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FACULTAD DE CIENCIAS SOCIALES

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CLASS SYSTEM TO IMPROVE THE /S/ AND /Z/ PRONUNCIATION THROUGH THE USE OF AUDIOVISUAL RESOURCES IN ENGLISH LANGUAGE.

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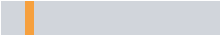
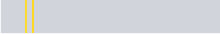📋 **1%** Similitudes
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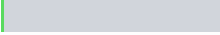
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Fecha de depósito: 30/6/2025
Tipo de carga: interface
fecha de fin de análisis: 30/6/2025

Número de palabras: 18.720
Número de caracteres: 127.178

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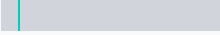| N°	Descripciones	Similitudes	Ubicaciones	Datos adicionales
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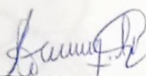## CLÁUSULA DE CESIÓN DE DERECHO DE PUBLICACIÓN EN EL REPOSITORIO DIGITAL INSTITUCIONAL

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DEDICATION

I dedicate this thesis to my family, who have been my greatest source of support throughout this time. To my parents, especially my mother, who is my greatest gift and my greatest love. To my siblings, who always supported me and motivated me to fulfill my dreams. To my friends, who always rejoiced in my achievements and never let me give up: Ammy, you are one of them. To my boyfriend, who with his love, patience, and support always encourages me to continue. And finally, to my pets, who stayed up with me for a long time.

Scarleth Silvana Eras Zhigue

I dedicate this achievement to my parents, to my mom Luz Marina Pando, for always supporting me through every stage of my life, being the safe place I can always turn to in order to calm my fears, and for being my constant guide in moments of uncertainty. To my dad, Angel Rodrigo Jara, for offering me his support even during difficult times, and for the valuable advice that still echoes in my life. To my siblings, for always being there, teaching me, and walking alongside me throughout this journey. And to the younger Ammy, the one from childhood and adolescence, who once doubted herself but still managed to achieve what she set out to do.

Ammy Angelica Jara Pando

ACKNOWLEDGEMENT

I would like to express my gratitude to the three pillars that have played a fundamental role in my life. Firstly, God, I thank you for allowing me to experience joyful moments with the people I love and cherish most. To my mother, who has always been there for me and believed in me, thank you for your encouragement in difficult times, for waiting up for me every night, and for the delicious meals you have always prepared for me. Thank you very much, Mum. To my siblings: thank you for your unconditional support; you are the best siblings!

I would also like to express my sincere gratitude to teachers Odalia Llerena and Kleber Sarmiento, who guided and taught us throughout this process.

Finally, I would like to thank my classmates, Team One. Thank you for the laughter and unique moments during this wonderful journey, for sharing every emotion, and for keeping our spirits high until the end. And thank you to my classmates in general, because despite our differences, we always remained united.

Scarleth Silvana Eras Zhigue

On this journey filled with joy, sorrow, and unexpected moments, I would like to express my deepest gratitude to my parents, who have supported me in every aspect of my life. You are my greatest source of courage, strength, and perseverance.

To my siblings, who despite our differences, are always there to lend a helping hand. Thank you for your advice and joyful moments.

To my teachers, for their dedication in helping me overcome doubts and for guiding me with commitment throughout this academic journey, especially Mr. Kleber and Miss Odalia, whose support was truly meaningful.

To my friends, whom I met along the way, thank you for lifting my spirits with your humor and words of encouragement. A special thanks to you, Scarleth, for being part of this important chapter in my life.

To my beloved pets for your silent yet comforting presence during those long nights of work and reflections.

And most specially, to my older brother, Javico. You are, and will always be, in my mind and heart. I know that if you were here, you would show your support with a smile, hold my hand like you did when we crossed the street even when I was already grown, embrace me like you did on my fifteenth birthday, and play a song on your guitar to celebrate this achievement.

To all of you, thank you.

Ammy Angelica Jara Pando

RESUMEN

La investigación se realizó con el fin de mejorar la pronunciación de los fonemas /s/ y /z/ del idioma inglés en los estudiantes de décimo año "A" de Educación General Básica, pertenecientes a una institución educativa ubicada en Santa Rosa, provincia de El Oro, durante el período lectivo 2025-2026, a través de la implementación de un sistema de clases dividida en tres sesiones, y la cual incorporó recursos audiovisuales como videos de YouTube, Canva, Wordwall y Youglish. El estudio se llevó a cabo bajo un enfoque metodológico cuantitativo, con un diseño experimental de carácter explicativo, lo que permitió medir el impacto de la intervención pedagógica y comprobar su influencia a través de la verificación de una hipótesis científica, por medio del empleo de métodos de nivel teórico y empírico para la recolección de datos y sustento de la investigación. Entre los instrumentos utilizados, se aplicaron pruebas pedagógicas como el pre-test y post-test, así como la aplicación de la observación con el fin de evaluar el desempeño inicial de 31 estudiantes antes de implementar el sistema de clases y, posteriormente, al concluir la intervención. La verificación de la efectividad de la aplicación del sistema de clases en la mejora de la pronunciación se llevó a cabo mediante el análisis de los resultados obtenidos de las pruebas aplicadas, utilizando la prueba t pareada. Este análisis estadístico permitió comprobar que la intervención mejoró de manera efectiva las dificultades en el dominio de la pronunciación de los fonemas /s/ y /z/ en el inglés.

Palabras claves: recursos audiovisuales, pronunciación, fonemas, precisión, fluidez, entonación y acentuación.

ABSTRACT

The objective of the research was to enhance the pronunciation of the phonemes /s/ and /z/ in the English language among tenth-grade "A" students in General Basic Education, belonging to an educational institution located in Santa Rosa, El Oro province, during the 2025-2026 school year. This was achieved through the implementation of a class system divided into three structured sessions, which incorporated various audiovisual resources such as YouTube videos, Canva presentations, interactive Wordwall activities, and the Youglish platform as instructional tools. This study followed a quantitative methodological approach, framed within an explanatory experimental design, which allowed the researchers to measure the pedagogical impact of the intervention and verify its influence through the testing of a scientific hypothesis. To ensure comprehensive analysis and data triangulation, both theoretical and empirical level methods were employed for data collection and research validation. The instruments employed included pedagogical tests, such as pre-test and post-test, as well as the application of an observation guide. These tools were aimed at evaluating the initial and final performance of a total of 31 students prior to the implementation of the class system and subsequently at the conclusion of the intervention. The effectiveness of the class system in enhancing pronunciation was verified through the statistical analysis of the test results, using a paired t-test. This analysis provided concrete evidence that the intervention significantly contributed to overcoming students' difficulties in the articulation and use of the phonemes /s/ and /z/ in English, particularly in terms of intonation, word stress, and fluency.

Key words: audiovisual resources, pronunciation, phonemes, accuracy, fluency, intonation, stress.

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INTRODUCTION

In today's globalized world, English has become essential for communication across various sectors of society, including economics, politics, international relations, and education. This trend is due to the desire to continue advancing in these areas, as well as the pursuit of better job opportunities and access to knowledge.

That said, besides being necessary, it is important to participate effectively in a global context. The increasing demand for effective communication skills has led to the integration of foreign language teaching in educational institutions at all levels. According to Moreira-Aguayo and Venegas-Loor (2020), English offers opportunities in a wide range of fields, including professional and academic settings. Consequently, it is a fundamental requirement for living in today's globalized world, allowing for greater participation in the global community.

As a result, educational institutions around the world have made efforts to incorporate the teaching of English as a compulsory subject, complementing it with programs and integrating educational policies that significantly improve the mastery of this language. However, most of these advancements are observed in nations with higher development indexes, such as the Netherlands, Singapore, Austria, Denmark, Hong Kong, and the Philippines, among others, which rank the highest in English proficiency levels (EF Education First, 2023).

On the other hand, in Latin America, various studies have identified that, despite the efforts made, the level of English proficiency among its population remains significantly lower than that of other regions of the world (Moreira-Aguayo and

Venegas-Loor, 2020; Tutillo-Piña et al., 2020). This gap in English proficiency limits the opportunities for Latin American citizens to participate fully in an increasingly globally interconnected economy and society.

In the specific case of Ecuador, the level of English proficiency is significantly below the Common European Standard, revealing a clear gap in the students' learning process (Castillo, 2021). Despite the efforts made, no significant changes have been observed in the progress of language skills in English, especially in the sub-skill of pronunciation, which is a challenge in the learning of this language for Ecuadorian students.

Therefore, one of the biggest obstacles is the pronunciation of certain phonemes, among which the sounds /s/ and /z/ stand out. These sounds, although there is a small similarity with Spanish, are not part of the phonological system of this language, which represents a considerable difficulty for the students.

As could be evidenced in the pre-professional practices of the Foreign Language Pedagogy career of the authors of this work, carried out among 10th-grade students, class A, of General Basic Education at "N.A" School during the 2025–2026 academic year:

- Students have little interest in learning English.
- Classes based on learning English grammar and not on its pronunciation, especially on the correct pronunciation of the phonemes /s/ and /z/.
- Students tend to confuse the pronunciation of the /s/ and /z/ phonemes of the English language with those of their native language.

● Students present difficulty when pronouncing phrases and words containing the phonemes /s/ and /z/.

● Use of repetitive and inefficient didactic resources for English language teaching.

Given the deficiencies mentioned above, the following research question is posed: How to improve the pronunciation of the phoneme's /s/ and /z/ of the English language in 10th-grade students, class A of General Basic Education at "N.A" high school?

Considering that the object of study is the teaching-learning process of the English language in basic general education, the possible causes of the problem are proposed:

● Lack of motivation for students to learn English.

● The teacher is focused on teaching grammar and not on developing the correct pronunciation of the /s/ and /z/ phonemes of the English language in the classroom.

● The absence of constant and regular practice in English pronunciation.

● Insufficient management of teaching resources by the teacher in the classroom for English language teaching.

The **general objective of the research** is: To implement a class system based on the use of audiovisual resources for the improvement of the pronunciation of the phonemes /s/ and /z/ of the English language among 10th-grade students, class A, of General Basic Education at "N.A" high school during the 2025–2026 academic year.

This objective focuses on the **field of action** of audiovisual didactic resources as a methodological strategy.

