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**Faculty of Education**

**Thesis submitted to obtain the licentiate degree in**

**English Teaching**

**The effectiveness of applying “Spell and Pronounce” APP through the Audio-lingual Approach and drilling techniques to improve the pronunciation of phonemes /θ/ and /ð/ on eight grade students from 15 to 41 years old from the Quepos Night School during the first quarter of 2025.**

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**I Quarter 2025**

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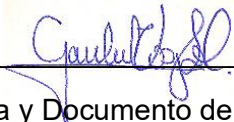
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## ACKNOWLEDGEMENT LETTER

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This achievement is not just mine; it is a collective effort of love, support, and dedication. To all of you, from the bottom of my heart, thank you.

Sincerely,

Gabriela Vargas Solís

08 de julio de 2025

Universidad Hispanoamericana

## RESUMEN

Este proyecto examinó la eficacia de la aplicación "Spell and Pronounce", unida al enfoque audio lingual y técnicas de repetición (drilling), para perfeccionar la pronunciación de los fonemas /θ/ y /ð/ en alumnos de octavo año, cuyas edades varían entre 15 y 41 años, en el Liceo Nocturno de Quepos durante el primer trimestre del 2025. La propuesta se enfocó en la utilización sistemática de la aplicación como instrumento de práctica oral, con tareas repetitivas diseñadas para fortalecer la correcta articulación de estos fonemas, frecuentemente complicados para los hablantes de español.

Se llevaron a cabo actividades prácticas mediante la App, lo que permitió a los alumnos obtener comentarios instantáneos sobre su pronunciación y practicar de forma independiente. Al concluir el proceso, se llevaron a cabo anotaciones, evaluaciones de los resultados y sondeos de percepción.

Los descubrimientos iniciales indican que la combinación de tecnología y métodos de repetición sistemática propició una identificación y producción más efectiva de los fonemas objetivo. Además, los alumnos demostraron una postura favorable hacia la aplicación, en particular por la oportunidad de repetir y rectificar la pronunciación en tiempo real. Estos hallazgos demostraron que, pese a que la implicación activa fue restringida, los alumnos que se comprometieron completamente en el proceso exhibieron avances significativos en su pronunciación. La práctica continua, la simulación auditiva y la retroalimentación instantánea ofrecida por la aplicación fueron elementos esenciales que impulsaron el proceso de aprendizaje. En términos generales, la combinación de la tecnología con tácticas convencionales del enfoque audio lingual resultó ser una mezcla eficaz para el fortalecimiento de competencias fonéticas particulares en entornos educativos de jóvenes y adultos.

## ABSTRACT

This research project, titled “*The Effectiveness of Applying the ‘Spell and Pronounce’ APP through the Audio-lingual Approach and Drilling Techniques to Improve the Pronunciation of Phonemes /θ/ and /ð/ on Eighth Grade Students from 15 to 41 Years Old from the Quepos Night School during the First Quarter of 2025*”, required to assess how using technology in conjunction with conventional language teaching techniques could improve Spanish-speaking learners' English pronunciation.

The research topic was defined in Chapter 1 as students' consistent mispronunciation of the English phonemes /θ/ and /ð/, which impairs their general oral communication abilities. Because of the phonetic variations between the two languages, this problem is especially prevalent among L1 Spanish speakers.

The theoretical and historical framework was introduced in Chapter 2, which also covered the Audio-lingual Approach, the application of drilling techniques, and the advantages of using mobile-assisted language learning (MALL) resources in EFL contexts, such as the "Spell and Pronounce" app.

The methodological framework was described in Chapter 3, which also described a qualitative and quantitative approach. Pronunciation tests, observations, and student surveys were used to gather data from a sample of twenty-three students. Over the course of several weeks, the treatment was administered with regular practice and feedback.

According to the data analysis in Chapter 4, students who actively engaged demonstrated a significant improvement in their ability to articulate the target phonemes, even though only a small percentage of them finished all evaluation tasks. The interactive feedback and repetition elements of the app were found to be important for students' development.

Results in Chapter 5 showed that the combination of technology and organized oral

practice improved the development of pronunciation. Recommendations highlighted the value of more individualized instruction during app-based activities, student motivation, and persistent practice.

For English teachers, Chapter 6 offered a set of instructional techniques and classroom procedures aimed at enhancing pronunciation using digital resources and the Audio-lingual Method. The proposal's main goals were to promote student autonomy, participation, and exposure to more precise phonemic models.

This study backs up the notion that improving English pronunciation, particularly for adult learners in night school settings, can be achieved by combining the use of easy-to-use digital tools like "Spell and Pronounce" with listening practices and drilling.

**Key words:** Pronunciation, Phonemes, Digital Resources, Mobile-Assisted Language Learning (MALL)

## **CHAPTER I**

### **RESEARCH PROBLEM**

## 1.1 Introduction

The phonological distinctions between Spanish and English languages create difficulties when teaching English phonemes to Spanish speakers. For those who are natural Spanish speakers, learning English can be extremely difficult due to its varied and frequently irregular phoneme register. It may be said that the phonology of Spanish is somewhat simpler, with fewer than five vowel sounds and a smaller range of consonant sounds. To become proficient in English, learners must link the phonological gap created by this contrast.

The distinction between sounds /i:/ and /ɪ/ in "sheep" vs. "ship," or the dental fricatives /θ/ and /ð/ in "think" and "this," respectively, are two examples of English phonemes that Spanish speakers frequently struggle with (Ladefoged & Johnson, 2014). Furthermore, a lot of diphthongs and triphthongs in English can be foreign to Spanish language learners. Accurate perception and production of these sounds are essential for clear communication and the avoidance of miscommunication.

One of the most important aspects of learning a language is developing phonemic awareness, which is the capacity to hear, recognize, and manipulate phonemes. It is crucial for Spanish speakers learning English to cultivate this understanding. It helps students differentiate between similar sounds, comprehend word meanings, and get better at pronouncing words correctly. Phonemic awareness is a powerful predictor of reading performance and general language skills, according to research. (National Reading Panel, 2000). Language learners may have difficulty pronouncing English words correctly, but Spanish speakers may find it particularly difficult due to differences in their sound systems. (IH World)

A combination of articulatory practice and auditory discrimination activities is necessary for effective phonemic training. (*Auditory processing, reading and phonological awareness*, 2014). Students need to be taught to pay close attention to the variations in phoneme production and to practice the physical movements necessary to make these sounds correctly. This ability to link learning techniques facilitates the ability to put phonological rules into practice for the student's oral production.

An additional choice is to use the International Phonetic Alphabet (IPA)'s visual aids and phonetic symbols. Regardless of anomalies in English spelling, learners can better understand the sounds they need to create by being familiar with the IPA. (Lubis et al, 2023). Interactive options that include both visual and audio information, like language learning applications and online pronunciation guides, can also be highly beneficial.

Adding multimedia materials like music and videos or technological strategies can make studying phonemes interesting and relevant to real world situations. By exposing students to real English pronunciation in a variety of settings, these resources can improve their speaking and listening abilities. Additionally, teachers can reinforce proper pronunciation patterns with practice drills and repetition, which will help learners become more competent and confident over time. There are free applications that can help teachers and especially students to facilitate the teaching and learning process. As many students have a smartphone, it is easier to develop techniques using different applications. In order to fulfill the demand for teaching and learning phonetics and pronunciation, efforts should be made to enhance awareness of mobile applications, given their relatively speedy expansion. (Meisarah, 2020)

Teaching English phonemes to Spanish speakers requires an important perception of the phonological differences between the two languages and a strategic approach to address these challenges. By focusing on phonemic awareness, employing effective teaching techniques, and leveraging multimedia resources, educators can significantly enhance their students' proficiency in English. This not only facilitates better communication but also opens broader opportunities for academic and professional growth.

### **1.1.1 Background**

Muhammad Hanafi performed an investigation base on the improvement of pronunciation ability in (2022). This research work aims to prove that the drilling technique is one of the best techniques available for teaching the pronunciation of English phonemes. It covers from the factors that interfere in the learning process to the solutions. The research makes a clear description of the different processes that are carried out with respect to the knowledge of the target language; it involves the knowledge of the articulations and productions of sounds. This work mentions the great validity of using these techniques. This paper mentions the great validity of using these drilling techniques but also emphasizes that interest on the part of the learner is an important key to learning success. Also, this investigation highlights that the most common aspects that influence the process of learning a Foreign Language are their native language, age, the exposure to the target language, the innate ability on phonetics that learners can have, the language ego, and the concern and motivation of correct pronunciation.

The main objective of the research is to show the ability of the use of drilling techniques to increase pronunciation skills.

The population of the investigation are the students in the eighth grade at SMP Negeri 4 Pancarijang for the 2018–19 school year. When a student registers to attend the school, their registration number is used to categorize them into classes. There are 23 students in 8-1, 21 students in 8-2, 25 students in 8-3, and 19 students in 8-4. There were eighty-eight learners in the population. There is a total of 23 students in the 8-1 sample that the researcher selected.

The researcher used a pronunciation pre and post-test and a questionnaire that was used to obtain information about the students' attitude regarding using communicative drilling.

The improvement in the students' ability to pronounce English words can be attributed to the intervention, in this case, communicative drilling. The authors suggest that students' pronunciation of English can also be enhanced through communicative training. The author concluded that communicative drilling is a useful method for teaching and learning, particularly when it comes to teaching English pronunciation. Pre-test and post-test results were compared, and the comparison showed how effective the communicative drilling strategy is at improving students' pronunciation. The importance of interactive, context-based pronunciation practice is highlighted by the notable rise in mean scores between the pre- and post-test. In addition to referring to pronunciation problems, this approach can create a more stimulating and productive learning environment, which will ultimately benefit students' language learning activities.

The authors recommend that using media into the teaching and learning process can improve it by making the material more visually appealing and captivating. Education could become more interesting, intelligible, and accessible by applying media in the

teaching and learning process. Media, when used intelligently, may revolutionize the classroom environment, increasing the effectiveness and enthusiasm of learning. But it's crucial to establish a balance between media use and educational objectives in order to guarantee that every student can take advantage of these innovative tools.

Students' pronunciation can be improved by using little dictionaries that provide phonetic transcriptions. Listening to native speakers is an essential part of the learning process. Students should be provided with adequate feedback and their pronunciation accuracy checked during communicative exercises. Promoting introspection is crucial. Teachers can help students become more aware of pronunciation by having them read aloud after hearing a model, record their reading, and then compare it to the model. To guarantee efficient communication, teachers should address students' grammatical faults in addition to emphasizing pronunciation. (Uniqbu, 2022)

Overall, I believe that the communicative drilling technique is a highly effective method for improving students' pronunciation abilities when implemented correctly. It combines the benefits of interactive, context-based learning with immediate feedback, creating a dynamic and engaging learning environment. However, its success largely depends on the teacher's ability to balance communicative activities with focused pronunciation practice and to manage the classroom effectively.

Likewise, Halil Ercan and Naciye Kunt investigate the difficulties to produce the th (/ð / and /θ/) sounds in English for EFL learners. The study aimed to determine if preparatory students could improve their pronunciation of the problematic "th" sounds (/ð/ and /θ/) through authentic practice opportunities. Also, it aims to contribute to the field of pronunciation by focusing on how instructors can create opportunities for learners to

improve their pronunciation skills. It will provide evidence of improvement among EFL learners, allowing learners and teachers from various contexts to reflect on their own practices.

The population involved in this study were twelve preparatory students from the Final International University (FIU) from the school of foreign languages.

The objective of the study is to determine whether providing authentic opportunities enables preparatory students to improve their pronunciation of the problematic /ð/ and /θ/ sounds.

The researchers used a pronunciation test to investigate the major pronunciation problems of participants, focusing on 26 items including the voiced (ð) and voiceless (θ) sounds. The test, developed by the researcher and observed by a supervisor, required students to pronounce words in isolation, in sentences, and through picture descriptions, all while being video recorded. Participants were informed about the study's purpose, ethics, and data importance. Two independent native speakers, one female and one male, listened to the recordings and rated the pronunciations as correct or incorrect.

Some of the most important results from this study were that the participants improved their pronunciation skills by engaging in real-world situations with the researcher's assistance. They became more motivated and confident speaking English. Initially, students were unaware of how to position their mouths to produce correct sounds, such as the /ð/ sound in "there." Despite this, many participants were able to produce the correct sounds during the test. Over four months, they showed significant improvement by

receiving instruction, listening to English speakers, and applying their knowledge outside the classroom.

The most relevant conclusion stated by the authors was that participants showed fewer mispronunciations of the voiced dental fricative (ð) and voiceless dental fricative (θ) consonants. Most had no problems with these sounds, though a few initially mispronounced /ð/ as /d/ and /θ/ as /t/ or /f/. Initially, unaware of how to articulate these sounds, participants improved their pronunciation after learning correct mouth positioning. The researchers suggest this improvement might be hindered by second-language lecturers not emphasizing proper pronunciation techniques for these consonants.

The improvement of students' pronunciation abilities can be attributed to a blend of proficient instruction in articulation methods and the learners' individual activities and dedication to repetition. It is necessary that language teachers put more emphasis on phonetic awareness. Furthermore, learners' pronunciation skills can be greatly improved by establishing an atmosphere that promotes consistent practice and provides constructive feedback. This complete method of teaching pronunciation can produce greater results and more competent, self-assured speakers.

Similarly, Eva Macháčková made a study about teaching English pronunciation to secondary school students that was focused on “th” consonants. The main objective of this work is to find the most effective way to teach the correct and as perfect as possible pronunciation of the th sound phonemes. The author wants to find and define what are the most frequent and problematic factors of th sounds mispronunciation.

A group of eleven secondary school students in their third year of study was considered to do this investigation.

This study's theoretical section discusses the background information necessary for both teaching and learning pronunciation. It teaches the significance of pronunciation in daily conversation and concentrates on the sounds that Czech English language learners find most difficult. It also covers the roles that educators and learners have, as well as the variables that influence a speaker's comprehensibility. Finally, it examines how to produce two sounds, /ð/ and /θ/, as Czech speakers finding English find it particularly challenging to produce these sounds. The thesis's practical section centers on the question of whether Czech students find it challenging to pronounce the “th” consonants in English. It also investigates whether or if secondary school learners may manage perfect pronunciation and the notion that they can get better at pronouncing certain sounds, particularly /ð/ and /θ/. The students' recordings are included in them.

The author used a survey which recorded before, during, and after the process. She selected a short text that matched the requirements and made the necessary changes to make "th" sound position occurrence occur. The text presents the initial, middle, and final locations. While being recorded, the students were instructed to read the material. At last, the author examined the recordings. Also, the author worked on activities aimed at practicing the pronunciation of specific consonants. After completing these activities, students were recorded again, and the initial and subsequent recordings were compared to determine if there was any improvement in their pronunciation. The author used explanation and illustration, minimal pairs, tongue twisters, and oral reading. The author concludes by saying that voiced consonants are normally spoken as /t/ or /d/ regardless of

where they appear, and that learners have a difficult time pronouncing the "th" sound. In place of voiceless consonants, /s/ or /f/ are frequently utilized. Additionally, the learners significantly improved their consonant pronunciation in the second recording exercise, especially in the middle and terminal positions, but the way the word was pronounced remained the same. There was a slight improvement in the voiceless "th" sound pronunciation as well, especially in the first position. Lastly, the students' pronunciation of voiced "th" consonants improved, especially when it came to the middle position of the word "other," which they all correctly pronounced. Nonetheless, they had trouble pronouncing "with" and "without," pronouncing them as /s/ or /t/, and they had trouble pronouncing the word "this," sometimes substituting /d/ or /dz/. Little improvement was made for the voiceless "th" consonant /ð/, as students kept substituting /t/ or /s/ for /θ/.

### **1.1.2 Justification**

The correct pronunciation of English "th" phonemes /θ/ (voiceless) and /ð/ (voiced) poses a significant challenge for English as a Foreign Language (EFL) high school students. These sounds are not common in many other languages, leading to frequent mispronunciations. Considering the research projects mentioned above, it is pointed out that drilling techniques, which involve repetitive practice, can be highly effective in helping students improve these difficult phonemes.

This project is a plan to develop the audio-lingual approach by implementing drilling techniques to improve students' pronunciation of /θ/ and /ð/. Students' pronunciation of the English "th" phonemes, /θ/ and /ð/, can be greatly improved in high school EFL classes by using drilling techniques. Through the integration of interactive activities using mobile applications, and reiterated repetition, students can improve their pronunciation, resulting in

increased self-assurance and English proficiency. This suggestion offers a complete strategy to accomplish the objectives, guaranteeing that students get the assistance and practice they need to become proficient with these difficult sounds. There are plenty of mobile application platforms to use in order to manage an accurate pronunciation of sounds. The recommendations are based on the concept of Mobile Assisted Pronunciation Training (MAPT), which focuses on content and design approaches tailored to students' pronunciation practice needs. The study suggests that a long-term investigation is necessary to evaluate the effectiveness of these mobile applications in improving pronunciation and phonetics learning. (Meisarah, 2020)

Pronouncing /θ/ and /ð/ correctly greatly improves students' comprehension of English. Derwing and Munro (2015) state that precise pronunciation is essential to the comprehension of communication by listeners. In English, phonemes are crucial for differentiating words like "think" and "sink" or "this" and "dis." Therefore, mispronunciation can cause confusion.

Mastering the "th" sounds allows students to communicate more effectively and confidently. Goodwin (2001) highlights that clear pronunciation is essential for effective communication and helps prevent communication breakdowns. This is especially important in academic presentations or professional settings where precise communication is necessary.

Correct pronunciation is often linked to perceived language proficiency and can significantly affect students' academic and professional opportunities. Levis (2005) emphasizes that pronunciation impacts how speakers are perceived in terms of their

language skills, which can influence their success in oral exams, presentations, and job interviews.

Taking into consideration all the information gathered, it is crucial for high school learners' general language development and efficient communication that they learn the proper "th" sounds. It makes them more comprehensible, gives them more self-assurance, and advances their chances in school and the workplace. Early approaching these pronunciation issues promotes improving listening abilities which eventually helps with cultural integration and offers a favorable educational experience.

For this project, it was chosen to apply the investigation at a night high school due to several key factors that make this population particularly relevant and significant for the study.

First, night high school students often face unique challenges that limit their ability to attend traditional daytime education. Many of them are individuals who must work during the day to support themselves or their families, making nighttime their only opportunity to continue their education. This reality highlights the importance of implementing effective teaching strategies that cater to their specific needs and learning conditions.

Second, despite their circumstances, these students deserve the same academic opportunities as those who attend daytime schools. However, they frequently encounter additional barriers, such as limited access to resources, less parental support, and fatigue from long working hours. This makes it crucial to explore innovative and engaging

teaching methods, such as the integration of technology and the Audio-lingual Approach, to enhance their learning experience.

Additionally, studying pronunciation difficulties in English among night school students provides valuable insight into how external factors, such as work responsibilities and reduced exposure to English outside the classroom, may affect language acquisition. The findings of this project could contribute to improving instructional approaches for this particular student population, ensuring they receive the necessary support to develop their language skills effectively.

In summary, choosing a night high school for this project is a deliberate decision that aligns with my goal of promoting inclusive and equitable education. By focusing on this group, I aim to demonstrate that, with the right methodologies and resources, all students, regardless of their schedule or personal challenges, can improve their English proficiency and enhance their academic and professional opportunities.

### **1.1.3 Problematization**

In Costa Rica students' pronunciation skills are severely vulnerable in high schools by teachers' instruction and the small amount of instructional time allotted to pronunciation practice. This has an impact on the students' overall English communicative competence. This theory is supported by multiple observable elements. First, it is possible that numerous Costa Rican English teachers did not obtain sufficient training in the specialized fields of phonology and phonetics throughout their professional study. Murphy (2014) points out that a complete understanding of the phonetic systems of both the target language and the native language is necessary for effective pronunciation instruction, yet many teachers lack this knowledge because of inadequate training. Second, there is minimal opportunity for

systematic pronunciation practice because grammar and vocabulary are typically given precedence over pronunciation in Costa Rican high school curricula (Darcy, Ewert, & Lidster, 2012). Students' options to participate in activities that would improve their pronunciation are restricted by this curriculum focus and time designated.

As mentioned before the efficiency of pronunciation training is impacted by several challenges while teaching English phonemes to secondary students in Costa Rica. These difficulties stem from linguistic, educational, and collective elements that work together to impede pupils' acquisition of English phonemes. For example, effective pronunciation instruction requires a thorough understanding of the sound systems of both the students' native language and the target language.

In Costa Rica, teacher training programs may not emphasize these aspects sufficiently, leading to a gap in teachers' expertise Murphy (2014). It is possible that many educators lack a solid background in these areas, which obstructs their capacity to instruct English phonemes. Furthermore, there is little time in the Costa Rican secondary education curriculum devoted to teaching phonemes because grammar and vocabulary are frequently given precedence over pronunciation. Standardized testing and curriculum objectives that prioritize reading and writing abilities make this problem worse.

The native language of Costa Rican students, primarily Spanish, significantly influences their pronunciation of English phonemes. Spanish has a different phonetic system from English, which leads to interference and the mispronunciation of certain sounds. For example, English phonemes such as /θ/ (as in "think") and /ð/ (as in "this") do not exist in Spanish, making them particularly challenging for students (Swan & Smith, 2001). These differences require continuous instruction and practice, which are often not enough

in the classroom. Students are rarely exposed to native English speakers and proper pronunciation of the language outside of the classroom. Their inability to fully immerse themselves prevents them from accurately hearing and practicing English phonemes. According to Levis (2007), frequent exposure to the target language, both within and outside of the classroom, is essential for the development of proper pronunciation, although many Costa Rican students do not have this experience.

It was observed that in eight graders from the Quepos Night school there are some difficulties pronouncing "th" phonemes and those difficulties can be attributed to different factors. One of those factors is the phonological differences; students from different language backgrounds often have trouble saying the "th" sounds in English because these sounds might not be in their own languages. (Flege,1991). For example, all those students speak Spanish as their native tongue and usually replace the "th" sound with a "d" or "t" sound because Spanish doesn't have the "th" sound. Another factor might be the instructional time and quality they receive during the process of learning the pronunciation skills for these specific phonemes. As Borg, 2006 mentions "The limited instructional time and potentially varied teaching quality can impede the thorough teaching of difficult phonemes like "th"."

Also, teaching methods have a great influence on learning the pronunciation of this "th" phonemes. The way that students are taught might influence their pronunciation achievement. Students may not learn how to pronounce words correctly if the teaching strategies are poor or do not have enough emphasis on teaching them how to make those sounds. Students will find it more difficult to learn the correct sounds if special strategies and sufficient practice are not offered for teaching pronunciation correctly. Effective

pronunciation instruction often requires specialized training and resources which might not be available in all night school settings. (Gilakjani, A. P., & Ahmadi, M. R. 2011).

Students at the Quepos Night School encounter various obstacles in accurately pronouncing the "th" phoneme due to linguistic and academic considerations. A strategy that considers the special needs of these night school students, such as phonetic education, extra resources, and support networks, is needed to address these issues.

Is for that reason that implementing the audio-lingual approach on the use of drilling techniques in the classroom using mobile application platforms at Quepos Night School students can improve the learning pronunciation process of the English “th” phonemes /θ/ and /ð/.

## **1.2 Problem formulation:**

Students from 15 to 41 years old at Quepos Night School struggle with the correct pronunciation of the “th” English phonemes /θ/ and /ð/ during the English class.

### **1.2.1 Research question**

What is the effectiveness of applying the mobile application “Spell and Pronounce” through the Audio-lingual Approach and drilling techniques to improve the pronunciation of phonemes /θ/ and /ð/ on eight grade students from 15 to 41 years old from the Quepos Night School during the first quarter of 2025?

### **1.3 Objectives**

#### **1.3.1 General Objectives**

To determine the effectiveness of applying “Spell and Pronounce” APP through the Audio-lingual Approach and drilling techniques to improve the pronunciation of phonemes /θ/ and /ð/ on eight grade students from 15 to 41 years old from the Quepos Night School during the first quarter of 2025.

#### **1.3.2 Specific Objectives**

1. To determine the knowledge students have related to the correct pronunciation of “th” phonemes at Quepos Night School during the first quarter of 2025.
2. To incorporate the “Spell and Pronounce” mobile application and audio-lingual approach during the English classes to identify the improvement of the “th” phonemes pronunciation at Quepos Night School during the first quarter of 2025.
3. To determine the accurate acquisition and comprehensive understanding of "th" phonemes in language learners at Quepos Night School during the first quarter of 2025.
4. To analyze the effectiveness of the “Spell and Pronounce” mobile application to be used with other phonemes at Quepos Night School during the first quarter of 2025.
5. To provide a detailed specification of the results obtained through comprehensive statistical analysis.

#### **1.3.3 Hypothesis**

The application of the "Spell and Pronounce" app through the Audio-lingual Approach and drilling techniques will significantly improve the pronunciation of the

phonemes /θ/ and /ð/ among eighth-grade students aged 15 to 41 years old at the Quepos Night School during the first quarter of 2025.

## **1.4 Scope and limitations**

### **1.4.1 Scope**

Pronouncing English phonemes correctly can be difficult for non-native speakers, especially /θ/ and /ð/. Communication problems arise from the frequent confusion or mispronunciation of these sounds. This paper investigates the possibility of improving pronunciation abilities by advancing the Audio-Lingual Method (ALM) via focused drilling methods, made possible by mobile application platforms. This method might create an efficient and interesting language learning experience by fusing contemporary technologies with the proven repetition-based learning strategy.

Based on behaviorist theory, the Audio-Lingual Method (ALM) stresses the development of positive language habits through repeated practice and drills. This approach places less emphasis on teaching grammar and vocabulary and more on speaking and listening. Students can improve their pronunciation and fluency by developing automaticity in language use through repetition of words and phrases (Richards & Rodgers, 2014).

An essential part of the ALM is drilling, which is the systematic repetition of linguistic forms. Methods for isolating and rehearsing certain phonemes include minimal pair drills, choral repetition, substitution drills, and transformation exercises (Larsen-Freeman, 2000). For instance, minimal pair drills help students distinguish between similar sounds, such as "think" (/θɪŋk/) and "sink" (/sɪŋk/), thereby honing their ability to produce the target sounds accurately.

There are several benefits of incorporating mobile technology into language learning, such as accessibility, interactivity, and adapted feedback. Students can practice drilling exercises at any time and from any location with the help of mobile applications, which can offer a versatile and entertaining platform. Instant feedback systems, visual assistance, audio recording and playback, and other features increase learning and offer chances for self-evaluation and progress (Godwin-Jones, 2011).

