding the answers provided by the students to question 2, only 3 of the participants answered the question. About participant 3, indicates that the use of tablets has helped them learn more about the topics that interest them. This indicates that they feel that tablets give them access to relevant information and allow them to explore areas of their interest, which can contribute to better English learning.

For participant 4, tablets allow them to learn faster because they spend less time correcting their mistakes, and it helps them learn faster than the book. This response suggests that they perceive tablets to streamline their learning process and provide them with a more efficient learning experience. And finally, participant 5 mentions that the use of tablets helps them learn faster because it corrects the words they pronounce incorrectly, which facilitates the repetition and learning of those words. This indicates that they perceive that tablets provide them with immediate feedback and help in correcting their mistakes, which contributes to better English learning.

Question 3 valued what students liked the most with respect to the use of tablets, in this line participant 2 indicated he likes the ability to open Google and access applications, which makes it more useful. This indicates they value access to a wide range of resources and applications through tablets. Participant 3 likes that tablets have more apps and other features

than books. This suggests that they value the versatility and options that tablets give them compared to traditional books.

In this line, participant 5 mentions that he likes that the teacher can provide them with many names of applications to help them learn English. This indicates that they value the teacher's specific guidance and recommendations regarding the use of tablets for learning English. A particular answer is given by participant 6 who indicates that he likes that they do not have to wait in line as with books, which saves time. This indicates that they value the convenience and efficiency offered by tablets compared to physical books.

Participant 8 indicates that he likes that they can learn in a fun and modern way. This suggests that they value the more engaging and up-to-date learning experience offered by tablets compared to traditional methods. According to participant 9 likes how easy it is to find information. This indicates that they value the accessibility and speed with which they can access relevant information through tablets.

Participants 10, 11, and 14 expressed different positive aspects about the use of tablets in the classroom. Participant 10 highlighted the ability to quickly find what they need, reflecting their appreciation for the efficiency and quick search offered by tablets compared to physical books. On the other hand, participant 11 valued that tablets provide more information and help in learning new topics, indicating that they appreciate the breadth and depth of content that can be explored through tablets. Finally, participant 14 highlighted the time savings provided by tablets, which shows their appreciation of the efficiency and convenience they offer compared to physical books. These students recognized benefits such as quick search, breadth of content, and time savings when using tablets in the English classroom.

Regarding question 4, students made several suggestions to improve the use of tablets in the classroom, Participant 2 pointed out the need to avoid distractions and for students to complete their work, suggesting that teachers should be more vigilant. Participant 3 mentioned that tablet use can be dangerous due to distractions. Participant 4 suggested increasing student surveillance while using the tablets. Participant 5 expressed that the internet should be improved to save time. Participant 6 recommended that teachers do not avoid problems and address them quickly. Participant 7 suggested that teachers could download an app or something similar, to track students' location. Participant 9 proposed to make the use of tablets more enjoyable. Participant 10 raised the need for greater vigilance over the content on the Internet and the possibility of using tablets for more fun practices. Finally, participant 14 mentioned that it is important to avoid the appearance of inappropriate content for children and suggested the implementation of a surveillance or blocking system on the Internet.

From this perspective, students expressed several suggestions to improve the use of tablets in the classroom. One of the points mentioned was the need to avoid distractions and make sure students complete their assignments instead of being distracted by games or other activities. In addition, the importance of increasing the vigilance of students during the use of tablets was highlighted to ensure their attention and commitment. Another suggestion raised was the improvement of Internet access, intending to save time and facilitate the search for relevant information. The students also mentioned the importance of addressing any issues that arise during the use of the tablets on time and not avoiding them, to ensure an effective learning environment.

In addition, it was suggested that teachers download apps or other tools that let them track student progress and location. This would help monitor their performance and provide

one-on-one support when needed. Students also expressed a desire to make using tablets more enjoyable and engaging. This could be achieved through the incorporation of interactive activities and practices that make learning with tablets more exciting and motivating. Finally, the importance of increasing surveillance over the content on the Internet and implementing blocking or surveillance systems to prevent the appearance of content inappropriate for children was highlighted.

Regarding question 5, students expressed their opinions on whether they feel more motivated to learn English when using tablets compared to traditional methods. Participant 4 mentioned that the tablet motivates him and makes learning more enjoyable and faster. Participant 5 expressed that he feels more motivated because the tablet is something unusual, fun, and modern. Participant 6 mentioned that the tablet facilitates learning, improves performance, and makes the classroom more interactive. Participant 7 indicated that he likes to use the tablet to learn English due to the variety of activities available. Participant 8 pointed out that there is more information on the tablet. Participant 9 mentioned that the tablet motivates him to learn English because it is more fun than books. Participant 10 stated that yes, the tablet motivates him to learn English because it makes the class more fun. Participant 11 mentioned that it motivates him because they do not have to write as much as they used to. Participant 12 expressed that he likes the activities in the book, so he prefers it. Participant 13 mentioned that the tablet motivates him more to learn through activities and apps.

Overall, most students expressed that they feel more motivated to learn English when using tablets compared to traditional methods. They highlighted that tablets give them a more enjoyable, fun, and modern learning experience, facilitating learning, improving their performance, and making the class more interactive. They also mentioned the variety of

activities available on tablets and the perception that they contain more information than books. However, some students still prefer traditional books and the activities associated with them.

In relation to question 6, participant 5 mentioned that the tablet helps him learn a lot of vocabulary and that when he does not know a word, it appears in several exercises on the tablet platform until he learns it. Participant 6 indicated that the tablet helps him learn faster than with the book or teacher and that there is much more information he can search for on it. Participant 7 said the tablet helps him expand his vocabulary by searching for words he does not know. Participant 8 mentioned that the tablet has helped him a lot to learn English, especially because of the very useful platforms and the translator application that helps a lot to learn new vocabulary and its meaning. Participant 10 pointed out that the tablet represented a change in him by being able to know how words are pronounced and written that he did not know before.

In question 7 participant 2 mentioned that before he spoke very little English, had little vocabulary, and did not know the meaning of words. However, since they started using tablets in second grade and used many apps that help them learn the language, she has noticed a difference in her learning. Participant 5 also expressed that it used to be very difficult for him to pronounce and understand words, but since they started using tablets, he has improved in his knowledge of the meaning of words and their pronunciation. Participant 7 mentioned that he has noticed many changes since he started using the tablet, especially due to the use of applications such as Duolingo or Oxford Discover, which have helped him a lot in learning English. In summary, some participants mentioned that they have noticed a difference in their English learning since they started using tablets, especially in their vocabulary, comprehension, and pronunciation of words.

On question 8 participant 4 mentioned that the tablet will help him in the future to learn new languages, improve his writing, avoid making spelling mistakes, and learn many other things. Participant 5 mentioned that the use of the tablet has made it easier to find information and perform more complex tasks, such as interviewing a scientist from the United States for a school project. He believes that the tablet will help him in the future to search for information and perform more difficult tasks. Participant 6 mentioned that he believes tablets will eventually replace books, as they allow writing and searching for information, eliminating the need for notebooks. Participant 8 highlighted that in addition to helping in language learning and correcting spelling mistakes, the tablet also helps to learn about the use of new technologies, which he considers double learning. Some participants mentioned that tablets will help them in the future to learn new languages, improve their writing skills, search for information, and perform more complex tasks, while others highlighted the possibility of using tablets as technological tools in education and preparing for future education.

Finally, regarding question 9, participant 2 suggested that it would be beneficial to have access to more engaging and interactive exercises on the tablet where they could practice English. Participant 4 mentioned that it would be useful to use more apps, watch more ad-free English videos, read more on tablets, write more on tablets, and have tablets correct spelling mistakes. Participant 5 suggested developing apps that do not contain a lot of ads and are easier to understand, as well as using apps to communicate with and learn from people in other countries. Participant 6 mentioned that they could use more apps besides Oxford Discover to make learning English more entertaining and expand their vocabulary. Participant 7 suggested using tablets to watch videos in English and eliminate ads, as well as looking for games to practice English in a fun way. Participant 8 mentioned the possibility of reading digital books

in English and looking for platforms with more interactive exercises to practice the language in an educational and fun way. Participant 10 suggested watching more videos in English, reading digital books in English, and using games and apps like Baamboozle and Kahoot to practice English in a fun way. In summary, suggestions include the use of more engaging and interactive applications, the removal of ads on digital resources, the incorporation of games and fun activities to practice English, the use of videos and digital books in English, and the exploration of additional platforms and resources for language learning.

