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The Use of Visual Didactic Materials as a Strategy for Enhancing the Recognition and Pronunciation of Long Vowel Sounds in English in Seventh-Grade Students at CTP de Platanar

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Dedication

To my parents,

With all my love and gratitude, I dedicate this work to my parents, who have been my greatest source of strength and support in every step of my life. Thank you for your unconditional love, your patience, and every sacrifice you have made to give me the best. You have taught me the value of effort, perseverance, and the importance of following my dreams, even when circumstances seem difficult. Every achievement I have achieved reflects your constant support and the teachings you have given. You have taught me never to give up and always stay true to myself. Thank you for always being by my side, as my guide, my inspiration, and giving me the confidence to keep moving forward.

This achievement is a small tribute to everything you have done for me.

Abstract

This study analyzed the difficulties Spanish-speaking students face when recognizing and pronouncing long vowels in English, given the significant differences between the phonetic systems of both languages. The central research question guiding this project was: How does teaching English phonetic rules supported by visual materials influence the accuracy of recognition and pronunciation of long vowels in seventh-grade students at CTP de Platanar? To address this, a qualitative methodology was employed with 45 seventh-grade students from groups 7-1 and 7-2. The research combined classroom observations with individual pre- and post-tests, offering a comprehensive perspective on students' learning processes and outcomes. Throughout the intervention, various visual resources such as illustrated flashcards, articulatory maps, and phonetic charts were implemented to reinforce understanding of mouth positioning, sound duration, and phonological contrasts. The findings revealed substantial progress: initially, 82% of students required significant support to correctly pronounce long vowels; following the intervention, 71% reached "good" or "excellent" levels, showing increased fluency, clarity, and confidence. In conclusion, the integration of visual teaching materials proved highly effective in improving recognition and pronunciation of long vowels, suggesting that sustained use could further enhance oral proficiency and foster more adaptive, engaging learning.

Keywords: Phonetics, long vowels, visual materials, pronunciation, learning English.

Resumen

Este estudio analizó las dificultades que enfrentan los estudiantes hispanohablantes para reconocer y pronunciar las vocales largas en inglés, dadas las diferencias significativas entre los sistemas fonéticos de ambos idiomas. La pregunta central de investigación que guio este proyecto fue: ¿Cómo influye la enseñanza de las reglas fonéticas del inglés, con el apoyo de materiales visuales, en la precisión del reconocimiento y la pronunciación de las vocales largas en estudiantes de séptimo grado del CTP de Platanar? Para abordar esto, se empleó una metodología cualitativa con 45 estudiantes de séptimo grado de los grupos 7-1 y 7-2. La investigación combinó observaciones en el aula con pruebas individuales previas y posteriores, ofreciendo una perspectiva integral de los procesos y resultados de aprendizaje de los estudiantes. A lo largo de la intervención, se implementaron diversos recursos visuales, como tarjetas ilustradas, mapas articulatorios y tablas fonéticas, para reforzar la comprensión de la posición bucal, la duración del sonido y los contrastes fonológicos. Los hallazgos revelaron un progreso sustancial: inicialmente, el 82% de los estudiantes requirió apoyo significativo para pronunciar correctamente las vocales largas; después de la intervención, el 71% alcanzó niveles "buenos" o "excelentes", mostrando mayor fluidez, claridad y confianza. En conclusión, la integración de materiales didácticos visuales resultó muy eficaz para mejorar el reconocimiento y la pronunciación de las vocales largas, lo que sugiere que su uso sostenido podría mejorar aún más la competencia oral y fomentar un aprendizaje más adaptativo y atractivo.

Palabras clave: Fonética, vocales largas, materiales visuales, pronunciación, aprender inglés.

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Chapter I

Introductory Framework

Learning English as a second language presents numerous challenges, and one of the most significant obstacles for students is mastering pronunciation. Proper pronunciation is a key aspect of language learning, as it directly impacts effective communication and comprehension. Among the many pronunciations difficulties students face, the correct articulation of long vowels is often one of the most challenging aspects to master. In English, long vowels can be incredibly confusing for Spanish-speaking students due to differences in the phonetic system of both languages. In Spanish, vowel sounds are generally shorter and less variable, making the concept of long vowels foreign and more challenging for many students to grasp.

The focus of this research is to address the difficulties that students face when learning to recognize and pronounce long vowels in English. By examining the impact of teaching English vowel pronunciation rules and supporting them with visual teaching materials, this study seeks to explore students' ability to pronounce long vowels correctly.

The research will be developed through a qualitative approach, focusing on the experiences and perceptions of seventh-grade students as they interact with visual materials such as phonetic charts, posters, interactive flashcards, and videos in the classroom. Through observations, interviews, and analysis of classroom interactions, the study will seek to identify how these visual materials support students in understanding and applying phonetic rules for long vowels.

To prepare for the research, the literature on phonetic difficulties in pronouncing long vowels and using visual materials as pedagogical tools will be reviewed. Visual resources, such as phonetic charts and posters, will be designed to facilitate understanding of pronunciation rules. In addition, an initial assessment of students' pronunciation will be conducted to establish a baseline. During the intervention, observations and interviews will be conducted to assess the impact of visual materials in improving the pronunciation of long vowels, adjusting teaching strategies as necessary.

1.1 Problem Statement

Correct pronunciation of long vowels in English is one of the main difficulties that seventh-grade students at Colegio de Platanar. These vowels represent a significant challenge due to the differences between English and Spanish phonetic systems. In Spanish, vowels do not have the distinction between long and short as in English, which causes students to fail to recognize and produce these sounds correctly. The importance of this problem lies in the fact that incorrect pronunciation affects not only oral communication but also comprehension of text and fluency in everyday situations in English. Lack of correct articulation of long vowels limits students' ability to express themselves clearly and understand correctly when others speak, affecting their performance in oral exams, presentations, and other academic situations.

The origin of this problem lies in the structural differences between the two languages, coupled with the lack of pedagogical resources specially adapted to address phonetic difficulties in the classroom. Many teachers do not visualize and practice sounds, which makes it difficult to internalize the phonetic rules of English. The probable causes of this problem include the

insufficiency of innovative teaching methods using visual aids, the lack of a systematic approach to teaching long vowels, and the poor practice of these sounds in real communication contexts. Without these aids, students fail to internalize the pronunciation rules and, as a result, maintain incorrect speaking habits.

The proposed solution involves designing and implementing visual teaching materials, such as phonetic charts, illustrative posters, and interactive exercises, which help students understand and practice more effectively, improving their ability to recognize and produce long vowels correctly. The benefits of this solution are clear: improved phonetic accuracy, greater confidence when speaking, better listening comprehension, and ultimately, an increase in overall English proficiency. By addressing this issue holistically, students will not only learn to pronounce correctly but also develop a greater understanding of the language, enabling them to use English more effectively in academic and everyday contexts.

1.1.1 Research Question

How does teaching English phonetic rules supported by visual teaching materials influence the accuracy of recognition and pronunciation of long vowels in seventh-grade students at CTP de Platanar.

1.2 Objectives of the Investigation

1.2.1 General Objective

To analyze the use of visual materials for improving the recognition and pronunciation of long vowels in seventh-grade students at CTP de Platanar

1.2.2 Specific Objectives

1. To identify the difficulties that students face when recognizing and pronouncing the long vowel sounds of English.
2. To apply different visual teaching materials that facilitate the learning of long vowels in English.
3. To evaluate the impact of using visual teaching materials in improving the recognition and pronunciation of long vowels in seventh-grade students

1.3 Justification of the Study

The issue of correct pronunciation of long vowels in English is presented as a crucial aspect in learning this language, especially for Spanish-speaking students, who face significant challenges due to the phonetic differences between English and Spanish. Long vowels are essential for correct oral comprehension and expression in English, but they are commonly misinterpreted and mispronounced. This Project focused on improving the accuracy of pronunciation of long vowels in seventh-grade students at CTP de Platanar, through the application of visual materials that help students understand and practice these sounds effectively.

The importance of this topic lies in the fact that proper pronunciation is an essential component for mastering the English language, especially in academic and communicative situations. Correct pronunciation not only facilitates understanding but also reinforces students' confidence when speaking, allowing them to perform more fluently in various situations.

However, the lack of resources and the limited focus on the pronunciation of long vowels in the classroom create difficulties for students to achieve proper articulation of these sounds, which affects their performance in language learning.

The utility of this research is both theoretical and practical. From a theoretical perspective, this work provides a detailed analysis of the phonetic difficulties faced by students and how visual materials can be an effective pedagogical tool to improve English pronunciation. From a practical perspective, the implementation of these visual resources can have an immediate impact in the classroom, improving students' ability to recognize and pronounce long vowels more accurately. This approach can also serve as a model for future teachers, promoting more complete and comprehensive teaching in the area of pronunciation.

In terms of its contribution to the academic field, this research addresses a problem that has been little explored in the local context, namely the teaching and improvement of the pronunciation of long vowels in English in secondary school students. In addition, it offers a new perspective on the use of visual materials as support tools in phonetic teaching, something that has not been implemented systematically at CTP de Platanar. This Project also presents novelties for future researchers in the area of language teaching, since it proposes an innovative approach that combines phonetic analysis with visual resources, something that can be expanded and replicated in other educational contexts. The research, therefore, offers a practical and accessible approach to address common phonetic problems and could open new opportunities for the application of visual methods in the teaching of English. In summary, the relevance of this research lies in its ability to improve students' pronunciation skills, providing them with concrete

tools for a better understanding and production of long vowels. The benefits of this work will not only impact students in the short term but will also contribute to their long-term language development, strengthening their confidence and ability to communicate in English.

1.4 Antecedents

1.4.1 National Antecedents (Costa Rica)

Aguilar Cubero (2019) – International University of the Americas

The study applied strategies such as tongue twisters, songs, and poems to improve the pronunciation of stop sounds (/p/, /t/, /k/, /b/, /d/, /g/) in seventh-grade students. The overall objective was to develop dynamic activities supported by visual aids to improve articulation. The research concluded that the use of these materials is an effective tool for developing pronunciation in English as a foreign language students. Salón Piedra (2019) – International University of the Americas. This thesis sought to improve oral skills in fifth-grade students through the use of visual aids such as images, songs, and videos. The objective was to design activities that would stimulate vocabulary and verbal fluency. The results demonstrated significant improvements in oral production, concluding that visual aids strengthen oral expression in English. Cervantes Marín (2017) – International University of the Americas. This study investigated the effect of using flashcards based on communicative drilling techniques to improve oral expression in sixth-grade students. The objective was to identify difficulties in speaking English and evaluate the strategy as a support for the development of oral skills. The conclusion was that this technique significantly facilitates the improvement of oral expression in the educational context.

1.4.2 International Antecedents

Figueras Havidich (2008) – University of Barcelona

This study analyzes the use of multimedia applications to improve English pronunciation in high school students. The overall objective was to evaluate how technological resources can enhance phonetic learning. The research sought to compare traditional methods with multimedia tools and concluded that the latter significantly improve pronunciation accuracy. Chiliquinga Naranjo & Subia Sarria (2021) – Central University of Ecuador. This thesis focuses on the impact of visual teaching resources on the development of English communication skills. The objective was to demonstrate the effectiveness of images and graphic materials in facilitating oral comprehension and production. The authors implemented strategies with visual resources and concluded that these materials improve vocabulary retention and pronunciation. Murillo Yépez (2012) – Technical University of Babahoyo. This research evaluated the use of teaching materials, such as flashcards and recordings, in teaching English phonetics to high school students. The overall objective was to determine the effectiveness of these materials in improving pronunciation. The study concluded that these resources contribute to more effective learning and better sound articulation. Muguerza Mariños & Quispe Lara (2019) – Universidad Nacional del Santa. This research examined the influence of recycled teaching materials on the oral expression in English of first-year high school students. Its objective was to determine the effect of these materials on verbal fluency. The study concluded that recycled visual materials are an effective resource for improving oral expression.

1.4.3 Scope

1. Provide Visual Learning Resources, use charts, diagrams, and phonetic symbols to help students visually connect with long vowel pronunciation patterns.
2. Engage with Creative Activities, incorporate playful, hands-on activities that use visual aids to make learning vowel sounds enjoyable and memorable.
3. Build Confidence in Pronunciation, encourage students to practice long vowels in a supportive environment, boosting their confidence in speaking accurately.
4. Foster Intuitive Phonetic Understanding, focus on helping students internalize long vowel sounds naturally, making pronunciation fluid and effortless through visual and practical support.

Chapter II

Theoretical Framework

This chapter focuses on strategies to improve the recognition and pronunciation of long vowels in English, using a phonetic rule-based approach supported by visual materials. Correct pronunciation and recognition of long vowels are critical for students to communicate more effectively in English, as errors in pronunciation can lead to misunderstandings. It explores how the use of visual materials, together with the teaching of clear phonetic rules, facilitates the understanding and production of these vowel sounds, helping students overcome common difficulties in their pronunciation and recognition.

Every language has its sound system, which it uses for communication. English has two main sound systems: consonant sounds and vowel sounds. This area has been the subject of numerous studies over time. Language, in its uniqueness and constant evolution, plays a fundamental role in human life. It facilitates communication and interaction between people. Without language, the transmission of information and human interaction would be severely limited. Each language has its sound system, used to communicate. In the case of English, this language has two main sound systems: consonant sounds and vowel sounds (Utin, 2023).

2.1 Literature Review

2.1.1 Introduction to Vowels

According to the International Phonetic Alphabet (IPA), English has 28 vowel sounds and 58 consonant sounds. Vowels are divided into two main types: monophthongs or pure vowels, and diphthongs. Within the monophthongs, six pairs are classified as short vowels and long vowels. Short vowels include [i], [ɛ], [æ], [ʌ], [ɑ], and [ʊ]; while long vowels are [i], [ɝ], [ɑ], [ɔ], [u], and [ɚ]. explain that vowels are produced with a smooth, unobstructed flow of air through the oral cavity. Differences between vowel sounds are due to variations in the shape of this cavity. The characteristics of each vowel are determined by: (a) the height of the tongue within the mouth; (b) the part of the tongue that is raised (whether front, middle, or back); (c) lip position; and (d) muscle tension in the oral area (Riadi et al., 2013).

Vowels are fundamental to the English sound system, forming the basis of almost all spoken words. Understanding vowel sounds is essential to learning the language. They are produced by the free flow of air through the vocal tract, without friction, and are characterized by the position of the tongue, lips, and oral cavity. They can be single sounds (monophthongs) or combinations of two sounds (diphthongs) and play an important role in differentiating the meaning of words (Fazira et al., 2023).