The present research establishes the following **specific objectives**:

☐ Theoretical basis for the use of audiovisual didactic resources to improve the pronunciation of the phonemes /s/ and /z/ in the process of teaching and learning English among 10th-grade students, class A, of General Basic Education at "N.A" high school during the 2025–2026 academic year.

☐ Diagnose the current level of pronunciation among 10th-grade students, class A, of General Basic Education at "N.A" high school during the 2025–2026 academic year.

☐ Implement a classroom system based on the use of audiovisual teaching resources to improve the pronunciation of the phonemes /s/ and /z/ in the English language.

☐ To verify how the classroom system based on the use of audiovisual teaching resources contributed to the improvement of the pronunciation of the phonemes /S/ and /Z/ in the English language among 10th-grade students, class A, of General Basic Education at "N.A" hush School during the 2025–2026 academic year.

Based on the objective, the following **scientific hypothesis** is established: If a class system is developed based on the use of audiovisual resources as a methodological strategy, it will contribute to the improvement of the pronunciation of the phonemes /s/ and /z/ in English among 10th-grade students of class 'A' at "N.A" high school during the 2025–2026 academic year.

Based on the hypothesis, the relationship between the following variables is studied:

The **independent variable** consists of the implementation of a class system that integrates the use of audiovisual resources. This translates into a set of classes focused on

the use of a variety of tools such as YouTube, websites and digital resources for pronunciation improvement.

The **dependent variable** corresponds to the pronunciation of the English language, specifically focused on the phonemes /s/ and /z/. This is defined as the correct articulation of words or phrases that include these phonemes, within a specific social context.

This scientific research is carried out from a quantitative **methodological paradigm**, with an experimental, explanatory and pre-experimental design. The study population is made up of 31 students in tenth grade of General Basic Education, class "A", in Santa Rosa city, during the school year 2025-2026.

As part of the **research methodology**, various theoretical methods are used, such as: analytical-synthetic, logical-historical, hypothetical-deductive and systemic. Empirical methods are also used, including observation, survey and the application of tests. These will be detailed in greater depth in the methodological framework of the study.

The **importance** of the research focuses on the use of audiovisual resources as a methodological tool to improve the pronunciation of the phonemes /s/ and /z/, through a system of classes, where the aim is to increase the mastery of the target language from interactive platforms.

The main **practical contribution** of this research lies in the proposal of a classroom system focused on the use of audiovisual resources as a methodological tool to improve the pronunciation of the phonemes /s/ and /z/. This will be carried out by means of a system of classes that seeks to increase the mastery of the target language through interactive platforms. In this way, students can feel more involved in the teaching-learning process of a second language.

This study is divided into 4 chapters: **Chapter I**, theoretical description on the object and field of research supported by bibliographic information. **Chapter II** establishes the types, methods, and techniques to be used. **Chapter III** presents the intervention proposal. Finally, **Chapter IV** contains the discussion of results, closing with conclusions and recommendations, bibliography, and annexes.

CHAPTER 1. THEORETICAL FOUNDATIONS OF THE USE OF THE

AUDIOVISUAL RESOURCES FOR TEACHING THE ENGLISH LANGUAGE.

1.1. The use of audiovisual resources for teaching English throughout history.

A theoretical foundation for using audiovisual materials as a teaching tool to improve students' pronunciation of the English phonemes /s/ and /z/ is presented in this section; additionally, it uses historical conceptualization to show how technology has changed over time, following the development of audiovisual resources in this context.

1.1.1. Historical features of audiovisual resources in the instructional process to enhance English language pronunciation.

Over time, language instruction has changed dramatically, and using audiovisual materials has been essential to this development. From the earliest attempts to use visual and auditory aids to the incorporation of more sophisticated digital technology, audiovisual resources have revolutionized English language learning and teaching. Thus, the purpose of this part is to examine the main phases of the creation and application of audiovisual materials in English language instruction, as well as the ideas, methods, and research results that have influenced their growth.

First stage: Beginnings (Late 19ᵗʰ to early 20ᵗʰ Century)

The use of audiovisual media in language instruction dates to the late nineteenth and early twentieth centuries. During this time, the first audiovisual resources, such as slides and silent films, were used to supplement traditional language instruction. Hikmah (1999) states

that the inclusion of visual material allowed students to connect abstract concepts with physical representations, therefore increasing comprehension and retention of content.

Educators recognized the potential of audiovisual resources to improve the engagement and effectiveness of language acquisition at this early level. According to Cuban (1986), pictures and projections enabled students to see and experience events and contexts that would otherwise be difficult to duplicate in the classroom.

Given the aforementioned, the evolution of audiovisual materials in language instruction emphasizes the significance of tailoring pedagogical tactics to students' requirements and preferences. By adding visual and multimedia resources, educators were able to make language learning more relevant and accessible, setting up the framework for the future incorporation of increasingly complex technologies in language classrooms. However, the exploration of these resources was limited by the complexity and cost of the technology available at the time.

Second stage: expansion (1920s-1940s)

From the 1920s to the 1940s, there was an increase in the creation and use of audiovisual media in language instruction. The introduction of film projectors and audio recorders allowed for a deeper integration of these resources into instructional programs. McAnany (2016) states that the usage of audio recordings and videos helped improve students' pronunciation and listening comprehension, resulting in a significant boost in their communicative skills.

During this time, educators began to investigate more systematic ways to use audiovisual tools in the language classroom. Hovland, Lumsdaine, and Shelffield (1949) found that using instructional films improved student performance in specific learning activities. According to these authors, educational videos not only caught students' interest but also facilitated the grasp and retention of crucial concepts. These findings highlight the need for tailoring teaching tactics to students' needs and preferences, as well as the use of visual and multimedia aids to make language learning more meaningful and accessible to all learners.

Third stage: The rise of audiovisual teaching (1950s-1970s)

The introduction of audiovisual materials in language education from the 1950s to the 1970s constituted a watershed moment in the growth of pedagogical practices. With the introduction of language laboratories and the widespread use of audio and video recordings, audiovisual materials became crucial tools during this period.

Studies from this era, such as Lumsdaine and Glaser (1960), emphasize the value of engagement and immediate feedback provided by these tools, allowing students to gain higher levels of understanding and language proficiency.

Furthermore, research by Brown (1972) and Heinich Molenad, and Russell (1993) stressed the importance of careful planning and selection of audiovisual resources, as well as their consistent integration with learning objectives and pedagogical practices. In this context, careful planning, selection, and alignment of audiovisual resources is critical to guaranteeing their effective integration and beneficial impact on language teaching and learning. This is an important factor for educators when adding audiovisual technologies into their teaching

techniques. The evolution of audiovisual and multimedia technologies as critical instruments for language instruction, offering educators and students a diverse set of materials and ways to improve teaching and learning processes.

Fourth Stage: Digitalization and Multimedia (1980s-1990s)

The introduction of computers and the development of multimedia resources such as CD-ROMs and DVDs heralded a new era in the use of digital audiovisuals in language instruction. According to Bates (1998), multimedia resources provided more interactive and individualized learning opportunities, allowing students to explore content autonomously while receiving rapid feedback.

During this time, research concentrated on the design and efficacy of multimedia resources for language acquisition. Mayer and Moreno (2002) found that combining text, images, audio, and video can improve students' understanding, retention, and motivation. According to the authors, using several sensory modalities in multimedia resources might stimulate distinct channels of information processing, boosting the building of knowledge and linguistic abilities.

Moreover, Salaberry (2001) emphasized the necessity of strategically integrating multimedia resources while considering students' learning styles and language instruction demands. This author argues that the effective use of multimedia resources in the language classroom involves thinking about how these tools might enhance and complement teaching and learning practices. This could be regarded as the most important integration of technology into teaching, opening new avenues for better learning processes.

Fifth Stage: The Internet Era and Emerging Technologies (2000s-Present)

Over the last 20 years, the fast development of digital technology, the internet and mobile devices has changed the use of audiovisual resources in language instruction. According to Beatty (2010), access to a wide range of films, presentations, and online applications has extended and diversified language teaching and learning methodologies, allowing students to interact in a more customized and autonomous manner.

Research by Gilakjani has highlighted the benefits of using audiovisual resources in the digital age. This author notes that videos, animations, and multimedia presentations can help students improve their comprehension, motivation, and retention of English language content (Gilakjani, 2012). Additionally, online audiovisual resources enable educators to create more dynamic and engaging learning experiences, which can lead to greater student engagement and participation.

At this stage, special attention has been paid to the use of mobile devices and applications for language acquisition. According to Kukulska-Hume and Shield (2008), mobile learning allows students to access audiovisual content at any time and from any location, fostering more flexible, individualized, and continuous learning.

Furthermore, the incorporation of artificial intelligence and augmented reality into audiovisual resources has created new opportunities for language instruction. Chun (2016) investigated how these technologies improve interactivity, feedback, and student immersion in English language acquisition. The development of digital tools, the availability of online content, and the incorporation of modern technology have created new options for students to expand and diversify their learning experiences.

To summarize, the usage of audiovisual materials has evolved over time, from traditional instructional aids to the introduction of new information technologies. Nowadays, educators use virtual audiovisual resources to offer knowledge to students in an interactive manner, with the goal of increasing motivation and interest in learning in English language educational environments. Their careful and planned integration into pedagogical procedures has proven critical to enhancing language teaching and learning processes. Thus, the creation and use of audiovisual resources has become a critical component in the progress of foreign language training.

1.2 Theoretical perspectives on the use of audiovisual resources to improve the teaching of the English language.

In this section, the theoretical characteristics of the teaching-learning process of the English language are analyzed, as well as the management of audiovisual resources in education and their impact on the development of pronunciation. The intention is to scientifically support the research and give it value through the reflection of various authors.

1.2.1. Characteristics of the teaching-learning process of English in Basic General Education.

The teaching-learning process in education is based on various theories of each author, for example, Munna & Kalam (2021) mention that the teaching and learning process is not merely about transferring information. It involves developing and discovering innovative strategies to foster effective learning. This requires considering the objectives that students should achieve and the methods that teachers should create and apply to aid the teaching process and engage students. That said, the teacher's goal is to direct teaching towards a

student-centered approach in order to create situations that connect the content and context that are part of the student. This action creates meaningful learning where the student can make use of the knowledge acquired when required in their daily lives.