Additionally, considering the answers provided by the students, an additional question is asked do you currently use a program on your tablet to correct word pronunciation? In this regard the participants indicated. Participant 2 mentioned that using a program on the tablet has both positive and negative aspects, as it can speed up the learning process, but there is also the risk of learning incorrectly due to minor spelling mistakes. Participant 3 uses the Duolingo app on their tablet to learn English and other languages. Participant 5 mentioned that they do not use a specific program to correct the pronunciation of words, but the Oxford Discover platform offers them options of phrases to repeat and tells them if they have done it right or wrong. Participant 6 considers it beneficial to use the tablet along with the teacher's guidance to reinforce the topics and make learning easier.

Participant 7 mentioned that the tablet allows them to look for other explanations if they do not understand something explained by the teacher. Participant 8 said that the program they use on the tablet helps them learn to write words correctly and pronounce them. Participant 10 thinks that using tablets is easier than books and considers that it works. Participant 11 believes it has helped him learn new English words more easily and quickly. Participant 12 mentioned that while the use of programs on the tablet can be useful, sometimes

there can be problems with the platforms and errors that require the intervention of the teacher for their correction. In summary, responses vary in terms of the use of specific programs on tablets to correct the pronunciation of words, but several participants mentioned the benefits and limitations of using tablets in English learning.

Likewise, the observation made to the class allowed to indicate that the physical environment of the English language classroom seemed favorable to learning. The students were seated in lines, indicating a structured classroom arrangement. The classroom was well-illuminated, which could have helped enhance students' focus and concentration during the lesson. Additionally, the classroom had good ventilation, even though the climate was hot.

Regarding the psychological-emotional environment of the classroom, the teacher created a positive atmosphere that encouraged learning. Students were confident, happy, and willing to learn, indicating that they felt comfortable and engaged in the subject. The English language classroom seemed to have provided a conducive environment for learning, both physically and psychologically.

Similarly, during the observation class, the use of tablets in the classroom was used as a tool to support learning, rather than as a distraction. Those students could use the tablet during different moments in the class suggesting that it was an integral part of the lesson.

However, there were some difficulties, each student had their own tablet except for two who used their cellphones instead. Another student experienced a setback when her tablet had a low battery, rendering it unusable. Moreover, the internet connection was unstable inside the class, which forced the students to move outside the classroom to the hall where they could get a better connection. One student could not connect to the internet due to tablet configuration

problems. Despite the inconvenience, the students persevered and worked on the floor to complete the evaluation activity.

From this perspective, the use of tablets in the classroom seemed to be integrated seamlessly without causing any major disruptions. Students were using the tablets during various moments in the class such as watching a video, playing a Kahoot game, researching a topic, using the tablet as a dictionary, and writing sentences they created. Even when faced with issues like a low battery or unstable internet connection, students were able to adapt and find solutions to continue their work. While a few students had to use their cell phones instead of tablets, it did not seem to have a significant impact on their learning. Overall, tablets were used as a tool to support learning rather than as a distraction.

For the third objective, to generate a pedagogical proposal that optimizes the development of English language skills by using the tablet as a tool, the following variable has been established pedagogical strategies. The statements raised in the teaching instrument had as their purpose to identify how the use of tablets helped improve the teaching and learning of the English language. Together with the diverse and interactive strategies that the teacher uses to provide personalized feedback, take advantage of multimedia resources, and create more interesting and relevant activities.

**Figure 4**

*Teacher Instrument on the Impact of Tablets on English Language Learning: Pedagogical strategies*

<b>Pedagogical strategies</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The tablets allowed for more varied and interactive English language teaching strategies.					X
The use of tablets helped me to provide more personalized feedback to students.				X	
The tablets facilitated the use of multimedia resources in English language instruction.					X
The use of tablets helped me to create more engaging and relevant English language activities for students.					X

Based on the above, it may be lower that the teacher showed strong agreement in all statements related to the use of tablets in pedagogical strategies. First, he highlighted that tablets allowed the implementation of more varied and interactive English language teaching strategies, providing students with an enriching learning experience, and encouraging their active participation.

In addition, the teacher stressed that the use of tablets has made it easier for her to provide more personalized feedback to students. This has improved communication and individualized support, allowing for more detailed tracking of students' progress, and offering feedback tailored to their specific needs.

Likewise, the teacher said that tablets have facilitated the use of multimedia resources in the teaching of English. This has enriched the learning process by incorporating elements

such as videos, audios, and interactive applications, which have improved comprehension and fluency in the language.

Finally, the teacher highlighted that the use of tablets has helped to create more interesting and relevant English learning activities for students. These activities, designed with the support of tablets, have promoted greater student engagement and motivation by using digital tools and interactive resources that align with their interests and learning needs.

In this line, to deepen the teacher's perspective, the answers given to the open questions posed during the interview were analyzed. Regarding question # 3: In what ways have you adapted your pedagogical strategies to effectively incorporate the use of tablets in English language instruction? The teacher posed the following answer:

*By adding this tool as class material to work on Games in platforms. A.*

*Alvarado, personal communication, May 4th, 2023*

Based on her response, it can be inferred that the teacher considers it important to adapt her pedagogical strategies when incorporating the use of tablets in the teaching of the English language. In particular, he mentions that he has added this tool as class material to work on games on platforms.

This response suggests that the teacher has actively integrated tablets into her teaching methodology by using interactive games available on digital platforms. By incorporating tablets as class material, the teacher seeks to take advantage of the playful nature of games to make the English language learning more engaging and entertaining for students.

The answer given to question # 4: What challenges have you faced when implementing the use of tablets in English language instruction? How have you addressed these challenges?

His reply was as follows:

*The main challenge is the internet connection, in our school the Wi-Fi is not as stable as one's wishes, another issue is the type of devices students have where some are not as high quality as others, as a result, they don't work as expected.*

*A. Alvarado, personal communication, May 4th, 2023*

Based on inferring that the teacher has faced challenges in implementing the use of tablets in English language teaching. The main challenge mentioned is the internet connection since in your school the Wi-Fi is not as stable as you would like. This can affect the availability and quality of online resources used during classes. In addition, the teacher mentions that there is variability in the quality of the devices that students use. Some devices may not be of high quality or may not work as expected, which can affect the experience of using tablets and limit the possibilities of interaction and participation of students.

Finally concerning question # 6: How could the use of tablets be further optimized in English language instruction at the 4th grade level? The teacher replied as follows:

*By improving the Wi-Fi connectivity which leads to a faster and better way of working. A. Alvarado, personal communication, May 4th, 2023*

Based on the previous answer, it is inferred that the teacher could further optimize the use of tablets in English language instruction in the fourth grade by improving Wi-Fi connectivity. The teacher identifies that a faster and improved connection would allow a more efficient operation of tablets and, therefore, could improve the teaching and learning experience of students.

When mentioning the improvement of Wi-Fi connectivity, the teacher recognizes that the quality of the internet connection is a crucial factor to make the most of the potential of tablets in the classroom. A faster and more stable connection could enable faster loading of online resources, facilitate real-time communication and collaboration, and provide seamless access to interactive applications and tools.

In this line, the answers provided by the students during the focus group to questions 5 and 7 were analyzed. From this perspective to question 5, the students' answers reveal different positive aspects of the use of tablets in their English learning. Participant 4 highlights that the tablet motivates them and makes learning more enjoyable and faster. This suggests that the tablet's unique interactive features influence their level of motivation and interest in learning the language.