A curriculum centered on the ALM will be created to put this strategy into practice, and it will include a range of drilling methods aimed at the phonemes /θ/ and /ð/. The mobile application that will be introduced to the students is made specifically for language learning and has features that will help them with these drills. To guarantee constant practice, practice sessions will be planned on a regular basis, both in the classroom and as homework assignments. Assessments conducted before and after the lesson will track how well students have learned to pronounce words, and comments from students will reveal how well the mobile app works.

The goal of this initiative is to improve students' pronunciation of the phonemes /θ/ and /ð/ significantly. It is anticipated that this method will boost student interest and engagement by fusing the advantages of mobile technology with the strengths of the ALM. Additionally, using mobile apps for drilling exercises might provide a scalable solution that is easily adjustable to various learning situations and student requirements.

An effective way to help language learners with their pronunciation is to incorporate drilling tactics into the Audio-Lingual Method, which is supported by mobile application platforms. This approach not only confronts the unique difficulties presented by challenging phonemes such as /θ/ and /ð/ but also applies technology to establish an adaptable and captivating educational process. Through the application of both

conventional and contemporary teaching resources, this methodology will promote greatly improving language acquisition results.

#### **1.4.2 Limitations**

The development and implementation of the Audio-Lingual Approach (ALM) through drilling techniques in classroom settings, supported by mobile application platforms, present some possible limitations. While the initiative aims to enhance students' pronunciation of the challenging English phonemes /θ/ (as in "think") and /ð/ (as in "this"), various factors may affect its overall effectiveness and feasibility.

One significant limitation is the dependency on technology. Not all students may have access to the necessary device, or a stable internet connection required to use mobile applications effectively. This digital divide can hinder equal participation and benefit from the proposed method. Additionally, the quality and user-friendliness of the mobile applications are critical. If the apps are not intuitive or lack robust functionalities such as real-time feedback and progress tracking, they might fail to engage students effectively.

The Audio-Lingual Method, with its heavy reliance on repetition and drilling, may not satisfy all learning styles. Some students might find the repetitive nature of drills monotonous, leading to decreased motivation and engagement over time. This method also focuses primarily on pronunciation and may neglect other essential language skills such as reading, writing, and critical thinking. The lack of contextual learning can limit students' ability to apply pronunciation skills in real-life communication scenarios. According to Richards and Rodgers (2014), ALM's focus on rote memorization can lead to a lack of engagement and reduced motivation among students, as it often fails to contextualize language use in meaningful ways.

Evaluating pronunciation improvement accurately is another challenge.

Pronunciation is inherently subjective, and assessments may require human evaluators who can discern subtle differences in speech. Automated assessment tools within mobile applications may not be sophisticated enough to provide accurate feedback, especially for nuanced phonetic distinctions. This could lead to incomplete or misleading assessments of students' progress.

Students come from diverse linguistic backgrounds, and the phonemes /θ/ and /ð/ might present varying levels of difficulty depending on their native languages. The one-size-fits-all approach of drilling might not address the specific needs of individual learners. Tailoring the exercises to accommodate these differences requires additional resources and effort, which might not be feasible in a typical classroom setting. Students with different linguistic backgrounds may find certain phonemes more challenging than others due to the phonetic structures of their native languages (Flege, 1995).

Sustaining student motivation over time with drilling exercises can be challenging. While mobile applications offer the advantage of interactive and engaging content, the novelty might wear off, especially if the drills become too repetitive. Keeping the content fresh and engaging requires constant updates and creative input, which can be resource intensive.

While integrating the Audio-Lingual Approach with mobile application platforms to improve pronunciation of /θ/ and /ð/ offer promising benefits, these limitations highlight the need for a balanced and well-rounded approach. Addressing technological barriers, diversifying pedagogical strategies, ensuring accurate assessment, accommodating cultural and linguistic diversity, providing adequate teacher training, and maintaining student

engagement are crucial for the success of such initiatives. By acknowledging and proactively addressing these challenges, educators can better leverage technology to enhance language learning outcomes.

**CHAPTER II:**

**THEORETICAL FRAMEWORK**

## 1.1 HISTORICAL CONTEXT

### 2.1.1 Background of the Organization and Community of Quepos Night School

Quepos Night School, offers to students who often have daytime commitments, has developed specific selection criteria to ensure that those who are most in need of flexible educational opportunities are able to enroll. These criteria are designed to identify and support students who exhibit a genuine need for night schooling due to various socio-economic and personal circumstances. To be eligible for enrollment at Quepos Night School, students must be between the ages of 15 and over and must reside within the Quepos district or surrounding areas. This residency requirement ensures that the school serves the local community, addressing the educational needs of those who live and work in the region (Ministerio de Educación Pública, 2022).

Priority is given to students from low-income families who might otherwise lack access to education due to financial constraints. Many students at Quepos Night School work during the day in industries such as tourism, agriculture, and fishing. The school recognizes the importance of providing educational opportunities to these students to improve their futures (González & Ramírez, 2021).

Applicants must demonstrate that they have daytime commitments that prevent them from attending traditional daytime schools. This includes full-time or part-time employment, family care responsibilities, or other significant obligations. The school requires documentation such as employment verification or a letter explaining the nature of the student's daytime commitments (Rodríguez, 2023). While academic performance is not the primary criterion, Quepos Night School seeks students who exhibit a strong motivation to complete their education. During the application process, students are often required to

provide a personal statement or attend an interview to discuss their educational goals and how attending night school will help them achieve these goals (Araya, 2020).

Recognizing the diverse needs of its student body, Quepos Night School offers support and counseling services to help students manage their responsibilities. The school provides academic counseling, career guidance, and personal support to ensure that students can balance their work, family, and educational commitments effectively (Ministerio de Educación Pública, 2022).

## **1.2 THEORETICAL-CONCEPTUAL CONTEXT**

### **1.2.1 Learning Approaches in English Language**

English language learning methodologies have changed dramatically over time, considering the various demands of students as well as developments in pedagogy. These strategies cover a range of techniques meant to improve language learning and competency. Task-based language learning (TBLL), blended learning, and communicative language teaching (CLT) are three well-known methods. Interaction is emphasized as both the means and the end aim of language learning in Communicative Language Teaching (CLT). Its main goal is to provide students with the skills they need to communicate clearly and effectively in everyday settings. (Richards, 2020). This approach encourages the use of authentic materials and real-life communication, promoting an immersive learning experience.

Another well-liked strategy is task-based language learning (TBLL), which gives students meaningful assignments that mimic language use in everyday situations. It places more emphasis on language use through job completion than it does on providing clear

instructions on language rules. It has been demonstrated that this approach improves students' involvement and pragmatic language abilities. (Ellis, 2020). Blended learning integrates online learning resources and interactive exercises with conventional in-person teaching techniques. This methodology provides adaptability and customized educational opportunities, meeting the requirements of each learner and encouraging self-governance (Graham, 2020). Blended learning has gained popularity due to its ability to integrate the advantages of both in-person and digital instruction.

### **1.2.2 Audio-Lingual Approach**

As mentioned before, there are many learning approaches, but it could be said that one of the most important is the Audio-Lingual Approach. It is a popular approach to teaching foreign languages throughout the middle of the 20th century called the Audio-Lingual Approach (ALA). This method, which is grounded on behaviorist psychology, stresses the development of oral competency through practice with patterns and repetitive drills. The ALA follows a planned sequence of language acquisition exercises, placing more emphasis on speaking and listening than on reading and writing. The Audio-Lingual Approach's key features include memorization, mimicry, and repetition and drills to teach proper language use. (Larsen-Freeman & Anderson, 2020).

The idea that learning a language is a process of forming habits is one that the ALA heavily depends upon. To promote language immersion and minimize the usage of the learner's native tongue, it employs rigorous oral drills to establish proper linguistic habits. Repetition, dialogue practice, and pattern drills are common exercises that are meant to strengthen vocabulary and grammatical structures over time. (Richards & Rodgers, 2020). Opponents of the ALA claim that because of its focus on memorization and rote learning,

learners may not be able to use the language in novel and creative ways. Supporters counter that the method's well-organized framework helps learners internalize linguistic patterns, which can provide a strong foundation for further language development. (Celce-Murcia, Brinton, & Snow, 2021). Even with the emergence of more communicative methods, language teaching practices are still influenced by the ALA, especially in settings that place a high importance on accuracy and structural competency.

It could be said, from a point of view, that the ALA's methodical and planned framework can give students a strong foundation in the essential concepts of the target language. Intense exercises and repetition aid in reinforcing vocabulary and grammatical structures, allowing students to absorb usage patterns. Before advancing to more difficult communicative activities, beginners who need to gain accuracy and trust in the language's fundamentals will benefit most from this gradual approach.

### **1.2.3 Historical Background and Principles of the Audio-Lingual Approach.**

The urgent requirement for fluent speakers of multiple languages for military objectives during World War II led to the development of the Audio-Lingual Approach (ALA) in the United States. The Army Specialized Training Program (ASTP), which concentrated on quick and intensive language learning, was created in response to this demand. In the 1950s and 1960s, behaviorist psychology and structural linguistics, especially the theories of B.F. Skinner and Leonard Bloomfield, had a significant impact on the widespread adoption of the ALA. (Richards & Rodgers, 2019).

Behaviorism, which holds that learning is a process of habit building, served as the foundation for the ALA. This perspective held that learning a language entailed developing appropriate speech patterns via consistent practice and reinforcement. (Mitchell et al.,

2019). The methodology gained popularity in educational settings and was aided by the availability of audio equipment and language labs, which made the method's repetitive oral drills possible.

The Audio-Lingual Approach (ALA) is based on a few key ideas; it focuses on repeating and practicing language patterns, gives more importance to listening and speaking than to reading and writing, encourages copying and memorizing conversations, and uses the target language as much as possible to help learners immerse themselves in it. These principles are based on behaviorist theories of learning, which view language acquisition as a process of habit formation through repetitive practice and reinforcement. (Larsen-Freeman & Anderson, 2020).

Drills and repetition are useful methods for learning a language since they help solidify and ingrain new linguistic patterns. Repeated practice of the same words and sentences helps learners strengthen their foundation and increase accuracy. This approach facilitates the memorization of grammar and vocabulary, which makes it simpler to remember and apply those concepts in everyday contexts. This methodical practice is crucial for gaining confidence and fluency in a new language, even though it may seem tedious at first. Language learning is achieved through the repetition of language patterns. Drills such as repetition, substitution, and transformation are used to reinforce correct language usage (Brown, 2020).

Memorization and imitation are helpful strategies for learning a language because they enable students to become used to the sounds and patterns of the target language. Learners can enhance their pronunciation and intonation by mimicking the speech patterns of native speakers and committing common phrases and conversations to memory.

Establishing a foundation through this technique facilitates efficient communication. Even though they may appear monotonous, these techniques are crucial for honing the abilities required to communicate effectively and smoothly in a foreign language. Students are encouraged to mimic the language models provided by the teacher or audio recordings. Memorization of dialogues and sentences is a key component (Richards & Rodgers, 2019).

When learning a language, concentrating on speaking and listening is like learning a new game by watching and then playing it yourself. Students may learn how to utilize the words and sounds appropriately by practicing speaking and paying close attention while they listen. This aids students in improving their self-expression and understanding of others. It is like laying a solid foundation for future language acquisition that will facilitate communication with others. Emphasis is placed on developing oral proficiency before reading and writing skills. This aligns with the behaviorist emphasis on oral practice and immediate feedback (Larsen-Freeman & Anderson, 2020).

Reducing the amount of time spent in someone's mother tongue when learning a new language is like embarking on an expedition without as many safety precautions. Learners are compelled to depend on the target language for understanding and communication when they immerse themselves in it as much as possible. This method helps to avoid depending on translations and promotes faster thinking in the target language. By fostering a more direct connection between ideas and expressions in the target language, immersion can quicken learning by gradually boosting confidence and fluency. It's like being in a new place where you learn to understand and respond in the local language without constantly translating back and forth. The target language is used exclusively in the classroom to maximize exposure and immersion. The native language is

minimized to avoid interference and promote direct association between meaning and the target language (Celce-Murcia et al., 2021).

The ALA has drawn criticism for its strict guidelines and neglect of communication skills. Nonetheless, it established the foundation for later approaches to teaching languages and still has an impact on language learning, especially in situations where correctness and structural understanding are valued highly.

#### **1.2.4 Effectiveness of the Audio-Lingual Approach in Language Learning**

In the field of language education, opinions on the usefulness of the Audio-Lingual Approach (ALA) for language acquisition have ranged from support to criticism. Its proponents contend that the methodical repetition, exercises, and oral practice it offers make it easier for students to learn pronunciation and grammar rules. (Richards & Rodgers, 2019). According to Larsen and Anderson (2020), the ALA's focus on intensive listening and speaking activities helps learners develop fluency and accuracy in the target language. Moreover, supporters suggest that the ALA's minimal use of the native language promotes a more immersive learning environment, which can enhance language acquisition (Brown, 2020). Critics of the ALA, however, draw attention to the ways in which it falls short of encouraging innovation and communicative skill in language use. They contend that learners' capacity to utilize the language flexibly in everyday contexts may be limited by the method's emphasis on rote memorization and pattern rehearsal (Celce-Murcia et al., 2021). Furthermore, some research suggests that while the ALA can improve immediate performance in controlled settings, its long-term effectiveness in developing communicative skills and language proficiency beyond basic levels may be limited (Mitchell et al., 2019). In summary, there is ongoing discussion in the field of language

education over the efficiency of the Audio-Lingual Approach in promoting communicative competence and adaptation, despite its benefits in enhancing core language abilities and accuracy.

### **1.2.5 Drilling Techniques in the Classroom**

In language teaching, drilling techniques have long been a strength, especially when used in conjunction with the Audio-Lingual Approach. These methods entail practicing language patterns repeatedly to strengthen linguistic structures and improve expertise. Drilling can take many different forms in the classroom, such as transformation, substitution, and repetition exercises. Even if the approach has changed over time, it is still useful in some situations when teaching and learning a language. The simplest type of drilling is called a repetition drill, in which students repeat words or sentences after the teacher. Beginners will find this technique very helpful as it helps them become accustomed to the sounds and rhythms of the new language. (Richards & Rodgers, 2019). Learners can enhance their pronunciation and internalize basic language concepts by repeatedly rehearsing the same words. This type of drilling is simple to use and works well in any language instruction.

Substitution exercises let students practice a variety of vocabulary and sentence structures inside the same grammatical framework by having them replace one phrase element with another. For instance, the teacher might present a sentence like "I have a book" and then prompt students to replace "book" with other nouns like "pen" or "apple" (Larsen-Freeman & Anderson, 2020). This kind of drill helps students build more flexible sentences and broadens their vocabulary while also reinforcing grammatical patterns as well as pronunciation. Also, there exist transformation drills, they require students to

transform sentences according to specific grammatical rules, such as changing affirmative sentences to negatives or converting present tense to past tense. This technique helps students understand and apply grammatical rules in a practical context (Brown, 2020). For example, students might be asked to change "She is going to the market" to "She is not going to the market," thus practicing both the vocabulary and the grammatical transformation. And therefore, if the student transforms the sentence, he must practice his new pronunciation as well.

Drilling techniques have critics who claim that they can be tedious and do not foster meaningful conversation. However, drills can offer a strong basis for language learning if utilized sparingly and in conjunction with other interactive techniques. Krashen (2020) argues that drilling, which focuses on rote repetition and memorization, does not effectively contribute to language acquisition. Instead, he believes that language is acquired when learners are exposed to meaningful and understandable language input that is slightly above their current proficiency level. This approach contrasts sharply with the mechanical nature of drills, which Krashen views as insufficient for fostering true language competence and communicative ability (Krashen, 2020). Krashen's criticism stems from his conviction that learning a language is an involuntary process that cannot be compelled by constant practice. He argues that although language drills can aid in improving accuracy in certain language forms, they do not encourage the spontaneous and natural use of language in everyday contexts. He therefore supports teaching strategies that offer rich and interesting language experiences as opposed to those that mainly focus on drills and rote learning.

### **1.2.6 Definition and Types of Drills**

Language acquisition drills are organized practice exercises designed to reinforce language concepts through repeated use. By using these strategies frequently, students will be able to internalize vocabulary, grammatical forms, and pronunciation patterns. In addition to being an essential part of the Audio-Lingual Approach, drills are used in many other teaching strategies to guarantee that language forms are retained through regular use. Drills are methodical activities that encourage automaticity in language use by emphasizing pattern practice and repetition. Their foundation lies in behaviorist psychology, which holds that learning a language entail forming habits via practice and frequent exposure. The primary goal of drills is to help learners acquire accuracy and fluency in the target language by reinforcing correct usage and minimizing errors (Larsen-Freeman & Anderson, 2020).

There are different types of drilling techniques, and those were mentioned before. To understand each of them, let's do a more in-depth explanation. First, repetition drills entail having students repeat words or sentences after an audio model or the teacher. For novices, this kind of drill works especially well since it helps them become used to the sounds and rhythm of the new language. Repetition drills focus on accurate pronunciation and intonation, ensuring that learners can produce language forms correctly (Richards & Rodgers, 2020). For example, the teacher says, "I am a student," and the learners repeat it in unison. Drills of repetition are essential to learning and developing new skills. These exercises entail practicing particular motions or methods repeatedly in order to increase performance and memory. Research has shown that consistent repetition helps solidify neural pathways, making the actions more automatic and efficient over time (Smith & Doe, 2021).

Secondly, there exist substitution drills, they demand that students swap out one sentence constituent for another. This aids in their practice of various vocabulary words, grammatical constructions inside predetermined sentence patterns and also pronunciation patterns. For instance, after learning the sentence "I have a book," students might be asked to substitute "book" with "pen," "apple," or "notebook" (Brown, 2020). This type of drill not only reinforces the structure but also expands learners' vocabulary. This type of drill is a very useful method for improving learners' competency by changing out a word or phrase in a sentence. Students can practice different sentence structures and develop a deeper knowledge of language and pronunciation patterns with these exercises. Studies have highlighted that such drills promote active learning and facilitate long-term retention of language skills (Jones & Lee, 2022).

Third, there exist transformation drills; in this type of drills, a sentence's structure is altered in accordance with certain grammatical norms. Students may be asked to turn direct speech into reported speech, affirmative words into negatives, or present tense sentences into past tense sentences. (Celce-Murcia et al., 2021). Transformation exercises are a crucial method for teaching languages. Through these drills, students must modify phrases in accordance with predetermined guidelines. Research indicates that transformation drills can significantly boost learners' confidence and competence in producing grammatically correct sentences, ultimately leading to greater fluency and language proficiency (Smith & Brown, 2023). It can be understood that learners' confidence and proficiency in constructing proper sentences can be significantly enhanced by transformation activities. With the aid of these drills, students can practice modifying sentences in various contexts. Learners improve their comprehension and application of grammatical principles by doing

this. They are consequently able to write and speak the new language more fluently and accurately. Through practice, they become more proficient and fluent in general.

Transformation exercises are an effective method for learning a language. By practicing this modifications method, it assists students in comprehending and appropriately applying a variety of sentence forms and appropriate pronunciation patterns. Through increased proficiency and confidence in their language skills, students become more accurate and fluent speakers. All things considered, transformation drills are a useful tool for strengthening language skills, grammar and pronunciation.

Fourth, in question-and-answer drills, the teacher poses questions, and learners respond using full sentences. This type of drill encourages learners to practice sentence formation and respond spontaneously, helping with the pronunciation patterns as well. It can be particularly useful for developing conversational skills and ensuring that learners can use language structures dynamically (Richards & Rodgers, 2020). Question-and-answer drills are a popular and successful approach to learning a language that improves speaking and comprehension. Through the practice of dialogues in which one person asks a question and the other responds, learners are encouraged to actively engage with the language and strengthen their thinking and rapid response skills. The fact that question-and-answer drills mimic real-world interactions and provide students hands-on practice speaking the language is one of its main advantages. As students get used to answering many types of questions, this helps them become more confident and fluent. According to a study by Lee and Park (2021), students who regularly engaged in these drills showed significant improvement in their conversational abilities and were more comfortable speaking the language in real-world situations. Additionally, by repeatedly practicing questions and

answers, learners internalize common phrases and sentence patterns, which aids in long-term retention. As Smith and Liu (2022) point out, this repetitive practice solidifies the learners' grasp of language rules, making it easier for them to recall and use the language correctly under pressure.

### **1.2.7 Role of the Drilling Method in Language Acquisition (Rote Learning)**

In the classroom, drilling methods are an essential tool for consolidating language structures and patterns, particularly for newcomers. Even while some educators contend that these methods are archaic and unduly mechanical, when applied properly, they can nevertheless have a big impact. Rote learning is a method of memorizing that uses repetition to help people retain information without necessarily knowing what it means. In educational contexts, this approach has been widely adopted, especially for teaching basic concepts like vocabulary, historical data, and multiplication tables (Brown, 2024). Critics contend that rote learning does not foster critical thinking or deep comprehension, even though it can be useful for remembering facts (Smith & Johnson, 2025). Research on its function in cognitive development and possible advantages when paired with more analytical learning strategies is still ongoing, but (Lee, 2025). Through controlled repetition, drills help students internalize grammar, vocabulary, and pronunciation, improving their accuracy and fluency in language production. To effectively implement drilling techniques, teachers can start with simple activities and gradually increase complexity as students become more comfortable. According to Johnson and Martinez (2023), incorporating drills in diverse formats keeps the practice dynamic and engaging, preventing monotony and sustaining student interest. It is imperative to mention that

drilling techniques have different roles in learning the target language, and those roles are the ones that measure their effectiveness.

First, it could be said that drilling techniques have more controlled practice on students. Drilling strategies allow learners a regulated setting in which to reinforce their comprehension of language patterns, making controlled practice essential to language learning. By repeatedly rehearsing particular grammar structures, vocabulary, and pronunciation aspects until they become second nature, this strategy enables beginners to concentrate on precision. Such repetition helps in the internalization of language rules, making it easier for students to recall and use them correctly in more spontaneous contexts. Drilling provides a highly controlled practice environment where learners can focus on the correct usage of grammar, vocabulary, and pronunciation without the pressure of spontaneous conversation. This helps in the internalization of language patterns and structures (ESL Lesson Handouts, 2022).

Second, pronunciation and intonation can greatly improve pronunciation and intonation, two important characteristics of language learning. Pronouncing words correctly guarantees that non-native speakers can comprehend students, lowering barriers to communication and boosting self-assurance. One of the primary benefits of drilling is improving learners' pronunciation and intonation. Techniques like back chaining, where learners start with the last word and move backwards, can effectively address pronunciation challenges, particularly with difficult sounds and stress patterns (ESL Lesson Handouts, 2022). Furthermore, choral drilling can boost learners' confidence by allowing them to practice pronunciation and intonation collectively before attempting individual pronunciation (MyEnglishPages, 2024). Effective drilling can address common

pronunciation issues, such as consonant clusters and weak forms, which are often problematic for learners (Educational Research Techniques, 2022). By incorporating drills that target these aspects, educators can significantly enhance learners' overall speaking skills, leading to more natural and effective communication.

Third, the variety of drills that can be used to enhance the process of learning a foreign language has a very important role. The use of a variety of drills in the classroom is crucial for effective language learning, as it addresses different aspects of language acquisition and provides diverse learning styles. Repetition drills help reinforce correct pronunciation and intonation, while substitution drills enhance learners' ability to use new vocabulary and structures in varying contexts (MyEnglishPages, 2024). Question and answer drills facilitate the practice of constructing and responding to common questions, thus improving conversational skills (Educational Research Techniques, 2022). Transformation drills aid in understanding grammatical structures by requiring learners to convert sentences from one form to another, which deepens their grammatical competence (ESL Lesson Handouts, 2022). This variety not only keeps learners engaged but also ensures comprehensive language practice, making the learning process more dynamic and effective. By incorporating multiple drill types, educators can provide a well-rounded language education that develops both accuracy and fluency.

Moreover, it is relevant to mention that there are people who criticize these techniques. Language acquisition drilling approaches are subject to a few criticisms and issues. One significant complaint is that too much memorization and repetition in drills can cause learners to get disinterested and bored. They frequently place more emphasis on precision than fluency, which leads to students who can construct proper language forms

but have difficulty speaking on the spur of the moment. (Educational Research Techniques, 2022). Drills that prioritize accuracy over fluency may cause children to struggle with spontaneous language use in real-world scenarios while still being able to create the right forms in controlled settings. (MyEnglishPages, 2024). Besides, drills are frequently perceived as encouraging surface-level learning, in which pupils may retain language structures for immediate application but fail to internalize them for long-term retention. The decontextualized practice may make it more difficult for students to apply their knowledge in real-world communication situations. To address these criticisms, modern language teaching integrates drills within more meaningful and communicative contexts. For example, incorporating choice and personalization into drills can make them more engaging and relevant to learners' real-life experiences. Contextualizing drills within activities that simulate real-world scenarios helps in bridging the gap between controlled practice and spontaneous use (ESL Lesson Handouts, 2022). Nevertheless, these concerns, those proponents contend that drills can still be an effective tool for reiterating language basics if they are carefully combined with worthwhile and communicative tasks. As an inference, in language learning, drilling techniques are still a useful tool, especially for beginners and for improving specialized language abilities. They do, however, work best when paired with contextual and communicative learning techniques. Education professionals can design a more comprehensive and interesting language learning experience by striking a balance between accuracy-focused drills and opportunities for meaningful language use.

### **1.2.8 Advantages and Disadvantages of Using Drilling Techniques in the Classroom**

The potential of drilling techniques to enhance learning through repetition and regulated practice has made them a mainstay in language education for a long time. Still up

for question, nevertheless, are their appropriateness and efficacy in contemporary language training. In recent years, the advantages and disadvantages of the use and impact that drilling techniques have on the process of learning English with the target language have been studied and investigated. Reinforcement in memorization, improvement in intonation and pronunciation, immediate and spontaneous feedback are three of the most important advantages found. However, some disadvantages have also been found, such as being a mechanical and boring process, focusing on accuracy over fluency and a lack of contextual learning.

Drilling techniques provide learners with repeated exposure to language structures, aiding in the memorization and reinforcement of vocabulary, grammar, and pronunciation. This repetitive practice is essential for beginners who need to establish a solid foundation in the new language. According to ESL Lesson Handouts (2022), repetition drills help learners internalize language patterns, making it easier to recall and use them in appropriate contexts. Drills are particularly effective for practicing pronunciation and intonation, which are crucial for clear communication. Techniques on drilling allow learners to focus on difficult sounds and stress patterns, thereby improving their overall speaking skills. (MyEnglishPages (2024) highlights the importance of choral drilling, where learners practice pronunciation together, which can build confidence before they attempt individual practice. In a classroom setting, drilling allows for immediate feedback from the teacher, which is essential for correcting mistakes and reinforcing correct usage. This real-time correction helps prevent the reinforcement of errors and ensures that learners are on the right track. (MyEnglishPages (2024).