2.1.1.1 Long Vowel Sounds

In standard English, there are five long vowels, which are presented in Figure 1 (attached), along with their corresponding tongue positions. These vowels are distinguished by

their tongue position, which can vary between different languages. Over time, a body of research in acoustic phonetics has grown to study phonemes in various languages. Vowel sounds, which exhibit consistent patterns in speech, have been studied more than other speech sounds. (Ahad et al., 2020) Long vowels in American English include: /ɑ, i, u, ju, ɔ, ɝ:/. The frequencies of these long vowels can be identified in the analysis, who correlated the Carnegie Mellon University Pronunciation Dictionary with Adam Kilgarriff's unlemmatized frequency list for the British National Corpus. For this study, the former dictionary was used as the phonemic lexicon and Kilgarriff's list as the sample set, weighting phonemes according to the relative frequencies of the words in which they occur. It should be noted that the data were based on an American accent (Demirezen, 2020).

2.1.1.2 Short Vowel Sounds

According to Simpson (2025), in English, short vowels are short sounds that usually appear in closed syllables, that is, those that end in a consonant. These vowels are pronounced quickly and with a more relaxed mouth and tongue position. They are common in words that follow the consonant-vowel-consonant (CVC) pattern, such as cat, bed, sit, pot, and cup. Each vowel has a characteristic short sound: A is pronounced /æ/ as in cat, E as /ɛ/ in bed, I as /ɪ/ in sit, O as /ɒ/ (in British English) or /ɑ/ (in American English) in pot, and U as /ʌ/ in cup. In addition, short vowels can also be found in unstressed syllables of longer words, such as compact or animal. Recognizing these sounds is key to improving your pronunciation and understanding of spoken English.

2.1.2 Difference Between Short and Long Vowels

In terms of duration, diphthongs resemble vowels. Clear differences in quality between long and short vowels depend on tongue shape, tongue position, and lip position. Length is indicated by a duration sign represented by a colon, as in the words beat /biːt/, bird /bɜːɹ/, boiling /bɔɪl/, boat /boʊt/, board /bɔɹd/, card /kɑɹd/, coat /koʊt/, cool /kul/, fool /ful/, hard /hɑɹd/, hoarse /hɔɹs/, needle /nidəl /, noon /nun/, post /poʊst/, seat /sit/, and toilet /ˈtɔɪlɪt/. "Short" vowel sounds cannot appear at the end of a syllable in English, as they must always be followed by a consonant. In linguistics, these vowels are also known as "checked" vowels (Demirezen, 2020).

2.1.3 Challenges in Pronunciation for Second Language Learners

Learning a second language comes with certain challenges, such as spelling, pronunciation, and interference from the native language, among others. Pronunciation and articulation of words pose a major problem for second language learners at different levels. Phonology is the study of the categorical organization of speech sounds in languages; that is, how speech sounds are organized and used to convey meaning. Learners need to understand that the correct articulation of words greatly improves the understanding of what is being communicated (Utin, 2023). Intelligible pronunciation is a key component of communicative competence. Pronunciation refers to the way speech sounds in the mouth, with an emphasis on how the listener perceives the production of those sounds (Riadi et al., 2013).

2.1.4 Factors Affecting Pronunciation Learning

Pronunciation plays a crucial role in learning English, as incorrect pronunciation can lead to misunderstandings in understanding the message. It is an essential factor in ensuring that speakers are properly understood. Many misunderstandings in communication occur due to errors in the pronunciation of certain words or incorrect intonation. For example, if a speaker pronounces words like “fit” and “feet”, “cut” and “cot”, “pull” and “pool” without a clear distinction, this can lead to confusion. Even if a non-native speaker has a good command of vocabulary and grammar, if his or her pronunciation is poor, he or she will not be able to communicate efficiently and effectively. This highlights the importance of correct pronunciation, especially in the case of long vowels in English, which can be crucial to accurately understanding the message (Riadi et al., 2013).

2.1.5 The Impact of Long and Short Vowel Differentiation on Communication

According to Utin (2023), some English speakers do not differentiate between long and short sounds in their speech, which sometimes leads to misunderstandings. This study analyzes the different contexts in which these sounds occur and how different environments affect their articulation and duration.

2.1.6 The Linguistic Transfer Factor in The Pronunciation Of Long Vowels

This study investigates the different contexts in which these sounds occur and how different environments affect their articulation and duration. The problems faced by second language speakers are considerable and sometimes arise from the pronunciation of words. This

occurs when the speaker transfers or associates what exists in his or her native language to the target language. While in English, duration is indicated by a colon before the sound /i/ (Utin, 2023).

2.1.7 Mother Tongue Influence Factor on Pronunciation

As observed by Ahad et al. (2020), a change in a single sound in the target language can alter the meaning of the entire word. The reasons for this weakness in pronunciation include lack of exposure to the target language, lack of motivation and attitude, influence of the native language (L1), lack of inspiration and stimulation from teachers, problems in spelling systems, lack of adequate attention to rhythm, intonation and stress, as well as lack of adequate tools to teach pronunciation.

2.1.8 Phonological Awareness

In the explicit domain, the preferred approach to measuring phonological awareness in a second language (L2) has been to assess participants' ability to articulate (either orally or in writing) what they are aware of. They used verbal protocols to investigate participants' awareness of their acquisition of third language (L3) phonology and their pronunciation. To minimize memory limitations that might affect participants' recall, "stimulated verbal recalls" were used, in which participants listened to recordings of their pronunciation (from reading passages) in short chunks and were asked to comment on them immediately afterward. Comments on L3 phonology followed a specific pattern: most comments were at the most basic level (noticing), then at the level of rule understanding, and only a few comments reflected the highest level of

phonological awareness, metacognition. These results support the gradual nature of L2 phonological awareness discussed above (Kivistö de Souza, 2015).

Phonemic awareness refers to the ability to focus on, distinguish, separate, and manipulate phonemes within the pronunciation of words. Various tasks have been used to assess and teach students to do this: segmenting spoken words (e.g., "dog") into phonemes (e.g., /d/-/o/-/g/); blending separated phonemes (e.g., /d/-/o/-/g/) to form whole words; adding, substituting, or deleting phonemes in spoken words (e.g., say "dog" without /d/) (Ehri, 2022). Phonics refers to a form of instruction that teaches students the major grapheme-phoneme relationships and their use in decoding and spelling words. Decoding involves transforming graphemes into phonemes and blending them to form the pronunciation of words. Spelling involves distinguishing and remembering phoneme and grapheme relations specified in written words. Phonics also refers to the knowledge and reading-spelling skills that students acquire when they receive systematic phonics instruction (Ehri, 2022).

2.1.9 Native Language Phonetic (ESL) English As a Second Language

According to Çakır & Baytar (2014), in the process of learning a foreign language, students often face difficulties in correctly pronouncing the target language, as new sounds do not always match those of their native language. This issue is difficult for both teachers and students, which is why some consider it essential to address it explicitly. In other words, intentionally teaching pronunciation could help students overcome the anxiety they feel when communicating orally, which usually comes from not pronouncing correctly. One of the key aspects of foreign language teaching is to create a “stress-free environment” and to minimize

students' anxiety as much as possible. It is also argued that if students experience a high level of stress, their ability to learn the language is affected, as they cannot assimilate comprehensible information due to anxiety, which acts as an "affective filter" (Çakır & Baytar, 2014). Another factor that significantly influences correct pronunciation is the age of the students, which is considered a key indicator for acquiring the pronunciation of a foreign language (Granena & Long, 2012). In this sense, it points out that there is a period in human life in which learning a language becomes much easier, and after this period, it becomes considerably more difficult, which was originally proposed by Lenneberg in his Critical Period Hypothesis (Çakır & Baytar, 2014).

2.2 Audio Visual Metod

Audiovisual resources are tools used to make teaching more effective through sound and images. These teaching aids not only capture students' interest but also help teachers explain content more clearly. Sometimes, without realizing it, audiovisual materials are part of the teaching process in the classroom (Swaran et al., 2021). Visual materials are a very useful tool for reinforcing the impact of a lesson. They help students better understand the content, as the teacher can "show" them what is being explained. Some examples include images, charts, transparent slides, flashcards, and printed materials. They also make learning more dynamic and entertaining, allowing classes to be more interactive and effective. Their value lies in the fact that they combine sound and image at the same time, facilitating a more complete understanding of the topics. Examples of these resources include videos, 3D presentations, virtual classrooms, and film projectors (Swaran et al., 2021).

Using multimedia and audiovisual tools in class not only makes the learning environment more dynamic but also helps students think more actively. Researchers investigated how these resources influence English teaching and concluded that teachers can easily integrate them into their classes. There are many multimedia tools, such as images, sounds, and videos, which help students understand better, since we all learn using our senses. Therefore, teachers need to include these resources in their daily activities so their students can achieve better results. For example, they discussed how difficult it can be to learn English without any visual or auditory support. Research confirms that using audiovisual materials in English classes can make learning much easier and more effective (Wazeema & Kareema, 2017).

2.2.1 Sound and Motion Film

Film is considered a type of audiovisual resource that can show moving images with sound. Although it has traditionally been used for entertainment purposes, it has also been widely incorporated into education and learning. This type of medium allows events or objects to be represented in a manner very close to reality (Fuady & Mutalib, 2018).

2.2.2 Videos

Videos combine sight, sound, and motion, making them one of the most valuable educational tools for facilitating language teaching and learning in the classroom. They help create a more engaging, interactive, and challenging environment. Additionally, videos demonstrate how English is naturally used by native speakers. They also enable teachers to present more information and conduct activities in less time, offering complete control over the pacing of the lesson. Teachers can pause, start, and repeat the video as needed. Videos can bring

actions, scenes, and sounds into the lesson, allowing learners to enjoy speaker dialogues and practice pronunciation. Many educational videos available on YouTube can be relied upon by teachers (Zerroug, 2019).

2.2.3 Television

Television is a medium that can serve educational purposes. There are certain programs and shows specifically created with educational content that teachers can incorporate into the classroom. Additionally, it is beneficial for teachers to be aware of the popular programs their students are watching and interested in. When introducing a topic, teachers should link the television program to the material being studied. The teacher's role is to guide students in focusing on the speaker's speech patterns, intonation, gestures, and expressions to help improve their language skills (Zerroug, 2019).

2.5 Visual Teaching Materials

In second language learning, the use of visual aids is a key teaching strategy in both English as a Second Language (ESL) and English as a Foreign Language (EFL) classroom. Most research in this area agrees that memorizing linguistic structures and vocabulary is not an effective way to learn a language. In this context, visual aids can help students reinforce and consolidate what they have learned, likely because they allow them to capture information through another sensory channel (Marquez et al., 2013). Visual aids, on the other hand, are very effective tools for increasing the impact of a lesson. They help students visualize the content more clearly, as the teacher "shows" it to them directly. Examples of these aids include images, charts, transparent slides, flashcards, and printed materials (Swaran et al., 2021).

According to Swaran et al., (2021), visual materials are a very useful tool for reinforcing the impact of a lesson. They help students better understand the content, as the teacher can "show" them what is being explained. Some examples include images, charts, transparent slides, flashcards, and printed materials. They also make learning more dynamic and entertaining, allowing classes to be more interactive and effective. Their value lies in the fact that they combine sound and image at the same time, facilitating a more complete understanding of the topics. Examples of these resources include videos, 3D presentations, virtual classrooms, and film projectors.

2.5.1 The Audiovisual Aids

Educational audiovisual aids are created to support both teachers and learners by engaging in the senses of sight and hearing. They assist in involving learners in more activities while also maintaining their interest. When using audiovisual aids, teachers should make effective and appropriate use of these tools to enhance the teaching and learning process. There are several types of audiovisual aids that teachers can incorporate into classroom instruction. Some of these tools can be used by the teacher as follows:

2.6 Teaching Resources

The visual activation of the 12 English vowel sounds, through the use of phonetic symbols, associations between sounds and words, drawings or characters, as well as articulation point diagrams depending on the student's level, facilitates the understanding that the number of vowel phonemes in English is greater than in Spanish. Moreover, the visual representation of

sounds helps strengthen the perceptual memory of their acoustic representation. (Kelly, 2003) This strategy involves integrating the selected visual tool (symbols, words, drawings, characters, etc.) into classroom materials such as posters, boards, or flashcards, using them during correction moments, specific activities, games, or lessons. Although visual aids are commonly used in learning, having a dedicated visual resource for the 12 English vowels is particularly beneficial for students. This is especially true if the material remains permanently available in the classroom, as phonetic explanations or corrections often arise reactively—that is, in response to a student's doubt or spontaneous production (Gallardo del Puerto y Gómez Lacabex, 2008).

Another strategy to reinforce vowel variety is the couple-matching activity in which students are asked to pair male and female proper names based on the vowel they contain. (Hewings, 2004) The teacher can modify popular games such as "bingo" or "tic-tac-toe" to practice vowel quality. In the case of "bingo," instead of numbers, the cards (see Table 1) contain representations of the sounds to be practiced. During the game, the teacher pronounces a series of words (e.g., *sheep, cod, bed*), and students must mark the corresponding symbols if the word they hear contains that sound (Kelly, 2003). The use of phonetic symbols and reading the words aloud enables practice focused on auditory perception, helping students concentrate on the sound and its auditory and symbolic representation. As an alternative, conventional spelling can be used instead of phonetic symbols, relying on the written form of words to guide the practice (Gallardo del Puerto & Gómez Lacabex, 2008).

2.6.1 Tic-Tac-Toe

In the case of "tic-tac-toe," the adaptation consists of students winning a square if they can say a word that contains the sound represented by the phonetic symbol in that square. The other players evaluate the response, giving positive or negative feedback, while the teacher monitors the process and clarifies any doubts that arise. (Kelly, 2000)

2.6.2 Phonemic Crosswords

The teacher should create a basic crossword grid. It’s a good idea to spend some time preparing a few blank versions, which can be photocopied (or printed out if you're comfortable with computer skills) and customized to fit the class's needs. The clues can be in alphabetic script with answers in phonemic script, or vice versa, or both clues and answers can be in phonemic script. (A phonemic crossword requires knowledge of both vowel and consonant phonemes.) Consider the students' familiarity and confidence with the phonemes, aiming to make the task achievable by including a mixture of familiar and recently learned words. It may be helpful to keep the clues related to a specific subject area. To focus on vowel sounds, ensure that some words intersect on these sounds. The small example provided includes both clues and answers (Kelly, 2000).

2.7 International Phonetic Alphabet (IPA)

According to Suryaleksana et al. (2020), the International Phonetic Alphabet (IPA) is a set of symbols designed to represent the speech sounds of the world's different languages. Britannica highlights that Otto Jespersen was the first person to propose the concept of the IPA,

which he sent in the form of a letter to Paul Passy of the International Phonetic Association. Later, A. J. Ellis, Henry Sweet, Daniel Jones, and Passy continued with this project in the late 19th century. The creation of the IPA concept aims to avoid errors or confusion caused by the uncertain spelling of each language by establishing a standard for spoken language. In addition, its purpose is to replace individual transcription systems. In 1888, the International Phonetic Alphabet was first released, and several improvements were made throughout the 20th and 21st centuries to perfect it. The IPA consists of 44 symbols, which are divided into three types: consonant sounds, diphthongs, and vowels, each with distinct characteristics that influence the production of word sounds.