For his part, Participant 5 expresses feeling more motivated to learn because the tablet is something unusual, fun, and modern. This response highlights the novel and entertaining aspect that the tablet provides, which generates greater interest and enthusiasm for the learning process.

As for Participant 6, he mentions that the tablet facilitates learning, improves performance, and makes the class more interactive. This highlights the practical benefits of using the tablet, such as improved academic performance and promoting greater interaction in the classroom, which contributes to a more effective and enriching learning experience.

In addition, Participant 7 expresses his pleasure in using the tablet to learn English due to the variety of activities available. This response highlights the importance of the diversity of activities that the tablet offers, which provides wider and more attractive options for language learning, which in turn increases their motivation and participation.

Finally, Participant 9 mentions that the tablet motivates them to learn English because it is more fun than books. This highlights the student's preference for the tablet as a learning medium due to its more playful and entertaining nature compared to traditional methods, which has a positive impact on their level of motivation.

For question 7, the answer provided by Participant 2 reveals how the use of tablets has transformed their English learning. Previously, he had difficulty speaking the language, a limited vocabulary, and a lack of knowledge of the meaning of words. However, since they started using tablets in second grade and have used various apps, they have experienced a significant improvement in their learning. This response highlights the positive impact that tablet use has had on their ability to acquire more vocabulary and understand the meaning of words.

Participant 5 highlights that he previously had difficulty pronouncing and understanding English words, but thanks to the use of tablets, he has noticed considerable progress in his ability to understand and pronounce words correctly. This testimonial demonstrates how the use of tablets has had a positive effect on their language competence, overcoming previous obstacles and developing fundamental language skills.

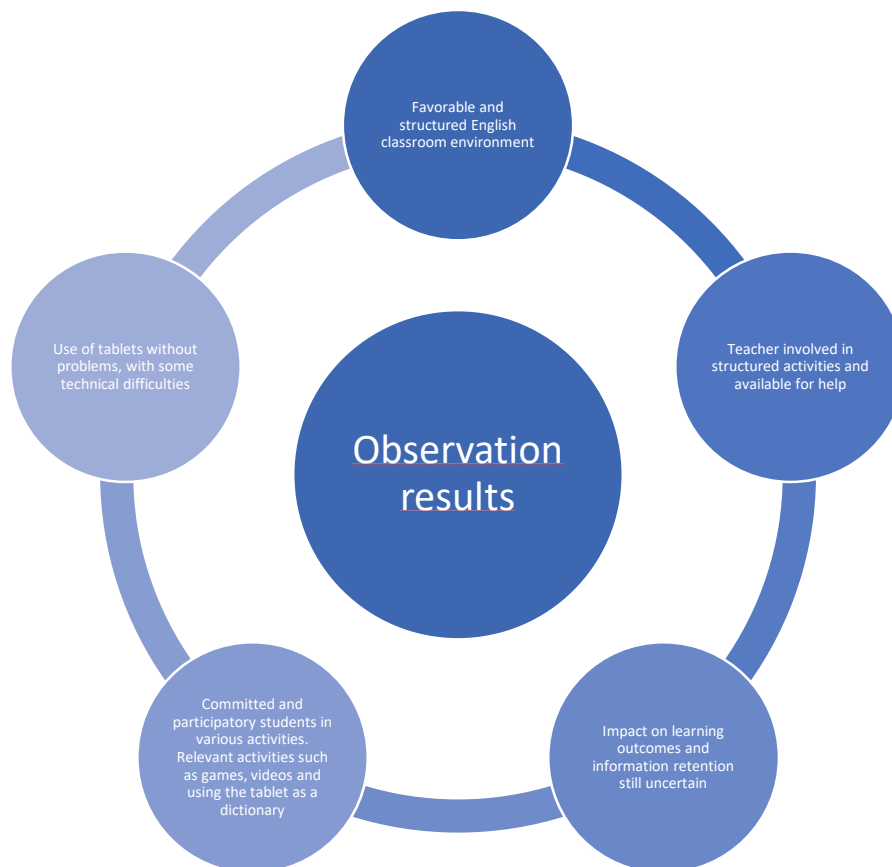
In the case of Participant 7, he mentions that he has noticed multiple changes since he started using the tablet, especially thanks to the use of applications such as Duolingo or Oxford Discover, which have been of great help in his learning English. This response highlights the positive impact of the specific applications used on tablets, which have contributed significantly to their progress in the language.

Finally, Participant 10 mentions that he has noticed the change mentioned above in the previous question. Although it does not provide specific details, this response indicates that the use of tablets has generated a significant impact on their English learning.

Next, the main results of the observation carried out in the classroom are presented, to show the process of interaction of the teacher with the students, and the use that is given to the tablets.

### Figure 5

#### *Observation results*



Source: Developed by Andrea Alvarado Durán (2023)

The environment in the English classroom is favorable and structured, which contributes to student learning. It is well-lit and ventilated, providing an environment conducive to study. In addition, the structured distribution of students in rows allows for better focus and concentration during activities. This favorable physical environment creates the right conditions for effective learning.

The use of tablets in the classroom has gone smoothly, although some technical difficulties have arisen. Some students have faced battery problems or difficulties establishing a stable internet connection on their tablets. Despite these challenges, students have shown great adaptability when looking for alternative solutions, such as using the floor to work or sharing devices with other classmates. This adaptability shows their commitment and willingness to make the most available technological tools.

Students have been engaged during tablet activities. They have actively and enthusiastically interacted with interactive games like Kahoot, used tablets to watch videos related to the topic, and taken advantage of its dictionary functionality to look up words and improve their vocabulary. In addition, they have practiced writing and taking notes on tablets, which has allowed them to organize and improve their work. This active participation demonstrates their interest in learning and their ability to use tablets effectively in their English learning process.

**CHAPTER V:**  
**CONCLUSIONS AND RECOMMENDATIONS**

## 5.1 CONCLUSIONS

This final chapter consists of the analysis of the responses provided by the research subjects to present the conclusions and recommendations that have emerged from this study. These findings are directly aligned with the specific objectives that were set forth at the onset of our research. Through a comprehensive examination of the collected data, valuable information was obtained to formulate meaningful conclusions. Moreover, based on these conclusions, these recommendations can serve as a guide for future endeavors in this field. By reflecting on the key findings and their implications, this can shed light on the significance of this study and its potential contributions to the broader academic and practical communities.

According to the first specific objective, which aimed to investigate the level of technical training in technology in the fourth-grade teacher involved in the English educational and pedagogical process, our analysis of the responses provided by the interviewed teacher has led to a significant conclusion. It has become evident that the educational institution in question has not adequately provided the necessary training for teachers to effectively utilize tablets in a manner that fosters a more dynamic and formative learning experience for their students.

The findings reveal a gap in technical training, indicating that the teachers have not received the requisite knowledge and skills to leverage tablets as powerful educational tools. This deficiency in training hinders the potential benefits and opportunities that technology integration can offer in enhancing the English educational and pedagogical process at the fourth-grade level.

The lack of proper training restricts the teachers' ability to utilize tablets to their full potential, limiting the range of interactive and engaging activities that can be incorporated into

the classroom. Consequently, the educational experience for students may be compromised, as they are unable to fully benefit from the advantages that technology integration can provide.

Educational institutions must acknowledge the significance of providing comprehensive and ongoing training in technology for teachers. By doing so, teachers can acquire the necessary competencies to effectively incorporate tablets into the English educational and pedagogical process, ultimately leading to more engaging and meaningful learning experiences for their students.

In this line, it was evidenced that there is a technological barrier that made it impossible for the teacher to use tablets as tools that would allow students to improve their training process in the context of the courses.

In addition to the conclusion regarding the lack of adequate training provided by the educational institution, our analysis also revealed another significant aspect. Despite the absence of sufficient training, it was not evident from the teacher's responses that she had taken the initiative to pursue independent training processes to better understand how the tablet could be utilized as an effective tool alongside the established teaching and learning strategies to create more dynamic classes with enhanced tools for their students.