On the other hand, one of the primary criticisms of drilling techniques is their mechanical nature, which can lead to monotony and disengagement among learners. Repetitive exercises that lack context and meaning may fail to engage students, reducing their motivation to learn. According to Educational Research Techniques (2022), this monotony can hinder the development of a deeper understanding and appreciation of the language. Secondly, drills often prioritize accuracy over fluency, which can result in learners being proficient in controlled practice but struggling with spontaneous language use in real-life situations. MyEnglishPages (2024) points out that while drills are effective for practicing specific language points, they may not adequately prepare students for authentic communication, where fluency and the ability to convey meaning are crucial. Finally, Drills are often criticized for being decontextualized, focusing on isolated language elements without integrating them into meaningful and communicative activities. This lack of context can hinder learners' ability to apply their knowledge in real-life situations, where language is used dynamically and interactively. Educational Research Techniques (2022) suggests that drills should be complemented with communicative practices to ensure that learners can use language effectively outside the classroom. It can be expected that while drilling techniques offer significant advantages in terms of reinforcement, they also come with notable disadvantages that are important considerations for educators. To maximize the benefits of drilling, it is essential to integrate these techniques with more meaningful, communicative activities that engage learners and prepare them for real-world language use. By striking this balance, educators can ensure that drilling techniques contribute effectively to language acquisition.

### 1.3 Educational Technology in Language Learning

With a variety of tools and resources that improve teaching and learning, educational technology has completely changed the way that people learn languages. The incorporation of technology into language teaching has ushered in novel approaches that accommodate diverse learning styles and requirements, rendering language acquisition increasingly approachable, captivating, and productive. The abundance of resources available to instructors and students is one of the major benefits of educational technology. Interactive language learning courses are available in many different languages on websites like Duolingo, Rosetta Stone, and Babbel. These platforms use gamification to make learning more engaging, incorporating elements such as quizzes, rewards, and interactive exercises to motivate learners (Munday, 2020). Furthermore, authentic language content is available on platforms like YouTube and podcasts, which aids learners in developing their listening comprehension and cultural awareness.

Thanks to educational technology, students can have individualized learning experiences that are catered to their specific needs. Algorithms are used by adaptive learning technology to assess learners' progress and modify task complexity accordingly. This ensures that learners receive appropriate challenges and support based on their proficiency levels. Tools like Anki and Quizlet enable learners to create custom flashcards, aiding in the retention and recall of vocabulary and grammar points. This personalization fosters a more efficient and effective learning process. (Johnson et al., 2022). Technology facilitates interaction and collaboration, which are crucial for language learning. Virtual classrooms and language exchange platforms such as iTalk and Tandem connect learners with native speakers and language tutors worldwide, providing opportunities for real-time

practice and cultural exchange. (Reinders & Benson, 2022). These platforms facilitate both synchronous and asynchronous communication, giving students a safe space to hone their speaking and writing abilities. Group projects and peer review are made possible by collaborative platforms like Google Docs and Padlet, which encourage active learning and involvement.

Multimedia learning is made possible using instructional technology that accommodates several sensory modalities. Through visual, aural, and kinesthetic inputs, language learners can gain skills through videos, audio recordings, and interactive simulations. For example, interactive videos on platforms like Edpuzzle allow learners to engage with the content by answering questions and participating in discussions, enhancing comprehension and retention (Stockwell, 2022). The incorporation of multimodal elements makes language learning more dynamic and appealing.

Despite the benefits, integrating technology into language learning comes with challenges. A significant issue is the "digital divide," which refers to how unequal access to technology can make educational disparities worse. Learners in underprivileged areas may lack access to reliable internet and devices, limiting their ability to benefit from technological advancements (Hampel & Stickler, 2022). Furthermore, an excessive dependence on technology may result in less in-person engagement, which is crucial for the growth of conversational abilities and cultural competency. To provide comprehensive learning experience, educators must strike a balance between the use of technology and conventional teaching techniques.

It could be expected that language learning has undergone a substantial transformation because of educational technology, which offers a wide range of resources,

individualized learning pathways, improved engagement, and multimodal learning opportunities. Strategic technology integration in language education can result in more inclusive, productive, and interesting learning environments, despite certain limitations. It can be safe to say that technology will continue shaping language acquisition in significant ways as it develops.

### **1.3.1 Overview of Language Learning Apps**

One may argue that the rise in popularity of language learning applications in the last years reflects larger developments in educational technology as well as the growing accessibility of digital learning resources. These applications make language learning more effective and entertaining by providing a plethora of options that accommodate different learning methods.

One of the most well-known apps, Duolingo, makes learning a language enjoyable and addictive through gamification. It provides classes in more than 30 languages, including rare and fictional languages, and has over 500 million users globally. The success of Duolingo can be ascribed to its community-driven content generation, free access, and user-friendly interface. (Business of Apps) and (Duolingo Blog). Another popular App is Babbel, it provides subscription-based access to classes in 14 languages and is well known for its structured courses that emphasize conversational skills. Its popularity has grown because of how well it assists users in becoming conversationally proficient. (Business of Apps). Being a pioneer in language learning, Rosetta Stone has updated its immersive methodology for the mobile age to prioritize visual and auditory learning over translation. Because of its comprehensive methodology, many learners still choose it despite its greater cost. (FluentU). Also, Memrise excels at vocabulary acquisition because it makes use of

multimedia content and spaced repetition. It provides courses in more than 20 languages and incorporates interactive features to improve learning, such as natural speaker videos. (FluentU) and (Lifewire). With the use of social media integration and traditional language instruction, Busuu app lets users practice speaking with native speakers. It is a complete resource for language learners since it offers customized study schedules and community comments. (Business of Apps).

There has been acclaim and criticism for the gamification of language learning programs such as Duolingo, even though it has been shown to increase engagement and make learning fun. Some contend that these applications might simplify language learning too much and be shallow in regard to topics like grammar and cultural background. (Business of Apps). Nonetheless, research indicates that gamified instruction might enhance students' motivation and memory. (Lifewire). Regional preferences for language acquisition differ. For instance, immigrants frequently use native tongues like Swedish, Danish, and Norwegian in Scandinavian nations for both business and academic purposes. (Duolingo Blog). In the meantime, the global influence of Korean pop culture and media has led to a notable increase in the popularity of Asian languages like Japanese and Korean. (Duolingo Blog). It might be argued that by making language instruction more approachable and interesting, language learning applications have completely changed the face of the field. This industry grew significantly in the last four years because of shifting educational requirements and technological improvements. Even though these applications have many advantages, to attain complete language competency, they must be used in conjunction with other learning resources.

### 1.3.2 Spell and Pronounce App Background Information

Pronounce and spell apps have grown to be essential resources for language learners, giving them interactive, user-friendly platforms to help them become more proficient in spelling and pronunciation. Between 2020 and 2024, these apps saw a lot of development, utilizing state-of-the-art features like voice recognition, gamification, and artificial intelligence (AI) to improve the learning process. The "Spell and Pronounce" App, is an app designed to help users improve their spelling and pronunciation skills in different languages. These apps typically power advanced technologies like artificial intelligence (AI) and voice recognition to provide real-time feedback, interactive exercises, and personalized learning paths. (TechWiser)

Spell and Pronounce is an original and unusual smartphone application that facilitates precise word spelling and pronunciation using a simple approach. Spell and Pronounce is an application designed to assist users who have trouble remembering spellings or pronouncing words correctly. The fundamental idea behind this spell and pronounce program is to translate voice to text, and then the appropriate spellings will appear in front of the user. The user of the Spell and Pronounce app is not limited to the spelling of words or sentences in a single language; instead, the program includes common languages including English, German, French, and Chinese. Thus, the student may conclude that this application has the potential to be useful, practical, and viable on a global scale. (*Spell & Pronounce words right*).

### 1.3.4 Specific Features of the Spell and Pronounce App

One of the key benefits of this phone software is the ability to check your spelling. You select the spell option, pronounce your sentence or word, and press the microphone

button. The program will display the precise spelling of the word or term the users have selected. There is no need to visit the other icon to share it with friends; the student just copies it and sends it to someone special once. If they would like to use it, the delete option is in the same section. Pronouncing words or sentences correctly is another key component of Spell and Pronounce. The user proceeds to the label, says the phrase or sentence that is needed, and writes it down. The user needs to select the speaker by clicking. What the handler writes on the page will be spoken by the AI. There is no need to turn over a new section. The same page offers features for copying, pasting, deleting, sharing, and using the microphone. (*Spell & Pronounce words right*). The platform will even correct the student's incorrect pronunciation, which is just one more remarkable feature of Spell and Pronounce. One more significant feature is that it will spell each alphabet individually if the user wants spelling done slowly. The app responds quickly and is easy to use. Quick response time is guaranteed. In addition, and this is a crucial feature, it is free. (*Spell & Pronounce words right*).

#### **1.4 Pronunciation Challenges in Learning English**

Acquiring knowledge pronouncing words correctly in English can be difficult for language learners because of its complicated phonetic system, variety of accents, and numerous exceptions to the rule. Because of its well-known non-phonetic spelling system, words in English rarely have a strong association between their spelling and pronunciation. This disparity can be confusing and challenging for language learners who are attempting to become fluent. It can be challenging for non-native speakers of English to create a wide range of vowel and consonant sounds correctly because these sounds are uncommon in many other languages. For instance, English has approximately 20 vowel sounds, while

some languages have as few as five. This phonetic diversity requires learners to distinguish and produce sounds they may not be familiar with, such as the difference between the vowels in "ship" and "sheep". (ling-app.com) and (Ellii, formerly ESL Library). An additional degree of difficulty is created by the existence of different English dialects and accents. The pronunciations of British, American, Australian, and other regional languages, each with unique phonetic traits, may be presented to learners. For example, the pronunciation of the word "water" differs significantly between American and British English, potentially leading to confusion and inconsistency in learning. (Ellii, formerly ESL Library).

The irregular norms of pronunciation and countless exceptions that characterize English are well-known. Words such as "ough" have several ways of being pronounced, as in "though," "through," "rough," and "cough," which might be confusing to learners. This inconsistency requires learners to memorize the pronunciation of individual words rather than relying on consistent phonetic rules. (ling-app.com). Also, it is important to mention that although it can be difficult for learners to acquire, the use of stress and intonation is essential for coherent communication in the English language since English is a stress-timed language, the pattern of stressed and unstressed syllables dictates the speech rhythm. Incorrect stress placement can alter the meaning of a word or sentence, making it difficult for non-native speakers to be understood. For instance, the word "record" can be stressed differently to mean a noun "RE-cord" or a verb "re-CORD". (Ellii, formerly ESL Library).

The variability of accents and dialects, the phonetic complexity of English, the significance of emphasis and intonation, and the irregular rules of pronunciation are the main causes of pronunciation difficulties. Developing successful teaching methods and

resources to assist students in overcoming these challenges and achieving competency in English pronunciation requires an understanding of these challenges.

#### **1.4.1 Challenges Faced by Non-native Speakers, Particularly Spanish Speakers**

When acquiring English pronunciation, non-native speakers, especially those whose mother tongue is Spanish, face several significant difficulties. These difficulties stem from the substantial phonetic and structural distinctions between Spanish and English, which make it hard to learn English consonants, stress patterns, and intonations. The distinction between vowel and consonant sounds is one of the main obstacles Spanish speakers face when learning English. Spanish has five vowel sounds, while English has about 20. This discrepancy can make it difficult for Spanish speakers to distinguish and produce English vowel sounds accurately. For example, Spanish speakers may struggle with the distinction between the vowels in "ship" and "sheep" or "cut" and "cat" (ling-app.com) and (Ellii, formerly ESL Library). Additionally, certain English consonants do not exist in Spanish, such as the /θ/ sound in "think" and the /ð/ sound in "this." Spanish speakers often replace these with /s/ or /z/ sounds, leading to mispronunciations. The /v/ and /b/ sounds can also be problematic, as Spanish does not differentiate between these sounds as distinctly as English does. (Ellii, formerly ESL Library). English word and phrase stress patterns provide still another difficulty. Since the arrangement of stressed and unstressed syllables determines the pace of speech, English is a stress-timed language. Syllable timing, on the other hand, is what distinguishes Spanish as a syllable-timed language. The misplacement of stress in English words by Spanish speakers can result from this basic difference, altering meaning and making comprehension more difficult. Using the same example as before, placing

stress on the wrong syllable in the word "record" can change it from a noun "RE-cord" to a verb "re-CORD". (Ellii, formerly ESL Library).

Consonant clusters, in which two or more consonants appear together without a vowel in between, are common in English words like "spring" and "strength." In Spanish, vowel sounds are frequently used to break up such clusters, which are normally avoided. This tendency can lead to Spanish speakers adding extra vowels in English words, resulting in pronunciations like "espring" for "spring". (ling-app.com) and (Ellii, formerly ESL Library). The impact of a language's orthography, or spelling system, can also cause issues. The pronunciation of English does not always match the spelling, with several exceptions and inconsistencies. Conversely, the spelling method used in Spanish is more phonetic, with words being pronounced exactly as they are spelled. This can lead to Spanish speakers applying Spanish pronunciation rules to English words, resulting in errors. (ling-app.com).

Because of the phonetic, stress pattern, consonant cluster, and orthographic distinctions between the two languages, Spanish speakers confront a number of unique difficulties when learning English pronunciation. To help Spanish speakers overcome these difficulties and attain a more discerning state, more accurate English pronunciation, effective teaching tactics must take these issues into account.

#### **1.4.2 Specific Difficulties with /θ/ and /ð/ for Spanish Speakers**

The interdental fricatives /θ/ (as in "think") and /ð/ (as in "this") present major obstacles for Spanish speakers learning English. Spanish does not have these sounds, which makes learning them more difficult. This information establishes the unique challenges that Spanish speakers have while using these sounds, as evidenced by recent studies. The phonological system of Spanish does not include the interdental fricatives /θ/ and /ð/. The

dental stops /t/ and /d/, on the other hand, are articulated in Spanish by placing the tongue in contact with the upper teeth. Spanish speakers often replace the English /θ/ and /ð/ with their closest Spanish equivalents, /t/ and /d/, respectively, because to this articulation difference. Research by González and Ortega (2021) confirms that this substitution is a common strategy among Spanish learners of English, resulting in non-native accents and potential misunderstandings.

The ability to perceive is essential for learning new phonemes. Due to the absence of these phonemes in their native tongue, Spanish speakers frequently find it difficult to distinguish between /θ/ and /ð/ and other comparable sounds. A study by Martínez (2022) showed that Spanish speakers have difficulty distinguishing between /θ/ and /s/, as well as /ð/ and /d/, in both isolated words and continuous speech. This perceptual difficulty hinders their ability to produce these sounds accurately. The production of interdental fricatives involves placing the tongue between the teeth, a gesture unfamiliar to Spanish speakers. According to Pérez et al. (2020), learners often either fail to position their tongue correctly or exert excessive force, resulting in non-standard pronunciations such as /t̪/ or /d̪/ instead of /θ/ and /ð/. This physical articulatory challenge can persist even with extensive practice.

Similarly, there is plenty of evidence supporting the impact of First Language (L1) phonology on Second Language (L2) acquisition. Interdental fricatives are not presented in Spanish speakers' L1, which indicates that they do not mentally represent these sounds. A longitudinal study by Ramos and Benítez (2023) highlighted that even advanced Spanish learners of English often revert to L1 phonological patterns under cognitive load, such as during spontaneous speech or complex tasks, leading to frequent substitutions of /θ/ and /ð/. Learning of challenging phonemes can be influenced by various instructional strategies.

Conventional techniques that emphasize auditory discrimination and repetition have had only patchy results. However, cutting-edge methods that include visual feedback like electropalatography and ultrasonic imaging, have shown to be more effective. A study by Santos and Murillo (2024) found that Spanish learners who received training with visual feedback tools showed significant improvement in producing /θ/ and /ð/ compared to those who received standard instruction.

Additionally, sociolinguistic factors influence how /θ/ and /ð/ are acquired. If Spanish speakers primarily communicate with non-native English speakers, they may consider these sounds to be less crucial for clear communication. A survey by Vega (2021) indicated that Spanish learners often deprioritize the accurate production of these sounds, focusing instead on other aspects of fluency and vocabulary expansion. Also, Language learners' attitudes toward their native language (L1) and the target language (L2) play a crucial role in pronunciation acquisition. For Spanish speakers, the interdental fricatives /θ/ and /ð/ are perceived as markers of English identity. Learners who strongly identify with their native Spanish culture may resist adopting these sounds to maintain their linguistic identity. According to Vega (2021), learners' motivation and attitudes toward English influence their willingness to adopt native-like pronunciation, including the interdental fricatives.

Pronunciation is influenced by learners' needs for communication. When non-native speakers of English communicate internationally, intelligibility frequently prevails over pronunciation that is similar to a native speaker. If the ability to pronounce /θ/ and /ð/ is not necessary for understanding in their usual communicative contexts, Spanish speakers may decide not to emphasize memorizing these sounds. Vega (2021) found that learners often

focus on overall fluency and vocabulary rather than specific phonetic details when their primary goal is effective communication with other non-native speakers. Pronunciation is influenced by learners' social networks and the norms in their learning communities.

Learners are more likely to make interdental fricative sounds if teachers and peers stress how important it is to pronounce these sounds correctly. On the other hand, if the learning community accepts or even prefers simplified or non-native pronunciations, learners may feel less compelled to acquire /θ/ and /ð/. The study by Ramos and Benítez (2023) demonstrated that peer influence and community attitudes significantly impact learners' pronunciation habits.

The interdental fricatives in English, /θ/ and /ð/, present a variety of barriers for Spanish speakers, including phonetic, perceptual, articulatory, phonological, instructional, and sociolinguistic issues. In order to overcome these challenges, a thorough strategy that includes cutting-edge teaching techniques as well as knowledge of the linguistic and social backgrounds of the students is needed. It will take more than just creative instructional approaches and constant study to assist Spanish speakers get beyond these particular phonetic obstacles.

### **1.4.3 Importance of Correct Pronunciation of /θ/ and /ð/ Phonemes in English**

Pronunciation accuracy has a direct impact on intelligibility, communication efficacy, and social perceptions, making it an essential component of language learning. The interdental fricatives are very difficult for English language learners, still they are necessary for attaining precise and understandable speech. It is imperative to observe the significance of pronouncing certain phonemes correctly, emphasizing how they help differentiate meaning, improve intelligibility, and support social and professional

integration. Proper pronunciation of /θ/ and /ð/ is essential in differentiating words that share phonetic similarities. Minimal pairings in English, such "think" and "sink," or "then" and "den," depend on how these sounds are spoken correctly to express different meanings. In situations where accurate communication is crucial, mispronunciation might result in misconceptions and perplexity. For example, mispronouncing certain phonemes might lead to important information being misunderstood in formal academic or professional settings. As González and Ortega (2021) point out, the ability to differentiate and correctly produce /θ/ and /ð/ is fundamental for effective communication in English.

Intelligibility refers to the extent to which a speaker's utterances are understood by a listener. Correct pronunciation of /θ/ and /ð/ significantly enhances a speaker's intelligibility. The research by Martínez (2022) demonstrates that native English speakers often rely on these sounds to analyze speech and understand meaning. Communication breakdowns may occur when non-native speakers pronounce these phonemes wrong, making it difficult for listeners to understand the intended message. Thus, it is essential to pronounce /θ/ and /ð/ correctly to promote efficient communication. Pronunciation also influences social and professional integration. Proficient and competent non-native English speakers are more likely to be regarded as such when they pronounce /θ/ and /ð/ correctly. Their social acceptability and professional credibility may be improved by this view. On the other hand, consistent mispronunciation might cast doubt on a speaker's linguistic abilities and general competency. According to Santos and Murillo (2024), learners who master the pronunciation of these challenging phonemes often report greater confidence and success in both social and professional environments.

Pronunciation accuracy eases the listener's cognitive strain. Listeners must work harder to deduce the intended words and meanings when speakers mispronounce /θ/ and /ð/, which can be mentally difficult and tedious. Pérez et al. (2020) found that native listeners expend more cognitive resources when processing speech from non-native speakers with pronunciation errors, impacting the overall effectiveness of communication. Speakers can encourage more productive and enjoyable interactions and sustain listener engagement by making sure their words are pronounced correctly. Stressing the proper pronunciation of /θ/ and /ð/ is crucial for language teachers in creating inclusive and successful lesson plans. Learning strategies that include auditory discrimination exercises, phonetic training, and visual feedback have been shown to be successful in assisting students in mastering these sounds. Ramos and Benítez (2023) suggest that focused pronunciation practice, combined with corrective feedback, can significantly improve learners' articulation of interdental fricatives, leading to better overall language proficiency.

Pronouncing the phonemes /θ/ and /ð/ correctly is an essential part of learning the English language, since it has a big impact on meaning differentiation, comprehension, and social and professional integration. Learners can improve their social and professional connections, decrease listener effort, and increase the effectiveness of their communication by learning these sounds. For students to meet these goals, teachers' curricula must give pronunciation instruction top priority. Fresh teaching strategies and concentrated practice will continue to be vital in assisting students in mastering these difficult but important phonemes, as research on the significance of precise pronunciation continues to demonstrate.

### **1.5 Educational Community Members (Andragogy)**

The members of night secondary schools' educational communities are a vibrant and varied collection of people bound together by a shared objective: the pursuit of education in unusual settings. Students, instructors, administrators, and support personnel are all part of this community, and they all contribute significantly to creating a supportive and productive learning environment.

According to PhD Bouchrika there is a term called Andragogy, he mentions that “Andragogy is an approach to learning that is focused on adult learners.” And also, he states that “Andragogy is typically contrasted with pedagogy, which is the more traditional approach to teaching children. Andragogy is built on the premise that adults are more self-directed and motivated than children, and that they need to be given the opportunity to learn in ways that are relevant to their lives.”

It could be said that according to andragogy, night secondary school students are usually adults or young adults juggling a variety of obligations, including employment and home duties. Their self-directed, experience-based, and goal-oriented learning style takes instructional strategies that consider their past knowledge and practical experiences.

Also, in night secondary schools, where some students may be returning to formal education after a long absence, andragogy, which focuses on the education of older adults, becomes pertinent. Since older learners may need more encouragement, flexibility, and support to overcome educational obstacles, andragogical approaches provide an emphasis on lifelong learning, adaptability, and personal growth.

In addition to imparting academic knowledge, these community members work together to

create an inclusive and flexible learning environment that gives students the self-assurance and abilities they need to succeed in their personal and professional endeavors.

The educational community members of Night Secondary Schools represent a diverse and dynamic group of individuals united by a common goal, the pursuit of education under unique circumstances. This community includes students, teachers, administrators, and support staff, each playing a vital role in creating a nurturing and effective learning environment. Students attending night secondary schools often juggle various responsibilities, such as work or family commitments, demonstrating remarkable dedication and resilience. Teachers and administrators in these institutions are equally committed, employing innovative teaching methods and support systems tailored to meet the specific needs of their students. Together, these community members foster an inclusive and adaptive educational atmosphere that not only imparts academic knowledge but also equips students with the skills and confidence needed to succeed in their personal and professional lives.

### **1.5.1 Background Information from Eight Grade Students from Quepos Night School**

Quepos Night School, located in the coastal town of Quepos, Costa Rica, serves a unique student population comprised of individuals who seek to continue their education outside of traditional daytime hours. The eighth-grade students at this institution come from diverse backgrounds, often balancing their studies with work and family responsibilities. This blend of circumstances shapes their educational journey in distinct ways.

Many students at Quepos Night School are young adults who, for various reasons, were unable to complete their education during the standard school day. Numerous of these

students work during the day to support their families, which necessitates their attendance at night school (Ministerio de Educación Pública, 2022). Economic necessity often drives them to find employment during the day, making evening classes the most viable option for continuing their education. Local businesses and organizations often partner with the school to provide resources and opportunities for practical learning experiences (Rodríguez, 2023). This demographic includes individuals working in the local tourism industry, agriculture, and other service sectors that are prominent in the region. The motivation for these students to pursue their education is multifaceted. For some, it is the desire for personal and professional advancement. A secondary education diploma opens doors to better job opportunities and higher wages, which can significantly impact their quality of life and prospects. For others, education is a means to set an example for their children, demonstrating the value of perseverance and lifelong learning. The educational challenges faced by these students are considerable. Students bring a variety of perspectives and experiences to the classroom, enhancing discussions and broadening the educational experience for everyone involved (Araya, 2020).

Balancing work, family, and school responsibilities requires significant time management skills and dedication. Additionally, the academic environment of night schools must adapt to the needs of their students, often incorporating flexible teaching methods and providing additional support services to address gaps in knowledge and skills that may have accumulated over the years. However, these students exhibit a high level of motivation and resilience. The drive to improve their socioeconomic standing and the desire for better job opportunities are significant motivating factors (González & Ramírez, 2021).

The teachers and administrators at Quepos Night School play a crucial role in this educational ecosystem. They are not only educators but also mentors and advocates, striving to create an inclusive and supportive learning environment. Their approach often involves personalized attention, recognizing the individual challenges and strengths of each student.

### **1.5.2 Selection Criteria for Students Aged 15-24 from Quepos Night School**

Quepos Night School, offers to students who often have daytime commitments, has developed specific selection criteria to ensure that those who are most in need of flexible educational opportunities are able to enroll. These criteria are designed to identify and support students who exhibit a genuine need for night schooling due to various socio-economic and personal circumstances. To be eligible for enrollment at Quepos Night School, students must be between the ages of 15 and over and must reside within the Quepos district or surrounding areas. This residency requirement ensures that the school serves the local community, addressing the educational needs of those who live and work in the region (Ministerio de Educación Pública, 2022).

Priority is given to students from low-income families who might otherwise lack access to education due to financial constraints. Many students at Quepos Night School work during the day in industries such as tourism, agriculture, and fishing. The school recognizes the importance of providing educational opportunities to these students to improve their futures (González & Ramírez, 2021).

Applicants must demonstrate that they have daytime commitments that prevent them from attending traditional daytime schools. This includes full-time or part-time employment, family care responsibilities, or other significant obligations. The school

requires documentation such as employment verification or a letter explaining the nature of the student's daytime commitments (Rodríguez, 2023). While academic performance is not the primary criterion, Quepos Night School seeks students who exhibit a strong motivation to complete their education. During the application process, students are often required to provide a personal statement or attend an interview to discuss their educational goals and how attending night school will help them achieve these goals (Araya, 2020).

Recognizing the diverse needs of its student body, Quepos Night School offers support and counseling services to help students manage their responsibilities. The school provides academic counseling, career guidance, and personal support to ensure that students can balance their work, family, and educational commitments effectively (Ministerio de Educación Pública, 2022).