Likewise, Osorio Gómez et al. (2021) state that the teaching and learning process is made up of several elements, such as teachers, learners, design and organization of educational activities, goals, curriculum, approaches, and teaching and evaluation materials, which follow a systematic order, in which their close relationship significantly affects the educational process. This represents a complex challenge, as it is not easy to adequately integrate all these elements to ensure effective learning.

In addition, it is worth noting that for González Hernández (2023), learning and teaching are interconnected terms within academic contexts, playing a central role in the dynamic between the classroom's key participants: the teacher and the student. In this setting, the teacher imparts knowledge and fosters the acquisition of key skills for learning, while the student is expected to fulfill their role by acquiring not only the provided knowledge but also the essential competencies and skills needed for autonomous and lifelong learning. In other words, learning is the starting point for the generation of knowledge in the individual, as it entails not only the acquisition of information but also the ability to process, interpret, and transform it into useful and applicable knowledge in different contexts.

Regarding the authors of this research project, they consider that the teaching-learning process follows a methodical and organized order for producing knowledge through critical thinking. This thinking is developed through assertive communication between the teacher and the student associated with the strengthening of theory through practice, which is carried

out in connection with the community, where each member of this contributes to creating an environment conducive to the integral and professional growth of the student.

However, although education is essential in society, some deficiencies have been identified in the English-learning process. According to Torres & Estrella (2022), the predominance of traditional methodologies and the lack of interactive resources are limiting factors for the development of practical and dynamic learning, hindering the student's overall performance. These deficiencies highlight the need to transform teaching methods into more innovative techniques that enable students to actively engage in their educational process.

In this regard, Durruthy (2023) argues that the English teaching-learning process is multidimensional and, therefore, complex, as it is composed of two complementary elements: theory, which refers to the acquisition of linguistic knowledge, and practice, which focuses on the development of habits and skills. Both components are closely interconnected, as theoretical knowledge alone is insufficient if it is not applied in practical, real-life situations.

For this reason, the English teaching-learning process has undergone significant evolution over time, employing various methods, techniques, and pedagogical strategies adapted to student's needs. The design of a foreign language curriculum represents the most innovative pedagogical approach for mastering a language, in this case, English. This curriculum outlines diversified methodologies, personalized approaches that incorporate innovative study materials, and specifies performance criteria based on students' educational level, with the aim of creating meaningful and effective learning experiences. (Ministerio de Educación del Ecuador, 2021)

From another perspective, in Spain, the English language is considered a very important tool in human education and working life, as well as being key to integration in a

globalized world. For this reason, English is one of the most widely used languages by both native speakers and foreigners, and it is also the second most used language as a second language (Ministerio de Educación y Formación Profesional y deportes, 2025). The contents of the area of English in the Spanish curriculum are organized into three curricular blocks which are:

− Communication: This section develops essential skills for comprehension, where students are expected to understand and process information in various formats. Additionally, it promotes the production of oral and written texts, involving the clear and coherent expression of ideas, as well as the correct application of grammatical rules. Interaction skills are also addressed, enabling learners to actively participate in conversations across different contexts and to mediate communicative situations effectively.

− Plurilingualism: reflection on the existence of different cultures and languages is encouraged, fostering a critical awareness of the use of foreign languages.

− Interculturality: respect and understanding of linguistic diversity are promoted, emphasizing the role of a second language in personal and educational development.

Likewise, by the end of secondary education, students should have reached level B1. According to the Common European Framework of Reference for Language by the Council of Europe (2020), it is expected that students in high school will have achieved a strong command of reading and listening comprehension, as well as written and oral expression. This is to ensure that each of these skills can be applied in everyday situations, enabling students to navigate and thrive in a multicultural and plurilingual society.

Despite the established achievements, many students fail to reach the expected level. According to RTVE.es (2024), the level of English has declined among the Spanish

population aged 18-22, which is reflected in the poor teaching in schools across the country. Additionally, there are other factors that hinder meeting the objectives, such as the predominance of the traditional approach focused on lecture-based classes, memorization, and mechanical repetition, which limits student participation. The lack of constructivist methods is evident, as these would position the learner as the main actor in the construction of their own learning through projects, educational games, or the use of technology.

Furthermore, Caicedo-Quinteros (2023) notes that the limited use of teaching strategies and methods is a constraint, as the insufficient implementation of activities that foster participation and motivation, such as practical workshops, role-playing, and educational games, does not encompass the diverse learning styles present in a classroom. In other words, teachers do not adapt their methodology and teaching strategies according to the needs and learning styles of their students.

Similarly, limited access to educational resources, such as audiovisual materials, interactive platforms, and digital tools that support the teaching process, presents barriers to learning English. Moreover, learning assessments centered on exams that primarily value the memorization of grammatical rules, without adequately considering oral, listening, and interactive skills, which are essential for language proficiency, could be another limitation to the comprehensive development of students.

All in all, the authors of this project conclude that the English teaching-learning process must incorporate innovative methods that encourage students' motivation and interest. The integration of communicative approaches, interactive activities, and, of course, the use of digital technologies is essential for creating a dynamic environment that facilitates the acquisition and development of linguistic skills in a language.

1.2.2. Pedagogical characteristics of audiovisual resources.

As mentioned by Olagbaju & Popoola (2020) audiovisual aids are tools that help the teacher to make the class more interactive, to motivate the students in subjects they find boring, or to facilitate the acquisition of information in areas in which students often have difficulties. This integration facilitates the understanding of complex concepts and the retention of knowledge by providing a multisensory representation, making communication more dynamic.

In education, audiovisual media have gained significant importance in the teaching and learning process of English, as they can be incorporated into the curriculum content of the subject. Additionally, they are the way in which students are constantly engaged. As Ramos & Méndez (2020) points out, these resources offer an innovative alternative within the classroom due to the growing consumption of movies, series, video games, etc.

Audio-visual devices are tools that can enhance the learning experience within the classroom, where students can absorb information through multiple senses and in more interactive ways. In the words of Mashrabovna & Sherzodbekovna (2023):

Audio visual is a combination of two words, audio which refers to what we can hear whereas visual refers to what we can see. In other words, it is any device which by sight or sound increases the individual's experience in the classroom. (p.120)

According to the authors of this research project, it can be stated that audiovisual resources are tools that combine auditory and visual media useful for transmitting information, teaching concepts, or providing entertainment to capture attention and demonstrate the acquisition of knowledge. These resources can include educational videos, slide presentations, documentaries, infographics, movies, interactive websites, and others.

To optimize the teaching and learning process of certain phonemes in the English language, the following audiovisual resources are proposed:

- YouTube: it offers a wide variety of educational resources, such as videos, tutorials, online classes, and an extensive range of instructional content on various topics. Furthermore, it is entertaining and dynamic, making the learning process more engaging.

- Online tools: for example, Canva, allow users to create graphics easily. This tool offers a variety of templates for presentations, infographics, videos, and visually appealing teaching materials, ideal for presenting various topics in class.

- Websites: these are valuable tools for enhancing the teaching and learning of pronunciation. Students can access a wealth of materials, books, articles, and learning platforms. One example is Youglish, which allows users to hear the correct pronunciation of words and understand the context in which they can be used, using video excerpts as audiovisual representations.

In summary, it is essential to implement and strengthen the teaching and learning process by using audiovisual resources to improve English pronunciation. These resources facilitate better comprehension and articulation of sounds and contribute to the development of more accurate and fluent pronunciation. Furthermore, they boost students' interest and motivation, turning learning into a more dynamic and engaging process when they are used in the classroom. They also support a more comprehensive approach that encompasses both theory and practice, leading to significant enhancements in students' language skills.

1.2.3. The development of pronunciation in the English language

The pronunciation is defined as ''the form in which the elementary symbols of language, the segmental phonemes or speech sounds, appear and are arranged in patterns of

pitch, loudness, and duration.'' (Mahmood, 2021, p.2). The elements of language do not function in isolation; rather, mastering them collectively enhances the proper development of pronunciation.

When discussing speech, an intrinsic connection is established with the sounds produced by human beings. These sounds, also referred to as suprasegmental phenomena because they affect multiple sounds or segments simultaneously, are composed of three key elements: rhythm, stress, and intonation (Ramos Oliveira, 2021). Thus, the production of oral discourse and correct pronunciation are considered essential to ensure effective and clear communication. Proper articulation of sounds not only enriches the message but also facilitates comprehension and interaction among speakers, promoting a more fluid and meaningful exchange.

From another perspective, pronunciation emerges as a linguistic sub-skill that enhances the vocalization of sounds in a language, enabling the development of key elements such as stress, fluency, and accuracy. According to Velázquez Ventura et al. (2023), pronunciation involves precise articulation, correct syllable and word stress, the appropriate use of pauses and intonation that aligns with communicative intentions. This suggests that pronunciation is not merely about producing sounds; it is also closely connected to the development of oral communication. Therefore, mastering these elements collectively improves clarity in communication and enriches the expressiveness of speech.

In a similar way, Jimenez Estrada (2024) notes in his research project that the most noticeable challenge in developing English pronunciation lies in correctly managing intonation, stress, fluency, and listener comprehension. These factors do not influence how individuals speak but also the intelligibility of the message they convey to the listener.

Having said this, considering the aforementioned authors, this study proposes addressing the pronunciation of the phoneme's /s/ and /z/ among 10th grade "A" students through an approach that incorporates key developmental dimensions. The following dimensions allow for a precise assessment of student performance: fluency, accuracy, word stress, and intonation.

The dimension of Accuracy focuses on evaluating how closely a student's pronunciation approximates the sounds of the L2 (Ping & Tao, 2025). The goal is not necessarily for the student to sound like a native speaker, but rather to minimize errors as much as possible to ensure message compressibility.

On the other hand, the dimension of Fluency examines the ability to speak, considering features such as speed, pauses, and ease of articulation. In the early stages of language learning, students tend to produce a high number of pauses in their speech due to their inability to formulate long and meaningful sentences, which negatively affects their fluency (Martin-Rubio, 2021).

Similarly, intonation is another fundamental element of pronunciation, as it allows for the identification of tonal variations that help interpret what the speaker intends to communicate or express. In linguistics, beyond conveying emotions and attitudes, intonation also contributes to maintaining order in conversation by highlighting the key points of discourse (Mukumbek, 2021).