Although the responsibility for providing comprehensive training falls on the educational institution, it is also essential that teachers show a proactive approach toward their professional development. By seeking out independent training opportunities and exploring resources on their own, teachers can stay abreast of technological advances and gain insight into how tablets can be integrated into their classroom practices.

Teachers must recognize the significance of continuously expanding their technological competencies and seeking out opportunities for professional growth. By engaging in independent training processes, teachers can unlock the full potential of tablets as educational tools, enabling them to design more interactive and engaging lessons that align with the specific needs and learning objectives of their students.

Furthermore, our analysis uncovered another significant factor impacting the effective use of tablets in the classroom. It became apparent that the educational institution lacks the necessary technological resources to facilitate students' effective utilization of tablets. Specifically, the absence of a stable network infrastructure poses challenges for students in connecting to educational pages and accessing relevant videos, leading to frequent interruptions and difficulties.

A stable network connection is crucial for the seamless integration of technology in the classroom. It enables students to access online educational resources, engage with interactive learning materials, and collaborate on digital platforms. However, the absence of a reliable network hinders the potential benefits of tablet usage, limiting students' ability to fully leverage the educational tools and materials available to them.

Without a stable network, students face disruptions and difficulties in accessing online resources, resulting in a compromised learning experience. This not only impedes their ability to engage with interactive content but also hampers the implementation of effective teaching strategies that rely on digital resources and connectivity.

Concerning the second objective to determine how the use of tablets as a technological resource fosters the development of acquisition of English language skills, it is concluded that

in the case under study the teacher failed to fully incorporate the use of tablets to strengthen teamwork and collaborative learning for a language that is not native to students.

This conclusion is reflected in the teacher's perspective, as she acknowledges the tendency of students to work more independently with tablets. While the teacher adapted and personalized her teaching according to the individual needs of the students, the potential for collaborative learning to promote language development was not fully realized. This highlights the importance of recognizing and addressing the barriers to incorporating tablets as tools for collaborative language learning.

Despite the limited focus on collaborative learning, it can be concluded that the use of tablets had a positive impact on the preparation of students. The tablets facilitated access to various digital tools such as videos, dictionaries, and interactive exercises, enabling students to deepen their understanding and write more detailed answers to assigned tasks. By utilizing these resources, students were able to enhance their language comprehension, vocabulary acquisition, and written expression, thus improving their overall language proficiency.

However, to maximize the benefits of tablets, future research, and practices should prioritize the integration of collaborative learning strategies that leverage tablets as platforms for interactive group activities, communication, and peer feedback. By emphasizing teamwork and collaborative problem-solving, students can engage in authentic language use, negotiate meaning, and develop communication skills that mirror real-life language contexts.

In conclusion, while the teacher in this study did not fully incorporate tablets to strengthen teamwork and collaborative learning for non-native English language learners, there is still a positive impact on students' preparation. The use of tablets facilitated access to various tools and resources, allowing students to deepen their understanding and improve their written

expression. However, to fully exploit the potential of tablets as a technological resource, it is crucial to address the barriers to collaborative learning and design pedagogical strategies that foster interactive and communicative language learning experiences. By doing so, students can not only enhance their language skills but also develop important 21st-century competencies, such as collaboration, communication, and critical thinking.

Regarding the third research objective, which aimed to generate a pedagogical proposal that optimizes the development of English language skills using tablets as a tool, our analysis has provided compelling evidence. It has become evident that tablets can indeed serve as a valuable tool that facilitates the learning process for students. In line with this, teachers need to possess the necessary skills to effectively implement educational platforms that enable both individual and collaborative learning experiences.

The findings demonstrate that when utilized appropriately, tablets have the potential to enhance the development of English language skills. The interactive nature of tablet applications, combined with engaging multimedia resources and educational platforms, can create a dynamic and immersive learning environment for students.

To fully capitalize on these benefits, teachers must acquire the necessary skills and competencies to effectively integrate tablets into their pedagogical practices. This includes not only understanding the technical aspects of tablet usage but also being proficient in utilizing educational platforms that support individual and collaborative learning.

By leveraging educational platforms, teachers can design activities and tasks that promote active engagement, critical thinking, and meaningful interactions among students. These platforms can facilitate individualized learning paths, allowing students to progress at their own pace while receiving personalized feedback and support.

Moreover, the collaborative features of educational platforms enable students to engage in group projects, discussions, and peer feedback, fostering collaborative learning experiences. Through collaborative activities, students can enhance their communication and language skills, develop teamwork abilities, and gain exposure to diverse perspectives.

On the other hand, it is concluded that the lack of guides and a structure within the planning of the teacher makes it impossible to use the maximum of the resources that can be found in the educational platforms, being in this line something evident as the curiosity and ingenuity of the students derived in the use of tools such as Duolingo or the Oxford dictionary to know how to write a word appropriately in the exercises proposed by the teacher. However, the use of games proposed by the teacher has been effective for students.

Finally, regarding the research question and the general objective, what is the impact of implementing the usage of tablets as a technological resource in the learning of English language process in students of the 4th level of primary education at Carmen Lyra Educational Center in San Carlos, Alajuela during the 1st quarter 2023?, and to analyze the impact of implementing the usage of tablets as a technological resource in the learning of English language process in students of the 4th level of primary education at Carmen Lyra Educational Center, it is concluded that if there is a positive impact on the use of tablets in the training process of students, However, for this to have a more effective impact, it is required that the teachers have training that allows them to involve all the tools that tablets can offer in the teaching and learning process.

## 5.2 RECOMMENDATIONS

This chapter offers a set of essential recommendations aimed at improving the integration of tablets as educational tools within the institutional framework. These suggestions are focused at integrating tablets into school as well as optimizing the educational experience of learning English:

- a. It is recommended that the educational institution provide a comprehensive training process for the teaching staff on the effective use of technology to enhance the teaching and learning process. This training should cover not only basic technical skills but also pedagogical approaches and strategies for integrating tablets into the classroom. By equipping teachers with the necessary knowledge and skills, they can confidently incorporate tablets as valuable educational tools.
- b. The development of guides and manuals is recommended to facilitate both students and teachers in understanding and utilizing the technology and tools offered by tablets for the educational process. These guides should provide clear instructions on how to navigate the educational platforms, access resources, and make the most of the tablet's functionalities. Such resources can serve as a reference for effective implementation and ensure consistency in utilizing tablets across different classrooms.
- c. It is crucial to prioritize the improvement of the conditions of access and power for the institution's Wi-Fi network. A stable and reliable network connection is essential for seamless access to online educational resources and platforms. The educational institution should invest in upgrading the network infrastructure, ensuring sufficient bandwidth, and addressing any technical issues that may hinder students' ability to fully utilize educational resources through tablets.

- d. For future research, it is recommended to delve deeper into the implications of planning, teaching, and learning strategies that can be implemented using tablets as a tool in the classroom. This could involve exploring specific instructional approaches, evaluating the impact on student engagement, and learning outcomes, and identifying best practices for effective integration. Further research can contribute to the ongoing development and refinement of pedagogical approaches that leverage tablets to optimize the teaching and learning experience.

By implementing these recommendations, the educational institution can foster an environment that promotes the effective use of tablets as educational tools. Providing training, developing resources, improving network conditions, and further exploring pedagogical strategies will contribute to enhancing the teaching and learning process, ultimately benefiting both teachers and students.

**CHAPTER VI:**  
**PROPOSAL**

## **6.1 PROPOSAL**

### **6.1.1 Name of the Proposal**

The name of the proposal is “Guide: Using Tablets in English Teaching”.

### **6.1.2 Description**

This thesis proposal intends to help English teachers adapt to the changing education model. It aims to provide them with a practical guide to effectively incorporate tablets into their teaching methods. By achieving the specified objectives, the project aims to contribute to the development of English language education through technology-enhanced approaches. Ultimately, the guide aspires to empower both teachers and students to harness the potential of tablets for a more engaging, collaborative, and efficient learning experience.

This guide is designed for English teachers who wish to incorporate the use of tablets into their lessons. Through this guide, teachers will explore tablet objectives, general considerations of using a tablet, and accessing a series of activities and lists of functional applications.