### **1.5.3 Description of the Study Sample with students aged 15-24 from Quepos Night School.**

The study sample consists of 23 students aged 15-41 enrolled at Quepos Night School, located in the coastal town of Quepos, Costa Rica. The socioeconomic backgrounds of this group are varied, which reflects the economic activities of the local population, which are mostly focused on tourism, agriculture, and fishing. (Rosmery Salazar M., personal communication, July 15, 2024). The sample's age distribution reveals a well-balanced representation of the 15–41 age group. Most students are in the 15, 16, and 17 age range, with a smaller percentage of older students who frequently balance their studies with important employment or family responsibilities. (Rosmery Salazar M., personal communication, July 15, 2024).

The sample's gender distribution is somewhat balanced, with a small male student majority. This equilibrium mirrors the wider demographic patterns of the area, with particular emphasis placed on comprehending the distinct obstacles and requirements faced by male and female learners. (Rosmery Salazar M., personal communication, July 15, 2024). Low-income households make up a sizable component of the sample. Many of these students must attend night school because they have low-paying jobs in the local tourism and agricultural industries. Their educational experiences and demands are significantly influenced by their socioeconomic background. (Rosmery Salazar M., personal communication, July 15, 2024).

The students come from a wide range of educational backgrounds. Some of them are returning to school after a short break, while others had to stop for personal or financial reasons. To accommodate these diverse educational pathways, the school offers specialized support to assist students in meeting their academic objectives. (Rosmery Salazar M., personal communication, July 15, 2024). The great majority of the study sample's students work throughout the day in jobs including physical labor, retail, and hospitality. Their enrollment in night school is primarily due to their daily obligations. One of the main themes of their educational journey is striking a balance between work and studies. (Rosmery Salazar M., personal communication, July 15, 2024).

The students in this group are driven by a strong desire to advance both personally and economically. A stable future for themselves and their family, together with increased work opportunities, is what motivates many. Their persistence and participation in school are greatly influenced by this incentive. (Rosmery Salazar M., personal communication, July 15, 2024)

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

### 3.1 Introduction

The use of technology in language instruction has shown great promise in recent years to improve students' pronunciation abilities, especially with difficult phonemes. The "Spell and Pronounce" app is one such technological tool that has been used to treat common pronunciation issues among English language learners. This study examines how well eighth-grade students can pronounce the phonemes /θ/ and /ð/ by using the "Spell and Pronounce" app in conjunction with the Audio-lingual Approach (ALA) and drilling techniques. Based on behaviorist theory, the Audio-lingual Approach prioritizes proper responses and repeated repetition to facilitate language acquisition (Larsen-Freeman & Anderson, 2019). This approach has been successful in enhancing pronunciation by emphasizing speaking and listening abilities through organized exercises. One of the main components of ALA is drilling techniques, which entail practicing language patterns repeatedly. This helps students develop proper phonetic habits (Richards & Rodgers, 2020). For learners, like Spanish speakers, whose first language does not have these sounds, the phonemes /θ/ and /ð/ present unique difficulties (Carter & Nunan, 2020). The emergence of mobile learning applications has opened up new possibilities for the application of conventional language teaching approaches. With the help of the "Spell and Pronounce" app, students may practice pronouncing words correctly and get instant feedback on their performance. According to recent studies, smartphone applications can improve language proficiency, especially in pronouncing words correctly (Golonka et al., 2022). In order to address specific pronunciation issues, the combination of technical tools with well-established educational approaches like ALA and drilling holds promise. The purpose of this study is to assess how well eighth-grade students can pronounce the sounds /θ/ and /ð/

by utilizing the "Spell and Pronounce" app in combination with the Audio-lingual Approach and drilling techniques. Through an analysis of the effects of this integrated approach, the study aims to add to the expanding corpus of research on the application of technology in language learning and offer guidance on efficient methods for teaching difficult phonemes.

## **1.6 Type of Research**

### **1.6.1 Purpose (applied)**

The two main categories of research are applied research and theoretical research. Because each of these study kinds has a distinct goal and makes a unique contribution to the advancement of knowledge and practice, understanding is essential for academics, practitioners, and policymakers. Theoretical research, also referred to as pure or basic research, its main goal is to increase the foundational understanding of a given topic. It is not immediately concerned with practical applications; rather, it is motivated by curiosity and the desire to investigate, comprehend, and explain events. The creation of new ideas or the improvement of preexisting ones are frequent outcomes of theoretical study. It is distinguished by being abstract and emphasizing expanding our knowledge of ideas, relationships, and principles within a specific field (Neuman, 2023). For example, theoretical linguistics research may investigate the cognitive mechanisms that underline language acquisition, without necessarily seeking to address a particular issue in language instruction.

Applied research, on the other hand, is focused on finding solutions to real world issues. It entails using theoretical knowledge to solve particular problems in practical situations. To provide solutions that may be used to enhance procedures, goods, or results, applied research is frequently carried out in industries like business, engineering,

healthcare, and education (Creswell & Creswell, 2023). To improve students' learning results, applied research in education could, for instance, evaluate the efficacy of an innovative teaching strategy.

This investigation's primary goal is applied since it seeks to solve a particular practical issue: using the "Spell and Pronounce" app to help eighth-grade students pronounce the English phonemes /θ/ and /ð/ more accurately. This project aims to create practical results that can be immediately adopted in the classroom to improve language learning outcomes by concentrating on a specific educational obstacle (Creswell & Creswell, 2023).

### **1.6.2 Temporal Dimension (transversal)**

The phrases transversal and longitudinal in research design denote several methods for examining the temporal dimensions of the phenomenon being studied. Data from a particular point in time is examined in a transversal and known as cross-sectional study. It offers a snapshot of the phenomena, enabling researchers to examine the traits, actions, or circumstances of a sample or population at that time. Although they cannot prove causation, cross-sectional studies are frequently employed to find correlations or relationships between variables. These investigations are appropriate for investigating current conditions or trends since they can usually be completed more quickly and cheaply than longitudinal studies (Bryman, 2022). For instance, to find out how common pronunciation errors are among students, a transversal study in education can evaluate the students' pronouncing skills at one moment in time.

Conversely, repeated observations of the same variables throughout time are a feature of longitudinal investigations. Researchers can monitor changes, advancements, or

patterns within the population or sample thanks to this design, which sheds light on how particular characteristics alter over time. Because longitudinal research may track how changes in one variable may affect another over time, it is especially useful for examining cause-and-effect interactions (Cohen, Manion, & Morrison, 2022). To assess the long-term efficacy of a teaching intervention, a longitudinal study may be conducted in the framework of educational research to monitor students' pronunciation skills development over the course of several months or years.

### **1.6.3 Framework (Micro)**

In educational research, the terms mega, macro, and micro indicate too many focuses or levels of analysis, each addressing a particular range of educational topics. To successfully frame their studies and address educational difficulties within appropriate contexts, researchers must have a thorough understanding of various levels.

The mega level is used to describe the widest range of investigation, frequently covering entire educational systems, laws, or trends around the world. This type of research could look at the effects of national or international policies on education, the influence of international organizations on educational practices, or a comparative study of educational systems in other nations. Mega-level research is frequently used to guide high-level policy decisions since it typically focuses on large-scale phenomena that have an impact on huge populations. (Ball, 2021). A mega study might, for instance, investigate how a national organization's educational programs affect literacy rates in various nations.

The macro level concentrates on organizations, neighborhoods, or sizable groups inside a certain educational system. This level of research may look at how districts, schools, or educational programs operate as well as how local or federal legislation affect

these organizations. Macro-level research could investigate topics like curriculum implementation, school leadership, or the differences in academic performance between various demographic groups. Understanding how larger institutions and policies affect particular learning contexts requires this degree of study. (Cohen, Manion, & Morrison, 2022). An example of macro-level research could be a study on how student achievement is affected by budget distributions at the district level across a network of schools.

The micro level, which focuses on single people or small groups like pupils, teachers, or classrooms, is the most finely tuned scope of study. The daily interactions and activities that take place in educational environments are the focus of this level of research. Micro-level research frequently looks at particular instructional strategies, student conduct, or relationships between teachers and students. Understanding the direct and personal components of education, such as how different teachers' instructional tactics affect students' learning results, requires this degree of study (Creswell & Creswell, 2023). For example, a micro-level study could investigate how a teacher's usage of feedback strategies affects student engagement in a single classroom.

Because it concentrates on unique, localized interactions and effects within a given educational setting, this inquiry adheres to a micro framework. Through the use of the "Spell and Pronounce" app, the research specifically looks at how eighth-grade pupils pronounce the English phonemes /θ/ and /ð/. The study examines how instructional strategies, such as the Audio-lingual Approach and drilling techniques, affect students' pronunciation abilities in a single classroom or small group context. Studies that concentrate on the dynamics and results inside such restricted educational environments are best suited for micro-level research (Cohen, Manion, & Morrison, 2022). Lastly, the study

aims to comprehend the precise impacts of a certain teaching tool, the "Spell and Pronounce" app, on a particular facet of language acquisition. Micro-level research, which aims to shed light on particular teaching and learning practices, is characterized by its focus on a single pedagogical approach and its narrow scope (Flick, 2022).

This study will take into consideration the community of Quepos, in the province of Puntarenas. The history of Quepos, a small town on Costa Rica's Pacific coast, is rich and depicts the town's evolution from a sleepy village to a bustling tourist destination. The region, which was once home to the Quepos indigenous people, was renowned for its abundant tropical forests and wide variety of fauna. The region was first seen by Spanish explorers in the sixteenth century, but for several centuries afterward it remained mainly undeveloped and remote. With the formation of banana plantations and the construction of ports and other infrastructure to support the export of agricultural goods, the town's growth really got underway in the late 19th and early 20th centuries (Rojas, 2017). With the rise of ecotourism in the second part of the 20th century, Quepos experienced a major metamorphosis. One of the main factors drawing people to the area was the establishment of the adjacent Manuel Antonio National Park in 1972. Because of the park's abundant biodiversity and breathtaking scenery, adventure seekers and nature lovers frequently visit Quepos. Due to this economic shift from agricultural to tourism, the town has been more developed and modernized while still making an effort to preserve its natural and cultural history (Vargas, 2020).

Recent years have seen significant improvements in education in Quepos, Costa Rica, which is consistent with national trends in educational development. Numerous public and private schools serving children in basic through secondary education are

located inside the municipality. In an effort to provide Quepos citizens with better access to educational opportunities and resources, the Costa Rican government has made large expenditures in the infrastructure and quality of the local school system. A larger attempt to improve educational performance in rural and coastal areas has included initiatives like the installation of digital learning tools and better facilities (González, 2022). Furthermore, in line with its status as a significant center for ecotourism, Quepos has profited from educational initiatives that prioritize environmental and cultural education. Local environmental and cultural contexts are frequently included in curricula at local schools, giving students a distinctive educational opportunity that fosters a sense of community. To prepare students for local job markets, programs that support bilingual education and technical skills related to tourism and hospitality have also been created (Martínez, 2021). These educational programs are a part of a bigger plan to promote sustainable development and raise the socioeconomic standard of living in the area.

Despite its growth and advancement, Quepos still has several social and educational issues that affect the local population. The difference in educational resources between urban and rural communities is one major problem. Even while Quepos has made progress in updating its educational infrastructure, schools in the region's more isolated areas continue to face challenges related to obsolete infrastructure and scarce resources. This disparity has an impact on the standard of instruction and may limit students' chances in the future as well as their academic achievement (Hernández, 2020). The increased demand for skilled labor brought about by the tourist inflow has also put pressure on the local education system to deliver timely and relevant vocational training. In Quepos, social problems and scholastic challenges coexist. The community has a high poverty rate, which exacerbates

the gaps in schooling. Numerous families experience financial difficulties that affect their capacity to fund their kids' education, affecting things like attendance at school and availability of educational resources. In addition, the quick development and population expansion brought on by tourism have disrupted society and put more strain on public services, such as education. Lack of focused social initiatives to meet the needs of the most disadvantaged communities exacerbates these issues. To ensure that every student has the chance to succeed, addressing these difficulties calls for a multipronged strategy that involves strengthening social support networks and promoting educational parity. (Ramírez, 2023).

Recent years have seen major advancements and changes at Quepos' high schools, which are indicative of larger patterns in Costa Rican education. To better prepare its students for postsecondary education and the workforce, educational institutions like the Liceo de Quepos have been at the forefront of regional educational breakthroughs, introducing innovative curricula and pedagogical approaches. The emphasis has been on raising academic standards, incorporating technology into the classroom, and providing specialty courses like environmental science and tourism that meet the demands of the local economy (Pérez, 2021). These upgrades are a part of a larger national initiative to raise educational standards and give students skills that are needed in today's labor markets.

For students unable to attend regular daytime sessions, the Quepos Night High School, also known locally as "Liceo Nocturno de Quepos," offers flexible learning options that are vital to the community's educational needs. Night High School is a vital component of expanding educational opportunities for a diverse student body, as it was founded to cater to the needs of working adults and other students with daytime responsibilities. This

strategy ensures that education is available to people who might otherwise be excluded and is in line with national educational goals to support lifelong learning and meet diverse student requirements (Martínez & Vargas, 2020). Although its significance, the Night High School has several difficulties. The school faces challenges related to inadequate infrastructure and resources when compared to regular institutions, which may influence the standard of instruction given. Furthermore, the requirements of its student body such as juggling employment and school create administrative and motivational difficulties that call for specialized support networks. The incorporation of technology and online resources to increase learning efficacy and flexibility is one way the school is working to improve its services (Gómez, 2023). These programs are a part of a larger motivation to modify teaching methods to better serve the requirements of non-traditional students in Quepos and beyond.

The eighth graders at the Night High School in Quepos reflect a distinct and varied set of individuals, many of whom deal with serious issues both within and outside of the classroom. These students frequently originate from low-income families, and many of them juggle their studies, jobs, and family obligations. Their choice to attend night school is indicative of their will to pursue their education despite potential barriers that would keep them from attending regular day schools. (Eight Grade Students, 8-1., personal communication, July 16, 2024). Eighth graders at Quepos's Night High School have demonstrated resiliency and dedication to their studies despite adversity. To assist these students, the school has put in place a few measures, such as counseling services, tutoring programs, and campaigns to boost motivation and involvement among the students. (Eight Grade Students, 8-1., personal communication, July 16, 2024). The school's teachers are

also qualified to handle the unique requirements of night school learners, such as those pertaining to adult education and learning preferences. (Rosmery Salazar M., personal communication, July 15, 2024). The path to success for these students is often more challenging, the school's efforts to provide a supportive and adaptive learning environment have been crucial in helping them achieve their educational goals (López, 2022).

#### **1.6.4 Nature (Mixed: Qualitative and Quantitative)**

Both qualitative and quantitative methodologies are frequently employed in educational research, and depending on the goals, questions, and nature of the phenomenon being studied, each offers unique benefits and insights. Investigating and comprehending the meaning that individuals or groups assign to social or human problems is the main goal of qualitative research in education. It is especially helpful for examining intricate, contextual, and subtle educational phenomena that are difficult to fully represent with numerical data. This method allows for an in-depth examination of participants' experiences, perceptions, and interactions within their educational environments because it employs open-ended data collection techniques like focus groups, observations, interviews, and document analysis (Merriam & Tisdell, 2016). A qualitative study might, for instance, investigate how learners feel about studying in a multicultural classroom or how teachers feel about a new curriculum. Qualitative research is strong because it may provide rich, context-sensitive insights that can guide policy and practice in education while also capturing the diversity of participant viewpoints (Creswell & Poth, 2018).

Comparatively, quantitative research uses statistical, mathematical, or computational methods to quantify relationships, behaviors, and events. In educational research, this method is frequently used to measure variables, test hypotheses, and ascertain the

frequency or prevalence of outcomes. Statistical analysis is used to evaluate the data in quantitative investigations, which generally include structured data gathering techniques including tests, trials, and surveys (Creswell & Creswell, 2023). A quantitative study could, for example, look at the relationship between academic success and student attendance or assess how well a new teaching strategy affects test results. When done with large, representative samples, quantitative research can yield findings that are generalizable and can identify patterns or causal correlations in educational contexts (Muijs, 2022).

Researchers use a mixed methodologies strategy in many educational research projects, integrating qualitative and quantitative methods to obtain a thorough grasp of the research subject. By using this strategy, researchers can benefit from the advantages of both approaches, giving their analysis both coverage and intensity. For instance, in a mixed methods study, trends in student performance might be found using quantitative data, and the underlying causes of these trends could be investigated using qualitative interviews (Creswell & Creswell, 2023).

### **1.6.5 Character (Exploratory-Descriptive-Correlational-Explicative)**

Several research character types can be used to investigate different aspects of the study when evaluating the efficacy of using the "Spell and Pronounce" app through the Audio-lingual Approach and drilling techniques to improve the pronunciation of the phonemes /θ/ and /ð/ in eighth-grade students aged 15 to 41 from the Quepos Night School. These consist of descriptive, exploratory, explanatory, and correlational research. Investigating a subject or issue that is little understood or has not received much attention is done through exploratory research. Within the framework of this study, exploratory research would entail examining how the particular student group uses the Audio-lingual

Approach and the "Spell and Pronounce" app generally. Getting a sense of how teachers and students feel about these approaches would be the first step toward identifying any potential drawbacks or advantages to using them. By identifying different concepts and prospective factors that can affect the result, this kind of research is essential in the early phases of the study to formulate the research questions and hypotheses (Stebbins, 2021).

The goal of descriptive research is to precisely characterize a population or phenomenon. Descriptive research in this study would concentrate on giving a thorough explanation of how the "Spell and Pronounce" app and drilling techniques are used, the student participants' demographics, and the particular pronunciation difficulties they encounter with the phonemes /θ/ and /ð/. Data on students' pronunciation skills before and after the intervention, an assessment of the degree of progress, and a list of the precise pronunciation elements most impacted by the intervention would all be gathered (Creswell & Creswell, 2023). To provide a detailed picture of the situation as it is and the changes brought about by the intervention, descriptive research is crucial.

To determine whether and how two or more variables are related, correlational research looks at their relationships. Correlational research could be employed in this study's setting to examine the connection between students' improved pronunciation of the targeted phonemes and their use of the "Spell and Pronounce" app. To determine whether there is a statistically meaningful relationship between the amount of pronunciation improvement and the frequency or intensity of app usage, statistical analysis would be required. But it's crucial to remember that correlational research just shows if and how strong a relationship exists, it doesn't prove causality. (Muijs, 2022).

Explicatory research takes it a step further by attempting to explain not just the why but also the how of the links that are found between variables. The goal of this study's explicative research is to elucidate the processes by which the Audio-lingual Approach and the "Spell and Pronounce" app enhance pronunciation. This could entail investigating how the app's particular features, like auditory feedback or repetition, affect students' capacity to pronounce the phonemes /θ/ and /ð/ appropriately. Additionally, explicatory study would aim to comprehend how drilling methods support learning and enhance pronunciation over time (Bryman, 2022). Providing a greater understanding of the causal links and underlying processes involved in the intervention's efficacy is the aim of explicative research.

### **1.6.6 Hypothesis**

The application of the "Spell and Pronounce" app through the Audio-lingual Approach and drilling techniques will significantly improve the pronunciation of the phonemes /θ/ and /ð/ among eighth-grade students aged 15 to 41 years old at the Quepos Night School during the first quarter of 2025.

### **1.7 Description of the Variables**

Independent and dependent variables are essential components in educational research because they help us understand how various factors affect educational results. The result that researchers measure in order to ascertain the impact of an independent variable is known as a dependent variable. When the independent variable is altered, this variable is what is seen and anticipated to change. For instance, the students' test results might be the dependent variable in a study looking at how well a new teaching strategy affects student performance. The test results would be the dependent variable since the modifications in the teaching strategy would be responsible for the changes in test scores. It

is imperative for researchers to comprehend the dependent variable as it enables them to evaluate the effectiveness of the intervention or treatment under investigation (Creswell & Creswell, 2019). The study question and hypothesis are frequently centered around the dependent variable. It is the object of measurement and analysis that interests researchers the most. Student involvement levels, for example, would be the dependent variable in a study looking into how technology integration affects student engagement. These levels could be determined via surveys, observations, or academic performance. Scholars can derive significant inferences on the correlations between factors and the efficacy of educational interventions by precisely identifying and quantifying the dependent variable (Fraenkel, Wallen, & Hyun, 2020). For instance, using the Spell and Pronounce App is an independent variable that has a big impact on language learning results. This software gives users visual and aural assistance to improve their spelling and pronunciation. Students can improve their language skills and reinforce proper speech patterns by using the app, which provides them with instant feedback (Smith & Jones, 2021). These technology-based tools' interactive features are especially useful for tailoring instruction to the different demands and learning preferences of users (Brown, 2022).

Another independent variable in the Audio-lingual Approach is drilling technique, which emphasizes practice and repetition to strengthen language patterns. By repeating words or sentences, these strategies help students internalize grammatical rules and pronunciation. Recent research indicates that drilling promotes language acquisition by giving students a lot of practice in a supervised setting, which increases accuracy and fluency (Johnson, 2023). Drilling is an effective method in language teaching because it can help students retain correct pronunciation and make language use more automatic when

used in conjunction with resources like the Spell and Pronounce App (Martinez & Lopez, 2024).

The result or effect that researchers measure to evaluate the influence of one or more independent factors is known as the dependent variable. It is the variable that is observed by researchers to ascertain the impact of changes in the independent variable. The students' academic performance, which is usually gauged by test scores or grades, would be the dependent variable in a study aimed at assessing the impact of a new instructional technique on student achievement, for example. This gives academics an idea of how effective an instructional technique is by allowing them to measure its effect on learning outcomes (Creswell & Creswell, 2020). The dependent variable's selection and measurement are essential to the validity and dependability of the study's conclusions. For the purpose of accurately assessing the results, it needs to be precisely defined and operationalized. For instance, if the study's focus is on how technology in the classroom affects student involvement, the dependent variable may be engagement levels, which can be determined via engagement surveys or observational checklists. Researchers can make inferences about how various factors, such as technological tools or instructional methods, affect educational outcomes by methodically examining these metrics (Fraenkel, Wallen, & Hyun, 2021).

The development of pronunciation in the "th" phonemes /θ/ and /ð/ is a crucial dependent variable in the context of educational research on phonetics. For non-native English speakers, especially those whose first language does not contain analogous sounds, these phonemes are famously difficult. This dependent variable may be measured by researchers using a variety of techniques, including speech analysis software or pre- and

post-intervention pronunciation tests. The objective is to measure the degree of progress made in producing these sounds accurately after certain practice routines or instructional interventions. Researchers can evaluate the efficacy of various teaching methods or resources targeted at improving phonetic accuracy by monitoring improvements in the clarity and precision of these phonemes (Smith & Brown, 2022).

Evaluating /θ/ and /ð/ pronunciation improvements accurately requires a methodical evaluation process. This could entail assessing the learners' development through rater assessments, acoustic analysis, or standardized pronunciation examinations. Researchers can ascertain how well students are able to acquire the precise articulatory patterns required for their proper pronunciation by concentrating on these particular phonemes. A successful intervention is indicated by an improvement in this dependent variable, regardless of whether it was implemented by other phonetic training methods, technology, or explicit teaching strategies. The efficient assessment and examination of this dependent variable yield important information on the effectiveness of different phonological teaching techniques (Johnson, 2023).

## **1.8 Subjects and Sources of the information**

This research identifies the demographic to be investigated in this section of the document. In this section of a study, there are two ways to classify individuals: the whole community and the sample.

As it has been mentioned before, the coastal region of Puntarenas in Costa Rica is well-known for its breathtaking beaches, abundant wildlife, and lively culture. Puntarenas is a popular tourist resort and important port. The main drivers of the region's economy are agriculture, fishing, and tourism. The Ministry of Public Education (MEP), which is in

charge of overseeing Costa Rica's national education framework, includes Puntarenas' educational system. Puntarenas schools adhere to the national curriculum, placing a strong emphasis on fundamental education from early childhood through secondary school. The area has particular difficulties, such as scarce resources in rural locations and the requirement for additional infrastructure to accommodate the expanding student body, particularly in more remote communities. (Barrantes, 2023).

In Costa Rica's Puntarenas region, Quepos is a neighborhood next to the well-known Manuel Antonio National Park. Quepos has gained popularity as a travel destination among both domestic and foreign tourists because of its stunning beaches, abundant biodiversity, and robust tourism sector. The three main industries driving Quepos's economy are tourism, agriculture, and fishing. (Castro, 2023). Quepos experiences issues including scarce resources, a lack of teachers, and inadequate infrastructure, just like other rural Costa Rican communities. Nonetheless, initiatives have been taken to improve educational quality and accessibility, such as those that support students who live in distant locations and work to improve technological access. The district's dedication to sustainability and conservation is reflected in local projects that also emphasize environmental education. (Castro, 2023).

The purpose of Quepos Night High School, a secondary education facility in Quepos, Puntarenas, Costa Rica, is to serve students who are unable to attend regular day schools. Most of the students at this school are older, working adults and those who have interrupted their education and are returning to finish it. The school meets the varied demands of its student body by providing flexible timetables and operating in the evenings. (Araya, 2022). The Ministry of Public Education (MEP) has established national criteria for

the curriculum which Quepos Night High School adheres to. The curriculum covers core courses like science, math, social studies, and language arts. The school also places a strong emphasis on practical skills and vocational training to meet the demands of the local economy, especially in the tourism and service industries. Given the significance of bilingualism in the area, the university also places a strong emphasis on enhancing English language skills. (Araya, 2022).

Quepos Night High School has a population of 331 students; it is contemplated as a significant number of students considering the quantity of day high schools in the area. This institution has three seventh grade groups, three eight grade groups, three ninth grade groups, two tenth grade groups, and two eleventh grade groups. (Rosmery Salazar M., personal communication, July 15, 2024). For this study, eight graders are the ones who will be taking into consideration applying the investigation process. There are four eighth grade groups, and they are eighty-eight students. The group from 8-1 is the sample of the investigation, and it has 23 students aged from 15 to 41 years old.

## 1.9 Firsthand Sources

**Table 1**

Firsthand sources used in the research process.

<b>Author(s)</b>	<b>Institution</b>	<b>Country</b>	<b>Year</b>
Muhammad Hanafi, Andi Sadapotto, Abd Kahar, Nurul Fadhila	Muhammadiyah Rappang University	Indonesia	2022
Eva Machackva	Masarik University	Czech Republic	2012
Halil Ercan, Naciye Kunt	Eastern Mediterranean University	Turkey	2019

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Rosmery Salazar M.	MEP	Costa Rica	2024
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Source: Developed by Gabriela Vargas Solís (2025)

## 1.10 Secondhand sources

**Table 2**

Secondhand sources used in the research process.