As a final aspect to consider in the analysis of pronunciation, stress refers to the emphasis placed on a syllable within a word, which may occur at the beginning, in the middle, or at the end. According to Labrada Batchelor (2021), improving pronunciation is crucial for

avoiding common language errors such as incorrect stress placement, verbal inaccuracies, and lack of clarity. In this context, promoting linguistic development involves addressing this dimension by focusing on two key aspects: the use of word stress, and the clear articulation of phonemes.

Consequently, in the case of this research, the goal is for students to improve their pronunciation, specifically in the articulation of phrases that contain the phonemes identified as particularly difficult for most of them. To assess these dimensions, the individuals participating in this study will be asked to pronounce certain phrases, in addition to reading aloud from the text.

1.3. The current context of teaching pronunciation in the English teaching-learning process in basic education.

The teaching of pronunciation in English learning within Ecuador's general basic education is a topic of growing importance, given the role pronunciation plays in effective communication. As English becomes an increasingly important language worldwide, it is essential for Ecuadorian students to not only acquire vocabulary and grammar but also to develop their pronunciation skills. According to Martínez (2022), this will enable them to interact effectively with native speakers and enhance their confidence when communicating.

One of the predominant approaches to English teaching in Ecuador is the communicative approach, as established by the Ecuadorian curriculum, which prioritizes interaction and the practical use of the language to develop students' comprehensive linguistic skills. However, there are several challenges regarding the lack of teacher training in the use of methodologies for language teaching. As López (2021) states that many teachers are not

trained to effectively apply more interactive methodologies, such as the communicative approach, which leads to limitations in students' learning.

Additionally, the lack of specific didactic resources represents another obstacle to improving pronunciation. Many of the materials available in the country focus on grammar and vocabulary, neglecting pronunciation practice.

1.3.1. Contextual Characteristics of Implementing Audiovisual Resources for Pronunciation in the English Teaching and Learning Process in General Basic Education in Ecuador.

The use of audiovisual resources in the English teaching and learning process has advanced significantly, bringing with it several notable changes that have, in turn, enabled greater progress in education. Since the inclusion of English in the National Curriculum in 2016, this language has been considered a fundamental subject in the Ecuadorian educational system. This curriculum has not only introduced a renewed approach to language teaching but also promoted the development of communicative competencies and socio-emotional skills from an early age. According to Alvarado (2021), this approach has motivated students, preparing them to interact in real-life situations.

In addition, another action taken by the Ecuadorian government was the implementation of various educational programs, one of which is the 'English Access Microscholarship Program,' aimed at providing low-income students with access to English classes and interactive materials. In addition, other programs have been implemented for basic and secondary education levels, which include teacher training and the adoption of student-centered methodologies to improve learning.

Despite government efforts, English learning in Ecuador faces significant challenges. One of the main issues is the failure to meet the established goals for the levels of English proficiency that students are expected to achieve by the end of each educational stage. For example, primary education students are required to reach an A1 level, secondary education students are expected to achieve an A2 level, and high school graduates must attain a B1 level, as stipulated by the Ministry of Education. However, a study by Cevallos (2019) shows that Ecuadorian students exhibit a low level of English proficiency, which is attributed to the lack of resources and adequate teacher training. This reinforces the need to address these challenges to improve English teaching.

Consequently, communicative competence, and particularly pronunciation, represents another issue faced by students at all levels. A study conducted in the province of El Oro indicates that insecurity regarding pronunciation is common among students, limiting their participation in oral activities and their confidence in using the language (Torres, 2019). Thus, the national curriculum emphasizes the importance of developing oral communicative competence, which encourages the inclusion of audiovisual resources aimed at improving pronunciation (Ministerio de Educación, 2016). However, the lack of audiovisual teaching materials adapted to the Ecuadorian context represents a limitation that must be addressed to make a significant impact on English pronunciation learning.

In Machala, several significant studies have been conducted on teaching English pronunciation, including the work of Pacheco Delgado and Ramírez Morales (2021), who highlight the importance of using audiovisual resources to improve the pronunciation of past tense verbs in students with difficulties.

Similar results were found in research by García and Villamar (2022), where they focus on the use of playful methods and videos to refine the pronunciation of these verbs. Despite the interest in this field, none of these studies specifically address the improvement of the phoneme's /s/ and /z/, which are often problematic for non-native speakers.

Therefore, the use of technological resources to improve the pronunciation of the phonemes /s/ and /z/ in students has not been demonstrated. This opens the door for future researchers to explore and develop new studies that delve into the use of audiovisual resources to improve the pronunciation of general basic education students, as it is a crucial component for effective communication and the development of their linguistic skills.

1.3.2. Current Diagnosis of the Pronunciation of the /s/ and /z/ Phonemes in English among 10th Grade "A" Students of General Basic Education at an Educational Institution in Santa Rosa.

This section shows the current command in the pronunciation of the phonemes /s/ and /z/ in a population of 31 students of 10th "A" of General Basic Education, belonging to an educational institution located in the city of Santa Rosa. In order to evaluate this competence, methodological instruments such as pedagogical tests and observations were implemented, which allowed gathering information about the students' phonetic management.

First, the researchers conducted a general observation of the group dynamics. By means of questions, repetitions, and reading aloud, direct information was collected on the linguistic performance of the student. This observation was complemented through a diagnostic test based on four criteria: intonation, word stress, fluency, and accuracy, in order to have a more accurate understanding of their pronunciation level.

Systematic analysis of the observation

During the application of the diagnostic test, some relevant observations were identified, which are as follows:

- Some students showed shyness when participating in oral activities, such as pronunciation, which affected their performance.
- There were limitations when communicating due to their restricted vocabulary.
- Students who did have knowledge of vocabulary presented, however, difficulties at the time of pronouncing certain words and maintaining fluency in speech.
- A significant number of students required support in aspects such as intonation, word stress, and fluency. However, they performed adequately in terms of accuracy in the use of the phonemes /s/ and /z/.

Figure 1

Dimension 1: Intonation
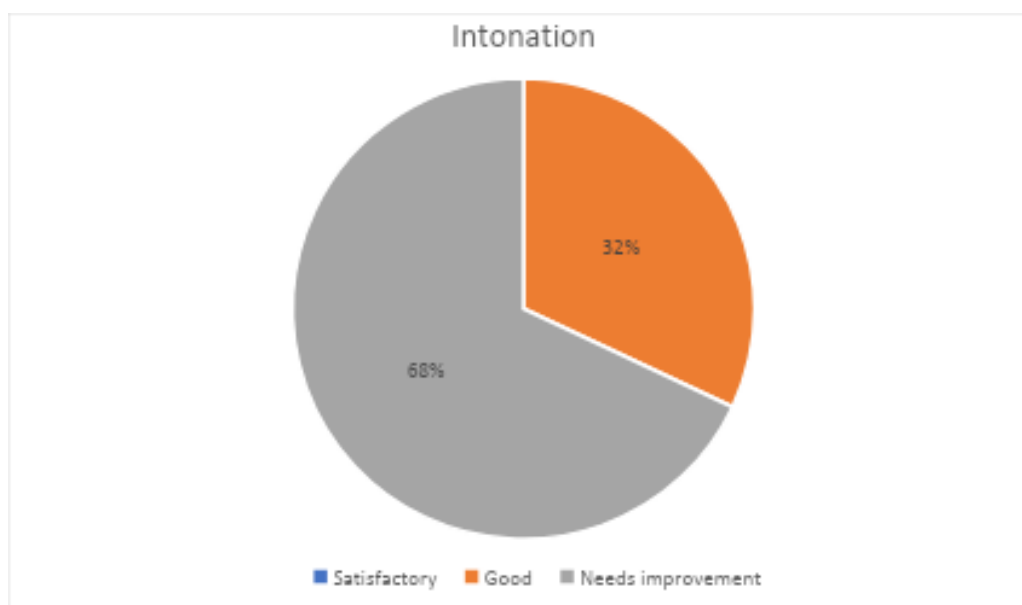
This dimension assesses variations in voice pitch, specifically how it rises or falls depending on the context of speech. These variations reflect the speaker's intention either to convey specific emotions or to distinguish types of sentences, such as declarative or interrogative. Therefore, the evaluation focused on whether students provide clarity and naturalness in the pronunciation of a dialogue that included the phonemes /s/ and /z/.

When analyzing the results of the intonation dimension, revealed that students experienced significant difficulties, as 68% (21 students), were unable to vary intonation appropriately when asking and answering questions or when pronouncing simple sentences. In contrast, 32 % (10 students), achieved a "Good" performance level, indicating acceptable results, though still with room for improvement. It is important to highlight that none of the students reached a "Satisfactory" level, which underscores the lack of full mastery of this indicator.

Figure 2

Dimension 2: Word stress

The results indicate that the word stress dimension also represents a significant weakness for the students. A total of 58% (18 students) of the group placed in the "Needs improvement" level, revealing that more than half of them struggle to identify and place the correct stress on syllables, specifically when differentiating between nouns and verbs. In contrast, 42% (13 students) achieved a "Good" level. This is a positive outcome, as it shows that they possess a basic understanding, although further improvement is still necessary. Notably, no student reached the "Satisfactory" level, highlighting a complete lack of knowledge regarding when to apply word stress.

This dimension was assessed through a task in which students had to pronounce sentences that included the same word, used as a verb in one sentence and as a noun in the other. In most cases, students accented the word in the same way in all sentences, which confirms their lack of understanding of word stress rules.