2.8 English Pronunciation IPA Application

Currently, there are many interactive applications available that can be used by teachers and students through mobile phones. Nowadays, students are more interested in searching for information through their mobile phones. According to Idayani et al. (2024), students are better at understanding technology to search and study modern topics. One application that can be used by both students and teachers is the IPA English Pronunciation App. This app is a mobile tool designed to improve English pronunciation, helping students improve their pronunciation and serving teachers as a guide in teaching English, especially in the area of pronunciation. In this app, all 44 phonemes of English are found, which include vowels, vowel diphthongs, and consonants.

Students can start practicing by clicking on the microphone and saying the words provided by the app. If you don't know how to pronounce a word, the app offers native speaker

pronunciation. Afterwards, students can practice pronouncing those words. If they get it right according to the phonetic symbol, they will receive three stars. If they pronounce it wrong, they will receive one star or a low score. To continue with the next word, students can click on "skip." Furthermore, it can be concluded that the IPA English pronunciation app is an educational tool classified as an e-book. In this app, there are lessons focusing on pronunciation theory, such as the IPA (International Phonetic Alphabet) and the 44 phonetic transcription symbols. Thus, it makes it easier for users to practice and improve their pronunciation (Idayani et al., 2024).

2.8.1 IPA Vowel Sounds

According to the Cambridge Dictionary, "Vowels are speech sounds produced by humans when air flows through the mouth without being blocked by the teeth, tongue, or lips." Vowel sounds can be classified into two types: Short vowels are those pronounced briefly. Seven IPA symbols represent short vowels. The IPA symbols for short vowels in English are: /ɪ/, /e/, /æ/, /ʌ/, /ʊ/, /ɑ / and /ə/. Long vowels are vowel sounds that are pronounced longer than other vowels. There are five IPA symbols for long vowels in English. The IPA symbols for long vowel sounds in English are: /iː/, /ɑː/, /ɔː/, /ɜː/, and /uː/ Suryaleksana et al. (2020).

According to the Cambridge Dictionary, the term kinesthesia refers to the ability to know where parts of your body are and how they are moving. It describes a type of learning that emphasizes physical activity and hands-on experiences as the primary means of learning and understanding new information. For kinesthetic learners, simply reading or hearing information may not be enough to fully understand or retain it. Instead, they must engage in hands-on experiences (Simple K12, 2025).

As mentioned, kinesthetic learners learn through real experiences and physical activity. They tend to learn best by making, touching, and manipulating objects. They like to act out scenarios, which help them better understand the material and apply it to real-world situations. Kinesthetic learning also occurs in daily life. For example, imagine you want to learn how to ride a bike. No amount of instructions will be as helpful as getting on the bike, falling off a few times, and learning how to handle the whole process (Simple K12, 2025).

2.9 Learning Types

2.9.1 Kinesthetic Learners

Kinesthetic learning is a way of acquiring knowledge through body movement, sensations, and the senses. Our bodies become key tools for understanding and constructing knowledge. When we engage in activities that involve moving or using our bodies, we not only learn better, but we also gain social, personal, physical, and academic benefits, as we integrate physical exercise with the content of our courses. The body is a fundamental channel of communication. Our gestures, postures, and actions in the classroom convey messages to both students and teachers, and if we learn to interpret them, they can become valuable resources for learning. By including dynamics that foster respect, attention, and affection, we can create a more empathetic environment, promoting healthy interpersonal relationships and the recognition of others in all their dimensions (Salamanca, 2015).

Strategies more in line with this style are:

Fieldwork: Getting out of the classroom or home to learn through direct experience is a very useful strategy, especially for those who learn best through movement and contact with their environment. These types of students improve their learning when they can touch, feel, and experience what they are studying. Therefore, any subject with a practical focus, or even a specific topic within a subject, can be greatly enriched by relying on direct experience. For example, in Geography class, students can learn about soil types or mountains by exploring and observing directly in the field (Romero, 2016).

Role-playing: This technique involves having students act out real-life or everyday situations. When interpreting a topic within a subject, for example, recreating a historical scene in History class, they are more likely to retain the information, since they have actively experienced it. Students with a kinesthetic style can even practice this technique at home, putting themselves in the role of a character from a period to better understand their way of life or the characteristics of the period (Romero, 2016).

Dramatizations: Unlike role-playing, in dramatizations, a scene is acted out in front of an audience, with the intention of understanding and reflecting on what is happening. This type of activity is useful for both kinesthetic learners, who learn by acting, and auditory learners, who better remember what they hear. While some participate with their bodies, others retain what they hear during the performance (Romero, 2016).

This type of learning is usually slower than auditory and visual styles, as it requires more time, effort, and energy to achieve truly meaningful learning. However, what is learned this way

tends to stick much longer. It's a deeper type of learning because it involves the entire body. For example, one can memorize a list of words and forget it the next day, but learning to ride a bike is something that, once mastered, is difficult to forget. When we incorporate something through the body, through what is called "muscle memory," that knowledge becomes very durable (Blas Flores et al., 2012).

According to (Blas Flores et al., 2012), the kinesthetic learning style is characterized by a strong need to move and actively participate to better understand the content. These students learn by doing, prefer reading with action from the beginning, and tend to move while reading, although they are not usually as enthusiastic about reading as others. Spelling is not their strong suit, as they write more by feeling than by following spelling rules, and although their handwriting is usually good, it can be affected in small spaces, and they press hard when writing. Their memory is activated by what they physically experience or what triggers sensations, and they do not pay much attention to images unless they involve movement. They are easily distracted if there is no physical activity involved, problems to solve through actions, and solutions to choose that allow them to be in motion. They find it difficult to sit still, so they constantly move, whether raising their hand, swaying, or walking. In communication, they gesticulate a lot, need to be close to the other person to maintain attention, and become bored with long or monotonous speeches.

2.9.2 Visual Learners

Visual learning is a widely recognized and highly effective learning style based primarily on the use of visual resources, images, and spatial understanding. People with a strong preference for this type of learning often excel at tasks that involve interpreting and remembering visual information, such as graphs, diagrams, illustrations, and other similar elements. The basis of this style lies in the human brain's great capacity to process and store visual information. By leveraging this natural ability, visual learners can create mental representations, make meaningful connections, and better understand complex concepts. The impact of visual learning on comprehension, memory, and motivation is significant. It has been proven that visual and multimedia resources significantly improve the way information is processed and retained, especially in those who learn best through visual stimuli (Alabi, 2024).

According to Fuadah (2023), people with a visual learning style have very specific characteristics that influence how they process and retain information. They tend to prefer materials that integrate visual elements such as images, diagrams, graphs, charts, and photographs, as this facilitates their understanding and memorization. Furthermore, they tend to take notes using different colors, which helps them organize information better and recall it more easily. For them, what is seen is much easier to remember; therefore, when they can directly observe a concept or demonstration, their learning is significantly strengthened. To enhance their learning, visual learners use various strategies that appeal to graphic and spatial representation. These include the use of concept or mind maps, which allow them to organize and connect ideas

clearly and visually. They also benefit from presentations with attractive images, color coding to differentiate topics or concepts, and the use of symbols or icons that simplify understanding.

Resources such as interactive whiteboards, physical models, or hands-on demonstrations help them visualize complex or abstract concepts, while the use of digital media, such as infographics or interactive presentations, further enriches their learning process. Furthermore, creating visual projects, such as posters or graphic displays, helps consolidate what they've learned and express ideas creatively. The use of illustrated books, comics, and other visual materials also reinforces their understanding and facilitates content retention. Visual learners maximize their potential when they can rely on visual elements that make what they need to understand and remember tangible and clear (Fuadah, 2023).

2.10 Effects Of Visual Input—Lipreading

Oral communication typically occurs in a rich multimodal context. In natural face-to-face interactions, people convey important information through channels such as facial expression, hand gestures, and tone of voice. Communication theories claim that this multimodal information is combined with speech to help people better understand language. In addition to the auditory modality, in the present study, we focused on two types of visual information: mouth movements and hand gestures. Several investigations have focused on the auditory and visual (AV) sensory integration of speech and lip movements (Hirata & Kelly, 2010).

2.11 Audiovisual Phonetic Training With Hand Gestures

Audiovisual phonetic training with manual gestures involves the use of multiple information resources, including auditory input of speech sounds, visible articulatory information from the instructor's face (such as lips, teeth, and tip of the tongue), and visual input from manual gestures that encode phonetic features. To investigate the potential benefits of manual gestures in second language (L2) sound training, researchers typically compare the learning outcomes of an audiovisual phonetic training paradigm with manual gestures to those of an audiovisual phonetic training condition without manual gestures (Xi et al., 2024).

According to Xi et al. (2024), the accessible articulatory information consisted of the visible opening of the lips. Lip manual gesture condition (LG): This condition offered training with manual gestures that mimicked lip opening, with the accessible articulatory information being both the lip opening and the related manual gesture. Tongue manual gesture condition (TG): In this condition, training was based on gestures that mimicked the posterior position of the tongue, so the accessible articulatory information included both the lip opening and the tongue manual gesture.

2.12 Auditory Word Repetition

According to Sugiura. (2016) Auditory word repetition involves a phenomenon known as the auditory priming effect, which is a subconscious process in which previously received auditory information is processed more quickly and accurately compared to information that has not been heard before (implicit learning). This type of learning occurs because phonetic/phonological information from spoken words is encoded and stored in listeners' implicit

memory, making it easier to process later. Previous research has shown that hearing a word just once can improve the perception of that word when it is presented again in speech. Since there is a close relationship between speech perception and production in the speech acquisition process, increased repetition of auditory words may increase learners' sensitivity to phonetic/phonological information in the L2 auditory input, which in turn should improve their pronunciation accuracy.

2.13 Pronunciation of Vowel Sounds

Human speech works similarly to playing a wind instrument. The various sounds we produce when speaking, regardless of the language, are created by passing a column of air through parts of the upper body, generating vibrations and sounds as the air moves. Each type of sound and way of articulating it depends on how we manipulate that airflow. In general, six main types of speech sounds are recognized: vowels, glides, nasals, liquids, fricatives, and stops (Ambalegin, 2021).

A language should always be taught as a communication tool. The most effective way to introduce a new word is through its pronunciation, as this ensures that the listener can understand us. Learning a foreign language requires constant motivation, and to achieve this, it is key to use stimuli appropriate for the student's age. Strategies such as Visual Sound are highly motivating and essential both for consolidating learning and for practicing it effectively (Chávez, 2015).

2.14 Strategy Visual Sound

According to Chávez (2015), this strategy is based on a learning experience using new technologies, where students participate in interactive and self-assessment activities. It includes a variety of exercises similar to those used in class, but with a more dynamic approach, such as virtual tours focused on English phonetics, especially vowel sounds. The goal is for students to learn by observing and enjoying the process through interactive materials available on an educational website with internet access. Furthermore, the platform allows them to assess themselves with a test that measures how much they have learned, and all activities are designed to help them review and consolidate their understanding of vowel sounds.

2.14.1 Synthetic Phonics

According to Arellano (2016), Synthetic phonics is a method used to teach reading and writing through the relationship between sounds (phonemes) and the letters that represent them (graphemes). This methodology begins by teaching students how letters sound and then shows them which letter corresponds to each sound. In this way, they first learn to recognize the sounds, then the letters, and over time, they can form and understand words and complete sentences. Essentially, synthetic phonics teaches children to identify the sounds in printed letters and to correctly combine them to form spoken words that they can recognize and understand.

The term synthetic comes from the verb "to synthesize" and refers to joining parts to form a whole. In this approach, beginning readers are taught letter-sound (grapheme-phoneme) correspondences from the beginning and are taught to blend these sounds to form complete words, which strengthens their reading skills. They also learn the reverse process: taking a

spoken word, breaking it down into its sounds, and then representing those sounds with letters to spell it correctly. Letter sounds are learned quickly, and both blending and separating sounds are taught from the earliest stages. In contrast, the analytic phonics method introduces sound blending much later. In this approach, children learn to identify common sounds within a group of words, but they do not practice individual sounds in isolation (Glazzard, 2017).

Within this methodology, one highly relevant method stands out: Jolly Phonics, developed by Sue Lloyd and Christopher Jolly in 1999. This approach offers a variety of resources and activities designed to apply synthetic phonics in the early childhood classroom. In her book, The Phonics Handbook, Sue Lloyd presents a wide range of materials that allow children to work on phonics in a simple, engaging, and accessible way. (Arellano, 2016).

Sound books: These are books designed to teach letter sounds. Children can take them home and review them with their parents, reinforcing the sounds they learned that day.

Flash card sheets: These are cards that show each letter along with its corresponding sound, helping children make visual and auditory associations.

Jolly Phonics video: Each video focuses on teaching the sound of a specific letter. Once children have learned their letters, they should watch the phonics videos as a way to review the sounds and reinforce what they've learned (Arellano, 2016).

2.15 Theory on teaching methods

2.15.1 Visual Method Theory

According to Quevedo, et. al. (2021), this theory posits that students with a visual learning style understand and retain information better when they read or observe it in some way. The act of visualizing allows them to connect ideas and concepts more clearly. Furthermore, the ability to abstract and plan is closely tied to their ability to create mental images. Language learning can be achieved through reading and analyzing charts, illustrations, and other types of visual representations.

2.15.2 Teaching-learning theory

This theory focuses on all the actions teachers take to help their students learn. To achieve this, they use different strategies, resources, and tools that facilitate understanding of a specific task. Over time, these methods have evolved, adapting to each era, from the most basic forms of teaching in ancient times to the most structured and modern approaches of today (Quevedo et. al., 2021).

2.15.3 Multisensory approach

The multisensory approach is an educational methodology that stimulates the senses to facilitate learning, primarily using three pathways: visual, auditory, and tactile-kinesthetic. This way of teaching and learning is considered a fundamental foundation within a comprehensive learning system. Our brain processes information through several channels simultaneously, as we

perceive our surroundings and what we feel internally through a combination of sensations from different senses (Nerida, 2017).

According to Jiménez (2024), multisensory learning involves the use of practical and physical resources that stimulate not only sight but also other senses. They emphasized that this form of teaching is especially useful for people with visual impairments, as English can be taught through touch, hearing, and body movement, using sensory activities that truly serve as support. Along the same lines, they stressed that educational strategies must go beyond visual materials, incorporating approaches that respond to students' diverse needs. Therefore, teaching methods must include tactile materials and activities that activate several senses, not just sight.