### **6.1.3 Place to be developed**

This proposal is set to be developed at Carmen Lyra School, located in San Carlos, Quesada. This organization provides a great environment to demonstrate the impact of tablets on English language acquisition, given its well-equipped hardware, software infrastructure, and personal staff. Both the teachers and the institution are willing to implement and embrace the proposed guide.

### **6.1.4 Organization**

The Carmen Lyra School is an educational institution that offers preschool, elementary, and high school education. It is situated in the town of San Carlos Ciudad Quesada. The purpose of the institution is that students can discover and develop their skills and talents as much as possible. This institution is a place where they're always thinking of new and better ways to teach and learn. They want to be at the forefront of trying out fresh ideas and finding the best ways to help students learn. So, while they're focused on making sure every student can do their best, they're also busy trying to make education itself even better for everyone.

### **6.1.5 Involved Population**

The target population for this project involves fifth-grade students and parents starting in the upcoming year (2024). The decision to not include the current year is based on the proposal design, which starts by applying some initial diagnosis tests. Subsequently, teachers and the institution can implement the guide's recommended steps based on the outcomes obtained. These fifth-grade students participated in the research study as fourth graders in 2023 and will advance to fifth grade in the upcoming year. A fifth-grade English teacher is also included in this project.

### **6.1.6 General and Specific Objectives**

#### **6.1.6.1 Proposal General Objective**

- To integrate tablets as dynamic and impactful pedagogical tools to improve the effectiveness of the English teaching and learning process by using a comprehensive guide.



	cy with tablets.													
Fifth grade teacher	Diagnostic for Students													
Fifth grade teacher	Improving student proficiency with tablets.													
Fifth grade teacher	Enhancing the tablet proficiency and security knowledge of parents.													
Information Technology staff and teacher	Analysis of results.													

*Note:* Modified Gantt's graph of the proposal chronogram made by this researcher.

### 6.1.8 Necessary Budget for its Implementation

There is no need to allocate funds for this proposal. The primary investment required for the successful execution of this proposal is a willingness to follow the provided guide and to enhance familiarity with tablet technology. It is important to mention that the school is already equipped with an internet connection, technology employees, and personal tablets for the students.

### **6.1.9 Proposal development**

In the following sections of this guide, we will explore each aspect in detail, providing step-by-step guidance, examples of activities, and best practices. By embarking on this journey of tablet integration for English language acquisition, institutions and teachers can shape a future where education is not just transmitted but experienced, and where language acquisition becomes dynamic and joyful.

## **GUIDE: USING TABLETS IN ENGLISH TEACHING**

### **General tablet considerations:**

- a. **Diagnosis:** A diagnosis about tablet usage at the beginning of the school year is important to assess students' and teachers' technology skills and, also involve parents.
- b. **App Selection:** Make sure you choose quality educational apps and digital resources that are appropriate for your student's learning goals.
- c. **Organization and management:** Establish clear rules for the use of tablets in the classroom, including assigned times, rules of behavior, and proper care of devices.
- d. **Internet access:** Verify that tablets have a stable Internet connection to access online resources and cloud-based applications.
- e. **Security and privacy:** Educate your students and parents about the safe use of tablets, including the importance of protecting their personal information and respecting copyright.

**Main aspects to consider when using a tablet:**

The integration of tablets into educational settings has the potential to serve as a valuable instrument for enhancing English language instruction. Despite initial apprehension, this set of instructions will provide guidance on the proficient use of a tablet as a tool for instructional purposes. In order to enhance your understanding of the technology and optimize its capabilities, it is recommended to adhere to the following sequential instructions:

- a. Familiarize yourself with the tablet:
  - Turn on the tablet and explore its interface.
  - Learn about the basics, such as unlocking, adjusting volume, sharing screen, and accessing apps.
  - Familiarized in terms of basic tablet navigation, digital literacy, app usage, internet and online safety, digital citizenship, multimedia, and device management.
- b. Download educational apps:
  - Explore the app store (such as Google Play Store or App Store) and search for educational apps related to learning English.
  - Download apps that suit your teaching goals, such as grammar and vocabulary, reading, phonics, writing, and listening.
  - Look for websites or download apps that develop group and individual learning.
- c. Plan activities:
  - Identify the topics or skills you want to teach and look for online activities that align with those goals.
  - Create a lesson plan that includes interactive, app-based activities to keep your students engaged.
- d. Explore online resources:

- Research educational portals, websites, and blogs that offer free resources for teaching English.
  - Find activities, exercises, videos, and reading materials that you can use in combination with your tablet.
- e. Advance practice:
- Before using the tablet in the classroom, explore and practice with the apps and resources you've selected.
  - Make sure you understand how they work and how they can be integrated into your lessons.
- f. Set rules and expectations:
- Before introducing the tablet into the classroom, establish clear rules about its use and students' behavioral expectations.
  - Explain how tablets should be cared for, how apps should be used, and when they are allowed to be used during class.
- g. Monitor and evaluate progress:
- During tablet activities, actively monitor your student's progress and give them feedback.
  - See how they interact with apps and how they use the tablet as a learning tool.

### **Tablet Care: A Guide for Teachers, Students, and Parents**

Proper maintenance of a tablet is crucial in order to promote its durability and achieve optimal functionality. For those assuming the roles of teachers, students, or parents, presented below are easy steps and recommendations to effectively maintain a tablet device within educational and domestic settings.:

- a. **Use a Protective Case:** Invest in a durable and high-quality protective case for the tablet. This will shield it from accidental drops, scratches, and other physical damage.
- b. **Keep it Clean:** Regularly clean the screen and the body of the tablet with a soft, lint-free cloth. To prevent screen damage, it's best to avoid using harsh chemicals or abrasive materials.
- c. **Charge Properly:** Follow the manufacturer's guidelines for charging the tablet. Overcharging or undercharging can affect the battery life and overall performance.
- d. **Avoid Extreme Temperatures:** Don't expose the tablet to extreme temperatures, as they can harm the battery and internal components. Take care not to expose it to harsh temperatures or direct sunshine.
- e. **Update Software:** Regularly update the tablet's operating system and apps to ensure it has the latest security patches and performance improvements.
- f. **Install Antivirus Software:** If the tablet is used for browsing the internet, consider installing a reputable antivirus application to protect it from malware and viruses.
- g. **Be Mindful of Liquids:** Keep liquids away from the tablet to prevent accidental spills. If a liquid does come into contact with the tablet, power it off immediately and seek professional assistance if necessary.
- h. **Set Usage Guidelines:** For students, parents can set guidelines for tablet usage, such as time limits and appropriate activities.
- i. **Secure Storage:** When not in use, store the tablet in a safe and dry location, away from potential hazards.
- j. **Avoid Overloading:** Don't overload the tablet with too many apps or files. This can slow down the device and reduce its storage capacity.

- k. **Use Screen Protectors:** It is recommended that you use a screen protector in order to offer an additional layer of defense to the display.
- l. **Backup Data Regularly:** To protect yourself against the possibility of losing data in the event that there is a problem with the tablet, it is a good idea to create backups of any significant files, such as images and papers, using an external storage device or a cloud service.
- m. **Teach Responsible Handling:** Educate students and children on how to handle the tablet responsibly and gently.
- n. **Keep Away from Magnets:** Avoid exposing the tablet to strong magnetic fields, as they can interfere with the device's internal components.
- o. **Avoid Modifying Hardware:** Unless you are a trained professional, refrain from attempting to open or modify the tablet's hardware. Leave any repairs or upgrades to authorized technicians.
- p. **By following these simple steps, students can extend the life of the tablet and ensure that it continues to serve them well in their educational or personal activities.**

### **Usage of the tablet before, during, and after class.**

#### **Before class:**

- a. **Familiarize yourself with the tablet:**
  - Make sure you understand how the tablet works and how to access apps relevant to teaching English.
  - Explore tablet features and settings to ensure optimal use during class.
- b. **Plan your teaching goals:**
  - Define the learning goals you want to achieve in class.