Figure 3

Dimension 3: Fluency
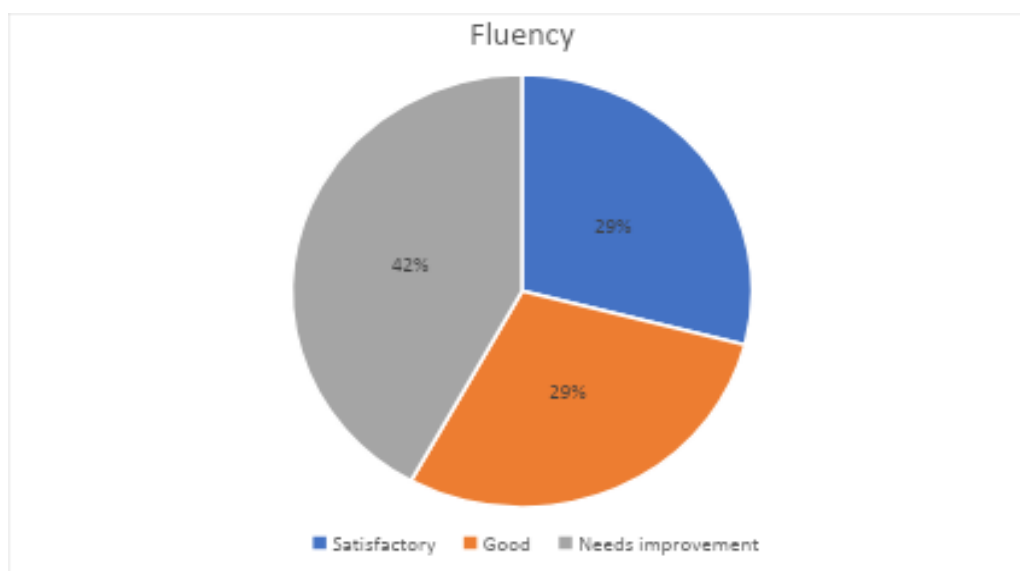
According to the data presented in the chart, the fluency dimension shows a more balanced distribution compared to the previous dimensions. 29% (9 students) of the group were placed at the "Satisfactory" level, while another 29% (9 students) reached the "Good" level. This suggests that a significant portion of the students demonstrated a solid level of fluency.

During the diagnostic test, which consisted of describing an image related to daily routines, the students who were placed in the aforementioned levels were able to maintain a relatively fluent discourse, expressing what they observed, although with some interruptions or gaps that still need improvement.

On the other hand, the remaining 42% (13 students) were classified at the "Needs development" level, indicating that there are still deficiencies in maintaining fluency in speech. Some students made unnecessary pauses, showed frequent hesitation, and had difficulty articulating a clear and coherent message.

Figure 4

Dimension 4: Accuracy
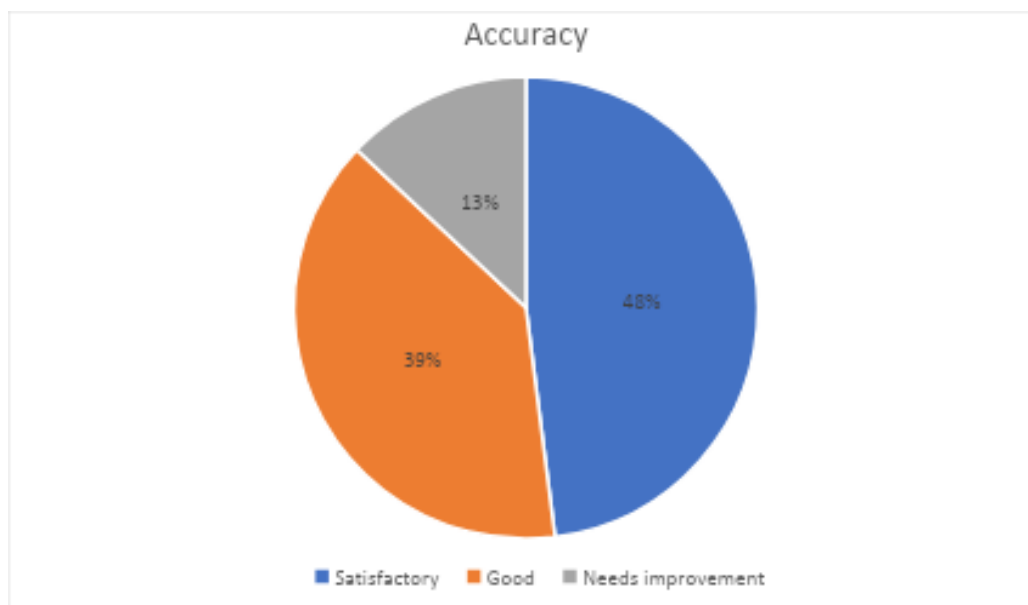
The chart presented indicates that the accuracy dimension is another area where students showed an acceptable command of the correct use of the phonemes /s/ and /z/, as 48% (15 students) of the group reached the "Satisfactory" level, while 39% (12 students) were placed at the "Good" level. This suggests that, during the diagnostic test, most students successfully identified which words contained the /s/ sounds and which ones contained /z/, through a minimal pairs exercise in which they had to select the correct option based on the dictation, although occasional errors were still present.

In contrast, only 13% (4 students) were classified under the "Need improvement" level, revealing that a minority continues to face challenges in identifying, selecting and properly using the /s/ and /z/ phonemes.

Figure 5

General analysis
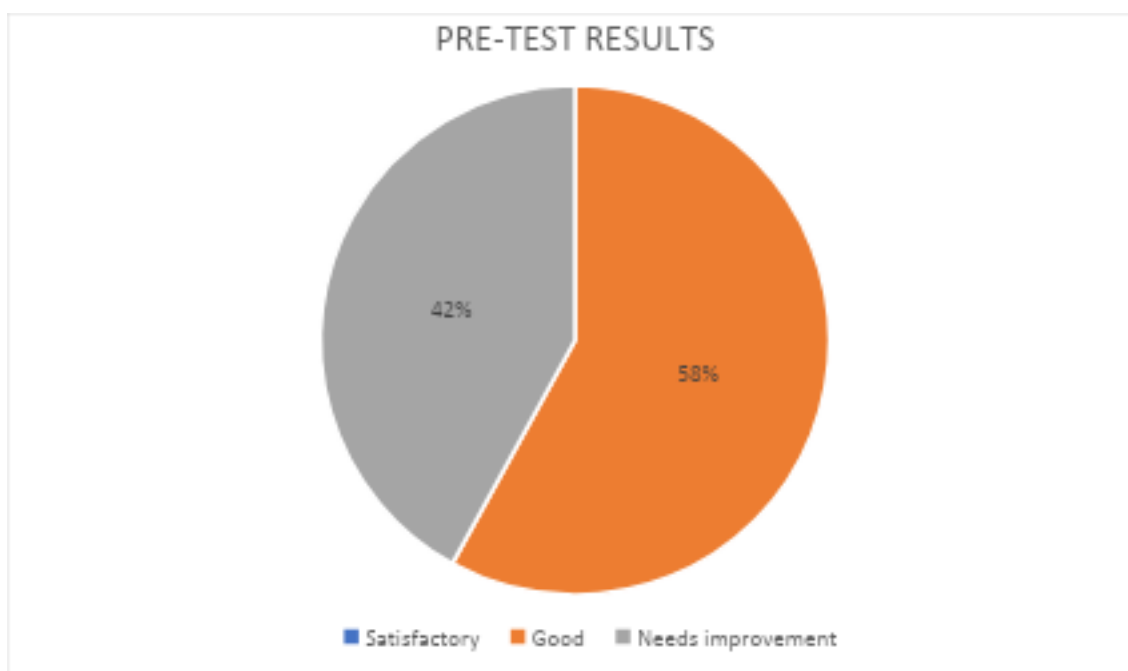
This chart shows a general analysis of the results obtained by 10th grade "A" students in relation to pronunciation management, considering the dimensions selected to determine the students' current level.

A total of 42% (13 students) reached a level of "Needs improvement" taking into account the performance in all dimensions, which indicates that the difficulties presented include: variation in intonation, proper word stress to distinguish between nouns and verbs, fluency in speech, and the accurate distinction between the /s/ and /z/ phonemes when working with minimal pairs in dictation exercises.

In contrast, 58% (18 students) of the group were classified at the "Good" level, which reflects that the majority demonstrate an acceptable performance, yet still have room for improvement in order to reach a more advanced and accurate level. Therefore, it can be inferred that although a significant portion of the students have mastered the basic aspects of the four dimensions, weakness is still evident and could be addressed through strategies focused on oral practice.

For this reason, based on the data obtained from the pre-test, it is proposed to implement a pedagogical strategy centered on the use of audiovisual resources as a didactic tool to improve the oral production of the /s/ and /z/ phonemes in English among 10th grade "A" students. This strategy aims to make knowledge acquisition more dynamic and engaging for students, thereby facilitating a more effective understanding of the content addressed.

CHAPTER II. METHODOLOGICAL FRAMEWORK

This chapter presents a comprehensive description of the various aspects related to the methodology employed in the development of this research. Key elements such as the type of research, research design, theoretical and empirical methods, and the population that will be used. Additionally, the data collection techniques applied throughout the process will be explained, as these are essential for understanding the research process as a whole and the validity of the results obtained.

2.1 Paradigm and type of research

This research is grounded in the quantitative paradigm and adopts an experimental design of an explanatory nature. It is further structured as a pedagogical pre-experiment. This methodological approach is suitable for measuring the impact of a pedagogical intervention and for addressing the complexity of the phenomenon under study. Moreover, it enables the identification of cause-and-effect relationships, allowing for an understanding of whether the observed changes are attributable to the interventions carried out. According to Hernández Sampieri, Fernández and Baptista (2014), "la investigación cuantitativa se caracteriza por la medición precisa de variables y el establecimiento de relaciones entre ellas, lo que facilita la formulación y prueba de hipótesis".

The nature of the pedagogical pre-experiment involves the implementation of a class system based on the results obtained from the pre-test, with the aim of verifying whether positive changes occur because of this system. These changes are assessed through the application of a post-test. According to Castañeda (2018), "los pre-experimentos pedagógicos se caracterizan por la manipulación de variables en entornos controlados con el fin de

observar sus efectos en el aprendizaje". This approach provides empirical data that contributes to a deeper understanding of the relationship between the use of audiovisual resources and pronunciation improvement.

2.2 Population

In research, the population refers to the total number of individuals, which may include living beings such as people or animals, or elements such as phenomena or objects, that share common characteristics and are therefore subject to study (Rojas, 2011). For this reason, it is essential that the selection of the population be based on the fulfillment of specific criteria necessary, ensuring that it is directly related to the characteristics of the research.

From another perspective, Vizcaíno Zúñiga et al. (2023) argue that populations are not simply homogeneous groups that share common interest or similarities; on the contrary, they often present a wide range of internal characteristics that make them unique. In other words, differences such as age, socioeconomic status, gender, and biological features, among others, contribute to their diversity. However, these differences can be regrouped into categories or subgroups that help to better understand the population's composition and dynamics.