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<b>Author(s)</b>	<b>Title</b>	<b>Year</b>
Douglas Brown H.	Principles of Language Learning and Teaching	2020
Rod Ellis	Task-based Language Teaching: Theory and Practice	2020
Pérez-Cortés, A., et al.	Articulatory Challenges in Producing English Interdental Fricatives by Spanish Learners	2020
Smith, R., & Liu, Y.	Enhancing grammatical retention through repetitive practice: Question-and-answer drills. Applied Linguistics Review	2022
Vega-López, J.	Sociolinguistic Perspectives on the Pronunciation Priorities of Spanish Learners of English	2021
Creswell, J. W., & Creswell, J. D.	Research Design: Qualitative, Quantitative, and Mixed Methods Approaches	2017

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Source: Developed by Gabriela Vargas Solís (2025)

### 1.11 Thirdhand sources

**Table 3**

Thirdhand sources used in the research process.

<b>Author(s)</b>	<b>Title</b>	<b>Year</b>
Isabelle Darcy	Bringing pronunciation instruction back into the classroom: An ESL teachers' guide	2012
Tracey M. Derwing	Pronunciation Fundamentals: Evidence-based Perspectives for L2 Teaching and Research	2015
Abbas Pourhossen Gilakjani	Why is Pronunciation so Difficult to Learn?	2011
González-Fernández, B., & Ortega, C.	Substitution Patterns in the Pronunciation of English Interdental Fricatives by Spanish Speakers. <i>Journal of Second Language Pronunciation</i>	2021
Business of Apps	Language Learning App Revenue and Usage Statistics	2024
Ladefoged, P., & Johnson, K.	The impact of question-and-answer drills on conversational fluency in language learners. <i>Journal of Language Education</i>	2021
Ellii Blog	5 Awesome Apps to Help Your Students Improve Their English Pronunciation	2020
Ramos, L., & Benítez, M.	The Influence of L1 Phonology on the Acquisition of English Interdental Fricatives by Spanish Speakers. <i>Studies in Second Language Acquisition</i>	2023

Source: Developed by Gabriela Vargas Solís (2025)

## **1.12 Population and Sampling**

### **1.12.1 Populations**

As it is mentioned in the book *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (Creswell & Creswell, 2017). The population is the complete set of individuals, items, or data points from which a sample is drawn and to which researchers intend to generalize their findings. The characteristics of the population should align with the research objectives and questions. For instance, the population taken into consideration for the study is the eighth graders of the Quepos Night High School. Eighty-eight students are in eighth grade, they are divided into four different classes; group 8-1 has 23 students, group 8-2 has 21 students, group 8-3 has 25 students, group 8-4 has 19 students.

### **1.12.2 Sample**

A sample is a smaller, manageable collection of observations or subjects drawn from a larger population. The goal is to select a sample that accurately reflects the characteristics of the population so that the findings can be generalized to the entire group (Fink, 2017). Taking into consideration the previous definition, it can be said that the sampling of the population at Quepos Night High School that are going to participate in the study is the 8-1 group that has 23 students. All the 23 students are going to be active participants during the process. The sampling method for this study could be by convenience. This approach ensures that the sample accurately represents the population in terms of age, educational level, and language proficiency (Etikan, Musa, & Alkassim, 2016). It is by convenience because it depends on the accessibility and willingness of the teacher in charge of the

group. Of the three teachers who work at Quepos Night High School, just one was willing to collaborate with the investigation.

### 1.12.3 Non-probabilistic Sampling

When using non-probabilistic sampling techniques, not every member of the population has an equal or known chance of being chosen. When logistical, financial, or temporal restrictions make probability sampling impractical, these techniques are frequently employed. Convenience, purposive, and snowball sampling are examples of non-probabilistic sampling methods. These approaches are simpler to use, but they have a greater chance of bias and restrict how broadly the results can be applied (Acharya et al., 2020).

## 1.13 Variables Chart

### 1.13.1 General Objective:

To determine the effectiveness of applying “Spell and Pronounce” APP through the Audio-lingual Approach and drilling techniques to improve the pronunciation of phonemes /θ/ and /ð/ on eight grade students from 15 to 41 years old from the Quepos Night School during the first quarter of 2025.

**Table 4**

<b>Specific Objectives</b>	<b>Variables</b>	<b>Conceptual Definition</b>	<b>Instrumental Definition</b>	<b>Operational Definition</b>
To determine the knowledge	The knowledge students have	It refers to the level of	Instruments: Pre-test.	In the Pre-test the variable is

<p>students have related to the correct pronunciation of “th” phonemes at Quepos Night School.</p>	<p>related to the correct pronunciation of “th” phonemes</p>	<p>understanding and ability of students to correctly articulate the English phonemes /θ/ (as in "think") and /ð/ (as in "this"). It encompasses students' awareness of the correct pronunciation features and their ability to produce these sounds accurately.</p>	<p>The Pre-test is designed to assess students' knowledge of the correct pronunciation of the "th" phonemes (/θ/ and /ð/). This pre-test includes Section 1: Word Pronunciation Section 2: Sentence Reading Section 3: Minimal Pairs Recognition Section 4: Free Speech Assessment</p>	<p>valid through this instrument if the students obtain 80% of the right answers in each part of the instrument.</p>
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<p>To incorporate the “Spell and Pronounce” mobile application and audio-lingual approach as well as drilling techniques during the English classes to identify the improvement of the “th” phonemes pronunciation</p>	<p>The improvement of the “th” phonemes pronunciation through the incorporation of the “Spell and Pronounce” mobile application.</p>	<p>It refers to the degree of enhancement in students' ability to accurately articulate the English phonemes /θ/ (as in "think") and /ð/ (as in "this") following the use of the "Spell and Pronounce" mobile application as part of their English language instruction.</p>	<p>Instrument: Students’ evaluation form: during spell and pronounce app use and drilling techniques. This form assesses students' engagement, progress, and pronunciation improvement while using the Spell and Pronounce App and drilling techniques.</p>	<p>In this Student evaluation form, the variable is valid through this instrument if it reflects, at least, the 77.5% of the effectiveness of incorporating the "Spell and Pronounce" app and drilling techniques in the English classes.</p>
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<p>To determine the accurate acquisition and comprehensive understanding of "th" phonemes in language learners.</p>	<p>The accurate acquisition and comprehensive understanding of "th" phonemes.</p>	<p>This variable refers to the extent to which language learners can both correctly produce (acquire) and thoroughly understand the phonemes /θ/ (as in "think") and /ð/ (as in "this"). It encompasses both the practical ability to articulate these sounds accurately and the cognitive understanding of their correct</p>	<p>Instruments: Post-test The Post-test is designed to assess students' knowledge of the correct pronunciation of the "th" phonemes (/θ/ and /ð/). This post-test includes. Section 1: Word Pronunciation Section 2: Sentence Reading Section 3: Minimal Pairs Recognition</p>	<p>In the Post-test the variable is valid through this instrument if the students obtain 80% of the right answers in each part of the instrument.</p>
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		use and distinction in various linguistic contexts.	Section 4: Free Speech Assessment These exercises were designed with a little higher level because it is expected that students will have an improvement in their pronunciation.	
To analyze the effectiveness of the “Spell and Pronounce” mobile application to be used with other phonemes	The effectiveness of the “Spell and Pronounce” Mobile Application for Other Phonemes	This variable refers to the degree to which the “Spell and Pronounce” mobile application successfully aids in the	Instruments: Student survey about the use of the spell and pronounce app. For evaluating how well the app aids students in	Observation records data during lessons where the app is used to teach new phonemes. This may include video recordings on

		<p>accurate pronunciation, understanding, and acquisition of phonemes beyond the “th” sounds (/θ/ and /ð/). It encompasses the app’s utility in enhancing learners’ ability to correctly articulate and comprehend various phonemes in the English language.</p>	<p>pronouncing English, especially the phonemes /θ/ and /ð/ (“th” sounds), this tool is an essential research tool. There were four distinct and well-defined portions to the survey: General Information: To collect information on age, gender, device and internet access, and technological</p>	<p>student behavior and performance. In the Checklist the variable is valid through this instrument if the teacher mark “Yes” in the 70% of the items.</p>
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			<p>background.</p> <p>App Usage: To ascertain how often, how long, and under what circumstances an app is used.</p> <p>Learning Experience: To evaluate perceived learning outcomes, particularly in terms of confidence and proficiency in pronunciation.</p> <p>Feedback and Suggestions: To gather opinions, likes, dislikes,</p>	
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			and suggestions from students about the app.	
To provide a detailed specification of the results obtained through comprehensive statistical analysis.	The results of Comprehensive Statistical Analysis	This variable refers to the specific outcomes or findings derived from a detailed and thorough statistical analysis of data related to a particular study or research objective. It encompasses the quantitative results that are generated, interpreted, and reported based	It refers to the specific tools, procedures, and criteria used to detail and communicate the results obtained from a comprehensive statistical analysis. It involves the methods and techniques employed to interpret, present, and specify statistical findings in a	It involves outlining a systematic approach to documenting and describing the outcomes of a comprehensive statistical analysis. It includes defining the criteria and methods for presenting the statistical results, ensuring clarity, accuracy, and

		on the application of statistical methods, such as descriptive statistics, inferential statistics, and other relevant analytical techniques.	clear, detailed, and accurate manner.	thoroughness in the reporting process.
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Source: Developed by Gabriela Vargas Solís (2025)

#### 1.14 Techniques and instruments

Thorough data collecting is essential to doing thorough research since it provides the framework for analysis and findings. The primary methods and tools used in the data collection process are described in this introduction to help researchers collect accurate, trustworthy, and pertinent data for their investigations.

The first specific objective is connected to the first instrument. The Pre-Test is designed to evaluate students' current knowledge and proficiency in pronouncing the "th" phonemes, specifically /θ/ and /ð/. The assessment incorporates different sections in which the participants show their knowledge of the phonemes previously mentioned. This pre-test includes section number one, which is a list of words they must pronounce. In section two, they have to read sentences in order to pronounce the phonemes in the study. In section 3,

they listen to the teacher reading minimal pairs of words containing the “th” phonemes and they must recognize the ones that have the phonemes. In section 4, participants answer free speech questions, but for the answers it is expected to include vocabulary with the “th” phonemes.

When students use the Spell and Pronounce App in conjunction with drilling techniques, their conduct, participation, and progress are tracked and evaluated using the Students Evaluation Form During Spell and Pronounce App Use. It is in line with the second objective of the study, which is to assess how well the app and repeat exercises work to improve pronunciation. This tool has three primary components: student engagement, which gauges how frequently and actively students use the app, how well they adhere to instructions, and how involved they are overall in pronunciation exercises. Students' progress in pronouncing the /θ/ and /ð/ phonemes is evaluated by assigning them a score of excellent, good, needs improvement, or poor. Additionally, it inquires as to whether any advancements have been noticed since the app and drilling exercise were introduced. Feedback and Observations: Gives the instructor a chance to share qualitative information on the students' areas of strength, growth, and any further remarks or suggestions based on their performance and involvement. Throughout the implementation phase, this instrument is crucial for recording continuous improvements in student pronunciation, which aids in assessing if the intervention is making a discernible difference.

The third specific objective is connected to the post-test. The Post-test is designed to assess students' knowledge of the correct pronunciation of the "th" phonemes (/θ/ and /ð/ after using the tools and strategies to improve the pronunciation issues found in the pre-test. This post-test includes section number one, which is a list of words they have to pronounce.

In section two, they must read sentences in order to pronounce the phonemes in the study. In section 3, they listen to the teacher reading minimal pairs of words containing the “th” phonemes and they must recognize the ones that have the phonemes. In section 4, participants answer free speech questions, but for the answers it is expected to include vocabulary with the “th” phonemes.

The fourth specific objective is connected to the student survey about the use of the spell and pronounce app. For evaluating how well the app aids students in pronouncing English, especially the phonemes /θ/ and /ð/ ("th" sounds), this tool is an essential research tool. There were four distinct and well-defined portions to the survey: General Information: To collect information on age, gender, device and internet access, and technological background. App Usage: To ascertain how often, how long, and under what circumstances an app is used. Learning Experience: To evaluate perceived learning outcomes, particularly in terms of confidence and proficiency in pronunciation. Feedback and Suggestions: To gather opinions, likes, dislikes, and suggestions from students about the app.

The fifth specific objective is connected to the final written report from the data analysis. This section offers a thorough description of the findings from the research project's extensive statistical analysis. The findings and important statistical metrics that came from the data collection are the main emphasis of the results, which are presented methodically. Descriptive statistics, inferential statistics, and any applicable tests or models are all included in the analysis. An explanation of each result's importance within the study's context is included with it.

It is imperative to mention that for developing this research and apply these data collection instruments, they were previously validated by a group of professionals with

extensive experience in their respective fields. The validation was carried out by Evelyn Vargas Cubillo, M.Sc. in Clinical Psychology and M.Sc. in Psychopedagogy, as well as by English teachers Haylin Arroyo Castro, Natalia Briceño Chinchilla, and Viviana Andrea Guzmán Jiménez, who contributed their knowledge of language teaching. In addition, the valuable review and approval of M.Sc. Maily Leiva Badilla, Regional English Advisor for the Regional Directorate of Education of Aguirre (DREAguirre), was also provided. The collaboration of this team of professionals ensured the relevance, clarity, and adequacy of the instruments used in the study.

**2 CHAPTER IV:**  
**RESULTS AND ANALYSIS OF DATA**

## 2.1 Analysis of the Current Situation

In the Costa Rican seaside area of Quepos, Quepos Night High School provide opportunities for different students who want to continue their education after regular school hours. Students from a variety of backgrounds attend this institution in the eighth grade, frequently organizing their education with obligations to their families and jobs. This confluence of factors influences their educational path in unique ways.

The eighth-grade group at the Quepos Night High School consists of 23 students ranging in age from 15 to 41 years old, reflecting a significant generational diversity. There are 6 students who are 15 years old; 5 students are 16; 4 students are 17; 1 student is 18; 1 student is 20, 1 student is 25; 1 student is 29, 1 student is 32; 1 student is 38; 1 student is 39; 1 student is 41.

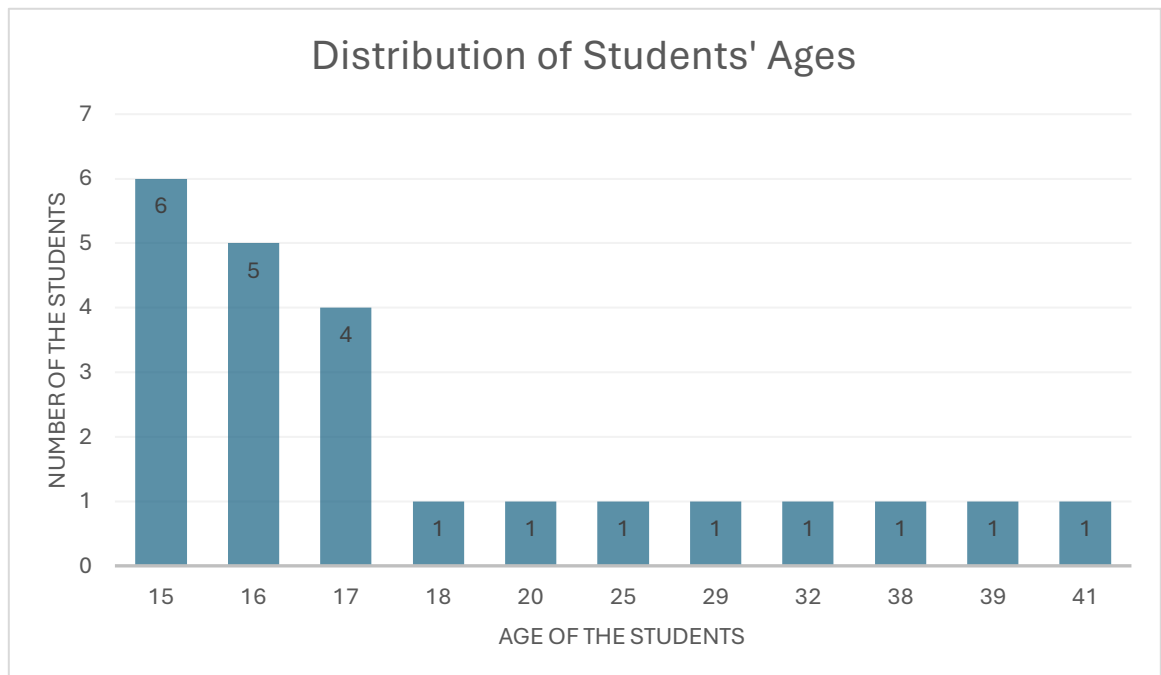
In general, it is an active, participative group with a willingness to learn, which supports the development of group dynamics and proactive activities.

However, they also present some characteristics, such as frequent absences, constant exits from the classroom during lessons, and extended periods of non-attendance. These factors can affect the continuity of the learning process, so flexible planning, ongoing motivational strategies, and individualized follow-up are necessary to support their academic progress and retention.

At the beginning of the investigation, they were attending classes in a classroom in front of the main highway and as the teacher mentioned “It was a little harder because there's a lot of traffic constantly going back and forth” and for listening exercises, better

conditions are needed. For this reason, the teacher asked for another classroom. The new classroom is quieter; it has four ceiling fans but just two of them work. The class is very hot, and it is important to mention that in the dry season, especially in this area of the country, the weather is very hot. The light is acceptable, but it could be better.

**Figure 1**



*Source: Developed by Gabriela Vargas Solís (2025)*

### 2.1.1 Description of the Group Observation

The group observation was on March 13th, in the current year. The class started with the greeting of the teacher, she called the attendance and did a short activity as a warmup about high frequency vocabulary. The topic to be developed was frequency adverbs; the teacher sent to students, by WhatsApp, a specific online worksheet with the instructions and the specific exercises to practice on. They worked in pairs and in groups of three people, they were free to choose their peers. They started working by reading the

vocabulary and asking some questions using the target vocabulary. It is notable that students are working eagerly, they are really practicing, they showed interest in doing the activities. The teacher walked around the class monitoring the students, sat with all the groups and asked them questions, she used both languages to make students feel more comfortable with the dynamic. She clarified doubts and helped them a lot with pronunciation. Students ask for permission to go out of the classroom always using the target language. Something that called the attention was a student who came late to classes, but she brought her baby with her, the teacher commented that this is something that usually happens in the institution, it is part of the chances the institution gives to single moms. In general, this is a motivated and cooperative group that demonstrates a strong willingness to work and actively participate in class. They show a positive attitude toward learning and are consistently open to developing all the activities assigned by the teacher. Their engagement and enthusiasm contribute to a productive classroom environment where learning goals can be effectively achieved.

## **2.2 Analysis of Data**

This section summarizes the information acquired during the investigation called *"The effectiveness of applying the Spell and Pronounce APP through the Audio-lingual Approach and drilling techniques to improve the pronunciation of phonemes /θ/ and /ð/ on eighth-grade students aged 15 to 41 years old from the Quepos Night School during the first quarter of 2025."* The data was collected through the following instruments: Group Observation and Data Collection Diagnostic Tool for Teachers, Group Observation and Data Collection Diagnostic Tool for Students, Pre-test: Pronunciation of "TH" Phonemes, Post-test: Pronunciation of "TH" Phonemes, Student Survey on the Use of the Spell and

Pronounce App, Student Evaluation Form During the Use of the Spell and Pronounce App, and the Investigator Journal.

The results are analyzed and evaluated to conclude if the techniques and resources used played an important role in the students' ability to produce the desired phonemes. This detailed discussion of the patterns, trends and significant deviations observed in the process provides a comprehensive understanding of the achieved results. Hence, for the information gathering, this instrument named Group Observation and Data Collection Diagnostic Tool for Teachers allows to collect relevant information about the technological infrastructure and internet accessibility available to English teachers of students in eighth grade from the *Quepos Night School*. particularly those who teach eighth graders. For instance, a diagnostic tool capable of supporting, identifying, and assessing technological and digital environments that affect the institution's teaching of English, while also emphasizing the availability, functionality, and effectiveness of the tools and internet connectivity available for teachers. This is important for understanding.

The principal aim of the instrument "Group Observation and Data Collection Diagnostic Tool for Students" is to gather pertinent data on access, use of technology by the eighth grade students at the *Quepos Night School*, ultimately to guide and reinforce pedagogy, particularly around the implementation of digital tools such as, the App: Spell and Pronounce, in English language learners' teaching. To learn about the students' technological context such as the age of the students of the class, whether the students are male or female, where the students live, what kind of access the students and school have, what kind of access students have to technology, and how the students use the technology

in their homes and at school. This enables the researcher to know what the digital conditions available are, to be able to effectively use educational technology in class.

The purpose of the Pre-Test: Pronunciation of "TH" Phonemes will be used to diagnose the students' initial knowledge of the English phonemes /θ/ (voiceless as in think) and /ð/ (voiced as in this). When planning, the teacher will use the pre-test to guide the lesson planning, providing activities and resources to help students improve in this area and using the App Spell and Pronounce with drilling activities as well.

After using the Spell and Pronounce App as part of their English language training, eighth-grade students at Quepos Night High School are given the Post-Test: Pronunciation of "TH" Phonemes to assess their progress in correctly pronouncing the /θ/ (voiceless) and /ð/ (voiced) phonemes. To assess how well the intervention; more especially, the Spell and Pronounce App, which is backed by the Audio-lingual Approach and drilling methods, helps students pronounce English "th" sounds.

To systematically evaluate how eighth-grade students at Quepos Night High School are using and benefiting from the Spell and Pronounce App during their English pronunciation lessons; specifically, for the "th" phonemes /θ/ (voiceless) and /ð/ (voiced), the instrument is called "Students Evaluation Form: During Spell and Pronounce App Use" and is applied to obtain the participants' opinions. As part of a larger educational approach to better pronunciation through technology-enhanced learning, to track student engagement, development, and difficulties while using the app.

The "Student Survey: Use of the Spell and Pronounce App" tool is designed to get direct input from eighth-grade Quepos Night High School students on their experiences using the app to practice pronouncing words correctly in English.

### **2.2.1 Survey Applied to the Teacher**

The goal of the teacher survey analysis is to collect crucial data on the working environment and teaching context that have a direct influence on the learning process. The length of time the teacher has been teaching, the standard and accessibility of the school's infrastructure, the availability and quality of technological devices, the dependability of the internet connection, and the general accessibility of digital materials are all important topics covered in this survey. Gaining an understanding of these elements helps teachers better understand the opportunities and difficulties they confront in integrating technology, providing effective education, and encouraging meaningful student participation in the modern classroom.

A complete summary of the teacher's professional background, current teaching circumstances, and the technology resources available in her workplace are provided by the survey she completed. With 19 years of teaching experience, the teacher contributes a wealth of pedagogical knowledge and competence to her position. She currently teaches in an urban context, which usually implies better access to resources and infrastructure than rural ones. Nonetheless, the answers show that her institution has serious technology support gaps.

According to the teacher, she is unable to use digital tools in her classes since she does not have access to a classroom that is technologically advanced. Despite having a reliable personal internet connection, she observes that the institution's electronic devices

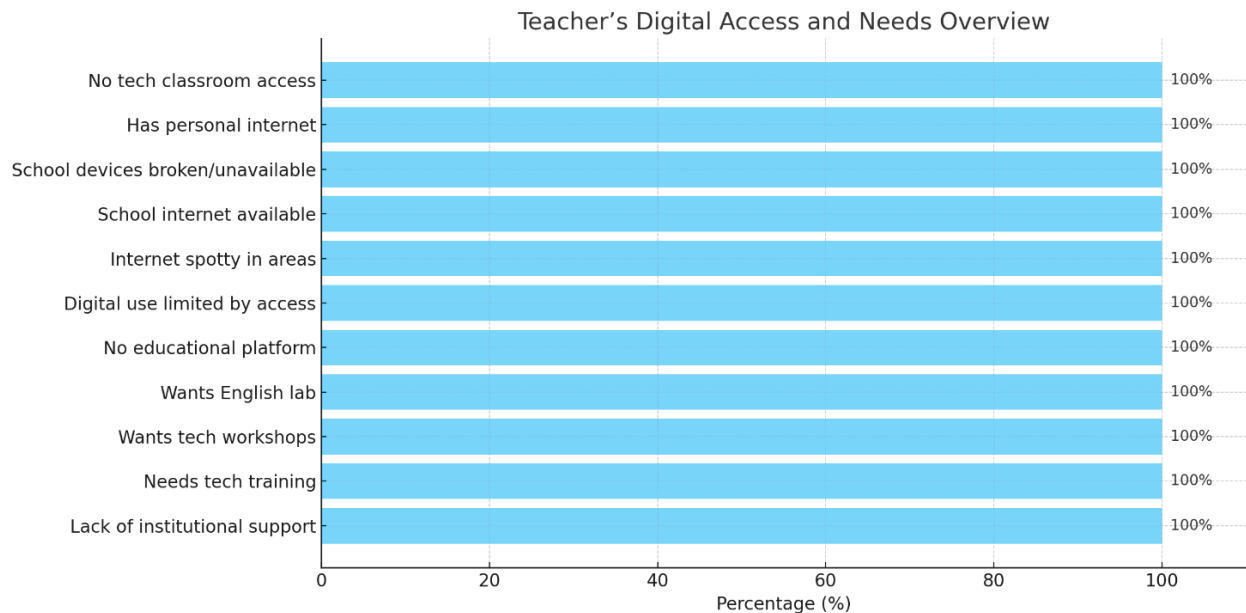
are often broken or unavailable, which further restricts the use of digital learning opportunities. Although the school offers internet access, she notes that in certain places, particularly those that are further away from the main router, connectivity is spotty or limited. Her capacity to regularly integrate digital or online resources into her lessons is severely impacted by this problem.

Additionally, the teacher points out that the high school does not provide any formal educational platform to assist with instruction, which limits the use of digital or blended learning strategies. She highlights in the open-ended section; observations, her desire for an English laboratory that is furnished with interactive software and multimedia materials to improve language acquisition. She also indicates a strong desire to take part in workshops centered around technological tools, demonstrating her readiness to advance her digital teaching abilities and adjust to the needs of contemporary education.

The survey's overall findings show a dedicated and skilled teacher operating in difficult circumstances. One major obstacle to successful technological integration is the absence of institutional support in the form of digital devices, infrastructure, and training opportunities. In addition to enhancing the teaching and learning process, investing in technological advancements, such as updating equipment, enhancing connections, and offering professional development workshops, would enable educators like her to provide more dynamic and captivating training.

The next graph sums up the needs and constraints of the teacher's digital access. Every category represents a significant discovery, all of which were given a perfect score because they only refers to the teacher who was surveyed.

## **Figure 2**



Source: Developed by Gabriela Vargas Solís (2025)

### 2.2.2 Initial Survey Applied to the Students

Designed to collect vital demographic and technology access data from students, the Group Observation and Data Collection Diagnostic Tool for Students is a comprehensive tool. Age, gender, residential area, smartphone ownership, internet access, internet connectivity methods, ownership of other technological devices, and smartphone usage patterns in the high school setting were among the important variables that were gathered in this case using the tool.