When it comes to learning English as a second language, many classrooms still use traditional methods focused on rote repetition and memorization, with a primarily visual and auditory focus. In this type of teaching, content is presented in isolation, unrelated to students' interests or prior knowledge. This often leads students to adopt a passive role, simply repeating the language as taught by the teacher, which leads to information being easily forgotten. In contrast, a multisensory methodology has proven to be more effective for learning English as a second language, as it allows students to relate the new language to real-life sensations and experiences. This approach promotes more meaningful and experiential learning, in which students actively participate and construct knowledge rather than simply receive it. Furthermore, the content is integrated holistically and serves as a foundation for acquiring more complex knowledge in the future (Nerida, 2017).

Chapter III

Methodological Framework

This chapter describes the detailed methodological framework for investigating the effectiveness of the phonetic rule-based approach and visual materials in improving pronunciation and recognition of long vowels in English. Through a well-structured research design, data collection methods, and analysis strategies, this study aims to contribute to the field of language learning by providing evidence on the value of this strategy in teaching phonology, specifically as it relates to long vowels.

According to Quecedo & Castaño (2002), a qualitative methodology focuses on understanding reality from people's perspectives, generating descriptive data from their words and observable behaviors. It is an inductive approach, meaning that researchers do not start with fixed hypotheses but rather construct knowledge from the data they collect, using a flexible design and open-ended questions. It considers people and their contexts holistically, without reducing them to isolated variables, and considers the influence that the researchers themselves can exert, seeking to act naturally and minimize their impact. Furthermore, it seeks to understand how people interpret their reality from their frame of reference, combining empathy with an objective perspective.

Quantitative research is a form of study that seeks to measure and express in number the aspects to be analyzed within a population. Through this data, descriptive or comparative results can be obtained, and statistical analyses can be performed to discover if there are important relationships between different variables. This method is based on questions such as "how

many?", "who?", or "in what quantity?", and its main objective is to understand and describe the behavior of a group of people. It is very useful because it allows information to be interpreted clearly and generally, focusing on stimuli and responses, and thus helping to make informed decisions in fields such as science, economics, or marketing. For it to work well, it is essential to have a representative sample and ask structured questions that produce reliable and accurate data (Ortega, 2025).

According to Duran (2019), mixed methods refer to a research approach that systematically, empirically, and critically combines both quantitative and qualitative data. This approach involves the collection, analysis, and subsequent integration of both types of data, as well as their joint discussion to generate inferences (meta-inferences) that allow for a deeper understanding of the phenomenon studied. According to Hernández & Mendoza (2018), in the mixed approach, various types of evidence, such as numerical, verbal, textual, visual, symbolic, and other data, are used to address problems in the sciences. It defines hybrid methods as the systematic integration of quantitative and qualitative methods in a single study to obtain a more complete view of the phenomenon. In addition, it highlights that these methods can be combined in such a way that their original structures and procedures are preserved (pure form of mixed methods) or adapted and modified according to the needs of the study (modified form of mixed methods).

This research will use a qualitative approach, as the main objective is to analyze how the use of visual teaching materials can improve the pronunciation of long vowels in English among seventh-grade students at CTP de Platanar. This type of methodology is the most appropriate

because it allows us to understand, through observation and direct interaction with students, the real difficulties they face in recognizing and pronouncing these sounds. By not focusing on numerical data, but rather on students' experiences, responses, and behaviors, the qualitative approach offers a deeper and more complete view of the learning process. Furthermore, it allows for a detailed evaluation of the impact of visual resources on the development of their oral skills in English, observing changes, interpretations, and improvements within the real classroom context.

3.1 Research Approach

Understanding the theoretical drive behind a project is crucial as it influences how research questions are addressed and the design of the study. If the goal of the study is to describe or find meaning, the methods used are typically qualitative, with a focus on providing detailed narrative descriptions. On the other hand, if the goal is to confirm hypotheses or test theories, quantitative methods will be employed. Theoretical orientation has significant implications for the design of the study. For example, qualitative data are typically collected from small samples, while quantitative data require larger samples. Qualitative samples are selected based on the study's goals, without meeting typical assumptions of a quantitative study, such as randomness. The researcher must make choices that help harmonize these aspects (Pole, 2009).

3.2 Research Design

The phenomenological approach within qualitative research is based on exploring how people experience and perceive reality from their perspective, considering their internal world

composed of memories, perceptions, and personal experiences. This method seeks to understand and reveal the essence of these experiences as they are experienced in everyday life, without external interpretations or prior judgments. To achieve this goal, the researcher must follow a structured process that includes several stages. First, they must identify and clarify their preconceptions so as not to influence the interpretation of the data. Then, they focus on describing in detail and faithfully what the participants experience about the topic of study. An in-depth analysis is then conducted to uncover the essential elements of these experiences. Finally, the results obtained are compared with other similar studies or existing theoretical approaches. This entire process is guided by fundamentals of phenomenology, such as phenomenological reduction and the phenomenological moment, which help the researcher focus solely on the subject's experience, thus ensuring an authentic and deep understanding of the phenomenon under study (Leal, 1997).

According to (Guevara, Verdesoto, & Castro, 2020), descriptive research focuses on detailing and specifying the characteristics of the population or phenomenon being analyzed. Its main purpose is to observe and describe how people, groups, or objects behave in the present moment. This type of research seeks to record, analyze, and interpret the current way in which certain phenomena occur, focusing on how they function or manifest without attempting to explain causes or make predictions. Through systematic criteria, organized and comparable information is obtained that allows us to understand the structure or behavior of what is being studied. Different methods can be used to develop this research. One of these is the case study, which consists of an in-depth examination of a specific person, group, or situation. Although this

method helps formulate hypotheses and expand knowledge about a phenomenon, it is not useful for establishing cause-and-effect relationships, as it may involve researcher bias or atypical cases that do not adequately represent the general population. Another method is observation, which is considered one of the most effective within this approach. It can be quantitative when objective data focused on numbers and values are collected, or qualitative, when it focuses on detailed descriptions and meanings from the participants' perspective. Both types of observation allow for a more complete and accurate view of the phenomenon being studied.

3.3 Information Sources

3.3.1 Primary Sources

These sources are direct accounts of events or evidence, presented as if they occurred without any analysis or interpretation. They provide information for the first time or serve as the foundational materials for subsequent research. Primary sources reveal original ideas, document new findings, or present novel information. Some examples are theses, dissertations, scholarly journal articles (research-based), some government reports, symposia, conference proceedings, original artwork, poems, photographs, speeches, letters, memos, personal narratives, diaries, interviews, autobiographies, and correspondence. (University of Minnesota, 2025)

3.3.2 Secondary Sources

These sources provide an interpretation or rephrasing of primary sources. They typically aim to describe or clarify the sources. These works often summarize, analyze, reorganize, or offer additional insight into the primary material. Such as textbooks, edited works, books, and

articles that interpret or review research works, histories, biographies, literary criticism and interpretation, reviews of law and legislation, political analyses, and commentaries. (University of Minnesota, 2025)

3.3.3 Tertiary sources

These sources categorize, summarize, compile, or condense information from other sources. Reference materials and textbooks are often considered tertiary sources when their main goal is to list, summarize, or reorganize information or ideas. Tertiary sources typically do not have a specific author attributed to them. For example, dictionaries/encyclopedias may also be secondary, almanacs, fact books, Wikipedia, bibliographies may also be secondary, directories, guidebooks, manuals, handbooks, and textbooks maybe secondary, indexing and abstracting sources. (University of Minnesota, 2025)

3.4 Analysis Categories

According to Rivas (2015), in qualitative research, analytical categories play a similar role to variables in quantitative research. These categories are a tool that helps us describe the phenomenon we are studying, but it is advisable not to use more than five to avoid confusion and a complicated analysis. Just as variables have dimensions and indicators, categories can also be divided into subcategories and indicators that guide the research. However, categories can be somewhat confusing because they function both as variables and hypotheses. These categories are defined based on a literature review or theoretical framework and help us establish which concepts we will use to explain the topic, in addition to delimiting the scope of the study. It is best to keep the categories to a minimum and have no more than three subcategories to ensure

the study is clear and easy to understand. The main idea of these categories is to simplify reality, reducing it to clear and easy-to-understand concepts. Furthermore, these categories must have theoretical support, that they are based on previous research on the topic being studied.

3.4.1 Visual Teaching Materials

According to Ortega, Ruiz, & Hernández (2016), when we talk about visual media, we usually refer to tools such as television, movies, photographs, paintings, among others. However, this definition can be somewhat limiting, since, if we analyze them more deeply, we notice that they not only stimulate sight but also engage other senses such as hearing and touch. Therefore, these resources are considered mixed media. The use of visual media in the classroom allows students to activate not only their senses but also their emotions and feelings, which enriches their learning process. There are various types of visual media; among the most common are photographs, illustrations, drawings, PowerPoint presentations, videos, maps, cards, models, charts, and more. These resources, in addition to helping with vocabulary comprehension, encourage student participation in communicative activities by observing and describing images or objects. One of the main advantages is that the use of real objects and images helps teach the meaning of words and keeps students motivated. Tools such as flashcards are very useful for practicing vocabulary and grammatical structures. In addition, images can be used in multiple activities that develop communication.

3.4.2 Pronunciation

Learning to pronounce English well is one of the most difficult skills to master, so students need to dedicate significant time to improving this aspect. Having a clear and understandable pronunciation is essential for students to communicate effectively and is also a key component of language teaching. Good pronunciation facilitates learning English, while poor pronunciation can create significant obstacles. Teachers should have access to specific courses and materials to help them better teach pronunciation. Rather than debating whether or not it is important to teach pronunciation, research in second language teaching should focus on how to teach it effectively. Morley points out that the primary objective when teaching pronunciation should be to enable students to speak understandably, as this is an essential part of communicative competence (Gilakjani, 2016).

According to Gilakjani (2016), it emphasizes that students must develop functionally understandable pronunciation, allowing them to communicate effectively, increasing their speaking confidence, and learning to monitor and adjust their speaking when necessary. This article analyzes what pronunciation means, the purpose of teaching it, why it is important, the teacher's role in this process, and offers some recommendations for teaching it. It should be noted that the goal of teaching pronunciation is not for students to speak like natives, but rather for them to be able to express themselves clearly and understandably. Achieving clearer pronunciation requires students to change the way they think about the sounds of English. This applies both to individual sounds and to broader aspects such as syllables, stress patterns, and rhythm. However, pronunciation teaching is often neglected or overlooked in English classes.

3.4.3 Long Vowel Sounds

According to Demirezen (2020), long vowels in English are simple vowel sounds that extend when spoken, and this extension is perceptible. In his analysis of vowels in North American English, he points out that a long vowel consists of a single sound whose articulation is maintained for a longer period. However, their differentiation is not based solely on the duration of their sound, but also on articulatory aspects such as the position of the tongue and the level of muscular tension during their production.

3.5 Data Collection Instruments

3.5.1 Observation Check List

To meet the research objectives, specifically the analysis of the recognition and pronunciation of long vowels in seventh-grade students at the Platanar CTP Centralized Spanish Vocational Training Center, the first instrument will be classroom observation using a checklist. This method will allow for obtaining concrete data on the students' current level before applying any visual teaching materials.

The observation will be conducted during specific pronunciation-related activities in which students must identify and pronounce long vowel sounds in English. The checklist includes clear and precise criteria, such as the ability to differentiate long from short vowels, the correct pronunciation of long vowel sounds in single words and sentences, confidence and fluency when speaking, and the presence of phonetic errors or confusions.

Each of these aspects will be assessed by marking whether the student meets the criterion during the observation, allowing for an objective and quantifiable evaluation. For example, it will be recorded whether the student correctly pronounces the long vowel /i/ in words like "sheep," maintains the correct length of the sound, and demonstrates confidence while performing the task. This tool will be essential for diagnosing the specific difficulties students will face, aligning with the first specific objective of the research, which will seek to identify these challenges in pronunciation and recognition.

3.5.2 Pre-Test

As a second data collection tool, a pretest will be administered, consisting of reading a list of English words containing long vowels. This activity will be conducted individually, allowing each student to be assessed individually and their pronunciation to be heard more clearly. During the test, students will pronounce the words aloud, while a scoring chart will be used to record whether each word was pronounced correctly. This instrument aims to identify the most common pronunciation errors and assess students' level of recognition of long vowels. The information obtained will allow for informed decisions to adjust the teaching resources used and, subsequently, evaluate their effectiveness in the teaching-learning process.

3.5.3 Activities in Between

3.5.3.1 Activity 1

In this activity, an interactive presentation will be created using illustrated flashcards that combine representative images with words containing long vowels in English. For example, an image of a sheep will be shown next to the word "sheep" to focus on the long /i/ sound. The

teacher will present each card, pronounce the word clearly and slowly, and the students will repeat it chorally and individually, focusing on the correct vowel duration. This dynamic will allow the sounds to be introduced appropriately and will develop students' listening skills and phonological awareness. The use of visual materials such as flashcards will facilitate the association between the image, the written word, and its pronunciation, thus reinforcing both visual and auditory memory. This activity will help students improve their pronunciation through consistent, guided practice. By incorporating visual elements, the understanding of the content will be strengthened, and more meaningful learning will be fostered. Overall, this strategy will allow students to recognize and produce long vowel sounds with greater clarity and confidence.

3.5.3.2 Activity 2

The second activity will use a visual pronunciation map designed specifically for teaching long vowels in English such as [i], [ɝ], [ɑ], [ɔ], [u] This map will show, in an organized way, each of these sounds along with clear diagrams of the mouth that illustrate the position of the lips and tongue during the articulation of each vowel. It will also include example words that contain these sounds, such as sheep, car, door, and moon. The student will begin by presenting one vowel sound at a time, pointing to the corresponding phonetic symbol and the image of the articulatory system. The student will then model the pronunciation slowly and clearly, while students carefully observe the shape of the mouth. Students will then repeat the sound and the word choral all together and then individually, imitating both the sound and the mouth position they observed. This activity significantly contributes to improving the pronunciation of long vowels, as it allows students to concretely visualize how the sounds are produced, which is

especially helpful for those with visual learning styles. By seeing and repeating correct lip and tongue movements, students develop greater phonetic awareness and can adjust their oral production to approximately more accurate pronunciation. Furthermore, the use of everyday examples reinforces the connection between sound, image, and word, facilitating the retention and correct articulation of these vowels, which are often difficult for non-native speakers.

3.5.4 Post-Test

The post-test will be a fundamental tool for evaluating the effectiveness of using visual materials in teaching long vowels in English. It will consist of reading aloud a short text that intentionally contains words with long vowels such as [i], [ɝ], [ɑ], [ɔ], [u] through sentences such as: “The sheep sleeps near the green tree,” “The moon is too far from the blue door,” or “He heard a bird in the dark park.” During the activity, an observation rubric will be used to record whether the student correctly pronounces the long vowels, maintains the appropriate sound duration, and demonstrates increased fluency, confidence, and phonetic accuracy.