In this context, the present research defines the study population as the students of the 10th grade, room "A", of General Basic Education at an educational institution located in Santa Rosa, El Oro. This group consists of a total of 31 students, aged between 13 and 14 years old. Since this group meets the necessary criteria to fulfill the objectives of the study, the research will be conducted with the entire population, without the need to select a sample.

2.3 Research methods

This study used both types of methods: theoretical and empirical. Theoretical methods such as the historical-logical, analytical-synthetic, hypothetical-deductive, and systemic, which served to conceptually support the background by performing a detailed analysis of the antecedents. On the other hand, empirical methods such as experimentation, measurement, observation, and the application of the pedagogical test were indispensable to know the state of the participants, validate the hypotheses proposed, and evaluate the participants after the pedagogical intervention.

2.3.1 Theoretical methods

Theoretical methods are tools that systematize and explain the results obtained from empirical research. This method analyzes the phenomena in different parts in order to have broader and deeper information on a particular phenomenon through the study of various concepts with different perspectives, which in turn allows the creation of theories of its own (Guanoluisa Almache et al., 2023).

Historical-logical

It allows gathering information on all the events or occurrences that the phenomenon under study has experienced over time to understand the structure of its development (Piñas et al., 2022). It analyzes its evolution, its different stages, and the trends that have arisen in history, which, by means of logic, rescue the essential aspects of the object, allowing the creation of new concepts of the object for a deeper understanding of its transformation over time.

For this reason, in this research this method was implemented to build the historical background of the object of study: the audiovisual resources. In this way, we inquired about its stages and its evolution in each one of them, evidencing the importance of implementing audiovisual resources for the improvement of the English language.

Analytical-synthetic

It consists of analyzing all the parts that make up a problem, studying them separately, and then uniting them into a whole and thus understanding the phenomenon as a whole (Reyes et al., 2022). Therefore, this method helped us to break down the different concepts of many authors about the study phenomenon in order to build a more general vision, i.e., it performs a deep analysis of all the parts to gather the most important characteristics.

Hypothetical-deductive:

It serves for the posing of a tentative idea (hypothesis) about the state of the research and, subsequently, to propose evidence that refutes or confirms the assumption of its state (Reyes Blácido et al., 2022, p. 4). In this way, it is possible to deduce consequences that can be put into action.

It accompanied us in the process of verifying the hypotheses that emanated from the study, allowing us to test whether the classroom system based on the use of audiovisual resources will improve the pronunciation of the phonemes /s/ and /z/ in the English language in students. This approach gives the possibility, through experimentation, to accept or refute the hypothesis formulated.

Systemic

A method that studies the object of investigation as a complete system made up of interrelated stages or elements. It does not analyze each part in isolation, but seeks to understand the dynamics that link them together (Ortega-Chávez et al., 2021).

Therefore, it helped us to approach the research problem not as an isolated element but as a system that integrates aspects that participate in the student teaching-learning process, such as the linguistic, which involves the dimensions that will be addressed in the research (intonation, word stress, fluency and accuracy); the pedagogical, which encompasses the strategies or methods used, in this case audiovisual resources; and human resources, which is the interaction between the student and teacher, which is fundamental to the learning process.

2.3.2 Empirical methods

For Hernández et al. (2020), empirical methods are fundamental to achieving a deep understanding of educational phenomena. The integration of these methods allows adjusting pedagogical strategies according to the evidence collected, which, in turn, facilitates the adaptation of teaching to the individual needs of students, thus improving the teaching-learning process. In this context, the present research aims to evaluate how students interact with audiovisual resources and the impact they have on the pronunciation of the phonemes /s/ and /z/. Therefore, in order to carry out this research, the following methods will be used at the empirical level.

In this research, the following methods will be employed at the empirical level, such as:

Experimentation

The experiment is regarded as the most complex and effective method within the empirical approaches, given that its development is intrinsically linked to the progress of techniques and human knowledge. This progress is the result of the constant effort of human beings to explore the unknown through their transforming activity. In this sense, this method allows the researcher to establish the necessary conditions or modify the existing ones to clarify the properties and relationships of the object of study, which is fundamental for this research (Chagoya, 2008).

Measurement

In the study of unknown phenomena, one begins with qualitative concepts that facilitate the classification of objects. Observation is one of the key factors to identify the specific properties and relationships between the components of an object. However, in order to adequately express the results, it is crucial to assign numerical values to these properties. Thus, measurement becomes an essential method to obtain numerical information about the properties of an object, process, or phenomenon by comparing magnitudes that are measurable (Chagoya, 2008).

Observation

Observation is a method widely used in scientific research due to its ability to provide a systematic, valid, and reliable record of observable behaviors and situations, which allows describing and analyzing the studied reality (Hernández Sampieri et al, 2014).

Thus, in this research it is proposed to use observation as a method to obtain accurate and contextual data that will enrich the analysis and strengthen the conclusions, in addition to identifying trends and relationships that might not be evident with other methods.

Application of tests

For López Falcón and Ramos Serpa, a test is defined as a scientifically valid and meaningful measurement instrument used in the research process to diagnose a problem or to evaluate the degree of change or improvement in an educational phenomenon that is to be improved (2021).

In the context of this research, it is fundamental to select the appropriate test as a tool to evaluate the impact of our study on the individuals involved. The choice of a well-designed test not only guarantees the validity of the data collected, but also allows us to identify areas for improvement and to evaluate the effectiveness of the educational interventions implemented. By integrating this type of tool into our methodology, we will be able to substantiate our conclusions with accurate empirical data, which will strengthen the credibility of our research and provide a solid basis for the recommendations that will be derived from it.

2.4. Description of techniques and instruments for data collection and processing.

Research techniques and instruments are fundamental to guiding the research process. These elements constitute a set of rules and procedures that facilitate the achievement of the established objectives and the resolution of the proposed problem. The following is a description of the instruments that will be used along with their respective variants.

- **Observation:** Observation is a fundamental method in research that involves the collection of data through direct observation of phenomena, behaviors, or contexts in their natural environment. This approach allows researchers to capture nuances and details that might go unnoticed with other data collection methods. According to Hernández et al. (2014), observation can be classified as structured, semi-structured, or unstructured, depending on the specific objectives of the study. This method not only facilitates data collection but also helps researchers to formulate hypotheses and gain a deeper understanding of the social or educational context in which the study phenomenon is taking place.

- **Pedagogical test:** The pedagogical test has established itself as an essential tool in educational research, particularly in the field of language teaching. In the context of this research, the implementation of this instrument will make it possible to accurately assess students' progress in the acquisition of the pronunciation of the phonemes /s/ and /z/. Through specific tests, they will be able to identify the difficulties faced by students in the production of these phonemes and provide continuous feedback to facilitate their learning. As pointed out by López and Ramírez (2021), pedagogical tests are key tools for measuring student progress, which will allow adjusting the methodologies used based on the results obtained. Thus, by integrating pedagogical tests in this research, not only will quantitative data on student performance be collected, but also hypotheses will be validated and teaching strategies will be adapted according to the particular needs of each student.

- **Rubric:** Rubrics are evaluation tools that establish clear and specific criteria for assessing student performance on tasks or projects. Andrade (2019) argues that rubrics not only facilitate objective and fair assessment but also provide constructive feedback that guides students in their learning process. By detailing performance levels, rubrics allow educators to identify areas for improvement and encourage the development of specific competencies. Thus, their implementation in this study will promote self-assessment and critical reflection among students and by the teacher.

2.5. Consistency Matrix

Scientific Problem	General Objective	Scientific Hypothesis	Definition of variables	Dimensions	Indicators	Instruments
How can the pronunciation of the English phonemes /s/ and /z/ be improved in 10th grade "A" students of General Basic Education, during the 2025-2026 school year?	To implement a class system based on the use of audiovisual resources to improve the pronunciation of the English phonemes /s/ and /z/ in 10th grade "A" students of General Basic Education, during the 2025-2026 school year.	If a class system is developed based on the use of audiovisual resources as a methodological strategy, then it Will contribute to the improvement of the pronunciation of the English phonemes /s/ and /z/ in 10th grade "A" students of General Basic Education during the 2025-2026 school year.	Independent Variable: Class system based on the use of audiovisual resources. Dependent Variable: Jiménez Estrada (2024), mentions that the most notable aspect in the development of English pronunciation is the difficulty in correctly managing intonation, stress, fluency, and listener comprehension. Furthermore, it is important to highlight that accuracy is another fundamental aspect of language that requires close interaction between cognitive and physiological processes. The acquisition of new sounds involves a complex reorganization of articulatory processes (GLOBAL ACADEMIC STAR). These indicators not only affect the way people speak but also the intelligibility of the message they convey to the listener.	Intonation	- Rising and falling intonation in statements and questions.	Pedagogical tests Observation Rubric
				Word stress	-Incorrect syllable stress. -Ignoring accents.	
				Fluency	-Excessive use of pauses or spaces during speech. -Fluent sentences with natural pauses.	
				Accuracy	-Distinguishes the use of the phonemes /s/ and /z/.	

CHAPTER III. CLASS SYSTEM BASED ON THE USE OF AUDIOVISUAL RESOURCES TO IMPROVE THE PRONUNCIATION OF THE PHONEMES /S/ AND /Z/ OF THE ENGLISH LANGUAGE.

This chapter is structured into three sections. First, it presents the theoretical foundation supporting the proposed system, grounded in pedagogical approaches and previous research on the use of audiovisual resources in pronunciation teaching. Then, the designed class system is described, including its purpose, methodology, and instructional resources. Finally, the system is characterized based on its pedagogical principles, types of activities, and evaluation criteria that support its implementation in the English language classroom.

3.1. Theoretical foundation of the class system based on the use of audiovisual resources in the improvement of the pronunciation of the phonemes /s/ and /z/.

A class system is defined as a structured methodological framework that integrates interrelated components—such as learning objectives, content, didactic strategies, resources, and assessment mechanisms—which interact coherently and sequentially to achieve specific educational goals (Zabalza, 2007). These systems enable comprehensive planning, execution, and evaluation of the educational process, while adapting to students' characteristics, context, and subject matter. Thus, a system should not be understood as a mere succession of lessons, but as a complex and functional structural unit with a defined pedagogical purpose.