In the current educational environment, when technology is becoming an increasingly important part of learning, it is imperative to comprehend these variables. Teachers and administrators can learn a lot about the digital gap among students, the prevalence of technology use, and possible obstacles to adequate access to digital resources by examining this data. Finding patterns and inequalities that could affect student

participation, engagement, and academic achievement is made easier with the use of this kind of analysis.

The Group Observation and Data Collection Diagnostic Tool for Students analysis provides a detailed picture of the demographics and technology environment of the 23 high school students in the observed group. With nine female and fourteen male participants, the group has a minor gender imbalance, with a greater percentage of male learners. In terms of residential distribution, five students live in rural areas, while most students, 18 of them, live in urban areas. This urban dominance is noteworthy because it frequently corresponds with easier access to resources and infrastructure related to technology.

One important finding is that all the students stated owning a smartphone; all of them reported personal ownership. Given how widely available mobile technology is, it is likely that cellphones play a major role in students' everyday lives and possibly in their educational efforts. Examining internet connectivity at home, however, reveals a discrepancy: three students lack online access, whereas twenty students have it in their homes. It is important to address this lack of connectivity since it may make it more difficult for these students to access online learning materials and engage fully in digital learning activities.

Investigating the nature of internet access further, the data reveals that the great majority of students, 20 exactly, connect to the internet at home using Wi-Fi, which usually provides faster and more reliable connections appropriate for a variety of academic pursuits. The other three students depend on mobile data, which can be more costly and less dependable. This could limit their ability to participate in bandwidth intensive activities like multimedia coursework or video conferences.

For most students, device ownership goes beyond smartphones: Twenty of the participants say they have extra electronics at home, like PCs or tablets. Three students, however, do not have these additional gadgets, so they are entirely dependent on their smartphones for any digital work. These students may be at a disadvantage when completing more complex tasks or taking part in group projects because of their reliance on a single device, particularly one with a small screen and less functionality than a computer or tablet.

In the educational setting, almost everyone uses a smartphone. In this survey, twenty-two students report using their smartphones in class, and the same number bring their phones to school. In each instance, only one student desists from using or bringing a phone to class. This high percentage of smartphone use in class emphasizes the possibility of incorporating mobile technology into teaching methods as well as the necessity of explicit policies to guarantee that these gadgets enhance learning rather than interfere with it.

In terms of institutional assistance, 19 students said their school offers internet access. Nevertheless, each of these students also complained about the quality of the connection, calling it inadequate for their requirements. The fact that four learners claim that their school does not offer internet connectivity at all highlights how unequal the availability of technology support is in the classroom.

Twenty-two out of twenty-three students, representing the vast majority, say they would want to see more technological assistance in their education. According to this broad consensus, students understand the value of technology in their education and are alert for advancements that will increase their access and involvement. Just one student is unsure

whether they require more help, indicating that there is a widespread need for improved resources.

In conclusion, despite the widespread ownership of smartphones, there are still gaps in home internet access and the availability of additional devices, which mostly affect students in rural areas and those who rely on mobile data. Inconsistent and frequently insufficient internet access is provided by institutions, and students clearly and broadly want more technological assistance. These results underline the necessity of focused interventions to guarantee fair access to digital resources, enhanced infrastructure, and careful incorporation of technology into the educational process.

The following table of percentages summarizing the key findings from the Group Observation and Data Collection Diagnostic Tool:

**Table 4**

Category	Subcategory	Number of Students	Percentage (%)
<b>Gender</b>	Female	9	39.1%
	Male	14	60.9%
<b>Residence</b>	Urban	18	78.3%
	Rural	5	21.7%
<b>Smartphone Ownership</b>	Own a smartphone	23	100%
<b>Home Internet Access</b>	Has internet access	20	87.0%
	No internet access	3	13.0%
<b>Type of Internet Connection at Home</b>	Wi-Fi	20	87.0%
	Mobile data only	3	13.0%

<b>Ownership of Additional Devices</b>	Owns additional devices (PC/tablet)	20	87.0%
	Smartphone only	3	13.0%
<b>Smartphone Use in School</b>	Using smartphone in class	22	95.7%
	Does not use smartphone in class	1	4.3%
	Bring smartphones to school	22	95.7%
	Does not bring smartphone	1	4.3%
<b>School Internet Access</b>	Internet provided but inadequate	19	82.6%
	No internet access at school	4	17.4%
<b>Desire for More Tech Support</b>	Wants more technological support	22	95.7%
	Unsure if more support is needed	1	4.3%

Source: Developed by Gabriela Vargas Solís (2025)

### 2.2.3 Pre-test applied to Students.

For many English language learners, correctly stating the English "th" sounds, both the voiced /ð/ as in "this" and the voiceless /θ/ as in "think", is a challenge. For effective communication and general language ability, mastery of these sounds is essential. A comprehensive pre-test has been created to evaluate students' current skills and determine specific areas in need of development. Each of the four components of this pre-test focuses on a distinct aspect of the pronunciation and recognition of the "th" sound. The findings will provide useful background information for tracking development and future instructional initiatives.

The pre-test is divided into four distinct sections, each with a specific focus and methodology.

The pronunciation of isolated words is covered in section one. Its primary goal is to evaluate students' proficiency in correctly pronouncing the "th" sound alone within words. A list of words with the voiced or voiceless "th" sound is given to the students. One by one, each student reads the words out loud. While paying close attention, the researcher notes the student's pronunciation, paying particular attention to how accurately the "th" is spoken in each word. When the target sounds are presented alone, without any context, this part aids in determining whether students can create them. The researcher records the students' spoken answers.

The second section considers reading sentences. This task's goal is to assess students' ability to pronounce the "th" sound in whole phrases. A series of phrases having one or more words that start with the letter "th" are presented to the students. Every sentence is read by the students. The researcher notes how the "th" sounds are pronounced in the sentences as they naturally occur. This segment evaluates students' ability to interpret connected speech, which frequently poses more difficulties than isolated words, while maintaining proper "th" pronunciation. The researcher records the students' spoken answers.

The third section involves the recognition of minimal pairs. Testing students' auditory discrimination and creation of minimal pairs involving the "th" sound is the primary goal. One word with the "th" sound and another with a comparable but distinct sound (for example, "thin" vs. "tin") are presented orally by the researcher. The student is instructed to find and repeat the word that contains the correct "th" sound after listening. The student's response is recorded by the researcher, who notes both recognition and

pronunciation accuracy. To assess students' ability to differentiate between identical sounds and correctly make the target "th" sound, this component is essential.

Lastly, an evaluation of free speech is included in section number four. Assessing students' impromptu usage and pronunciation of "th" sounds in normal conversation is its primary goal. To elicit responses that contain words with the "th" sound, the researcher asks students to respond to three open-ended questions. Students must answer in whole sentences, paying close attention to how to pronounce any "th" syllables. For a later analysis, the researcher records the students' spoken answers. This component assesses the students' real-world speaking proficiency by evaluating their application of proper "th" pronunciation in spontaneous, conversational situations.

This pre-test offers a comprehensive evaluation of students' proficiency in identifying and producing the English "th" sounds. The examination provides a thorough grasp of each student's areas of strength and growth by analyzing performance across single words, phrases, minimal pairings, and free speech. The information gathered will guide focused instructional tactics and function as a standard by which to evaluate future development.

Table 5 shows the word list the students pronounce in section 1. And the way they pronounce them using the "t" sound and the "th" combination sound.

### **Table 5**

<b>Student</b>	<b>Think</b>	<b>Thumb</b>	<b>Thunder</b>	<b>Thirty</b>	<b>Bath</b>	<b>This</b>	<b>That</b>	<b>Mother</b>	<b>Father</b>	<b>Brother</b>
<b>Student #1</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #2</b>	T	T	T	T	T	✓	✓	✓	✓	✓
<b>Student #3</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #4</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #5</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #6</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #7</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #8</b>	T	T	T	T	T	✓	✓	✓	✓	✓
<b>Student #9</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #10</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #11</b>	T	T	T	T	T	✓	✓	✓	✓	✓
<b>Student #12</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #13</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #14</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #15</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #16</b>	T	T	T	T	T	T	T	✓	✓	✓

<b>Student #17</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #18</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #19</b>	T	T	T	T	T	✓	✓	✓	✓	✓
<b>Student #20</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #21</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #22</b>	T	T	T	T	T	T	T	✓	✓	✓
<b>Student #23</b>	T	T	T	T	T	T	T	✓	✓	✓

Source: Developed by Gabriela Vargas Solís (2025)

**Legend:**

✓ = Correct pronunciation (with "th" sound)

T = Pronounced with /t/ instead of /θ/ or /ð/

Table 6 shows the percentage accuracy in pronouncing “th” Sounds for the 23 students.

**Table 6**

<b>Word</b>	<b>Students Pronounced Correctly</b>	<b>Percentage Correct</b>
Think	0 / 23	0%
Thumb	0 / 23	0%
Thunder	0 / 23	0%
Thirty	0 / 23	0%
Bath	0 / 23	0%
This	4 / 23	17.4%
That	4 / 23	17.4%
Mother	23 / 23	100%

Father	23 / 23	100%
Brother	23 / 23	100%

Source: Developed by Gabriela Vargas Solís (2025)

The evaluation of the 23 students' pronunciation of the "th" phoneme showed distinct trends in their articulation skills. With a 100% success rate, every student properly spoke the words "mother," "father," and "brother," which all contain the voiced "th" sound /ð/. This implies that the voiced "th" phoneme might be simpler for them to mimic, perhaps because it sounds more like some Spanish sounds. However, there was a zero percent accuracy rate for terms like thought, thumb, thunder, thirty, and bath because none of the students correctly spoke the voiceless "th" sound (/θ/), substituting a /t/ sound instead. The success rate for "this" and "there", which also contain the voiced "th," was 17.4%, as only four students (Students #2, #8, #11, and #19) correctly spoke the terms. These findings show that participants' capacity to make voiced and voiceless "th" sounds differs significantly, with the voiced form being noticeably easier to learn.

In table 7, the pronunciation results for each student in section 2 are shown, called sentence reading.

**Table 7**

Student	Th is	Th at	Th ere	T he	Th an	Oth er	Thi nk	Thir sty	Thea ter	Ba th	Thu mb	Mot her	Fat her
Student #1	T	T	T	T	T	T	T	T	T	T	T	✓	✓
Student #2	✓	✓	✓	✓	✓	✓	T	T	T	T	T	✓	✓



<b>Student #15</b>	T	T	T	T	T	T	T	T	T	T	T	✓	✓
<b>Student #16</b>	✓	✓	✓	✓	✓	✓	T	T	T	T	T	✓	✓
<b>Student #17</b>	T	T	T	T	T	T	T	T	T	T	T	✓	✓
<b>Student #18</b>	T	T	T	T	T	T	T	T	T	T	T	✓	✓
<b>Student #19</b>	✓	✓	✓	✓	✓	✓	T	T	T	T	T	✓	✓
<b>Student #20</b>	T	T	T	T	T	T	T	T	T	T	T	✓	✓
<b>Student #21</b>	T	T	T	T	T	T	T	T	T	T	T	✓	✓
<b>Student #22</b>	✓	✓	✓	✓	✓	✓	T	T	T	T	T	✓	✓
<b>Student #23</b>	T	T	T	T	T	T	T	T	T	T	T	✓	✓

Source: Developed by Gabriela Vargas Solís (2025)

**Legend:**

✓ = Correct pronunciation with "th"

T = Pronounced with /t/ instead of /θ/ or /ð/

Table 8 shows the percentage accuracy in pronouncing “th” Sounds for the 23 students when reading the sentences in section 2.

**Table 8**

<b>Word</b>	<b>Students Pronounced Correctly</b>	<b>Percentage Correct</b>
This	7 / 23	30.4%
That	7 / 23	30.4%
There	7 / 23	30.4%
The	7 / 23	30.4%
Than	7 / 23	30.4%
Other	7 / 23	30.4%
Think	0 / 23	0%
Thirsty	0 / 23	0%
Theater	0 / 23	0%
Bath	0 / 23	0%
Thumb	0 / 23	0%
Mother	23 / 23	100%
Father	23 / 23	100%

Source: Developed by Gabriela Vargas Solís (2025)

The students' articulation of the "th" phoneme within sentences follows a distinct pattern, according to the results of the pronunciation exercise in Section 2. Mother and father were pronounced correctly by all 23 learners, exhibiting complete accuracy with these well-known and frequently used terms. Accordingly, a set of seven students (Student 2, Student 8, Student 9, Student 11, Student 16, Student 19, and Student 22) achieved 30.4% accuracy in accurately pronouncing the voiced "th" sounds in terms such as this, that, there, the, than, and other. However, none of the participants were able to correctly pronounce the voiceless "th" sounds in words like "think," "thirsty," "theater," "bath," and "thumb," substituting the /t/ sound instead. This persistent mispronunciation points to

phonological interference, most likely brought on by Spanish's lack of the voiceless "th" sound. It's interesting to note that some learners seem to have an easier time reproducing the voiced "th" sound, perhaps due to its comparable articulation to other Spanish consonants. Furthermore, students' anxiety during the oral reading exercise might have affected their performance, which would have led to more pronunciation errors.

The next table summarizes the results of the 23 students identifying voiced and voiceless "th" sounds from the minimal pairs: think–sink, this–dis, bath–bass, that–bat, and three–tree.

**Table 9**

<b>Student</b>	<b>Think</b>	<b>This</b>	<b>Bath</b>	<b>That</b>	<b>Three</b>
<b>Student #1</b>	✓				
<b>Student #2</b>	✓	✓		✓	✓
<b>Student #3</b>	✓			✓	✓
<b>Student #4</b>	✓	✓		✓	
<b>Student #5</b>				✓	
<b>Student #6</b>	✓			✓	✓
<b>Student #7</b>	✓				
<b>Student #8</b>	✓	✓		✓	✓
<b>Student #9</b>	✓	✓	✓	✓	
<b>Student #10</b>	✓	✓			
<b>Student #11</b>	✓	✓		✓	
<b>Student #12</b>	✓				✓
<b>Student #13</b>	✓	✓			
<b>Student #14</b>	✓	✓		✓	
<b>Student #15</b>		✓		✓	
<b>Student #16</b>	✓	✓	✓		✓
<b>Student #17</b>	✓			✓	✓
<b>Student #18</b>		✓		✓	
<b>Student #19</b>	✓	✓	✓	✓	
<b>Student #20</b>	✓		✓	✓	
<b>Student #21</b>	✓		✓	✓	

<b>Student #22</b>	✓	✓	✓	✓	✓
<b>Student #23</b>	✓			✓	

Source: Developed by Gabriela Vargas Solís (2025)

The following table shows the percentage accuracy in listening identification of the “th” voiced and voiceless sounds reading by the researcher.

**Table 10**

<b>Word</b>	<b>Students Correctly Identified</b>	<b>Percentage Correct</b>
<b>Think</b>	21 / 23	91.3%
<b>This</b>	13 / 23	56.5%
<b>Bath</b>	7 / 23	30.4%
<b>That</b>	17 / 23	73.9%
<b>Three</b>	8 / 23	34.8%

Source: Developed by Gabriela Vargas Solís (2025)

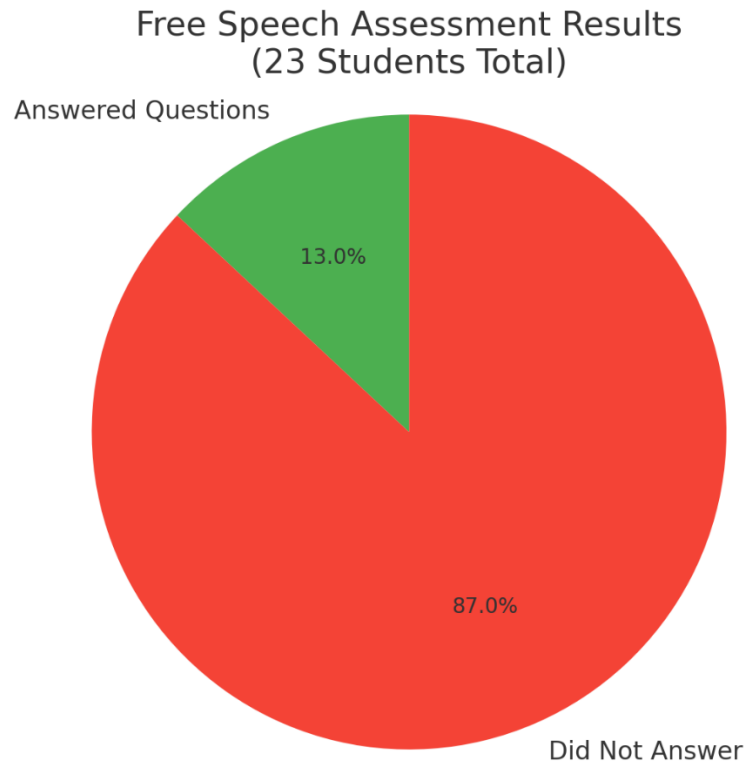
According to the findings of the basic minimal pairs listening exercise, 21 out of 23 students (91.3%) correctly identified the voiceless "th" sound in the word think, demonstrating that most students could recognize it. The term that 17 students (73.9%) properly selected was the second most accurately identified. On the other hand, only 13 students (56.5%) recognized this, which was a slightly lower recognition rate. With only 8 (34.8%) and 7 (30.4%) accurate identifications, respectively, the words three and bath, which also contain voiceless or difficult to distinguish "th" sounds, were the least identified. According to these findings, students may find it simpler to recognize the voiced "th" in that and the voiceless "th" in think because of more frequent exposure or clearer articulation. However, it appears that less frequently used terms or those with less pronounced minimal pair contrasts provide more difficulties. In addition to highlighting areas of relative phoneme discrimination strength, this exercise indicates the need for focused listening practice, particularly with unfamiliar or more phonetically subtle words.

Three open-ended questions requiring the use of "th" words; think, three, things, and Thursdays, were given to students to answer orally as part of Section 4, the Free Speech Assessment. This assignment was designed to assess the students' ability to use whole sentences to produce these target sounds in spontaneous speech.

Only three students; students 8, 11, and 22, were able to correctly answer every question out of the twenty-three students. These participants were able to articulate their thoughts a little bit clear; they tried to integrate the target phonemes into their speech because they showed management of vocabulary and sentence structure. They were significantly more accurate in their pronunciation of the voiced and voiceless "th" sounds, indicating a higher level of comfort and confidence with these sounds. However, the remaining 20 students failed to finish the assignment. A notable gap in their spoken language development was evident when they were asked why, citing a lack of vocabulary and trouble understanding the inquiries. Many said they were unsure of how to react or could not comprehend the directions, indicating difficulties with active language usage, listening comprehension, and pronunciation.

According to this result, most students still require structured guidance in vocabulary development, listening techniques, and guided speaking practice, even though some are making progress in their pronunciation. The low participation rate also highlights how crucial it is to scaffold free speech activities using modeling, visual aids, and focused vocabulary pre-teaching to increase students' confidence and involvement.

This pie chart, which graphically depicts the Free Speech Assessment's findings. It demonstrates that just three students (13%) could answer the questions, while twenty of them (87%) were unable to do so because of language gaps or understanding issues.

**Figure 3**

Source: Developed by Gabriela Vargas Solís (2025)

#### **2.2.4 Student Evaluation Form During the Use of the Spell and Pronounce App**

A formative assessment instrument created especially to track and record students' participation, engagement, and pronunciation growth while using the Spell and Pronounce program is the Students Evaluation Form. This tool is essential for collecting both qualitative and quantitative data during the intervention's implementation, and it supports the main goal of the study, which is to assess how well eighth-grade students at Quepos Night High School pronounce the phonemes /θ/ and /ð/ when using the app in conjunction with the Audio-lingual Approach and drilling techniques.

Assessing the degree of student engagement and involvement with the app during English classes is the focus of section one. This section's items estimate how frequently users use the app, how actively they participate in pronunciation exercises, and how well they follow the app's instructions. The researcher can ascertain how regularly students are using the tool and how motivated they are to take part in pronunciation drills according to the data gathered here. This is important since successful pronunciation improvement in language learning is frequently closely correlated with consistent and active participation.

Students' oral production of the intended English phonemes—/θ/ (voiceless "th") as in think and /ð/ (voiced "th") as in this, is the specific subject of the instrument's second half. In order to monitor both individual and group growth over time, the researcher uses a scaled assessment of each phoneme's pronunciation accuracy. It also asks a broad question on perceived progress since the app's launch, which sheds light on how well the app works as a teaching tool. To determine whether the software helps users achieve quantifiable improvements in pronunciation accuracy, the collected data can be examined.

Individualized input and qualitative observations are involved in the last section. Researchers are urged to record areas of strength, areas that require development, and any further comments or recommendations. This component is very helpful for recognizing tendencies in student conduct, highlighting unusual effort or challenges, and adjusting future training to better suit the requirements of the students. This section's open-ended structure aids with data triangulation by adding descriptive and anecdotal evidence to the quantitative data from the preceding parts.

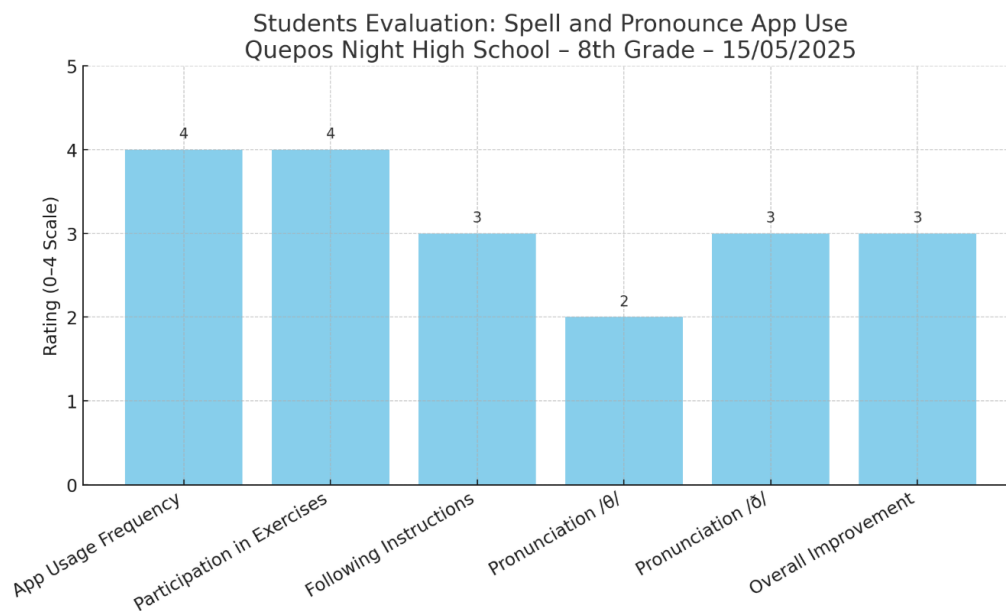
The researcher can gather continuous data to confirm or deny the hypothesis that the Spell and Pronounce app, in conjunction with the Audio-lingual Approach and drilling, enhances pronunciation of /θ/ and /ð/ by methodically using this assessment form during

the intervention period. The tool is straightforward to use, teacher-friendly, and practical, making it possible to collect data consistently during several class sessions. Additionally, it guarantees ongoing student progress monitoring, which serves as a solid foundation for reflective instruction, intervention modifications, and the research project's final analysis.

The following is a specific bar graph visualizing the students' evaluation while using the Spell and Pronounce App. Each bar reflects a different aspect assessed during the class, based on a 0–4 scale:

- **4** = Always / Very Actively / Excellent / Significant Improvement
- **3** = Often / Good / Some Improvement
- **2** = Sometimes / Needs Improvement
- **0–1** = Rarely / Poor / No Improvement

**Figure 4**



Source: Developed by Gabriela Vargas Solís (2025)

### **2.2.5 Student Survey on the Use of the Spell and Pronounce App**

An essential tool for gathering data for this study is the Student Survey, which was used to receive firsthand input on the Spell and Pronounce app experience from the target demographic, which consists of eighth-grade students at Quepos Night High School. The purpose of this survey is to collect quantitative and qualitative data about students' access to technology, usage styles, opinions about the app's usefulness, and recommendations for enhancements. It is essential for assessing the app's effectiveness as a teaching tool in relation to the Audio-lingual Approach and drills meant to enhance English pronunciation, particularly of the phonemes /θ/ and /ð/.

Age, gender, and access to technology resources like smartphones, tablets, and internet connectivity are among the fundamental demographic and contextual data gathered in the first segment. Understanding the participants' socioeconomic and technical backgrounds is crucial because it can have a big impact on how regularly and successfully, they use the app. By identifying these variables, the researcher can also account for extraneous variables that could influence pronunciation development, like how often a student uses digital learning resources outside of the classroom.

The way that students use the Spell and Pronounce app is examined in the second segment. This section includes questions about how frequently the app is used, how long a session lasts on average, and if the app is primarily used at home, at school, or somewhere else. This information reveals how much time students spend using the app, which can subsequently be linked to their self-reported pronunciation, confidence and progress. Determining usage patterns also aids in assessing the app's usefulness and usability for students attending night classes, where time and resources may be insufficient.

Students' subjective experiences and perceived learning results are the main topics of the third segment of the survey. In addition to determining which features, such as word pronunciation, spelling help, listening exercises, or interactive tests, they are asked to rate how much the program has improved their pronunciation. The study also inquires as to whether the software has increased their confidence in their ability to pronounce English words. These answers aid in evaluating students' metacognitive awareness of their development and identifying the precise app tools or tactics that work best for them. By emphasizing students' voices and perspectives as instructional resource users, this component directly advances the study goal.

Students are asked to provide open-ended feedback in the last section. Questions are made about their favorite features, potential enhancements, and if they would promote the platform to other students. By offering complex insights into student motivation, contentment, and personal preferences, this qualitative component enhances the data collection process. It also enables students to take an active role in the assessment process by providing them with a discussion to express their needs and suggestions for development. Both the final analysis of the intervention and possible future iterations or changes of the app's deployment can benefit from this feedback.