- Identify areas of English that will be addressed, such as vocabulary, grammar, listening skills, etc.
- c. Select and download the right apps:
- Research and select quality educational apps that are relevant to your teaching goals.
  - Download the apps and make sure they are installed and ready to use before class.
- d. Create a diagnosis about tablet usage:
- Include tablet navigation, digital literacy, app usage, internet safety, digital citizen, multimedia, and device management at least.

**During class:**

- a. Tablet diagnosis:
- Administer the diagnosis at the beginning of the school year, ideally during the first few days or weeks of classes. This allows to gather baseline data on students' tablet proficiency.
  - Continue to monitor students' progress throughout the school year. Use formative assessments and informal observations to gauge improvements in tablet usage.
  - Consider including self-assessment, where students reflect on their own comfort level with using tablets and identify areas, they feel confident or need improvement.
- b. Introduce tablet use:
- Explain to students the purpose and benefits of using the tablet in English class.
  - Set clear expectations about how the tablet will be used and how students are expected to interact with it.
- c. Demonstrate proper tablet use:

- Show students how to navigate apps, access content, engage in interactive activities, etc.
  - Explain any special functions or tools on the tablet that are relevant to class activities.
- d. Supervise and provide support:
- Watch closely how students use the tablet and give them support and guidance when needed.
  - Answer questions and clarify any questions they may have about using the tablet or apps.

**After class:**

- a. Evaluate student progress:
- Review and evaluate student work done on the tablet during class.
  - Identifies achievements and areas for improvement to adapt future activities.
- b. Reflect on the effectiveness of tablet use:
- Evaluate how the tablet was integrated into the classroom and consider its impact on student learning.
  - Reflect on activities that worked well and those that could be improved in future classes.
- c. Adjust and improvements:
- Use student feedback and observations to adjust future activities with the tablet.
  - Look for new apps or resources that can complement your English lessons and enhance students' learning experience.

d. Parental Involvement:

- Teach parents about fostering digital citizenship and responsible technology use within the family.
- Teach parents how to manage app downloads, updates, and organize the tablet to ensure it remains optimized.
- Advise parents on setting up security features, such as lock screens and passwords, to protect the tablet and personal information.
- Share the classroom rules established with the students with parents, explaining the behavior consequences and reinforcements. This empowers parents to implement the same guidelines at home, providing consistent support between school and home environments when necessary.
- If appropriate and allowed, share the diagnosis results with parents. Discuss their child's technology skills and create strategies for supporting their development.
- It's important to get parents involved monitoring their child's use of electronic devices, particularly tablets.

### **Tablet usage diagnosis guide**

Creating a diagnosis about tablet usage involves the following basic steps:

- a) Define the objectives: Determine the specific goals of the diagnosis. Decide what aspects of tablet usage you want to assess, such as:
  - Basic tablet navigation: Assess students' ability to navigate and interact with the tablet's interface, including tasks like accessing apps, using the touch screen, and navigating menus.

- Digital literacy: Include questions to gauge students' understanding of digital concepts, such as file management, copy-pasting, saving documents, and using cloud storage.
  - App usage proficiency: Evaluate students' familiarity with educational apps or software commonly used in the classroom, and their ability to perform tasks within these apps.
  - Internet and online safety: Include questions about internet safety, recognizing safe websites, identifying potential risks, and understanding how to protect personal information online.
  - Digital citizenship: Assess students' knowledge of responsible and ethical use of technology, including proper online behavior and respect for others' digital privacy.
  - Problem-solving skills: Include scenarios where students need to troubleshoot common tablet-related issues and find solutions independently.
  - Multimedia understanding: If it's important, check how well students understand things like pictures, movies, and interactive material on the tablet.
  - Device management: Include questions related to device maintenance, battery charging, and handling technological challenges.
- b) Target audience: Remember that the diagnosis should be age-appropriate, relevant, and aligned with your educational goals.
- c) Choose the assessment format: Decide on the format of the diagnosis. It could be a series of multiple-choice questions, true/false statements, or short-answer questions.

- d) **Develop clear instructions:** Create clear and concise instructions for students, explaining the purpose of the diagnosis and any guidelines for taking it.
- e) **Create the questions:** Design questions that align with the objectives and content you want to assess. Include questions about tablet navigation, app usage, internet safety, etc.
- f) **Organize the diagnosis:** Structure the diagnosis in a logical order, and group related questions together for a coherent flow.
- g) **Analyze the results:** After students have completed the diagnosis, analyze the results to identify patterns and areas of strength and weakness.

### **Organization and management guide**

When setting rules for tablet use in the classroom, it's essential to involve the students in the process to ensure they understand the reasoning behind the rules and the consequences of not following them. Here's a step-by-step guide:

- a) **Brainstorm rules:** Engage the students in a brainstorming session where they can suggest rules for tablet use. Encourage them to think about what behaviors would help them to stay focused during tablet activities.
- b) **Discuss and prioritize:** Prioritize the rules based on their importance and relevance to the classroom environment.
- c) **Keep it simple:** try to keep the list relatively short and straightforward. Aim to have between three and five rules in order to make them simpler for everyone to remember and adhere to.

- d) Use positive language: Phrase the rules in positive terms rather than using negative language. For example, instead of saying "Don't play games during class," the teacher could say "Tablets should only be used for educational purposes."
- e) Create a visual display: After finalizing the rules, design a visual display and place it in a visible place in the classroom.
- f) Discuss consequences: Work together with the students to determine the consequences of not following the rules. Emphasize that consequences are intended to be fair and to help maintain a conducive learning environment for everyone. For repeated behaviors, a progressive discipline approach may be used, where consequences become more severe with each subsequent infraction. (Verbal warning, time out, loss rewards, parent notification, etc.)
- g) Incorporate reinforcement: Along with consequences, introduce positive reinforcement for following the rules. Consider a reward system or praise for those who consistently use their tablets responsibly.
- h) Regularly review: Schedule regular discussions to review the rules and their effectiveness.

### **Guide of apps and platforms to use with the tablet**

#### **Grammar and vocabulary activities using the tablet:**

Interactive exercise app: Use grammar apps that offer interactive exercises for students to practice different grammar concepts. For example, you can use applications that include exercises to complete sentences, identify parts of speech, build sentences correctly, etc.

**Grammar games:** Download educational grammar games on tablets that are fun and challenging for student. For example, you can use crossword games, word association games, and drag-and-drop games to build grammatically correct sentences.

**Videos and songs:** Look for videos or songs online that entertainingly teach grammar concepts. Play the videos or songs on the tablet and ask students to identify and analyze the grammatical structures that appear in them.

**Sentence Building Apps:** Use applications that allow students to construct sentences interactively. These apps may include options to select words and arrange them in the correct order to form grammatically accurate sentences.

**Bug fixing activities:** Use apps or online resources that present sentences with grammatical errors and ask students to identify and correct them. Students can use the tablet to mark errors and provide corresponding corrections.

### **Recommended apps or platforms to teach grammar and vocabulary in the English classroom using a tablet:**

**Duolingo for schools:** Duolingo offers a specialized version for teachers that allows teachers to track students' progress, create assignments, and access a library of interactive language learning content.

**English grammar in use:** Based on the same name book, this app offers English grammar lessons with practical exercises and clear explanations.

**Quizlet:** A web platform that allows teachers to create flashcards to practice grammar and vocabulary. Students can access teacher-created flashcard sets or browse existing resources.

**Sentence builder:** An application designed to help students build grammatically correct sentences. It offers practical exercises and monitoring of student progress.

**English idioms illustrated:** This app presents a collection of English idioms along with their meanings and usage examples. It is an excellent tool for teaching the contextual use of idioms.

**Seesaw:** Seesaw is a digital platform that gives teachers the ability to design and distribute interactive courses, especially those pertaining to the study of the English language.

**Knoword:** is a web-based word game that tests your English vocabulary and word knowledge. The game presents you with a single word, and you need to guess as many words as you can that can be formed using the letters of the given word. It's a fun and challenging way to improve the language skills while having an enjoyable time.