In the field of language teaching, class systems have evolved to incorporate dynamic, participatory, and multisensory approaches. Specifically, a class system based on the use of audiovisual resources entails the deliberate integration of visual and auditory materials (such as videos, recordings, animations, and interactive presentations) within the teaching-learning process. These resources are not used decoratively or in isolation, but as strategic tools to

facilitate the comprehension, modeling, and production of spoken language (Mishan &

Timmis, 2015).

This type of system seeks to address the specific challenges in English pronunciation

teaching—particularly for problematic phonemes like /s/ and /z/—through strategies focused

on exposure, meaningful repetition, and guided practice. The use of audiovisual resources

allows students to observe articulatory movements, listen to native models, and practice in

both simulated and real communicative contexts, thus improving oral production and phonetic

awareness (Celce-Murcia et al., 2010).

Pedagogically, the system promotes active and meaningful learning, engaging students

in multisensory experiences that connect new knowledge with prior mental structures

(Ausubel, 1983). The system is organized into phases (presentation, practice, production)

following the principles of discovery learning and instructional mediation, ensuring logical

progression of content.

From a didactic perspective, the system structures its activities around controlled

exposure to auditory input, contextualized practice, and structured oral production. Digital

tools such as YouTube, YouGlish, Canva, and Wordwall are integrated to model

pronunciation, foster peer interaction, and provide immediate feedback. According to Roquet

and Gil (2006), the design of such materials must prioritize clarity, sequencing, and

interactivity.

Psychologically, the system aims to create emotionally safe, motivating, and

aesthetically stimulating learning environments. Audiovisual resources attract attention,

reduce communication anxiety, and encourage positive attitudes towards the foreign language.

These factors are essential for learners to participate, make mistakes, and progressively

improve (Valencia-Naranjo & Robles-Bello, 2022).

Linguistically, the system adheres to a communicative approach to pronunciation instruction, working not only with isolated sounds but also with their use in real and functional contexts. Effective pronunciation instruction, as noted by Celce-Murcia et al. (2010), involves auditory perception, articulatory training, minimal pairs, and contextual practice—all of which are incorporated into this system through carefully designed activities.

In summary, the proposed class system represents a comprehensive methodological structure aimed at improving the pronunciation of the /s/ and /z/ phonemes through the intentional use of audiovisual resources. It integrates pedagogical, didactic, psychological, and linguistic principles while addressing the current needs of secondary students, fostering a more inclusive, interactive, and effective approach to teaching English as a foreign language.

3.2. Description of the classroom system based on the use of audiovisual resources for the improvement of the pronunciation of the phonemes /s/ and /z/ of the English language.

The proposed class system aims to improve the pronunciation of the English phonemes /s/ and /z/ among tenth-grade students in basic education. This is achieved through the didactic integration of audiovisual resources that promote active, multisensory, and meaningful learning. The system is organized into a progressive sequence of sessions, each designed with specific phonetic objectives, communicative activities, and carefully selected or designed audiovisual materials appropriate to the students' proficiency level.

Each session consists of three essential stages: introduction, development, and consolidation. These phases are designed not only to help learners recognize and articulate the phonemes /s/ and /z/, but also to enable them to use them effectively within functional

linguistic structures. The approach is grounded in the communicative framework for pronunciation instruction, which emphasizes contextualized practice, immediate feedback, and articulatory automatization as key to effective phonetic learning (Celce-Murcia et al., 2010).

Audiovisual resources serve as central mediating tools in this learning process. Their implementation includes the following tools and functions:

YouTube: Used to project short didactic videos created by native or specialized instructors that model the /s/ and /z/ phonemes through key vocabulary, sentence examples, and articulatory explanations.

YouGlish: This tool is used as an auditory complement, allowing students to hear the target phonemes in natural speech contexts and authentic usage.

Canva: Used to design interactive visual presentations introducing the /s/ and /z/ phonemes with imagery, articulatory diagrams, and contrastive examples.

Wordwall: Enables the creation of digital interactive games focused on auditory discrimination and oral production of the /s/ and /z/ phonemes.

Each session is carried out in a flexible classroom environment, incorporating guided oral activities, repetition exercises, read-aloud tasks, and paired or individual recordings. The teacher acts as a facilitator, providing both visual and auditory models, delivering immediate corrective feedback, and fostering an anxiety-free atmosphere conducive to oral expression.

The methodological progression of the system is articulated around three core principles:

- Initial exposure and phonological awareness

- Guided practice with feedback

- Autonomous production in context

This sequence ensures that students move from passive recognition of the sounds to controlled production and ultimately to autonomous use. The system is characterized by its practical and motivating focus, the functional integration of digital tools, and the balanced combination of traditional techniques (e.g., repetition drills and minimal pairs) with innovative strategies (e.g., interactive platforms, authentic video content, and gamified activities). This hybrid approach supports more natural, contextualized, and lasting phonetic learning, consistent with contemporary communicative methodologies in L2 pronunciation teaching (Derwing & Munro, 2015).

In conclusion, the class system based on the use of audiovisual resources constitutes a pedagogically coherent and innovative proposal, tailored to the real needs of students learning English pronunciation. Its progressive methodological structure, multisensory approach, and solid theoretical foundation give it a comprehensive didactic character. By integrating digital tools with phonetic-communicative strategies, the system fosters not only accurate articulation of /s/ and /z/, but also enhances learners' communicative confidence, intrinsic motivation, and autonomy in using the target language.

3.3. Characterization of the class system for improving the pronunciation of the English phonemes /s/ and /z/.

This section presents the characterization of the class system implemented to improve the pronunciation of the phonemes /s/ and /z/ in tenth-grade students at a basic education institution located in Santa Rosa, El Oro. The system comprised three in-person sessions conducted on June 29, May 3, and May 5 of the current year. These classes centered on the use of the audiovisual resources described previously, aiming to encourage and motivate students to engage actively in the learning process.

Throughout each session, videos, recordings, and interactive exercises were employed to help students listen to and practice the correct articulation of the /s/ and /z/ phonemes. A dynamic and collaborative learning environment was fostered, in which students worked in pairs and groups, facilitating peer feedback and mutual support. This holistic approach not only aimed to enhance pronunciation but also sought to strengthen students' confidence in communicating in English, contributing to more meaningful and lasting learning outcomes.

General Objective:

To design and implement a class system that uses audiovisual resources to improve the pronunciation of the /s/ and /z/ phonemes in tenth-grade students of basic general education.

Specific Objectives:

- To foster auditory recognition of the /s/ and /z/ phonemes through interactive activities.
- To develop students' ability to articulate these phonemes accurately via practical exercises.

- To increase students' confidence in their ability to communicate in English using correct pronunciation.

CLASS 1

Theme: Introduction to the Phonemes /s/ and /z/

Objective: To identify and distinguish the phonemes /s/ and /z/ in simple words and phrases.

Duration: 45 minutes

Resources:

- YouTube video on the pronunciation of /s/ and /z/ (didactic content highlighting the difference between the two sounds)
- Canva presentation (a list of example words containing /s/ and /z/)
- YouGlish (for a phoneme identification activity)

Activities:

➔ Introduction (5 min): Presentation of the lesson topic and objective
➔ Development (25 min): Brief explanation of the importance of pronunciation, introduction to /s/ and /z/ with examples, repetition exercises
➔ Closing (15 min): Group-based phoneme identification activity using the minimal pairs strategy

CLASS 2

Theme: Use of /s/ and /z/ in Plural Noun Forms

Objective: To improve pronunciation and understanding of the /s/ and /z/ phonemes in the plural forms of English nouns.

Duration: 90 minutes

Resources:

- Informational handout (rules for plural noun endings)
- Printed worksheet (exercises aligned with lesson objectives)
- A YouTube video explaining when to use the /s/ and /z/ sounds in plural nouns.
- Canva presentation (explanation of the class topic with a variety of images of plural nouns as examples to support the content).

Activities:

➔ Introduction (10 min): Recap of the previous class and introduction to the new topic.

➔ Development (65 min): Explanation of the topic using Canva, video, implementation of the Youglish platform, and a pair activity in which students read a dialogue containing examples of plural nouns.

➔ Closing (15 min): individual activity focused on the analysis of plural nouns through the identification and annotation of the corresponding phoneme for each one.

CLASS 3

Theme: Present Simple in Third Person Singular

Objective: To develop students' ability to distinguish and correctly pronounce the /s/ and /z/ phonemes within third-person singular verb forms in the present simple tense.

Duration: 45 minutes

Resources:

- Canva (lesson presentation)

- Wordwall (interactive sentence selection activity in the present simple tense)

- Printed worksheets (topic-related exercises)

- YouGlish (drilling exercises for verb pronunciation)

Activities:

➔ Introduction (5 min): Quick review of the previous session and warm-up activity

➔ Development (25 min): Lesson explanation via Canva, use of flashcards, practice activity in Wordwall

➔ Closing (15 min): Pair activity focused on present simple verb forms and pronunciation

CHAPTER IV: CLASS SYSTEM BASED ON THE USE OF AUDIOVISUAL RESOURCES

This chapter presents the results obtained from the implementation of a classroom system aimed at improving the pronunciation of the phonemes /s/ and /z/ in the English language through the use of audiovisual resources. This intervention was carried out in a population of 31 students in the tenth year of General Basic Education, class "A", belonging to an educational institution located in Santa Rosa city, during the period 2025-2026. For this study, data obtained through indirect observation, the analysis of pronunciation in dialogues, and the results of the diagnostic test and post-test were used.

4.1. Description of the application of the class system.

Within the framework of this research, a rigorous process was carried out that included the selection of a suitable educational institution for the implementation of audiovisual resources in the classroom. For this purpose, a school located in the city of Santa Rosa, El Oro, was chosen. The choice of this institution was facilitated by the willingness and collaboration of the school's principal, who provided access to the facilities. In addition, a formal permit was obtained from the career coordinator as proof of an official endorsement that legitimized the intervention in that institution.

This section details the pedagogical proposal through a system of classes that was structured in three sessions, each one with activities that integrate audiovisual tools aimed at improving the pronunciation of the phonemes /s/ and /z/ in the English language. The description of the classes is based on the observation made by the authors of this research work, who played the role of teacher during the research process.