This rubric will be presented in the form of a scoring table, with specific criteria such as correct pronunciation of the vowel sound, sound duration, clarity of articulation, reading fluency, and speaking confidence. Each criterion will be evaluated on a scale of 1 to 4, where 4 represents excellent performance and 1 indicates improvement is needed. This table will allow for an objective assessment of each student's performance. The posttest, along with this grading tool, will facilitate comparison with the pretest results, allowing for the identification of individual and group progress. If students show significant improvements in their pronunciation, it can be concluded that the use of visual materials such as flashcards and pronunciation maps was

effective. Furthermore, observing whether students can apply what they have learned in a more natural context, such as reading a text, will determine whether significant and transferable learning has been achieved.

3.6 Collection Data Process And Data Analysis

The data collection and analysis process for this research will focus on determining whether the use of visual materials helps improve the pronunciation of long vowels in English among seventh-grade students at CTP de Platanar. To achieve this, a series of steps will be taken to observe students' pronunciation before, during, and after applying the visual strategies. First, a classroom observation will be conducted using a checklist. During a pronunciation-related activity, students will be observed to see if they can differentiate long from short vowels, if they pronounce words containing these sounds correctly, and if they do so with confidence and fluency. This observation will provide a clear idea of the starting point, that is, how the students are before working with the new strategies. Afterward, a pretest will be administered, in which students will read aloud a list of words with long vowels. As they read, their pronunciation of each word will be noted. This step will help identify which sounds they find most difficult and which ones they pronounce most easily.

Once these difficulties are identified, two educational activities specifically designed to improve pronunciation will be implemented. In the first activity, illustrated flashcards will be used to show images alongside words with long vowels. Each word will be pronounced and repeated, first together and then individually. This activity aims to associate the sound with the image and the written word, strengthening auditory and visual memory. In the second activity, a

visual pronunciation map will be presented, showing the correct mouth, lip, and tongue movements for producing each long vowel. Students will observe how the sound is made and then imitate it while practicing with real-life examples. This activity is especially useful for those who learn best by watching something being done.

Finally, a post-test will be administered, which will consist of reading a short text aloud full of long vowel words. While the students read, the teacher will use a grading table to evaluate various aspects, such as correct pronunciation, proper elongation of sounds, clarity of speech, fluency in reading, and confidence. Each of these criteria will be graded on a scale of 1 to 4. Once all the data is collected, the pretest and posttest results will be compared, and the initial observations will be reviewed to see if there are any improvements. If the students achieved better pronunciation, with greater confidence and fewer errors, then the visual materials can be considered effective. Furthermore, this analysis will allow us to identify which sounds showed the greatest progress and which still need reinforcement. All of this will help us better understand how to teach pronunciation more clearly and meaningfully in the classroom.

Chapter IV

Data Analysis

Data analysis is the process of organizing, examining, and interpreting information collected during a research project to draw clear and meaningful conclusions. In this paper, a data analysis will be conducted based on the results of the pretest, midterm activities, and posttest, administered to seventh-grade students at CTP de Platanar. The objective will be to identify whether the use of visual teaching materials as a teaching strategy had a positive effect on the recognition and pronunciation of long vowel sounds in English. Through this analysis, we will be able to objectively understand how students responded to the visual approach implemented.

Data analysis is a fundamental part of this research, as it allows us to verify whether and to what extent the stated objectives were met. Through the analysis of the results, we will be able to assess the real-world effectiveness of using visual materials in learning the pronunciation of long vowels in English. Furthermore, this process provides a solid basis for the conclusions and recommendations that will be presented at the end of the study, as they will be based on concrete data rather than assumptions. In this way, data analysis not only validates the research process but also contributes to the development of more effective pedagogical strategies in teaching English as a foreign language.

4.1 Observation Check List

During the observation process, several key aspects of the seventh-grade students' English proficiency were identified. The observation was conducted in two different groups: 7-1 with 18 students and 7-2 with 20 students, with a total of 38 students. Both groups showed very low levels of oral English proficiency. Specifically, it was observed that only two students per group spoke some English, but they did so sluggishly, with insecurity and frequent errors. The remaining students, 34 students in total, did not speak English at all.

This was reflected in the fact that when they had questions or needed support during class, the students communicated entirely in Spanish, both among themselves and with the teacher. Even in activities directly related to English, questions were asked in Spanish, and the teacher also responded in Spanish, which significantly limited the use and exposure to the language in the classroom. Furthermore, it was observed that students lacked the concept of long and short vowels, so they were unable to correctly recognize and produce the difference between the two sounds. This lack of phonetic understanding made it difficult to properly pronounce many basic English words.

It was also evident that students lacked visual or auditory materials to help them relate sounds to their correct pronunciation. Many relied exclusively on rote repetition, without a real understanding of the language's structure. This situation highlights the urgent need to implement practical visual and teaching strategies that support the development of listening and pronunciation skills through a more interactive, accessible, and meaningful approach for students.

Table 1. English Speaking Level. Group 7-1. n=18. . Researcher's Creation

English Speaking Level. Group 7-1. n=18		
	Number of students	Percent
Speak a little English	2	11.1%
Do not speak English	16	88.9%

Figure 1. English Speaking Level Group 7-1 n=18. Researcher's Creation

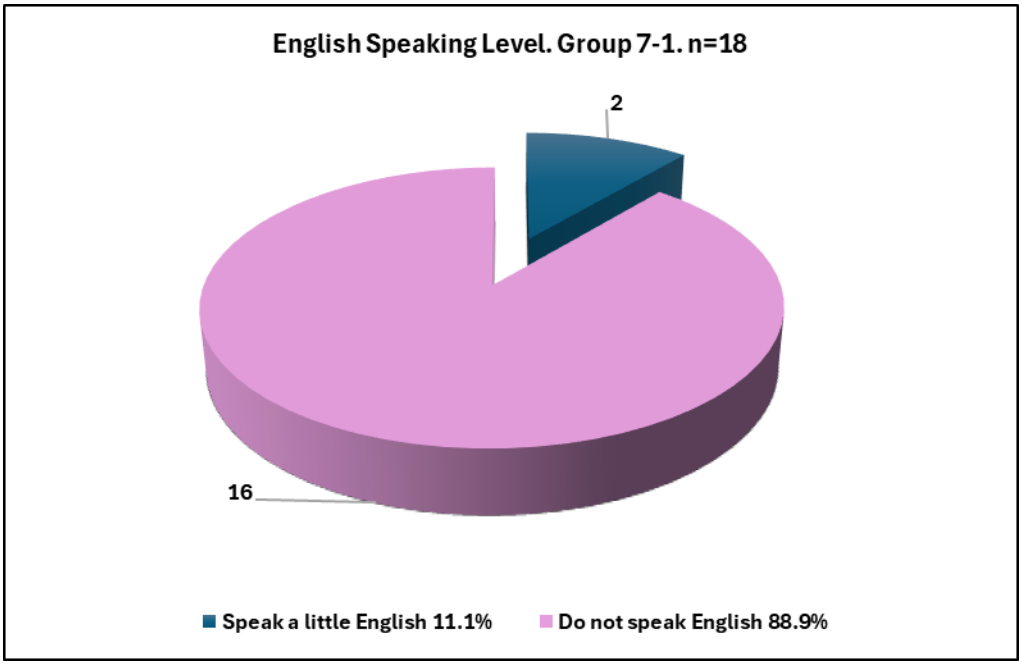
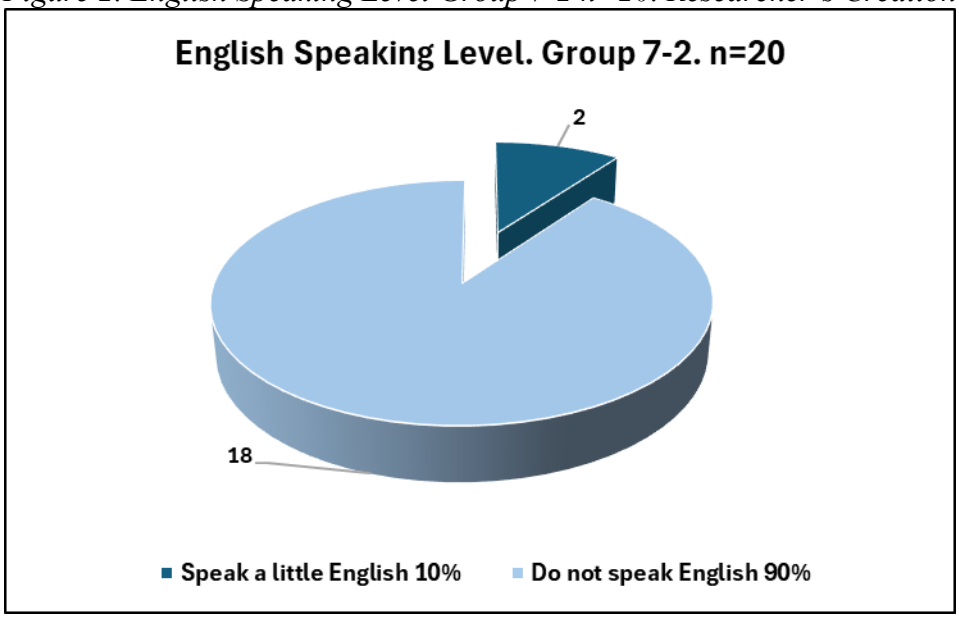


Table 2. English Speaking Level. Group 7-2. n=20. Researcher's Creation

English Speaking Level. Group 7-2. n=20		
	Number of students	Percent
Speak a little English	2	10.0%
Do not speak English	18	90.0%

Figure 2. English Speaking Level Group 7-2 n=20. Researcher's Creation



The comparison between groups 7-1 and 7-2 of CTP de Platanar, based on the figures presented, reveals a very similar pattern regarding the level of oral English proficiency among the students. Both figures, represented by pie charts, clearly and directly display the proportion of students who do not speak English compared to those who demonstrate minimal fluency. In group 7-1, composed of 18 students, the figure shows that 16 students (88.9%) did not speak English, while only two students (11.1%) spoke some English. This small minority had limited English proficiency, with evident difficulties in fluency, pronunciation, and use of basic

structures. The students who did not speak English displayed a complete dependence on Spanish to communicate, both with the teacher and among their peers, even during activities directly related to the English class.

Similarly, in group 7-2, made up of 20 students, it was observed that 18 of them (90%) did not speak English, while only two students (10%) demonstrated minimal ability to express themselves in that language. As in the previous group, these two students did not speak English fluently, displaying insecurity and limited vocabulary. The rest of the group presented the same characteristics observed in group 7-1: constant recourse to Spanish, poor understanding of instructions in English, and difficulty participating in oral activities.

Both figures show a consistent and worrying trend: the vast majority of students in both groups lack basic oral communication skills in English. This similarity between the two groups indicates that low English proficiency is not an isolated case, but a widespread condition that could be related to various factors. One of the most relevant factors identified is that most of these students did not receive English classes during primary education, which creates a significant disadvantage when entering secondary school. This means that students begin the course with little prior knowledge of the language, with almost no initial level, which makes it difficult to understand, actively participate in class, and develop language skills.

Furthermore, the data show that only 10.5% of the total students observed (4 out of 38) showed some ability to speak English, albeit limited. This reinforces the need to use more effective methods adapted to the needs of the context, especially those that integrate visual resources such as phonetic maps, illustrated flashcards, and interactive activities that encourage

the recognition and pronunciation of vowel sounds, such as the long and short sounds in English. The graphic comparison between groups 7-1 and 7-2 not only highlights the urgency of strengthening students' oral skills but also fully justifies the relevance of this research, whose main objective is to implement visual teaching materials as a strategy to improve English pronunciation at this educational level. This intervention becomes even more relevant when considering the academic lag with which many students begin the process of learning English in secondary education.

4.2 Pre-test

As part of the initial assessment, an individual pretest was administered to students in groups 7-1 and 7-2 to assess their recognition and pronunciation of words containing long vowels in English. This assessment consisted of a list of ten carefully selected words, each representing a common long vowel sound in the English language. The words used were sheep, beat, cake, bike, moon, blue, name, rose, tree, and cube. These words covered sounds such as [i], [ɝ], [ɑ], [ɔ], [u], and [ɚ], all essential for achieving clear and precise pronunciation.

The pretest was administered individually, meaning each student was assessed one by one. This methodology was chosen to allow for careful listening to each student's pronunciation without peer pressure or background noise. This approach also allowed for more detailed and authentic observations, as some students tend to repeat what they hear from their peers, which could affect the objectivity of the assessment.

During the activity, it was noted that most students had no prior knowledge of the difference between long and short vowels, so their pronunciation was often an approximation

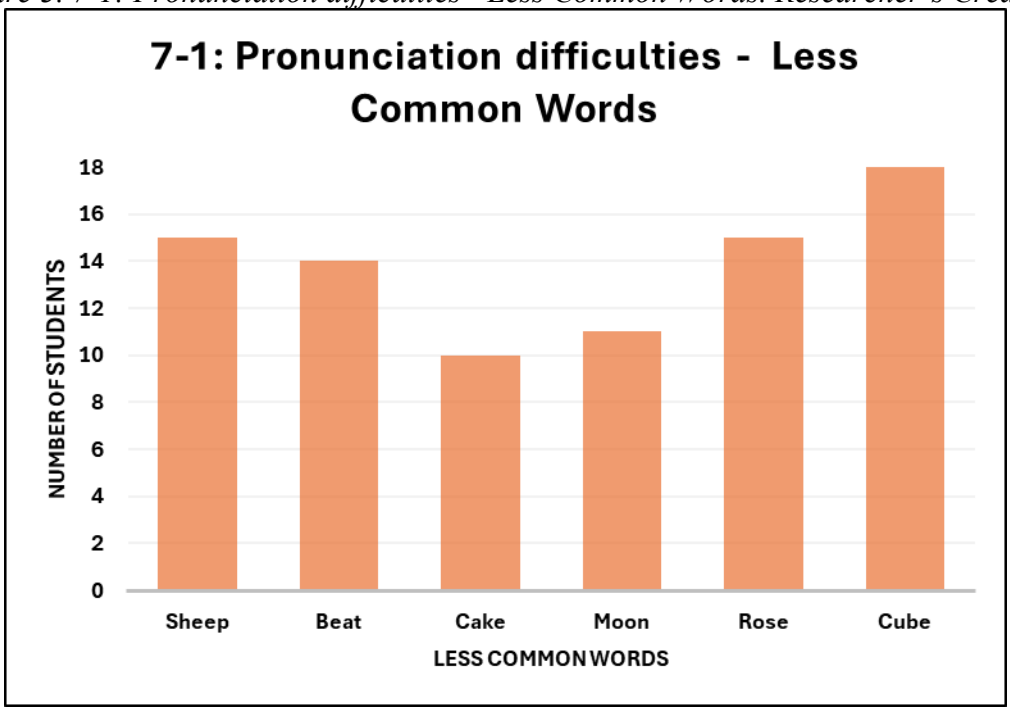
based on intuition or very limited knowledge of the language. Although all students attempted to pronounce the words, only a small portion were able to do so clearly and accurately. It was evident that the most familiar words, such as blue, name, bike, and tree, were pronounced with less difficulty. This could be due to their frequent appearance in popular audiovisual contexts, such as songs, social media, video games, or basic school materials, which may have facilitated incidental exposure to their correct pronunciation. In contrast, words such as sheep, beat, cake, moon, rose, and cube were more difficult to pronounce correctly. Many students shortened sounds, changed the order of syllables, or mispronounced vowels. This reflected a lack of phonological awareness about the sound structure of English, especially how vowel duration can completely change the meaning of a word.