### **Listening activities that you can do using a tablet in the English classroom:**

**Listen and answer:** Choose an audio or video recording that contains dialogues or questions in English. Students must listen carefully and then answer questions related to the recording. You can create interactive quizzes on platforms like Google Forms or Kahoot! for students to answer using their tablets.

**Audio dictations:** Play an audio file with a recording of a text in English. Students must listen and write what they hear. You can find audio dictations on websites like ESL-lab.com or EnglishClub.com.

**Listen and complete:** Choose an audio recording in which words or phrases are missing. Students must listen and fill in the blanks with the correct words or phrases. You can create interactive activities using tools like Edpuzzle or Quizlet.

**Audiobooks:** Use audiobook apps, such as Audible or Librivox, for students to listen to storytelling in English. After listening, you can do listening comprehension activities, such as asking questions about the plot or asking students to summarize what they heard.

**Podcasts:** Explore different podcasts in English that are appropriate for the level and age of your students. You can select episodes that address topics that are relevant and interesting to them. After listening, organize group discussions or listening activities based on the content of the podcast.

### **Recommended apps or platforms for listening activities in the English classroom:**

**Duolingo:** This application is widely used for language learning and offers interactive listening exercises that help students practice their listening comprehension.

**FluentU:** FluentU offers a wide variety of authentic English videos, with subtitle options and interactive exercises. Students can improve their listening skills through real-life situations.

**TED Talks:** The official TED app offers access to thousands of inspiring talks in English. Students can listen to native speakers and develop their listening comprehension while exploring various topics.

**BBC Learning English:** The BBC offers an English learning app that includes listening activities such as news, talk and interviews. Students can listen to updated content and improve their listening comprehension.

**ESL Listening:** This app focuses specifically on listening activities for learners of English as a second language. It offers a variety of listening comprehension exercises and tests for different skill levels.

**LyricsTraining:** Allows users to practice listening to songs by filling in the missing lyrics, making it an enjoyable way to improve listening skills.

Elllo: Provides authentic English conversations and listening exercises to help learners practice listening comprehension.

ESL Fast: Offers a collection of short audio clips on various topics for English learners at different proficiency levels.

DailyDictation: This website provides numerous dictations exercises that aid in enhancing the practice and progress of English learners.

### **Phonics and reading activities using the tablet:**

Phonics games: Use phonics apps and games that help students practice letter sounds, blends, and phonemic awareness. These apps often have interactive activities like matching sounds to letters, blending words, and identifying rhymes.

Interactive eBooks: Provide students with interactive eBooks on the tablet that have read-aloud features. This allows students to follow along with the text as it is read aloud to them, reinforcing word recognition and comprehension.

Reading comprehension Apps: Engage students with reading comprehension apps that offer interactive stories and questions to test their understanding of the text.

Reading fluency practice: Use recording apps to allow students to record themselves reading passages or books. They can listen to their recordings to improve fluency and expression.

Reading theater: Encourage students to perform plays or stories using reading theater apps. They can take on different roles and practice reading with expression.

**Recommended apps or platforms for phonics and reading activities in the English classroom:**

Starfall: Starfall is an excellent website for elementary readers, offering phonics-based activities and interactive stories to improve their English skills.

Phonics Hero: Phonics Hero is an app designed to teach phonics and early reading skills. It provides a broad variety of games and activities for children to participate in so that they may acquire letter sounds, blending, segmenting, and other related skills.

ESL Fast: While it primarily focuses on listening activities, it does offer some short reading passages with audio support and interactive activities.

**Writing activities using the tablet:**

Digital story writing: Have students write short stories using word processing apps or storytelling platforms. They can then share their stories with classmates, encouraging both writing and reading skills.

Blogging: Set up a classroom blog where students can write blog posts in English. This activity allows them to practice writing for an authentic audience and receive feedback from peers and teachers.

**Recommended apps or platforms for writing activities in the English classroom:**

Storybird: This platform encourages students to create and share their own stories, improving their English language skills in a creative way.

**Grammarly Keyboard:** A keyboard app that provides real-time grammar and spell checking. Students can use it to improve their English writing.

**Hemingway Editor:** Hemingway Editor helps simplify and improve writing by highlighting complex sentences, passive voice, and other potential issues.

### **Group and individual activities that you can do using the tablet to strengthen English proficiency:**

#### **Group activities:**

**Video discussions:** Choose a short video in English related to a topic of interest to students. Divide them into small groups and ask them to watch the video on the tablet. Then, encourage them to discuss the content, answer questions, and share their opinions in English.

**Collaborative storytelling:** Use a story or comic creation app on your tablet. Divide students into groups and ask them to collaborate to create a story in English using images and text. Each member of the group can contribute a part of the story and then present it to the rest of the class.

**Vocabulary scavenger hunt:** Create a list of English words related to a specific topic. Students must use the tablet to look for images or definitions of each word. Then, organize a competition in which the teams must find the words and display them on the tablet as quickly as possible.

#### **Recommended apps or platforms for group activities in the English classroom:**

**Google Docs:** uses the Internet to store and process documents that supports collaborative working amongst numerous users on a single document at the same time and offers automated storing in the cloud.

Genially: It's a cloud-based platform, which means people can work individually or cooperatively on projects from any device with an internet connection. The web platform is widely used in educational settings for creating interactive lesson materials, dynamic presentations, interactive buttons quizzes, and gamified learning experiences.

Canva: is a well-known platform for graphic design that gives users the ability to generate a large variety of different types of visual material, including social media graphics, posters, presentations, infographics, flyers, and much more. Canva enables collaboration, allowing multiple team members to work together on the same project in real time.

Padlet: is an online virtual bulletin board that facilitates collaborative brainstorming, discussions, and sharing of ideas among students.

Flipgrid: it enables video-based discussions and responses, promoting collaboration through short video responses to prompts or questions.

Jamboard: is a collaborative digital whiteboard that encourages students to brainstorm, draw, and collaborate on ideas together.

Answergarden: is a simple and free tool for generating word clouds from students' responses to open-ended questions, encouraging collaboration and brainstorming.

Individual activities:

Language learning apps: Recommend students download English learning apps on their tablets. They can use these applications to practice vocabulary, grammar, listening comprehension, and pronunciation in an individualized and autonomous way.

Writing prompts: Provide students with a writing app on the tablet and present them with different topics or writing questions in English. Ask them to choose a topic and write a paragraph or short story using the app. Then, they can share their writing in class or exchange it with other classmates to receive feedback.

Language games: Download interactive games on the tablet that allow students to practice English language skills, such as crossword puzzles, riddles, word games or grammar games. These games can be a fun and motivating way to practice the language individually.

### **Recommended apps or platforms for assessment activities in the English classroom:**

Bamboozle: is a web-based game platform designed for teachers and students. The website allowed teachers to create, customize, and share interactive quiz-style games for educational purposes. These games could be used to engage students in a fun and interactive way while testing their knowledge of English grammar and vocabulary.

Kahoot: An online game application that allows students to participate in interactive grammar quizzes. Teachers can create their quizzes or use the ones available in the Kahoot! community.

Edpuzzle: Teachers have access to a wide variety of video sources, as well as the ability to contribute their own recordings. They will then have the ability to include interactive components such as questions, comments, voiceovers, and notes at various points during the movie. While they are watching the movie, students who participate in this exercise keep their attention and ensure that they understand what is being taught.

Quizlet: is an online platform that helps teachers create and share digital flashcards, quizzes, and study materials. It can be used for evaluating students' knowledge by creating quizzes that test their understanding of various subjects. Students can study with flashcards and then take quizzes to assess their learning progress.

Wordwall: is an online platform aimed at teachers, enabling them to craft interactive learning resources. Teacher can create customized activities with questions and multimedia. These activities are then shared with students who complete them online. The platform provides real-

time progress monitoring and data collection, allowing teachers to analyze student performance based on accuracy and time.

Liveworksheets: lets teachers build interactive worksheets and learning tools for students.