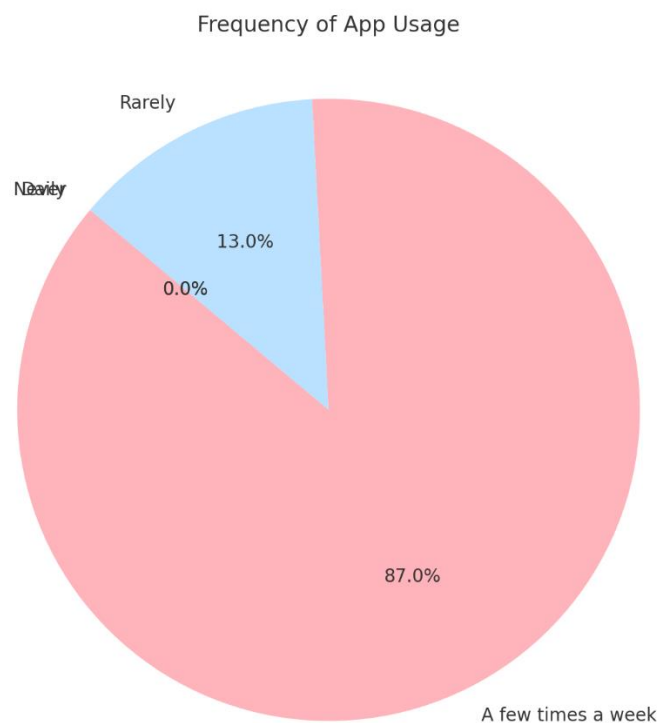
By gathering the viewpoint of the students, a crucial component of a comprehensive evaluation of the app's efficacy, this Student Survey enhances other assessment tools. This survey enables self-evaluation of perceived learning gains, confidence, and satisfaction, whereas researcher's observations and pronunciation tests offer an external picture of student progress. A comprehensive comprehension of the educational intervention is facilitated by the mix of closed-ended and open-ended items, which guarantees the collection of both quantifiable data and subjective insights. Along with encouraging learner

reflection, the survey aids in the development of a learner-centered strategy within the scope of the study.

This study obtains important insights into the Spell and Pronounce app's usability, accessibility, and pedagogical value from the perspective of the learner by incorporating the Student Survey into the methodology. This is crucial for evaluating the app's practical efficacy in enhancing English pronunciation through mobile assisted language learning.

The following graph shows that a significant number of students (87%) reported using the Spell and Pronounce app several times a week. The remaining (13%) rarely use it. None of the students use the app daily or never, indicating a moderate level of consistent engagement.

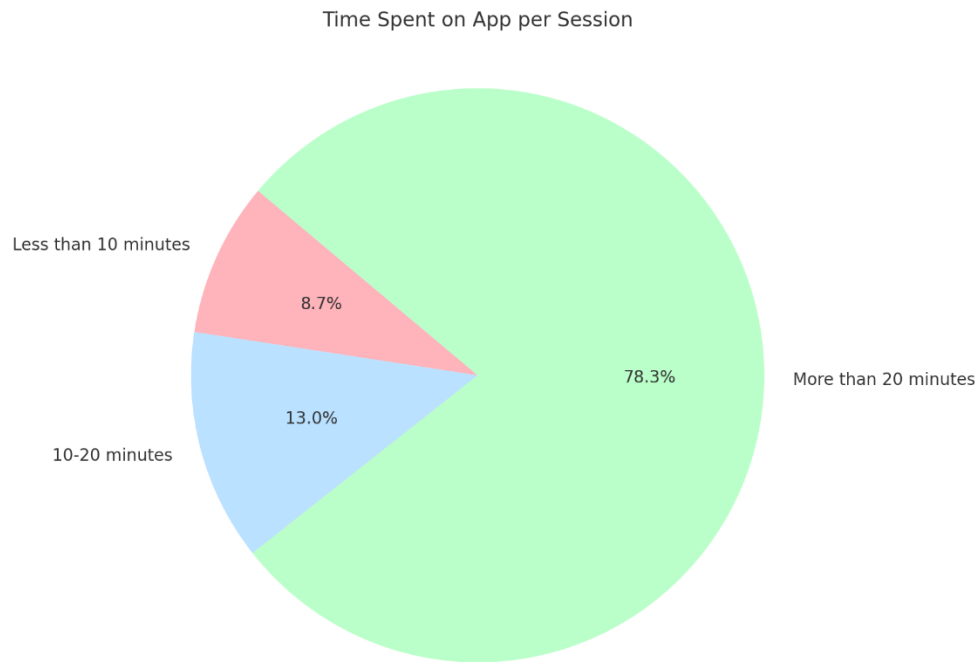
**Figure 5**



Source: Developed by Gabriela Vargas Solís (2025)

According to the following graph, 78.3% of students use the app for more than 20 minutes each session, 13% for 10 to 20 minutes, and 8.7% for less than 10 minutes. This implies a great deal of commitment and extended use of the app with each session.

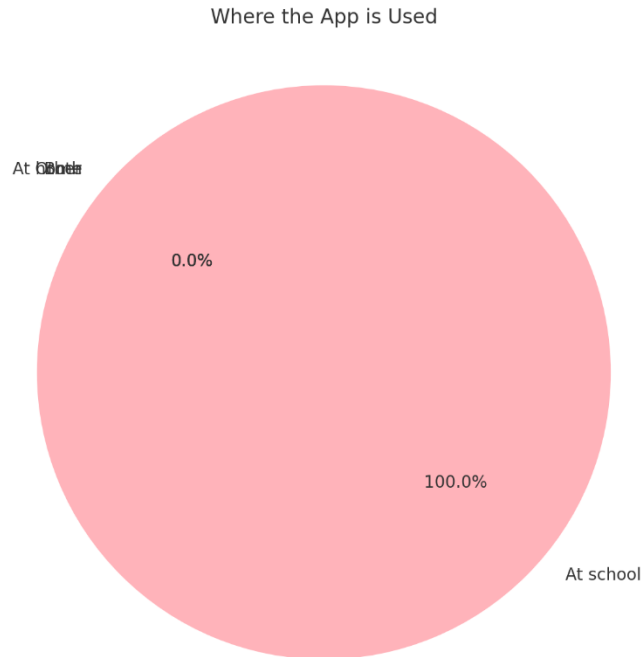
**Figure 6**



Source: Developed by Gabriela Vargas Solís (2025)

A hundred percent of the participants reported using the app in school, as seen in the following graph. Not a single student mentioned using the app at home, at school, or anywhere else. This emphasizes that the school is the only place where the app was used.

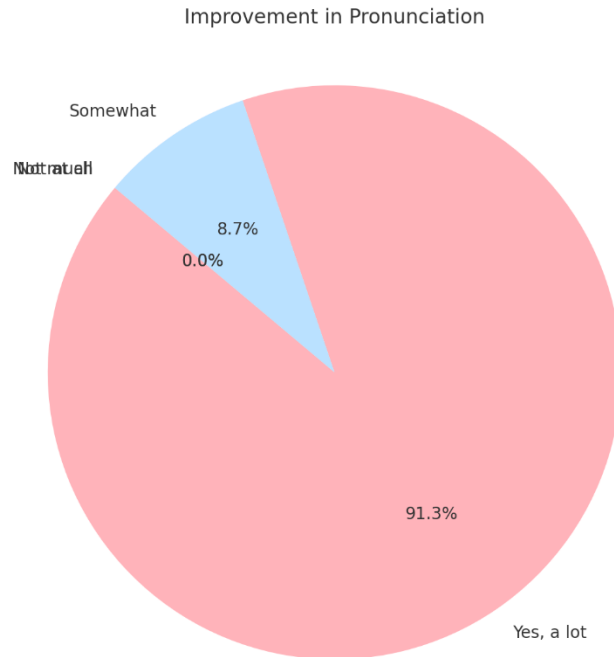
**Figure 7**



Source: Developed by Gabriela Vargas Solís (2025)

Additionally, graph 8 shows that a significant 91% of students think the app has really improved their pronunciation. The remaining 9% claimed that it was somewhat helpful. None of the student chose "not much" or "not at all," indicating that they thought it was very effective.

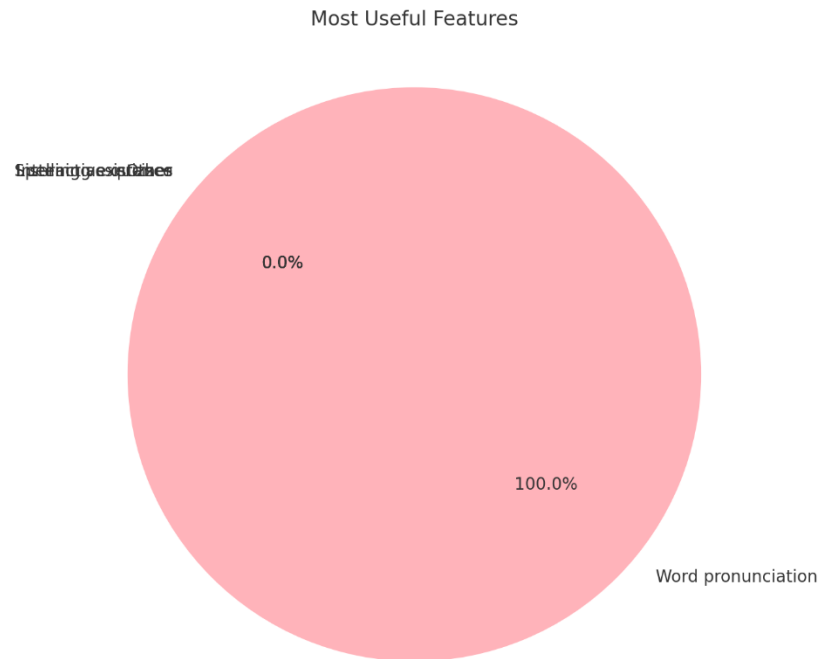
### Figure 8



Source: Developed by Gabriela Vargas Solís (2025)

According to Graph 9, all 23 students (100%) thought that Word Pronunciation was the app's most helpful feature. Other features like interactive tests, listening exercises, spelling help, and other alternatives were not marked by any students. This demonstrates that the fundamental pronunciation functionality is universally preferred and acknowledged.

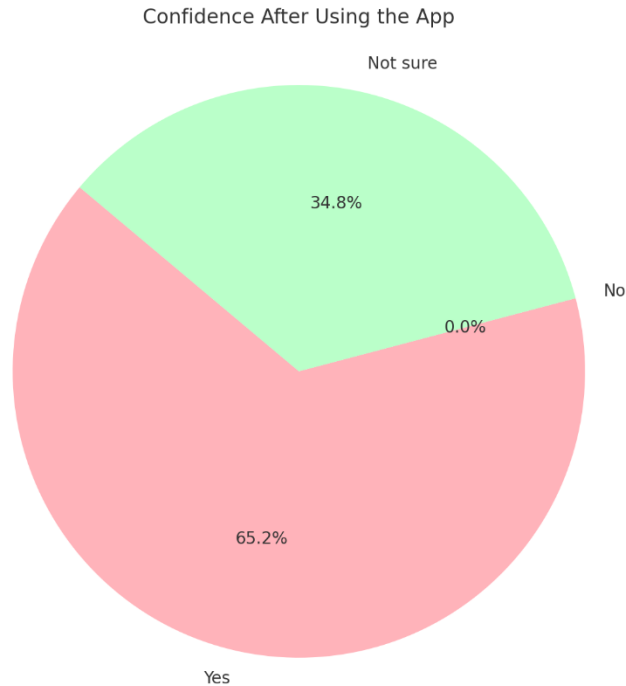
**Figure 9**



Source: Developed by Gabriela Vargas Solís (2025)

Graph 10 demonstrates that after employing the app, the majority of students (65%) said they felt more comfortable speaking English words. None of the students answered "no," while the remaining 35% were "not sure." Even while the majority of students feel more confident now, a sizable percentage are still uncertain, which may suggest that they need additional practice or more feedback.

**Figure 10**

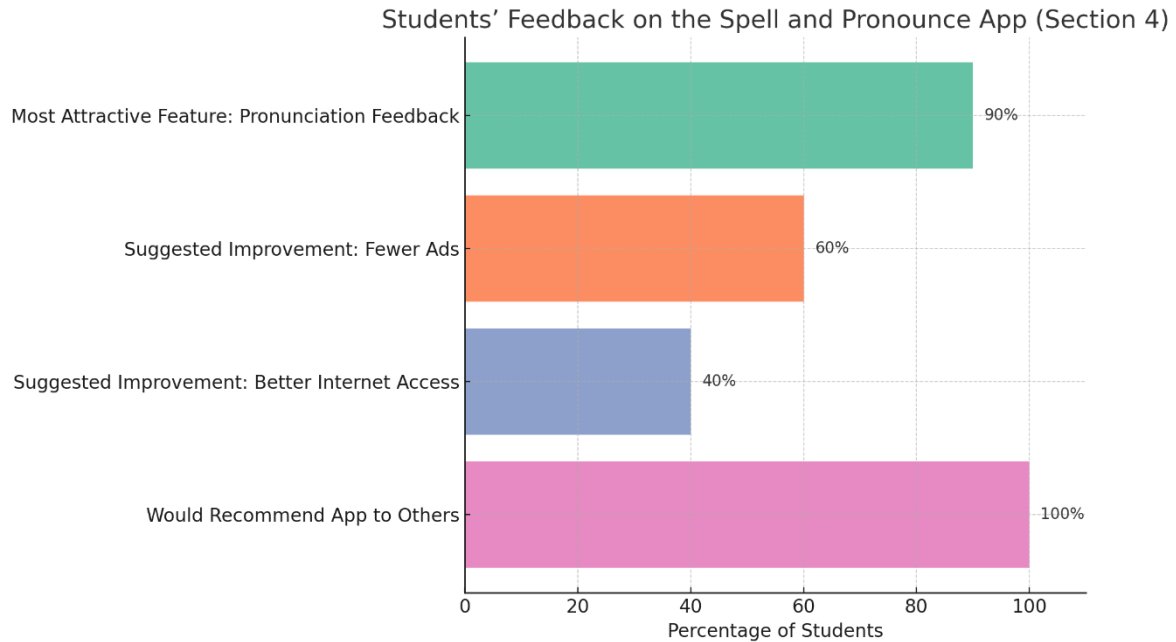


Source: Developed by Gabriela Vargas Solís (2025)

According to the survey results, students' experience learning pronunciation has been significantly and favorably impacted by the Spell and Pronounce App. Most students use the app, demonstrating a high level of engagement with the resource during class time.

At the end of the survey, students had to do section number 4 that was about comments and suggestions. Most of them, 21 of them (90%), agreed that the part in which they practiced improving their pronunciation and the App revealed if the word was well pronounced or not was the most attractive. Also, the majority of the participants, 14 of them (60%), suggested that an improvement to the App would be to have fewer ads or that it would be better to use if there were better internet service at the high school 9 students (40%). All of the students, 23 (100%) agreed on share the App with others to improve more people's pronunciation.

**Figure 11**



Source: Developed by Gabriela Vargas Solís (2025)

### 2.2.6 Post-test applied to Students.

The Post-Test: How to Pronounce "TH" Using the Spell and Pronounce app in conjunction with the Audio-lingual Approach and drilling techniques, Phonemes is an essential summative assessment tool intended to gauge the success of the educational intervention used in this study. This tool specifically evaluates students' proficiency in pronouncing the English phonemes /θ/ (voiceless "th") and /ð/ (voiced "th") correctly following participation in a focused pronunciation program. The exam is used at the end of the intervention and yields empirical data that either confirms or disproves the theory that eighth-grade students at Quepos Night High School have improved their pronunciation skills.

Students' ability to pronounce isolated syllables that contain the voiceless or voiced "th" sounds is the main topic of Section 1. To ensure a thorough assessment of the learners' phonological accuracy, each chosen word has either the /θ/ or /ð/ phoneme at different

word places; initial, medial, or final. The researcher records and evaluates the students' pronunciation as they read each word out loud. The researcher can pinpoint pronunciation difficulties and improvements associated with the individual phonemes in this section by conducting a direct, controlled observation of pronunciation proficiency.

Students read complete sentences with several target words that contain the letter "th" in section 3. This exercise assesses pronunciation in a speech context that is more connected and natural, demonstrating the students' capacity to apply what they have learned beyond discrete vocabulary. It enables the researcher to assess students' ability to retain proper articulation of /θ/ and /ð/ in authentic language use, as well as their fluency and rhythm. Sentence reading is an essential component of evaluating practical language acquisition because it fills the gap between mechanical practice and natural speech.

The listening and speaking exercise in section three uses minimal pair comparison to evaluate students' auditory discrimination and pronunciation. Students must correctly identify and pronounce the word with the correct "th" pronunciation when they hear two similar words, one of which contains a "th" sound and the other does not (for example, "thin" vs. "tin"). In addition to strengthening phonemic awareness, this component assesses students' ability to recognize and mimic minute phonological variations. Accurate pronunciation relies heavily on phonological processing and auditory discrimination, both of which are strongly indicated by success in this exercise.

In the last part, students must use whole sentences to answer open-ended questions while paying close attention to how they pronounce "th" syllables. This activity encourages spontaneous speech output, mimicking real communication in contrast to the earlier sections, which are structured and predictable. It gives the researcher a chance to see if students can reliably pronounce /θ/ and /ð/ correctly in an unstructured setting. This section

is crucial for assessing how well acquired pronunciation abilities translate to authentic communication situations, which is a primary goal of communicative language instruction.

As a detailed, performance-based assessment instrument, the Post-Test documents the results of the instructional intervention. It allows the researcher to assess the improvement in pronunciation in a variety of ways, including auditory discrimination, contextual reading, isolated words, and spontaneous speech. Use recordings and live observation to get comprehensive, student specific pronunciation data. To determine the extent of improvement, compare outcomes with baseline assessments, such as pre-tests or preliminary pronunciation assessments. Increase the validity and reliability of the study findings by cross referencing them with data from other sources, such as the Teacher Evaluation Form and Student Survey.

The Post-Test essentially acts as a last diagnostic instrument that gathers data on student learning and offers definitive insight into the efficacy of the Spell and Pronounce app and the used approach. It guarantees that pronunciation is evaluated using tangible, measurable performance that is in line with the linguistic goals of the study, rather than merely perception or opinion.

After using the strategy to improve pronunciation of the “th” phonemes through the “Spell and Pronounce” app and the repetition technique in the audiolingual approach, this post-test provides a comprehensive assessment of students' ability to identify and produce the sounds. After analysis, it is possible to identify the progress each student made when implementing the aforementioned techniques.

Table 11 shows the word list the students pronounce in section 1. And the way they pronounce them using the “t” sound and the “th” combination sound.

**Table 11**

Student	Thirsty	Theater	Thick	Author	Path	These	Those	Together	Another	Leather
Student #1	✓	T	✓	T	✓	✓	✓	✓	✓	✓
Student #2	T	T	✓	T	✓	✓	✓	✓	✓	✓
Student #3	T	T	T	T	T	✓	✓	✓	✓	✓
Student #4	T	T	T	T	T	T	T	T	T	T
Student #5	T	T	T	T	T	✓	✓	✓	✓	✓
Student #6	T	T	T	T	✓	✓	✓	✓	✓	✓
Student #7	T	T	T	T	✓	✓	✓	✓	✓	✓
Student #8	T	T	✓	✓	✓	✓	✓	✓	✓	✓
Student #9	T	T	T	✓	✓	✓	✓	✓	✓	✓
Student #10	T	T	T	T	✓	✓	✓	✓	✓	✓
Student #11	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Student #12	T	T	T	T	✓	✓	✓	✓	✓	✓
Student #13	T	T	T	T	T	✓	✓	✓	✓	✓
Student #14	T	T	T	T	✓	✓	✓	✓	✓	✓
Student #15	T	T	T	T	T	✓	✓	✓	✓	✓
Student #16	T	T	T	T	✓	✓	✓	✓	✓	✓

<b>Student #17</b>	T	T	T	T	T	✓	✓	✓	✓	✓
<b>Student #18</b>	T	T	T	T	T	✓	✓	✓	✓	✓
<b>Student #19</b>	T	T	T	T	✓	✓	✓	✓	✓	✓
<b>Student #20</b>	T	T	T	T	T	✓	✓	✓	✓	✓
<b>Student #21</b>	T	T	T	T	✓	✓	✓	✓	✓	✓
<b>Student #22</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Student #23</b>	T	T	T	T	✓	✓	✓	✓	✓	✓

Source: Developed by Gabriela Vargas Solís (2025)

It can be inferred from the table how the students pronounce now the English /θ/ and /ð/ sounds, which are frequently spelled "th" in English nouns. While ✓ denotes proper pronunciation, the letter T most likely implies a mispronunciation (for example, using /t/ instead of the right /θ/ or /ð/).

After practicing it is shown that students with full mastery (100%) are student #11 and student #22, they pronounced all words correctly. Only 2 out of 23 students (8.7%) fully mastered both /θ/ and /ð/.

Students with near mastery with 1 or 2 mistakes are student #1 who committed only 2 errors (theater and thick) and student #8 who committed 2 errors (thirsty and theater).

The following table shows the most frequent problems in pronouncing words.

**Table 12**

<b>Word</b>	<b>Errors (T)</b>	<b>Correct (✓)</b>	<b>% Correct</b>
<b>Thirsty</b>	21	2	<b>8.7%</b>
<b>Theater</b>	20	3	<b>13%</b>
<b>Thick</b>	19	4	<b>17.4%</b>
<b>Author</b>	14	9	<b>39.1%</b>
<b>Path</b>	7	16	<b>69.6%</b>
<b>These</b>	2	21	<b>91.3%</b>
<b>Those</b>	2	21	<b>91.3%</b>
<b>Together</b>	2	21	<b>91.3%</b>
<b>Another</b>	2	21	<b>91.3%</b>
<b>Leather</b>	2	21	<b>91.3%</b>

Source: Developed by Gabriela Vargas Solís (2025)

The investigation found that words that contain the voiceless /θ/ sound, such as thirsty, theater, thick, author, and path, were the most difficult for students to learn. The lowest accuracy rates were found for thirsty, theater, and thick, indicating that learners find it especially challenging to pronounce the first /θ/ sound correctly. These, those, together, another, leather, and other words that contain the voiced /ð/ sound, on the other hand, demonstrated high accuracy rates of over 90%. This shows that participants pronounce the voiced /ð/ significantly more accurately, perhaps because these words are easier to mimic or are more frequently used in ordinary speech and it is a little bit like Spanish /d/ sound.

In table 13, the pronunciation results for each student in section 2 are shown, called sentence reading.

Table 13

Student	author	thrilling	brother	father	the	path	these	third	those	three	together
Student #1	T	T	✓	✓	✓	T	✓	T	✓	T	✓
Student #2	T	T	✓	✓	✓	✓	✓	T	✓	✓	✓
Student #3	T	T	✓	✓	T	T	✓	T	✓	T	✓
Student #4	T	T	✓	✓	✓	T	✓	T	✓	T	✓
Student #5	T	T	✓	✓	T	T	✓	T	✓	T	✓
Student #6	T	T	✓	✓	T	T	✓	T	✓	T	T
Student #7	T	T	✓	✓	T	T	✓	T	✓	T	T
Student #8	✓	T	✓	✓	✓	✓	✓	✓	✓	T	✓
Student #9	T	T	✓	✓	✓	✓	✓	T	✓	✓	✓
Student #10	T	T	✓	✓	T	T	✓	T	✓	T	✓
Student #11	✓	T	✓	✓	✓	✓	✓	T	✓	✓	✓
Student #12	T	T	✓	✓	T	T	✓	T	✓	T	✓
Student #13	T	T	✓	✓	T	T	✓	T	✓	T	T
Student #14	T	T	✓	✓	T	T	✓	T	✓	T	T

<b>Student #15</b>	T	T	✓	✓	T	T	✓	T	✓	T	T
<b>Student #16</b>	T	T	✓	✓	✓	T	✓	T	✓	T	✓
<b>Student #17</b>	T	T	✓	✓	T	T	✓	T	✓	T	T
<b>Student #18</b>	T	T	✓	✓	T	T	✓	T	✓	T	T
<b>Student #19</b>	T	T	✓	✓	✓	T	✓	T	✓	T	✓
<b>Student #20</b>	T	T	✓	✓	T	T	✓	T	✓	T	T
<b>Student #21</b>	T	T	✓	✓	T	T	✓	T	✓	T	✓
<b>Student #22</b>	✓	T	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Student #23</b>	T	T	✓	✓	T	T	✓	T	✓	T	✓

Source: Developed by Gabriela Vargas Solís (2025)

The following table shows the percentages obtained on the second part of the post-test.

#### Pronunciation Accuracy Table

**Table 14**

<b>Student</b>	<b>Correct</b>	<b>Incorrect</b>	<b>Total Items</b>	<b>% Correct</b>	<b>% Incorrect</b>
#1	7	4	11	63.6%	36.4%
#2	10	1	11	90.9%	9.1%
#3	8	3	11	72.7%	27.3%
#4	9	2	11	81.8%	18.2%
#5	8	3	11	72.7%	27.3%
#6	7	4	11	63.6%	36.4%
#7	7	4	11	63.6%	36.4%
#8	10	1	11	90.9%	9.1%
#9	10	1	11	90.9%	9.1%
#10	8	3	11	72.7%	27.3%

#11	10	1	11	90.9%	9.1%
#12	8	3	11	72.7%	27.3%
#13	8	3	11	72.7%	27.3%
#14	8	3	11	72.7%	27.3%
#15	8	3	11	72.7%	27.3%
#16	9	2	11	81.8%	18.2%
#17	8	3	11	72.7%	27.3%
#18	8	3	11	72.7%	27.3%
#19	9	2	11	81.8%	18.2%
#20	8	3	11	72.7%	27.3%
#21	9	2	11	81.8%	18.2%
#22	11	0	11	100%	0.0%
#23	9	2	11	81.8%	18.2%

Source: Developed by Gabriela Vargas Solís (2025)

The average pronunciation accuracy across all students is approximately 78.26%, which indicates good general progress, although there is still room for improvement, especially in students with accuracy below 70%. Only one student (Student #22) achieved a perfect score, showing full mastery of the target phonemes. Students #1, #6, and #7 showed the lowest performance with only 63.6% accuracy, which suggests they may need extra support or focused drilling, especially on /θ/ and /ð/ sounds. Most common problematic words, based on consistent "T" responses across students, are likely "author," "thrilling," "third," "three," "those," and "together", which contain the target phonemes /θ/ or /ð/.

The next table summarizes the results of the 23 students identifying voiced and voiceless “th” sounds from the minimal pairs: thin–tin, than–dan, bath–bat, though–dough, and thorn–torn.

**Table 15**

Student	Thin	Than	Bath	Though	Thorn
Student #1	✓	✓	✓		✓
Student #2	✓	✓	✓	✓	✓
Student #3	✓		✓	✓	✓

<b>Student #4</b>	✓	✓	✓	✓	
<b>Student #5</b>	✓	✓	✓	✓	✓
<b>Student #6</b>	✓	✓	✓		✓
<b>Student #7</b>	✓	✓	✓		✓
<b>Student #8</b>	✓	✓	✓	✓	✓
<b>Student #9</b>	✓	✓	✓	✓	✓
<b>Student #10</b>	✓	✓		✓	
<b>Student #11</b>	✓	✓	✓	✓	✓
<b>Student #12</b>	✓	✓		✓	
<b>Student #13</b>	✓	✓	✓	✓	✓
<b>Student #14</b>			✓	✓	✓
<b>Student #15</b>	✓	✓	✓		
<b>Student #16</b>	✓	✓	✓	✓	✓
<b>Student #17</b>	✓	✓	✓	✓	
<b>Student #18</b>		✓	✓	✓	✓
<b>Student #19</b>	✓	✓	✓	✓	
<b>Student #20</b>	✓	✓	✓	✓	✓
<b>Student #21</b>	✓	✓			
<b>Student #22</b>	✓	✓	✓	✓	✓
<b>Student #23</b>	✓	✓		✓	

Source: Developed by Gabriela Vargas Solís (2025)

These findings imply that, especially in popular words, the majority of students show significant discrimination abilities between voiced and voiceless "th" sounds. Some of them still struggle with unfamiliar or phonetically subtle words, though. Repetition-based exercises, like minimal pair drills, and ongoing auditory discrimination may help reinforce these differences in all situations.