This initial diagnosis was key to understanding the group's weaknesses and justifying the need to implement more effective strategies, particularly visual teaching materials, to help students recognize and produce long vowel sounds more clearly. Furthermore, the individual administration of the pretest not only allowed for more accurate results but also revealed students' insecurity when confronted with the language, reinforcing the importance of creating more visual, practical, and safe environments to promote learning English pronunciation.

Table 3. 7-1: Pronunciation difficulties - Less Common Words. Researcher's Creation

7-1: Pronunciation difficulties - Less Common Words	
WORDS	NUMBER OF STUDENTS
Sheep	15
Beat	14
Cake	10
Moon	11
Rose	15
Cube	18

Figure 3. 7-1: Pronunciation difficulties - Less Common Words. Researcher's Creation



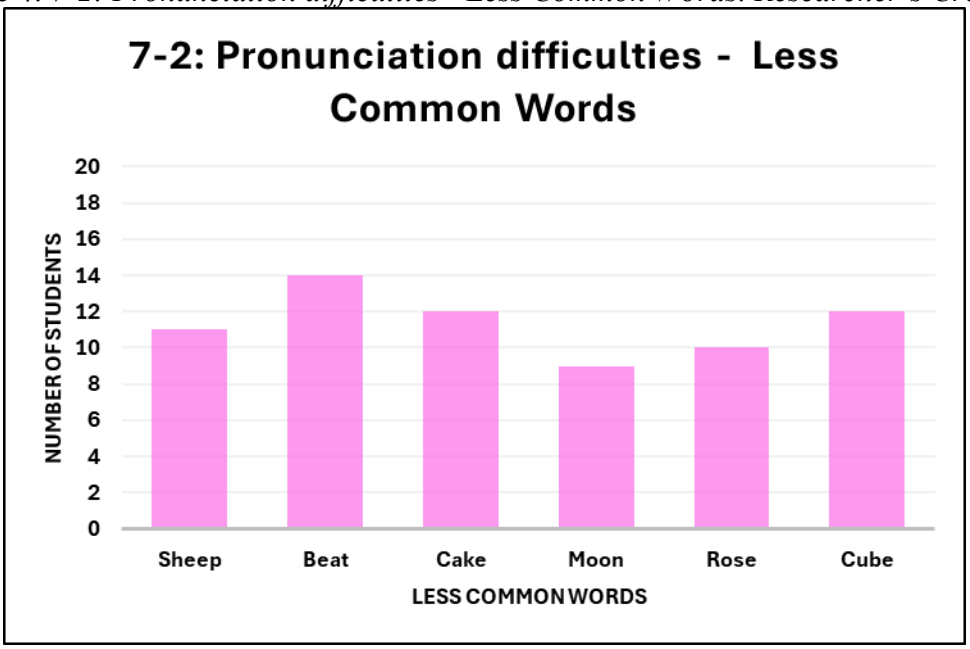
The figure of 7-1: Pronunciation Difficulties – Less Common Words shows the number of students in the 7-1 group who had difficulty pronouncing English words considered less common. The words analyzed were Sheep, Beat, Cake, Moon, Rose, and Cube. Cube was the word with the highest number of errors, with 17 students failing to pronounce it correctly, representing virtually the entire group. Sheep and Rose followed, with 15 students each. In contrast, Cake and Moon had fewer errors, with 10 and 11 students, respectively, although these are still high numbers.

This behavior reflects a general trend in which students in the 7-1 group face greater difficulty pronouncing words containing long vowels or more complex phonetic combinations, such as /juː/ in “Cube” or /iː/ in “Sheep” and “Beat.” Furthermore, it is evident that words that are not part of everyday vocabulary tend to generate more errors, possibly due to a lack of auditory exposure and phonetic practice.

Table 4. 7-2: Pronunciation difficulties - Less Common Words. Researcher's Creation

7-2: Pronunciation difficulties - Less Common Words	
WORDS	**NUMBER OF STUDENTS**
Sheep	11
Beat	14
Cake	12
Moon	9
Rose	10
Cube	12

Figure 4. 7-2: Pronunciation difficulties - Less Common Words. Researcher's Creation



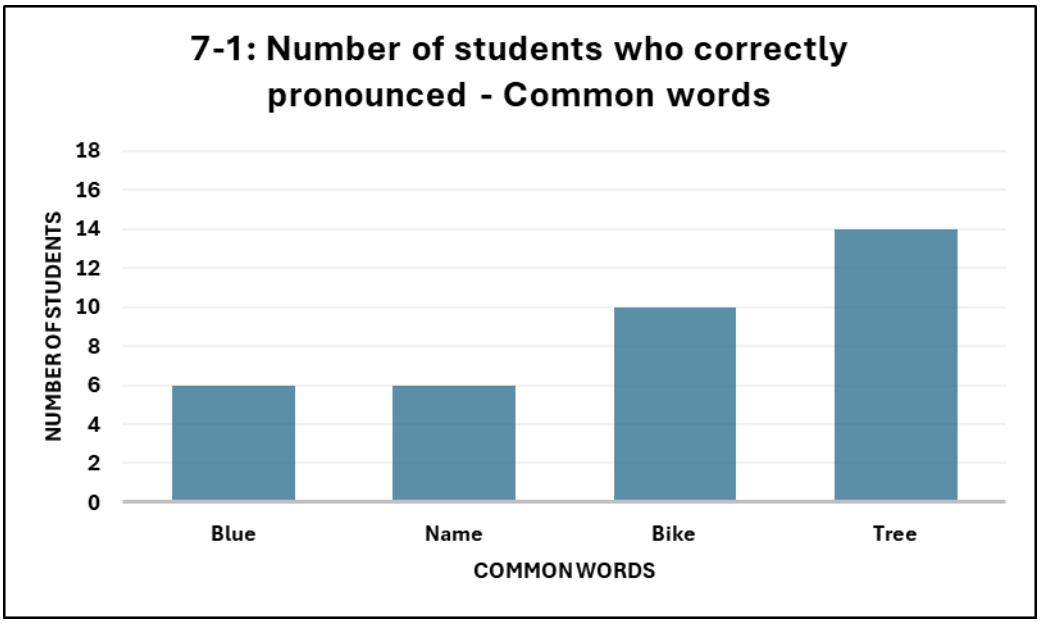
The figure 7-2: Pronunciation Difficulties – Less Common Words shows the difficulties students in the 7-2 group (20 in total) had when pronouncing uncommon English words. The

words with the most errors were Beat (14 students), Cake, and Cube (12 students each), followed by Sheep (11), Rose (10), and Moon (9). Although “Moon” had the fewest errors, almost half of the group also made mistakes in its pronunciation. These results reflect that most students struggle with pronouncing long vowels or unfamiliar sounds in English. Although the 7-2 group performed slightly better than the 7-1 group in some words, difficulties are still evident. This indicates the need to continue working on pronunciation in class with practical exercises, repetitions, audio recordings, and activities that help improve students' pronunciation of these complex sounds.

Table 5. 7-1: Number of students who correctly pronounced - Common words. Researcher’s Creation

7-1: Number of students who correctly pronounced - Common words		
WORDS	**NUMBER OF STUDENTS**	**Percent**
Blue	6	33%
Name	6	33%
Bike	10	56%
Tree	14	78%

Figure 5. 7-1: Number of students who correctly pronounced - Common words: Researcher's Creation



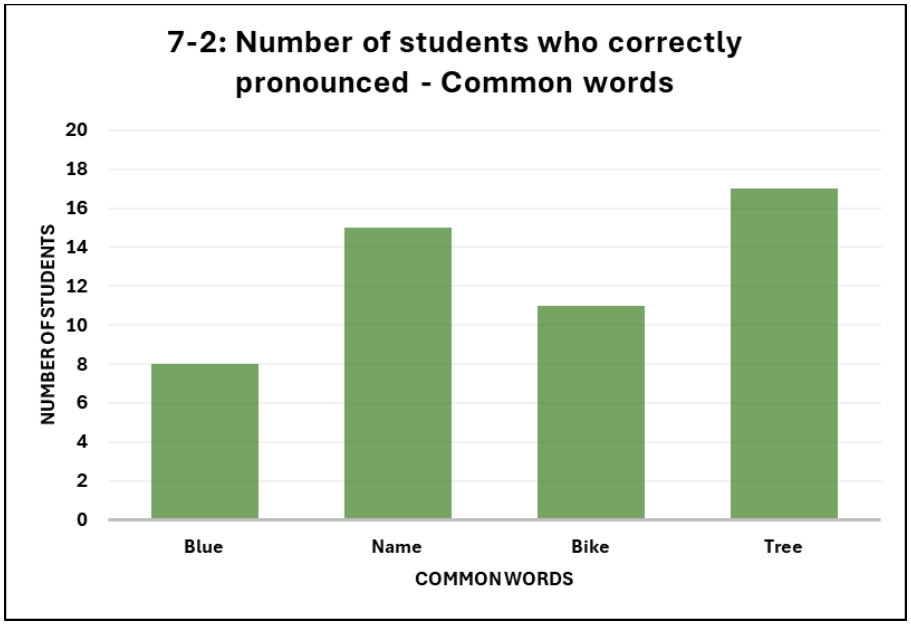
This figure presents the results obtained from the pronunciation assessment of frequently used English words by students in group 7-1. The words included in this category are "Blue," "Name," "Bike," and "Tree," which are part of the basic vocabulary that students typically encounter from the earliest stages of exposure to the language. The data show that, on average, 6 of the 18 students were able to pronounce these words correctly, representing approximately 33% of the group. Although this number may seem low at first glance, its interpretation must be made considering the level of exposure to the language and the educational context. Many students at the elementary level tend to recognize these words visually or understand them in an oral context, but they have not necessarily developed the ability to accurately produce them phonetically. This trend suggests that, although there is some familiarity with basic vocabulary, there is still a significant need to reinforce pronunciation skills, even for words considered simple. This could be due to several factors: instruction focused on grammar and vocabulary

without sufficient oral practice; Poor phonetic feedback; or a learning environment where oral production is not prioritized. Furthermore, this finding reinforces the importance of integrating phonological practices from the early stages of English learning, using resources such as visual cards, songs, phonetic games, or educational technology that reinforce the relationship between grapheme and phoneme.

Table 6. 7-2: Number of students who correctly pronounced - Common words. Researcher's Creation

7-2: Number of students who correctly pronounced - Common words		
WORDS	NUMBER OF STUDENTS	Percent
Blue	8	40%
Name	15	75%
Bike	11	55%
Tree	17	85%

Figure 6. 7-2: Number of students who correctly pronounced - Common words: Researcher's Creation



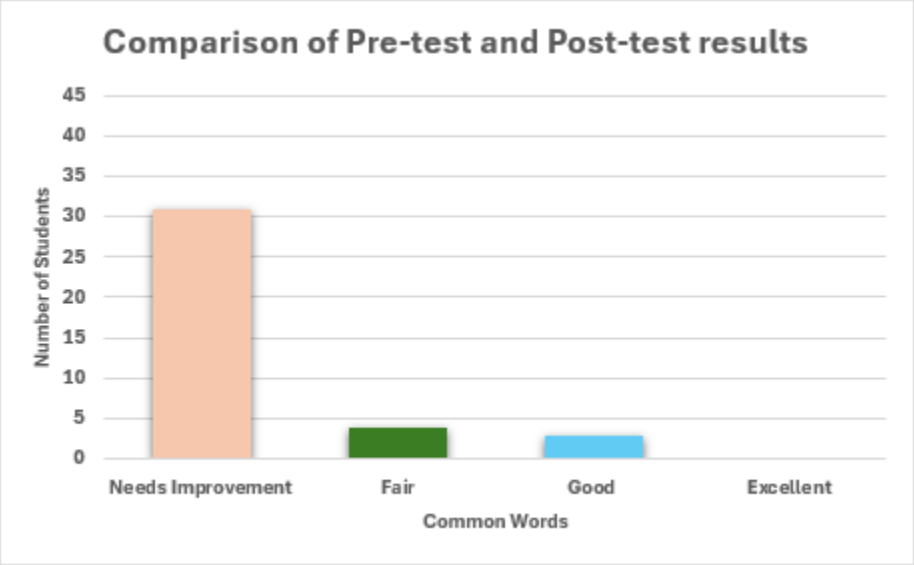
The figure-“7-2: Number of Students Who Correctly Pronounced Common Words” shows the number of students in the 7-2 group (made up of 20 students) who were able to correctly pronounce a series of common English words. According to the results, 8 students correctly pronounced “Blue,” 15 correctly pronounced “Name,” 11 correctly pronounced “Bike,” and 17 correctly pronounced “Tree.” These data indicate that, since these are frequently used words in the school environment and audiovisual materials, most of the group achieved acceptable pronunciations, as they are terms they have heard repeatedly.

Compared to the 7-1 group, the 7-2 group performed better in pronouncing these common words. While only an average of 6 students in the 7-1 group were able to correctly pronounce this type of vocabulary, the 7-2 group achieved higher scores, reaching over 75% correct pronunciations for words like “Name” and “Tree.” This suggests that the 7-2 group may have greater auditory familiarity with English or have received more consistent exposure to the language in practical contexts. Overall, this graph shows that the frequency of use and exposure to certain words positively influence pronunciation and highlights the importance of including everyday vocabulary in oral activities to strengthen phonetic production from the simplest possible angles.

Table 7. Pre-test analysis Group (7-1) (7-2) n=38 Researcher's Creation

Pre-test analysis Group (7-1) (7-2) n=38		
Criterion	**NUMBER OF STUDENTS**	**Percent**
Needs Improvement	31	82%
Fair	4	11%
Good	3	8%
Excellent	0	0%

Figure 7. Pre-test analysis Group (7-1) (7-2) n=38: Researcher's Creation



An analysis of the pre-test administered to students in groups 7-1 and 7-2, before implementing the activities with visual materials, reveals an initial picture of marked improvement needs in English pronunciation. According to the results, 82% of the total (31 students) fell into the Needs Improvement category, showing great difficulty in correctly recognizing and

producing long vowel sounds, as well as a lack of confidence and fluency when reading aloud. On the other hand, 11% (4 students) reached the Fair level, showing some success but with inconsistent pronunciation and notable hesitations. Only 8% (3 students) achieved the Good level, demonstrating acceptable performance, although not yet achieving solid mastery. It is important to note that no students (0%) reached the Excellent level, which underscores the limited prior consolidation of the phonological skills assessed. Taken together, these data demonstrate that, before the intervention, there was a clear pedagogical need to implement innovative strategies to strengthen pronunciation, phonological awareness, and oral confidence in English within these groups.