Interactive worksheets can feature multiple-choice, fill-in-the-blank, crossword, and other tasks.

**General recommendations for assessing English proficiency:**

- a. Clear objectives: Establish clear and specific evaluation objectives that align with the content and skills that you have worked with the students. Define which aspects of English proficiency you want to assess, such as listening comprehension, speaking, reading, or writing.
- b. Assessment rubrics: Create detailed assessment rubrics that describe the criteria and expected performance levels for each skill assessed. Rubrics will help standardize the assessment and provide clear and specific feedback to students.
- c. Varied activities: Design assessment activities that allow students to demonstrate their competence in different areas of English. You can include listening comprehension activities, recorded conversations, writing texts, and multimedia presentations, checklists, scaled checklists, and grading lists, among others.
- d. Use of digital tools: Take advantage of the capabilities of tablets and available applications to facilitate the evaluation. For example, you can use audio recordings to test pronunciation and listening comprehension or use writing apps to test written expression.
- e. Direct observation: Make direct observations during class activities in which students use the tablets. Observe their participation, interaction, and effective use of digital tools. This

will allow you to assess aspects such as oral fluency, collaboration, and technology management.

- f. Digital portfolios: Ask students to create a digital portfolio where they can collect their work, projects and activities in English carried out throughout the year. Digital portfolios can be an effective way to assess student progress and development over time.
- g. Constructive feedback: Provide constructive and specific feedback to students on their strengths and areas for improvement in relation to English proficiency. Use available digital tools, such as written comments or voice recordings, to offer individualized and personalized feedback.

### **Examples of rubrics:**

#### **Oral expression rubric:**

#### **Evaluation criteria:**

- Pronunciation and intonation
- Vocabulary and proper use of expressions
- Fluency and coherence in speech
- Correct use of grammatical structures
- Ability to hold a conversation.
- Participation and answer to questions

#### **Performance levels:**

- Outstanding: Clear pronunciation, rich and varied vocabulary, fluency, and coherence in speech, correct use of grammatical structures, active participation, and complete responses.

- **Notable:** Understandable pronunciation, adequate use of vocabulary, fluency in speech with some pauses, correct use of mostly grammatical structures, active participation, and clear answers.
- **Acceptable:** Understandable pronunciation with some errors, basic use of vocabulary, fluency in speech with frequent pauses, basic use of grammatical structures, limited participation, and short answers.
- **Insufficient:** Unintelligible pronunciation, limited vocabulary, difficulty maintaining speech, frequent errors in grammatical structures, little participation and minimal responses.

**Listening Rubric:****Evaluation criteria:**

- Understanding specific details
- Understanding the main ideas
- Recognition of vocabulary and expressions
- Ability to follow oral instructions.
- Identification of the intention and attitude of the speaker

**Performance levels:**

- **Outstanding:** Understands all details and main ideas, identifies and comprehends vocabulary and expressions, follows oral instructions accurately, and captures speaker's intention and attitude.

- Good: Understands most of the details and main ideas, identifies and understands most of the vocabulary and expressions, follows most of the oral instructions, and captures the intention and attitude of the speaker for the most part.
- Acceptable: Understands some details and main ideas, identifies and understands part of the vocabulary and expressions, follows some oral instructions, and captures the intention and attitude of the speaker at times.
- Insufficient: Understands few details and main ideas, has difficulty identifying and understanding vocabulary and expressions, has difficulty following oral instructions, does not capture the intention and attitude of the speaker.

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## **ANNEXES**

## 8.1 ANNEX A

### Teacher Instrument on the Impact of Tablets on English Language Learning

Introduction: This instrument aims to evaluate the impact of implementing the usage of tablets as a technological resource in the learning of English language process in students of the 4th level of primary education at Carmen Lyra Educational Center. Please rate each statement on a scale from 1 (strongly disagree) to 5 (strongly agree).

<b>Level of technical training</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The training provided for the use of tablets was adequate.					
The technical support provided was helpful.					
The technical difficulties encountered during the implementation were resolved in a timely manner.					
Overall, I felt confident in using the tablets for teaching English language.					
<b>Use of tablets</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The tablets were easy to use in the classroom.					
The tablets enhanced the students' engagement in English language learning.					
The tablets helped me to deliver English language content more effectively.					
The use of tablets provided opportunities for differentiation in English language instruction.					
<b>Development of English language skills</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The use of tablets had a positive impact on students' English language proficiency.					
The tablets helped students to develop their listening and speaking skills in English.					
The tablets helped students to improve their reading and writing skills in English.					

The tablets provided opportunities for students to practice English language skills independently.					
<b>Pedagogical strategies</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The tablets allowed for more varied and interactive English language teaching strategies.					
The use of tablets helped me to provide more personalized feedback to students.					
The tablets facilitated the use of multimedia resources in English language instruction.					
The use of tablets helped me to create more engaging and relevant English language activities for students.					

Below are some open questions, you can answer according to what you consider most relevant to explain according to your experience in class using tablets in the educational process:

1. Do you feel that the use of tablets has increased student autonomy and independence in their learning of English?
2. Have you observed any improvements in student English language skills since the implementation of tablets? If so, please provide examples.
3. In what ways have you adapted your pedagogical strategies to effectively incorporate the use of tablets in English language instruction?
4. What challenges have you faced when implementing the use of tablets in English language instruction? How have you addressed these challenges?
5. Do you believe that the use of tablets should be continued in English language instruction at the 4th grade level? Why or why not?
6. How could the use of tablets be further optimized in English language instruction at the 4th grade level?

7. Have you received sufficient technical training and support to effectively use tablets in English language instruction? If not, what additional support would you need?

Do you feel that the use of tablets has increased collaboration and communication among students in English language?

## 8.2 ANNEX B

Universidad Hispanoamericana  
English Teaching  
Final Thesis Project

### Focus group for students

Introduction: Today we are going to cover a little about the use of tablets in classes. I want everyone to participate, and we can have an entertaining time. No answer is bad, all opinions are welcome. Any questions I answer.

Objective: To analyze the impact of implementing the usage of tablets as a technological resource in the learning of English language process in students of the 4th level of primary education at Carmen Lyra Educational Center.

1. Icebreaker: Start with a fun, engaging activity to break the ice and get the students comfortable sharing their thoughts.

Questions:

1. How do you feel about using tablets in your English language class?
2. Do you think using tablets has helped you learn English better?
3. What do you like the most about using tablets in class?
4. What do you think could be improved about using tablets in class?
5. Do you feel more motivated to learn English when using tablets compared to traditional methods?
6. How do you think tablets can help you with your English language learning process?
7. Have you noticed any differences in your English language learning since using tablets?
8. How do you think tablets can help you in your future education?
9. Do you have any suggestions for how tablets can be used more effectively in English language learning?

Conclusion: Thank you for participating in this activity, I enjoyed it very much and you have been a great help for the work I am doing.

## 8.3 ANNEX C

Universidad Hispanoamericana  
English Teaching  
Final Thesis Project

### Observation Guide for Tablet Usage in English Language Learning

Introduction: This observation guide aims to evaluate the impact of tablets as a technological resource in the learning of English language process among 4th-grade students at Carmen Lyra Educational Center. The purpose of this guide is to observe the use of tablets during English language classes, how students engage with the technology, and the impact on their learning process.

#### 1. Classroom Environment

- What is the classroom environment like during English language classes?
- Is the use of tablets integrated into the classroom seamlessly or is it disruptive?

#### 2. Tablet Usage

- How do students interact with the tablets during class?
- Are students engaged in their learning when using tablets?
- What type of activities do students engage in on the tablets?
- Are the activities appropriate and relevant to the English language learning process?

#### 3. Teacher and Student Interaction

- How does the teacher incorporate the tablets into her lesson plans?
- What is the level of teacher involvement during tablet usage?
- Are students comfortable asking questions to the teacher about the tablet activities?

#### 4. Learning Outcomes

- Has the use of tablets improved students' learning outcomes in English language classes?
- Are students able to retain the information learned on the tablets?
- What are some examples of how tablet usage has helped students learn English?