Table 16 demonstrates the improvement on percentages for this section.

**Table 16**

**Student's Level Summary Table with Percentages**

<b>Student</b>	<b>Correct (✓)</b>	<b>Incorrect</b>	<b>Total Items</b>	<b>% Correct</b>	<b>% Incorrect</b>
----------------	--------------------	------------------	--------------------	------------------	--------------------

<b>#1</b>	4	1	5	80.0%	20.0%
<b>#2</b>	5	0	5	100.0%	0.0%
<b>#3</b>	4	1	5	80.0%	20.0%
<b>#4</b>	4	1	5	80.0%	20.0%
<b>#5</b>	5	0	5	100.0%	0.0%
<b>#6</b>	4	1	5	80.0%	20.0%
<b>#7</b>	4	1	5	80.0%	20.0%
<b>#8</b>	5	0	5	100.0%	0.0%
<b>#9</b>	5	0	5	100.0%	0.0%
<b>#10</b>	3	2	5	60.0%	40.0%
<b>#11</b>	5	0	5	100.0%	0.0%
<b>#12</b>	3	2	5	60.0%	40.0%
<b>#13</b>	5	0	5	100.0%	0.0%
<b>#14</b>	3	2	5	60.0%	40.0%
<b>#15</b>	3	2	5	60.0%	40.0%
<b>#16</b>	5	0	5	100.0%	0.0%
<b>#17</b>	4	1	5	80.0%	20.0%
<b>#18</b>	4	1	5	80.0%	20.0%
<b>#19</b>	4	1	5	80.0%	20.0%
<b>#20</b>	5	0	5	100.0%	0.0%
<b>#21</b>	2	3	5	40.0%	60.0%
<b>#22</b>	5	0	5	100.0%	0.0%
<b>#23</b>	3	2	5	60.0%	40.0%

Source: Developed by Gabriela Vargas Solís (2025)

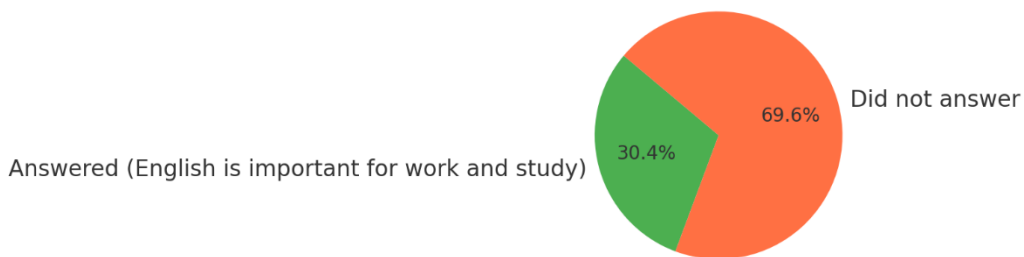
The class achieved a high overall success rate of 83.5% in identifying the voiced/voiceless "th" sounds from minimal pairs. Eight students (35%) had perfect scores (100%), a strong indicator of clear phonemic awareness for /θ/ and /ð/. The most

misidentified words appear to be "though" and "thorn", based on the frequent empty entries. Student #21 had the lowest performance (40%) and may benefit from targeted pronunciation and auditory discrimination practice. Most students are developing strong discrimination skills between minimal pairs containing /θ/ and /ð/ vs similar voiced/voiceless consonants.

In the last section, students must answer three open questions to finish the post-test. Just seven of the students answered the first question. From 23 students only 2, 8, 9, 11, 16, 19, and 22 answered these questions. They said, "English is important for work, and study".

**Figure 12**

Student Responses on Importance of English Pronunciation

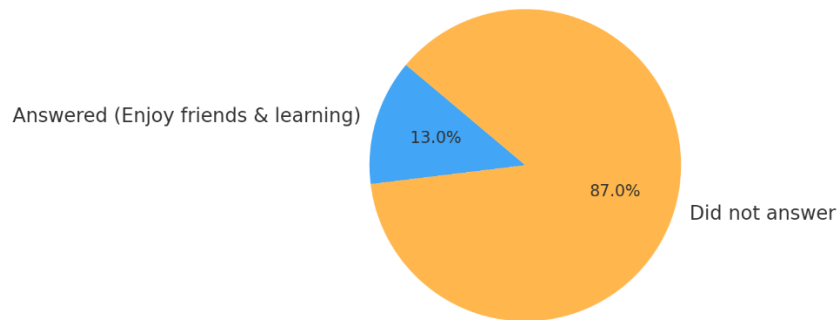


Source: Developed by Gabriela Vargas Solís (2025)

Question 2 was answered only by 3 students. Students 2, 11, and 22 said they enjoyed sharing time with friends and learning new things.

**Figure 13**

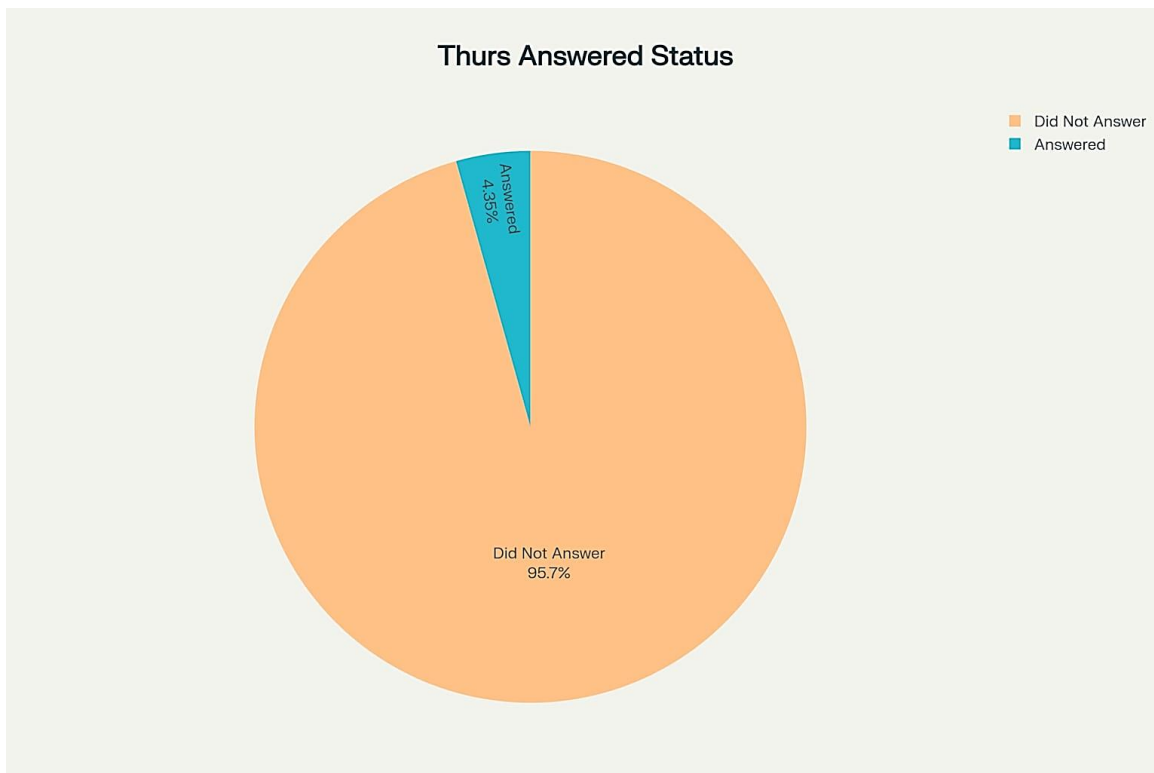
## Student Responses About Enjoying School (Question 2)



Source: Developed by Gabriela Vargas Solís (2025)

Question 3 was answered only by student 22. He described what he does every Thursday.

**Figure 14**



Source: Developed by Gabriela Vargas Solís (2025)

**3 CHAPTER V:**

**CONCLUSIONS AND RECOMMENDATIONS**

### 3.1 Conclusions

#### 3.1.1 General conclusions

Pronunciation accuracy was positively impacted by the "Spell and Pronounce" app; students who used the app demonstrated a significant improvement in identifying and pronouncing the target phonemes /θ/ and /ð/, particularly in structured tasks like individual word pronunciation and minimal pair discrimination.

Both the Audio-lingual Approach and drilling worked well; the Audio-lingual Approach's repeated rehearsal of sounds both alone and in words helped to strengthen good articulatory habits. Repetition exercises, corrective feedback, and minimal pair activities all made a substantial contribution to students' phonological awareness.

Students showed more accuracy rates with the voiced / ð / (as in this, those, though), than with the voiceless / θ / (as in thin, bath, road) suggesting that / θ / may be more difficult because of its limited appearance in Spanish phonology.

The feedback element of the app was deemed encouraging by the students, who also expressed gratitude for the app's instantaneous pronunciation check. Students' autonomy and engagement were enhanced by this interactive feedback loop.

Low participation in reflective tasks; although students' pronunciation has improved, only a small percentage of them finished reflective oral questions. This indicates that students might benefit from further guidance, different formats, guided prompts, or oral reflections to express themselves.

Inconsistent performance in unplanned situations; whereas students' pronunciation got better in controlled practice, they continued to make occasional mistakes in unplanned

speech, suggesting a disconnect between communicative application and mechanical practice.

### 3.1.2 Specific conclusions

In accordance with the project objectives and the analysis of the results obtained in the study on the application of the audiolingual approach, repetition techniques, and the use of the “Spell and Pronounce” application to improve the pronunciation of the phonemes /θ/ and /ð/ in eighth-grade students at Quepos Night School, the following conclusions were reached:

1. Limited prior knowledge of the correct pronunciation of the phonemes “th”.

Most students had significant difficulty pronouncing the phonemes /θ/ and /ð/ correctly, especially the voiceless phoneme /θ/ (as in “think”), which was almost universally replaced by the sound /t/. Only a minority managed to correctly pronounce words with the voiced phoneme /ð/ (as in “this” and “that”), while words such as “mother,” “father,” and “brother” were pronounced correctly by all students, possibly due to their similarity to existing sounds in Spanish.

2. Significant improvements after the intervention.

After implementing the App and repetition techniques, a notable increase in pronunciation accuracy was observed, especially in the phoneme /ð/. The average percentage of correct pronunciations of words and phrases increased from low levels, from 0% to 30% in the pre-test to an overall average of 78.26% in the post-test, with some

students achieving perfection (100%). However, the phoneme /θ/ continues to pose a major challenge, although it also showed progress.

### 3. Development of auditory discrimination skills.

Students improved their ability to identify and discriminate between the phonemes /θ/ and /ð/ in minimal pairs, achieving an average success rate of 83.5% in the post-test. This indicates progress in phonological awareness and auditory skills, although difficulties persist with less frequent words or subtle phonetic contrasts.

### 4. Positive perception and high participation with the App.

The App was well received: 87% of students used it several times a week, and 91% felt it significantly improved their pronunciation. The most valued feature was word pronunciation. However, practice was limited almost exclusively to the school environment due to access and connectivity limitations.

### 5. Persistence of barriers in spontaneous oral production.

Although there was progress in structured exercises, free oral production remains a challenge. Only a small group of students managed to answer open-ended questions correctly, highlighting the need to strengthen vocabulary, listening comprehension, and confidence for spontaneous communication.

## 3.2 Recommendations

### 3.2.1 General recommendations

Keep developing the "Spell and Pronounce" app with all students. Because of its accessibility, interactive features, and demonstrated effect on accuracy, the app should continue to be a fundamental part of pronunciation training, particularly for individual practice and homework.

Use focused drills to increase practice of voiceless / θ /. To help students internalize its production, spend more time on this sound utilizing visual aids, mouth diagrams, delayed articulation, and contrastive pairings.

Combine communicative exercises with mechanical drills. Once repetition has been managed, incorporate role-plays, brief conversations, and pronunciation games to assist students in transferring proper articulation into more fluid and natural speech.

Encourage student participation through oral reflection; many students may feel more comfortable expressing themselves orally, so use guided oral prompts or audio recordings in place of or in addition to written reflection questions.

Since students range in age from 15 to 41, differentiate training for their age range and learning needs. To accommodate varying degrees of language exposure and learning styles, employ flexible grouping and individualized pace.

To promote long-term independence in language learning, teach students self-monitoring techniques and how to listen critically to their own pronunciation using recordings, mirror activities, or peer feedback.

Include frequent formative evaluations; use brief, recurring tests to track pronunciation development, guarantee participation, and modify instruction based on student achievement.

### **3.2.2 Specific recommendations**

- 1.** Continue and reinforce the use of the app and repetition techniques.

It is recommended to continue using the “Spell and Pronounce” app and the repetition techniques of the audiolingual approach, especially when practicing the phonemes /θ/ and /ð/, with an emphasis on the phoneme /θ/, which continues to be the most problematic.

- 2.** Expand practice outside the classroom.

Find strategies for students to practice outside the school environment, such as improving connectivity or facilitating access to mobile devices, to maximize exposure and independent practice.

- 3.** Develop guided and free oral production activities.

Implement activities that encourage spontaneous oral production, using scaffolding, visual aids, and vocabulary pre-teaching to increase students' confidence and communicative competence.

- 4.** Differentiated attention for students with slower progress.

Identify students with lower success rates and provide them with individualized support or reinforcement sessions, focusing on auditory discrimination exercises and the production of problematic phonemes.

- 5.** Improve technological infrastructure and reduce barriers.

Consider using other mobile applications in combination with “Spell and Pronounce” where there are no ads to interfere with practice and improve connectivity at the institution, as suggested by the students themselves, to optimize the learning experience.

**6. Explore the application for other problematic phonemes.**

Given the positive impact observed, it is suggested that the effectiveness of the app and the audiolingual approach be evaluated in teaching other phonemes that present difficulties for Spanish-speaking students.

**4 CHAPTER VI:  
PROPOSAL**

#### 4.1 Name of the Proposal

The proposal for this research project is named “*The effectiveness of applying “Spell and Pronounce” APP through the Audio-lingual Approach and drilling techniques to improve the pronunciation of phonemes /θ/ and /ð/ on eight grade students from 15 to 41 years old from the Quepos Night School during the first quarter of 2025.*” The purpose of this study is to assess how well eighth-grade students at Quepos Night School, ages 15 to 41, can pronounce the English phonemes /θ/ and /ð/ when utilizing the "Spell and Pronounce" app in conjunction with the Audio-lingual Approach and drilling techniques. The goal of the study, which will take place in the first quarter of 2025, is to ascertain whether combining technology with organized oral practice may significantly improve students' pronunciation abilities.

#### 4.2 Description

In order to improve pronunciation of the English phonemes /θ/ and /ð/, this study examines the effects of the "Spell and Pronounce" app in conjunction with the Audio-lingual Approach and drilling techniques. It has a variety of methods to assess the beginning, middle, and end of the study. However, the pre-test and the post-test are the instruments that will show the efficacy of the techniques applied in the process.

The project's final objective is to improve students' oral communication abilities, pronunciation accuracy, and self-assurance when speaking English. The results might also provide insightful information for teachers looking for creative and successful approaches to teach pronunciation in comparable learning environments.

### **4.3 Place to be Developed.**

The project will be developed at Quepos Night High School, located in the Puntarenas province of Costa Rica. This institution offers educational opportunities to adolescent and adult learners, many of whom are returning to formal education. The study will focus specifically on the populations of eighth-grade students who are from 15 to 41 years old.

### **4.4 Organization**

Quepos Night High School is an institution that offers an educational opportunity to people who want to return to studying, and they cannot go to Day High School because of their age or because they need to work during the day. Since the first day the project was proposed, the principal of the institution has been very interested because they are compromised to apply all possible strategies to improve students' educational process.

### **4.5 Involved Population**

The population involved in this research project consists of eighth-grade students from Quepos Night High. They are 23 students, and the ages go from 15 to 41 years old. The project will be carried out during the first quarter of 2025.

### **4.6 Objectives of the Proposal**

#### **4.6.1 General Objective**

To determine the effectiveness of applying “Spell and Pronounce” APP through the Audio-lingual Approach and drilling techniques to improve the pronunciation of phonemes /θ/ and /ð/ on eight grade students from 15 to 41 years old from the Quepos Night School during the first quarter of 2025.

#### 4.6.2 Specific Objectives

1. To determine the knowledge students have related to the correct pronunciation of “th” phonemes at Quepos Night School.
2. To incorporate the “Spell and Pronounce” mobile application and audio-lingual approach during the English classes to identify the improvement of the “th” phonemes pronunciation.
3. To determine the accurate acquisition and comprehensive understanding of "th" phonemes in language learners.
4. To analyze the effectiveness of the “Spell and Pronounce” mobile application to be used with other phonemes.
5. To provide a detailed specification of the results obtained through comprehensive statistical analysis.

#### 4.7 Chronogram of activities

Lessons	Activity/Schedule
13-02-2025	Meeting with the principal and teacher.
1 & 2 6-03-2025	Group Observation. *  Apply the instrument “ <i>Group Observation Diagnosis and Data Collection for Teachers</i> ”
3 & 4 14-03-2025	Group Observation  Apply the “ <i>Diagnostic Instrument for Group Observation and Data collection for Students</i> ”
5 & 6 21-03-2025	Apply the Pre-test
7 & 8 09-05-2025	Apply the Pre-test

<b>9-10&amp;11 15-05-2025</b>	Apply strategy. <ul style="list-style-type: none"> <li>• Make an introduction about the phonemes from the “th” combination.</li> <li>• Hand in students printed images from the articulation.</li> <li>• Introduce the Spell and Pronounce App. Students download the App onto their smartphones.</li> <li>• Hand in students printed material with lists of word containing the “th” phonemes. First, they practice. Then, they start using the app to pronounce the words.</li> <li>• Observe and evaluate the group with the instrument “<i>Students Evaluation Form: During Spell and Pronounce App Use</i>”.</li> </ul>
<b>11-12 &amp; 13 29-05-2025</b>	Apply the “ <i>Student Survey Use of the Spell and Pronounce App</i> ”  Apply the Post-test
<b>14-15 17-06-2025</b>	Apply the Post-test
<b>16-17 20-06-2025</b>	Apply the Post-test  Ending activity

Source: Developed by Gabriela Vargas Solís (2025)

#### 4.8 Budget for its implementation

There is no budget for the project's implementation. There is no consideration for money. All the material they used was free. And the App also was installed and used for free.

#### 4.9 Suggested Bibliography

Ercan, H., & Kunt, N. (2019). Is it really difficult to produce correct th (/ð / and /θ/) sounds in English for EFL Learners? A case study in Northern Cyprus. *The Journal of*

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## **5 Annexes**

### **5.1.1 Annex 1.**

#### **5.1.2 Cover letter:**

I am writing to invite you to participate in an important study conducted by my person from Universidad Hispanoamericana aimed at understanding the extent of learners' pronunciation related to the "th" phonemes (/θ/ and /ð/) in English. This study seeks data on the range and depth of pronunciation students possess regarding these two phonemes. We assure you that all responses will be kept strictly confidential and anonymous. The data collected will be aggregated, and no individual responses will be identifiable. We adhere to strict ethical standards to ensure the privacy and security of all participants. To participate in this study, please complete all the instruments provided. Your involvement in this study is highly appreciated and will contribute significantly. Thank you for your time and cooperation.

**Sincerely,**

**Gabriela Vargas Solís**

**Student from Universidad Hispanoamericana**

### 5.1.3 Annex 2.

### 5.1.4 Instruments

#### INSTRUMENT #1: PRE-TEST

#### PRE-TEST: PRONUNCIATION OF "TH" PHONEMES

**Institution:** Quepos Night High School

**Level:** Eighth Grade

**Date:** \_\_\_\_\_

**Teacher:** Gabriela Vargas Solís

**Objective:** Assess students' pronunciation of the /θ/ (voiceless) and /ð/ (voiced) phonemes in words containing the "th" consonant cluster.

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#### Section 1: Word Pronunciation

**Instructions:** Read the following words aloud while the teacher records your pronunciation.

1. Think
2. Thumb
3. Thunder
4. Thirty
5. Bath
6. This
7. That
8. Mother
9. Father
10. Brother

#### Section 2: Sentence Reading

**Instructions:** Read the sentences aloud while the teacher records your pronunciation of the "th" sounds.

1. My mother and father are at home.

2. I think that this is the best way.
3. There are thirty people at the theater.
4. He took a bath before going to bed.
5. That thumb is bigger than the other one.

### **Section 3: Minimal Pairs Recognition**

**Instructions:** Listen to the teacher pronounce two words. Identify and say the word with the correct "th" sound. (You will be recorded)

1. (Think - Sink)
2. (This - Dis)
3. (Bath - Bass)
4. (That - Bat)
5. (Three - Tree)

### **Section 4: Free Speech Assessment**

**Instructions:** Answer the following question using complete sentences while focusing on proper pronunciation of "th" words. (You will be recorded)

- What do you think about your school?
- Describe three things you like about your family.
- What are some things you do on Thursdays?

**Teacher's Signature:** \_\_\_\_\_

Source: Developed by Gabriela Vargas Solís (2025)

**INSTRUMENT #2: STUDENTS EVALUATION FORM DURING SPELL AND PRONOUNCE APP USE****STUDENTS EVALUATION FORM: DURING SPELL AND PRONOUNCE APP USE****Institution:** Quepos Night High School**Level:** Eighth Grade**Date:** \_\_\_\_\_**Teacher:** Gabriela Vargas Solís**Objective:** Assess students' engagement, progress, and pronunciation improvement while using the Spell and Pronounce App.

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**Section 1: Student Engagement****Instructions:** Mark the most appropriate option based on the students' behavior and participation.**1. How often do the students use the app during class?**

- Always
- Often
- Sometimes
- Rarely
- Never

**2. How actively do the students participate in pronunciation exercises?**

- Very actively
- Moderately
- Passively
- Not at all

**3. Do the students follow the app instructions correctly?**

- Always
- Often
- Sometimes
- Rarely
- Never

## Section 2: Pronunciation Progress

**Instructions:** Assess the students' pronunciation skills based on their app usage.

**1. Pronunciation of /θ/ (voiceless "th") in words like "think" or "thirsty"**

- Excellent
- Good
- Needs Improvement
- Poor

**2. Pronunciation of /ð/ (voiced "th") in words like "this" or "brother"**

- Excellent
- Good
- Needs Improvement
- Poor

**3. Have the students shown improvement in pronunciation since using the app?**

- Significant improvement
- Some improvement
- Little improvement
- No improvement

## Section 3: Feedback and Observations

**Instructions:** Provide additional feedback on the students' performance and engagement.

**1. What are the students' strengths when using the app?**

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**2. What areas need improvement?**

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**3. Additional comments or recommendations:**

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Source: Developed by Gabriela Vargas Solís (2025)

## INSTRUMENT #3 POST TEST

### POST-TEST: PRONUNCIATION OF "TH" PHONEMES

**Institution:** Quepos Night High School

**Level:** Eighth Grade

**Date:** \_\_\_\_\_

**Teacher:** Gabriela Vargas Solís

**Objective:** Assess students' pronunciation of the /θ/ (voiceless) and /ð/ (voiced) phonemes in words containing the "th" consonant cluster after using the Spell and Pronounce App.

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#### Section 1: Word Pronunciation

**Instructions:** Read the following words aloud while the teacher records your pronunciation.

1. Thirsty
2. Theater
3. Thick
4. Author
5. Path
6. These
7. Those
8. Together
9. Another
10. Leather

#### Section 2: Sentence Reading

**Instructions:** Read the sentences aloud while the teacher records your pronunciation of the "th" sounds.

1. The author wrote a thrilling story.
2. My brother and father love soccer.
3. She walked along the narrow path.
4. These books are on the third shelf.

5. Those three students are working together.

### **Section 3: Minimal Pairs Recognition**

**Instructions:** Listen to the teacher pronounce two words. Identify and say the word with the correct "th" sound. (You will be recorded)

1. (Thin - Tin)
2. (Than - Dan)
3. (Bath - Bat)
4. (Though - Dough)
5. (Thorn - Torn)

### **Section 4: Free Speech Assessment**

**Instructions:** Answer the following questions using complete sentences while focusing on proper pronunciation of "th" words. (You will be recorded)

- What do you think about learning English pronunciation?
- Describe three things you enjoy about your school.
- What do you usually do on Thursdays?

Source: Developed by Gabriela Vargas Solís (2025)

**INSTRUMENT #4: STUDENT SURVEY ABOUT THE USE OF THE SPELL AND PRONOUNCE APP****STUDENT SURVEY: USE OF THE SPELL AND PRONOUNCE APP****Institution:** Quepos Night High School**Level:** Eighth Grade**Date:** \_\_\_\_\_**Teacher:** \_\_\_\_\_**Objective:** Gather student feedback on the use of the Spell and Pronounce App to assess its effectiveness in improving pronunciation skills.

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**Section 1: General Information****1. Age:** \_\_\_\_\_**2. Gender:** Male Female Other: \_\_\_\_\_**3. Do you have access to a smartphone or tablet?** Yes No**4. Do you have internet access at home?** Yes No**Section 2: App Usage****1. How often do you use the Spell and Pronounce App?** Daily A few times a week Rarely Never**2. How much time do you spend on the app per session?** Less than 10 minutes

- 10-20 minutes
- More than 20 minutes

**3. Where do you usually use the app?**

- At home
- At school
- Both
- Other: \_\_\_\_\_

**Section 3: Learning Experience**

**1. Do you think the app has helped you improve your pronunciation?**

- Yes, a lot
- Somewhat
- Not much
- Not at all

**2. Which features of the app do you find most useful? (Check all that apply)**

- Word pronunciation
- Spelling assistance
- Listening exercises
- Interactive quizzes
- Other: \_\_\_\_\_

**3. Do you feel more confident pronouncing English words after using the app?**

- Yes
- No
- Not sure

**Section 4: Suggestions and Feedback**

**1. What do you like most about the Spell and Pronounce App?**

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**2. What improvements would you suggest for the app?**

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**3. Would you recommend this app to other students? Why or why not?**

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Source: Developed by Gabriela Vargas Solís (2025)

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