4.3 Activities in Between

4.3.1 Activity 1

The activities designed in this project are being implemented with seventh-year students at CTP de Platanar, specifically with groups 7-1 (21 students) and 7-2 (24 students), as part of a program to improve phonological awareness and the correct pronunciation of long vowels in English. The experience was enriching for both the students and the research process, as it allowed for direct observation of the impact of using visual aids in teaching pronunciation. The session began with a brief introductory explanation of what long vowels are in English, accompanied by simple examples and their representation in the International Phonetic Alphabet (IPA). This moment generated great curiosity among the students, who expressed surprise when observing the phonetic symbols and made comments such as: "That looks like another language," or "I've never seen those strange letters before." This atmosphere of wonder and spontaneous questions helped capture their interest from the beginning.

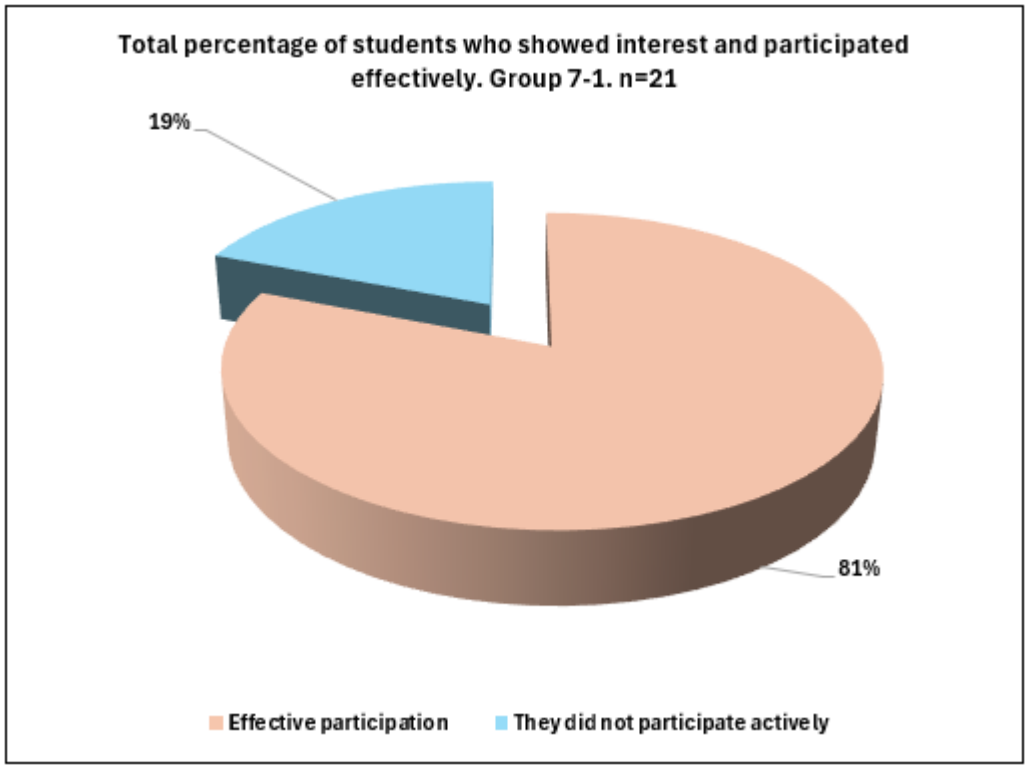
After the initial introduction, the main activity began. This consisted of illustrated flashcards designed to capture students' attention through attractive images, accompanied by English words that include long vowels. A total of twelve carefully chosen words were selected to encompass a variety of vowel sounds and enrich the group's listening and visual experience. The words worked on were cake, rain, sheep, beach, bike, home, blue, moon, smile, cube, train, and paint. The dynamic involved showing each card to the group, saying the word aloud at a slow and understandable pace, and then inviting students to repeat it together in chorus. Afterward, some students were encouraged to do so individually, creating a participatory and relaxed atmosphere.

This approach allowed the activity to develop in a playful tone, encouraging students to explore the sounds of the language without fear or pressure.

Visual support played a fundamental role in this process, as it helped students establish an immediate connection between the new vocabulary and a specific reference they could observe. This positive impact was reflected in various spontaneous reactions from the group. Some students expressed statements like: "This makes it easier for me because I see the picture and remember the word," while others laughingly commented: "Now every time I see a cake, I'm going to say 'cake.'" These expressions demonstrate how the use of visual aids not only made the activity more engaging but also helped strengthen understanding and memorization of the new vocabulary presented.

The students' motivation was evident throughout the activity. A high level of participation was observed, with approximately 85% of students of 17 students in both groups voluntarily participating by repeating words, raising their hands to respond, or making spontaneous comments. Even those who initially seemed more reserved eventually joined in after seeing their classmates practice so fluently. This participatory atmosphere was reinforced by the visual nature of the flashcards, which allowed students to connect the images with the sound.

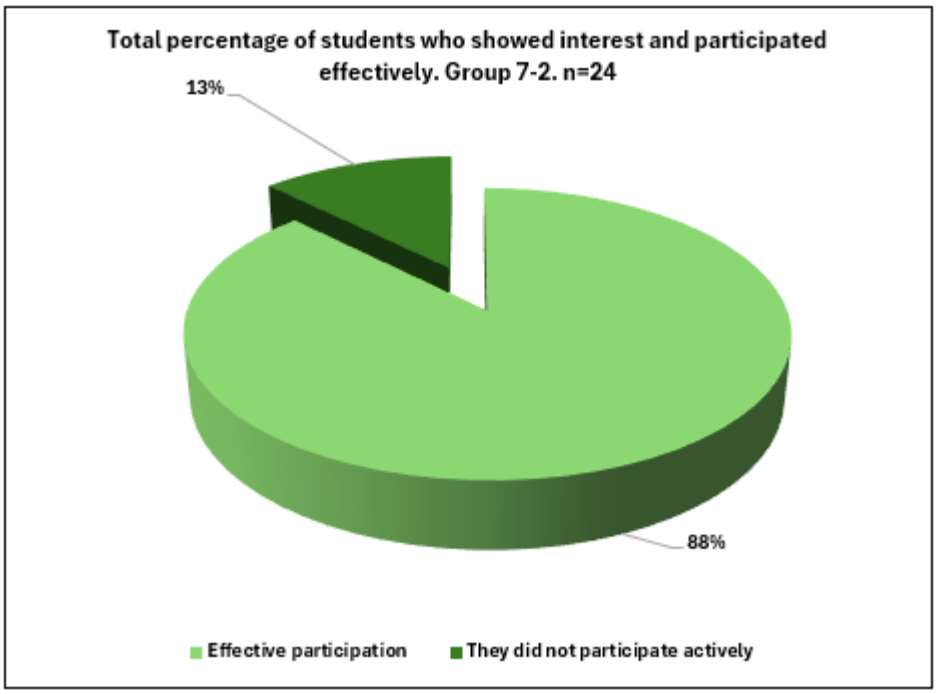
Figure 8. Total percentage of students who showed interest and participated effectively. Group 7-1. n=21: Researcher's Creation



As observed in the circular graph, 81% of 17 students showed active and committed participation during the activity, while the remaining 19% of 4 students were not significantly involved. This distribution reveals a mostly positive trend, suggesting a motivating and receptive learning environment, as well as the effectiveness of the teaching strategies used to capture the group's interest. The fact that more than two-thirds of the students were actively involved indicates that the proposed activities were, in general terms, engaging, relevant, and understandable for the majority. However, the presence of a significant percentage, almost a third of the group, who opted for a more passive role, invites reflection on possible factors that may have influenced their lower participation. These factors may be related to personal aspects,

such as shyness or lack of confidence; to social dynamics within the classroom; or even to methodological adjustments that may be needed to address diverse learning styles and rhythms.

Figure 9. Total percentage of students who showed interest and participated effectively. Group 7-2. n=24: Researcher's Creation



The pie chart shows the percentage distribution of participation levels observed in group 7-2, made up of 24 students, during the activity focused on learning English vocabulary with long vowels, implemented using illustrated flashcards. It can be seen that 88% of 21 students demonstrated a level of participation classified as effective, which included actions such as repeating words chorally and individually, intervening with content-related questions, or making comments that demonstrated genuine interest in the activity. This high percentage indicates that the majority of the group responded positively and enthusiastically, actively engaging in the oral practice process, which generated a dynamic and collaborative environment during the session.

On the other hand, the chart shows that 13% of 3 students in group 7-2 adopted a more passive stance, limiting themselves to observing and listening without directly engaging in oral interventions or spontaneous exchanges with the teacher or their classmates. This behavior, although a minority, is significant, as it demonstrates the presence of students who may require additional strategies or greater support to feel safe and participate actively.

4.3.2 Activity 2

The second activity was conducted with students in grades 7-1 (21 students) and 7-2 (24 students) at CTP de Platanar. The aim was to continue strengthening their knowledge of long vowels in English, this time from a more phonetic and articulatory perspective. This session was designed so that students could visualize, understand, and specifically imitate how long vowel sounds are produced, which is key to internalizing pronunciation patterns that are new and often challenging for non-native speakers. To achieve this, a visual pronunciation map was used, which presented in a structured way five long vowels in English: [i], [ɝ], [ɑ], [ɔ], and [u]. This map included detailed diagrams of the vocal apparatus, explicitly showing the position of the lips and tongue when articulating each sound, as well as examples of everyday words that contain them. On this occasion, we worked with the words: sheep, eat, door, more, moon, and blue, carefully selected to illustrate each target long vowel and facilitate the relationship between sound, image, and meaning.

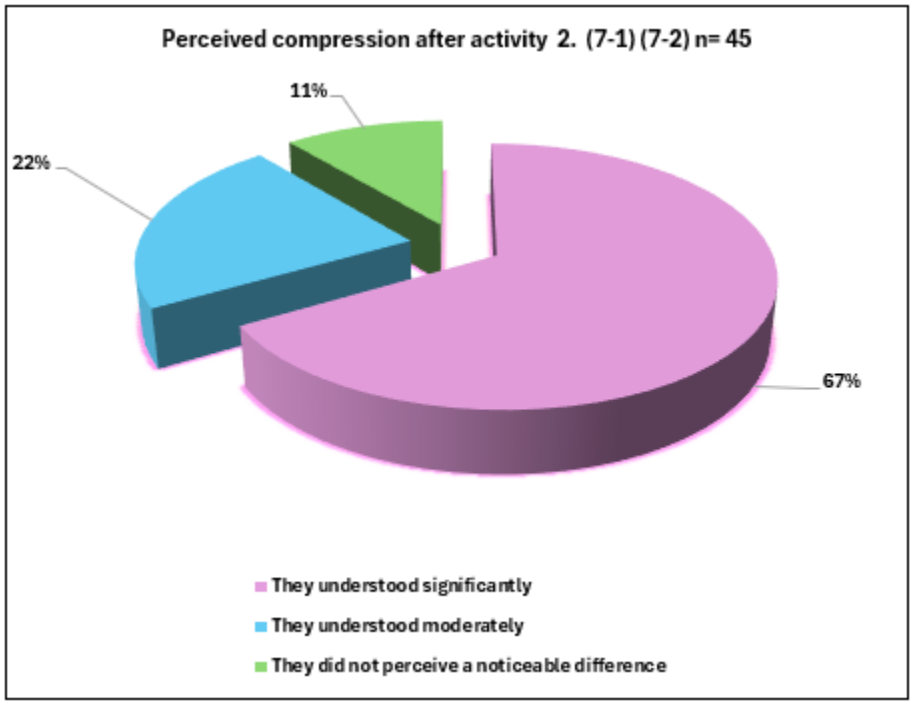
The activity followed a carefully structured teaching sequence designed to progressively guide students' learning. First, one sound was introduced at a time: the teacher pointed out on the visual map both the corresponding phonetic symbol and the image illustrating the specific

articulatory position, for example, showing a diagram for the long [i] sound with the lips extended and the tongue raised, while presenting the words "sheep" and "eat" as examples. This was followed by pronunciation modeling, in which each word was articulated slowly and clearly, slightly exaggerating the movements of the lips and tongue so that students could observe the necessary oral configuration. The entire group was then invited to repeat the word chorally, imitating both the sound and the observed mouth shape. This fostered a climate of trust and reduced any anxiety that individual oral production could generate by allowing everyone to practice simultaneously. Finally, some students were asked to repeat the word individually, trying to accurately emulate the pronunciation shown. This opportunity was also used to offer immediate feedback, make gentle corrections, and highlight correct answers, thus encouraging participation and especially encouraging those who were more uncertain.

During the activity, subtle differences were observed between the groups. In group 7-1, some students showed particular curiosity, asking questions like, "Why do I have to open my mouth so wide for 'more'?" or "Is that also how it is said in songs?", which demonstrated a thoughtful interest in how the language works. In this group, the pace was slightly slower, allowing for clarification of doubts and repetition several times until they felt comfortable with the sounds. In contrast, group 7-2 participated very enthusiastically and spontaneously; amusing comments were heard when they tried unfamiliar sounds, generating laughter and a relaxed atmosphere that encouraged repeated practice without fear of making mistakes. The combination of visual (articulation diagrams), auditory (listening to the sound), and kinesthetic (imitating mouth movements) elements was especially effective in helping students understand how these

sounds are physically produced. This approach allowed them to develop a stronger phonetic awareness, recognizing the direct relationship between articulatory position and the resulting sound, a fundamental aspect for moving toward more accurate pronunciation.

Figure 10. Perceived compression after activity 2 (7-1) (7-2) n= 45: Researcher's Creation



The graph shows the perceptions of students in groups 7-1 and 7-2 (n=45) regarding their understanding of pronunciation after activity two, which used visual maps with articulatory diagrams. The results reveal that 67% (30 students) indicated that they had significantly improved their understanding of how to articulate sounds thanks to the diagrams, while 22% (10 students) indicated that their understanding was moderately improved. On the other hand, 11% (5 students) stated that they had not perceived a notable difference compared to other activities without visual support. These data confirm the positive effect that visual resources have on

teaching phonetics by facilitating the identification and conscious practice of sounds, although they also suggest the need to continue using a variety of strategies to address all learning styles present in the classroom.

4.4 Post Test

After completing the cycle of activities designed to strengthen the pronunciation of long vowels in English through the use of visual materials such as illustrated flashcards and articulatory maps, the post-test was administered. The objective was to systematically evaluate the progress made by the students in groups 7-1 (21 students) and 7-2 (24 students), for a total of 45 participants. The post-test consisted of an individual reading aloud a short text that intentionally integrated words with the long vowels they had studied [i], [ɝ], [ɑ], [ɔ], [u]. Examples of phrases included were: “The sheep sleeps near the green tree,” and “The moon is too far from the blue door,” which required students to apply what they had learned in a more natural communicative context. Each student was called individually in front of the teacher to read, while completing a previously designed observation rubric.

Each aspect was rated on a scale of 1 to 4, allowing for an accurate record of each student's performance and a more comprehensive view of the intervention's pedagogical impact. During the implementation of the post-test, highly positive results were observed compared to the initial pre-test. Many students showed clear improvement in their ability to recognize and produce long vowel sounds, maintaining more appropriate duration and with considerably clearer articulation. This was especially noticeable in words that had previously been difficult, such as "sheep," "moon," or "door." Additionally, an increase in reading fluency and greater confidence

in individual tasks was evident, a contrast to the nervousness or excessive pauses reported at the beginning of the process.

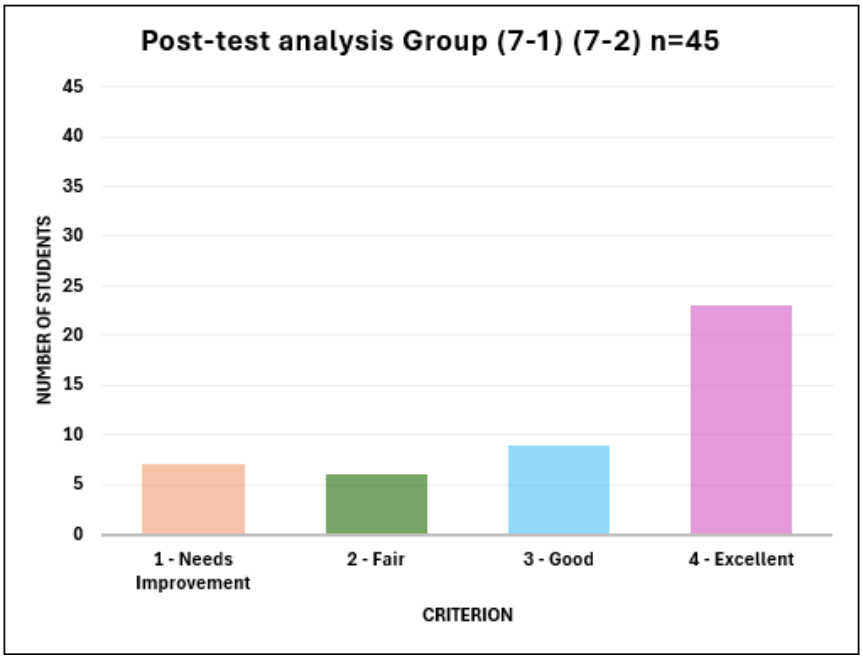
It was also relevant to note that several students spontaneously commented that the articulation maps had allowed them to "better understand how to move their mouths" or "remember how words sounded." This type of qualitative perception reinforces the hypothesis about the effectiveness of using visual aids to facilitate phonetic learning, especially in a beginner-level group.

The post-test not only demonstrated objective improvements in students' pronunciation and oral performance but also provided evidence of the educational value of integrating visual aids into the English phonology teaching process. These results underscore the importance of continuing to explore and incorporate methodologies that address different learning styles, foster self-confidence, and promote a more conscious and effective command of the language.

Table 8. Post-test analysis Group (7-1) (7-2) n=45:Researcher's Creation

Post-test analysis Group (7-1) (7-2) n=45		
Criterion	**NUMBER OF STUDENTS**	**Percent**
1 - Needs Improvement	7	16%
2 - Fair	6	13%
3 - Good	9	20%
4 - Excellent	23	51%

Figure 11.Post-test analysis Group (7-1) (7-2) n=45:Researcher's Creation



The bar graph shows the performance distribution of all students in groups 7-1 and 7-2 after administering the post-test designed to assess the correct pronunciation of long vowels, sound duration, articulatory clarity, reading fluency, and self-expression confidence. According to the data presented, it is observed that a majority of the group achieved high levels of performance, placing themselves in the upper categories of the scale used. 48.9% of the total (22 students) were placed at level 4 - Excellent, demonstrating outstanding mastery of the assessed aspects. This group demonstrated accurate pronunciation, adequate handling of rhythm and sound duration, and was confident and fluent when reading the proposed text aloud.

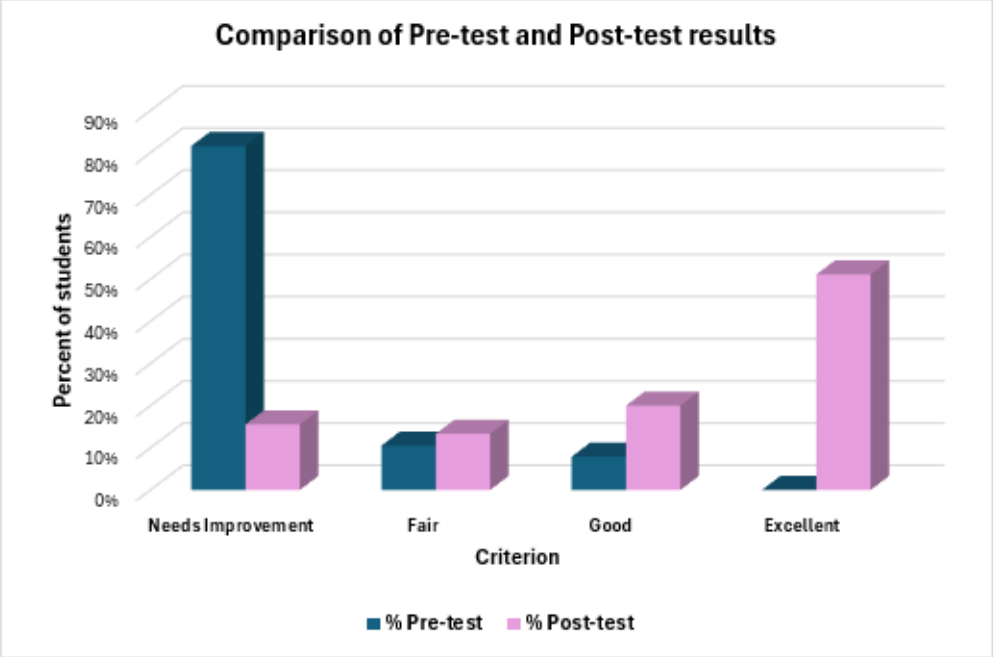
Twenty percent (9 students) obtained a score of 3 - Good, indicating consistent performance, although with minor details that could still be improved, especially in the consistency of some vowel sounds. On the other hand, 15.5% (7 students) were in Level 2 - Fair,

showing progress but with some notable difficulties in the duration or articulation of certain sounds. Finally, 15.5% (7 students) were in Level 1 - Needs Improvement, indicating that, while they actively participated, they require additional support to consolidate more precise and confident pronunciation. This analysis concludes that, following the educational intervention using visual materials (illustrated flashcards and pronunciation maps), approximately 69% of students (Good + Excellent levels) achieved solid proficiency, reflecting the effectiveness of the strategies applied. At the same time, a sector that still requires targeted support was identified, which will be valuable for designing future consolidation activities.

Table 9. Comparison of Pre-test and Post-test results: Researcher's Creation

Comparison of Pre-test and Post-test results		
Criterion	**% Pre-test**	**% Post-test**
Needs Improvement	82%	16%
Fair	11%	13%
Good	8%	20%
Excellent	0%	51%

Table 10. Comparison of Pre-test and Post-test results: :Researcher's Creation



A comparison of the pre-test and post-test results for students in groups 7-1 and 7-2 revealed significant progress in the development of long vowel pronunciation in English following intervention using visual aids such as illustrated flashcards and articulatory maps. In the pre-test, 82% (31 students) were at the Needs Improvement level, 11% (4 students) at Fair, 8% (3 students) at Good, and none reached the Excellent category. In contrast, the post-test results showed a marked transformation: only 16% (7 students) remained at the Needs Improvement level, 13% (6 students) at Fair, while 20% (9 students) reached Good, and a remarkable 51% (23 students) reached the Excellent level, reflecting solid mastery of the assessed aspects such as correct articulation, vowel duration, reading fluency, and self-confidence. This change demonstrates that the use of visual materials was highly effective in enhancing phonological awareness and accurate pronunciation of long vowel sounds, facilitating

internalization and correct production through direct visualization of lip and tongue placement. Thus, the data confirm that integrating visual teaching strategies not only objectively improved students' performance but also strengthened their confidence when interacting orally in English.

Chapter V

Conclusions and Recommendations

This final chapter constitutes a key moment in the research process, as it allows for in-depth reflection on the path taken, the achievements made, and the lessons learned throughout the study. Concluding is not limited to simply summarizing the results; it also involves recognizing the true impact that the strategies implemented in this case, the use of visual materials to improve pronunciation, had on student learning. Furthermore, the recommendations become a valuable guide for teachers, researchers, and educational institutions interested in enriching their teaching practices. Through these final reflections, this chapter connects the evidence obtained with the broader needs of the educational field, reaffirming the importance of innovation, motivation, and inclusion within the English classroom.

5.1 Purpose of the Conclusion

The conclusion is one of the most relevant and significant sections of any research project, as it is the space where the results obtained throughout the process are integrated, analyzed, and comprehensively assessed. Its main purpose is not only to offer a final summary, but also to demonstrate whether the implemented pedagogical strategies and instruments effectively met the objectives set from the beginning of the study. In this particular case, it demonstrates whether the use of visual materials such as illustrated flashcards and pronunciation maps really contributed to improving students' phonological awareness and pronunciation of long vowels in English. The conclusion validates the effort invested in each phase of the

research, showing how the data collected, both in the pre-test and post-test, confirms the positive impact of the intervention. It also provides a space to reflect on the practical implications of the findings, not only for the study group but also for teachers and educational centers seeking innovative strategies to enhance language learning. In this way, the conclusion not only closes the research cycle but also gives it meaning and scope, turning the knowledge generated into a useful guide for continuing to improve educational processes and more consciously addressing the real needs of students.

5.2 Conclusions

5.2.1 To identify the difficulties that students face when recognizing and pronouncing the long vowel sounds of English.

Based on the objective posed in this study, these difficulties are noticeable and significantly affect the development of oral proficiency in English. The pre-test revealed that the vast majority of students had limited mastery in auditory recognition and correct production of long vowels, manifested in errors related to sound duration, confusion with short vowels, and imprecise articulation. This finding was particularly clear in words less familiar to them, such as sheep, beat, cube, or rose, where the percentages of poor performance were high. These results not only fulfilled the purpose of identifying the main weaknesses in this area but also demonstrated the urgent need to implement innovative strategies that directly address these deficiencies. Therefore, the conclusions of this work underscore that a thorough understanding of these difficulties is an essential step toward designing more effective pedagogical interventions

that are sensitive to students' real needs, enabling English pronunciation learning to become a more accessible, conscious, and successful process.

5.2.2 To apply different visual teaching materials that facilitate the learning of long vowels in English.

Based on the objective of this research, the application of different visual materials to facilitate the learning of long vowels in English, it is concluded that the implemented pedagogical strategy was highly effective and relevant to the needs of the study group. The use of visual resources such as illustrated flashcards and articulatory maps not only generated a more dynamic and participatory learning environment but also allowed students to associate the sound, written form, and articulation of long vowels. This was reflected in the post-test results, which showed significant progress in the pronunciation, duration, and recognition of these sounds, as well as a notable increase in confidence when reading aloud. Furthermore, qualitative feedback provided by the students themselves indicated that the visual materials helped them "better understand how to move their mouths" and "remember how words sounded," reaffirming the importance of using multisensory strategies to strengthen phonological learning. In summary, this study demonstrated that the conscious and structured use of visual materials facilitates the learning of long vowels in English, helping to overcome previous difficulties and promoting a more solid and secure command of pronunciation.

5.2.3 To evaluate the impact of using visual teaching materials in improving the recognition and pronunciation of long vowels in seventh-grade students.

Based on the objective of this study, it is concluded that the implemented didactic intervention had a positive and significant effect on the learning of the analyzed group. The data obtained after comparing the pre-test and post-test showed notable progress: the percentage of students at low levels with difficulties pronouncing long vowels decreased considerably, while the percentage of students who achieved performance classified as "Good" and "Excellent" increased significantly. This progress demonstrates that the use of visual materials such as illustrated flashcards and pronunciation maps not only facilitated the auditory and visual recognition of sounds but also strengthened oral production, allowing students to articulate long vowels with greater clarity, appropriate duration, and confidence. Furthermore, qualitative observations during the sessions and spontaneous feedback from the students themselves confirmed that these resources helped them more consciously internalize the use of long vowels in English. Consequently, it can be stated that the use of visual materials had a favorable and effective impact on the development of phonological competence, constituting a valuable tool for strengthening English language teaching at this educational level.

5.3 Restatement of the Research Question

How does teaching English phonetic rules supported by visual teaching materials influence the accuracy of recognition and pronunciation of long vowels in seventh-grade students at CTP de Platanar?

Based on the research question, it can be concluded that the study provided a positive and well-founded answer. The results obtained, especially after comparing the pre-test and post-test, show that the implementation of visual materials such as illustrated flashcards and articulatory maps favorably influenced students' learning, allowing them to recognize and produce long vowel sounds with greater clarity and confidence. While the change was neither radical nor immediate, significant progress was evident, demonstrating the potential of this approach. This indicates that the strategy employed fulfilled its initial purpose, without the need to modify the original approaches, as it was demonstrated that the systematic and conscious use of visual resources can progressively improve phonological competence. Furthermore, it is inferred that, if this methodology continues to be applied over time, students could achieve even higher levels of accuracy and confidence in their English pronunciation.

5.4 Recommendations

Based on the experience gained during this research, it is recommended that those wishing to undertake similar work carefully plan each stage of the process and design activities that progress gradually, allowing students to assimilate the content gradually and demonstrate real improvements. It is essential to use a variety of assessment instruments, including clear rubrics, systematic observations, and diagnostic tests before and after the intervention, as this provides a comprehensive view of the impact achieved. Furthermore, administering both the pre-test and post-test individually was extremely valuable, allowing for a more precise observation of each student's strengths and weaknesses without the influence of the group, which significantly enriched the understanding of the results.

It is also important to maintain an open and empathetic attitude, adjusting strategies to the needs and specific characteristics of each group, as well as providing spaces where students can express how they perceive their learning, thus strengthening their confidence and motivation. Finally, it is worth noting that the use of visual materials not only facilitates pronunciation development but can also be extended to enhance other skills, such as listening comprehension. Linking sounds to images and practicing their identification in different contexts fosters more comprehensive, dynamic, and meaningful learning.

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