The classes were held in a favorable environment, in a large, air-conditioned classroom with adequate lighting, ideal conditions for activities such as the projection of videos, audios, and interactive games, without affecting the concentration and comfort of the students. These sessions were held during the morning from 9.15 a.m. to 12.00 p.m. In another aspect, the behavior of the group in general presented certain ups and downs, moments in which everyone participated and collaborated proactively; however, there were times when it was necessary to use dynamic activities aimed at stimulating participation and favoring the students´ concentration during class.

Next, according to what was observed in the classroom, we proceed to describe the different class sessions conducted:

Diagnostic session—pre-test

Date: May 22, 2025.

At the beginning of the class, a diagnostic test was conducted to evaluate the initial level of pronunciation of the phonemes /s/ and /z/ of the students. In general terms, the participants showed a positive attitude during the application of the test; however, common difficulties were identified, such as accentuation and fluency in the reading of words and simple sentences. The results of this evaluation revealed deficiencies in the four dimensions analyzed: word stress, intonation, fluency, and accuracy. These deficiencies served as a basis for the design and planning of the classes to be implemented, ensuring that the specific needs of the students are addressed.

Introduction to the phonemes /s/ and /z/.

Date: May 29, 2025.

The class began with a brainstorm session on the concept of "Pronunciation". Students shared their previous knowledge of the concept, which allowed them to generate new ideas and encourage participation from the beginning of the class. Next, the teacher presented the phonemes /s/ and /z/ using Canva as a visual resource and reinforced the explanation with a video. To reinforce the content, students listened to words that included these phonemes through the Youglish platform. During the activity, students held up a card with a phoneme on each side (/s/ and /z/), according to the sound they were able to identify by listening to the pronunciation of the words. Through these activities, it was possible to observe significant progress in listening skills and in the recognition of phonemes in different communicative situations. Likewise, the dynamic of raising the cards encouraged interaction among peers, which contributed to the consolidation of the auditory memory essential for the development and learning of pronunciation in a second language.

Afterwards, students worked in pairs to participate in a Kahoot, which added a playful and interactive component to the class, thus keeping motivation high. At the end, students answered questions to reflect on and consolidate what they had learned during the class.

Class 2. Plural nouns with /s/ and /z/ sounds

Date: June 2, 2025.

The second class began with a dynamic called "Hot Potato", in which students had to pass a marker between them until the teacher said "stop." Whoever had the marker at that

moment had to answer questions such as, "What was the last class about?" and "What is the difference between the two phonemes? Can you tell me a word that contains those phonemes?" It could be observed that, thanks to this dynamic, the students were more receptive and engaged with the content that would be addressed later.

Then, with the visual support of the Canva tool, the topic of the formation of the plural in English with the endings -s and -es was introduced, emphasizing the variation in their pronunciation second to the final sound of the noun. The explanation was complemented with an illustrative video that included visual examples such as balls, pencils, and foxes. As the teacher pronounced the words and/or reproduced the pronunciation on the speaker, students identified whether they contained the phoneme /s/ or /z/, which fostered phonological awareness.

Next, a paired activity was carried out in which students had to read a dialogue that included examples of plural nouns with the phonemes /s/ and /z/. During this activity, students' intonation and accentuation were evaluated in a specific communicative context, allowing us to observe their ability to correctly apply phonological rules in real speaking situations.

Finally, an individual activity consisted of analyzing a list of nouns, identifying and writing down the corresponding phoneme next to each one. This task allowed assessing the knowledge acquired about the pronunciation of plurals in English. During the task, it was observed that some students had difficulties in identifying the phonemes /s/ and /z/. Faced with this situation, they were provided with a support sheet with the corresponding rules, in order to facilitate their understanding and guide them in the resolution of the activity.

Class 3. Application in Context, present simple verbs in the third person singular.
Post-test

Date: June 5, 2025.

On this third day, a lead-in dynamic was developed with the purpose of activating the students' previous knowledge and preparing them for the new content to be addressed. Through this activity, students were asked to express their knowledge and areas of ignorance regarding the topic to be taught.

Subsequently, the use of the present simple tense in the third person singular was introduced through a presentation created in Canva. During the explanation, cards with verbs and illustrative examples were used to facilitate the understanding of the grammatical structure. In addition, students practiced with the Youglish tool, which facilitated listening to the proper pronunciation of phonemes in real contexts. To consolidate what they had learned, an interactive activity was carried out on the wordwall platform.

Finally, for the evaluation of the class, a video of a character performing his daily routine was presented, where students in pairs had to formulate sentences and then read them aloud through the dynamics of 'la roulette', this with the aim of focusing on the correct conjugation of verbs and the identification of their pronunciation in the third person. In addition, in this session a post-test was applied to evaluate the individual progress of each student.

The present evaluation was carried out using a rubric designed to assess the correct pronunciation of words and phrases containing the phonemes /s/ and /z/. Students elaborated

simple sentences based on everyday activities, which were read aloud. In this process, dimensions such as word stress, intonation, accuracy, and fluency were considered. The results obtained were highly positive; most of the students were able to identify and pronounce correctly the phonemes mentioned above, significantly overcoming the difficulties observed in previous evaluations. This class provided evidence of notable progress in the dimensions of intonation and accentuation, manifesting itself in participation and a clearer communicative intention during oral production.

4.2 Description of results

During the implementation of the classroom system supported by audiovisual resources, direct observations were made to the group of students in order to identify relevant behaviors related to the improvement in the pronunciation of the phonemes /s/ and /z/ in English.

First, there was a significant increase in student participation and engagement during activities, suggesting that the inclusion of audiovisual resources can foster a more interactive and motivating learning environment. However, although moderate progress was observed in students' pronunciation, some limitations were identified.

Lack of continuous practice and limited vocabulary contributed to students' difficulties in both fluency and accuracy in English usage. This finding highlights the need for a more comprehensive approach that includes regular practice and vocabulary enrichment.

On the other hand, in terms of intonation and accentuation, there was a noticeable improvement thanks to the use of videos that provided examples of correct pronunciation.

However, some students required additional tools, such as the Youglish application, to better understand the variations in pronunciation in different native contexts. This indicates that, although audiovisual resources are effective, additional support can be crucial to achieve a more complete mastery of pronunciation.

After completing the pedagogical intervention based on the use of audiovisual resources, the post-test was applied on June 5, 2025, to a population of 31 students of General Basic Education belonging to an educational institution located in Santa Rosa city. The purpose of this evaluation was to measure the performance in the pronunciation of the phonemes /s/ and /z/ in English after implementing a didactic strategy through a system of classes divided into three sessions, specifically oriented to improve oral production through the use of audiovisual resources.

For this evaluation, the dimensions of intonation, word stress, fluency, and accuracy were considered, using a rubric made up of specific criteria and achievement levels established in three categories: Satisfactory (8-10 points), Good (6-7.99 points), and Needs Improvement (0-5.99 points). This instrument made it possible to obtain more specific results on student performance. The results of the post-test are as follows:

Figure 6

Post-test results

General Analysis

Satisfactory: 29%
Good: 55%
Needs improvement: 16%
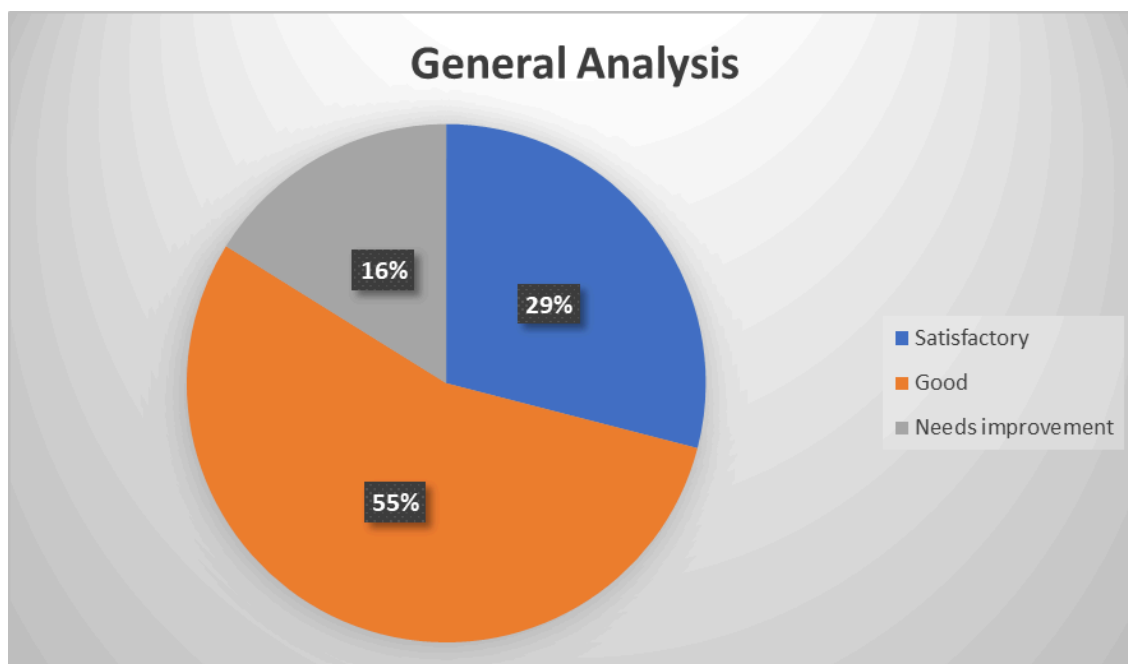
The results of the post-test show significant progress in the students' pronunciation. A total of 55% of the total, equivalent to 17 students, obtained a performance classified as "Good", which indicates that more than half of them reached an acceptable level of proficiency in the dimensions evaluated: intonation, word stress, fluency and accuracy. Although errors were detected in one or more of these dimensions, pronunciation was generally understandable and students showed potential for continuous improvement.

On the other hand, 29%, made up of 9 students, reached the "Satisfactory" level, which reflects an adequate handling of the aforementioned dimensions. Although some errors were evidenced, these were minimal and did not affect the clarity or comprehension of the oral discourse.

Finally, only 16% of the group, corresponding to 5 students, was placed in the "Needs improvement" level, which suggests significant difficulties in the four dimensions evaluated.

This group requires more attention and pedagogical support to strengthen their pronunciation and improve their overall performance in oral language production.

Figure 7

Dimension 1: Intonation
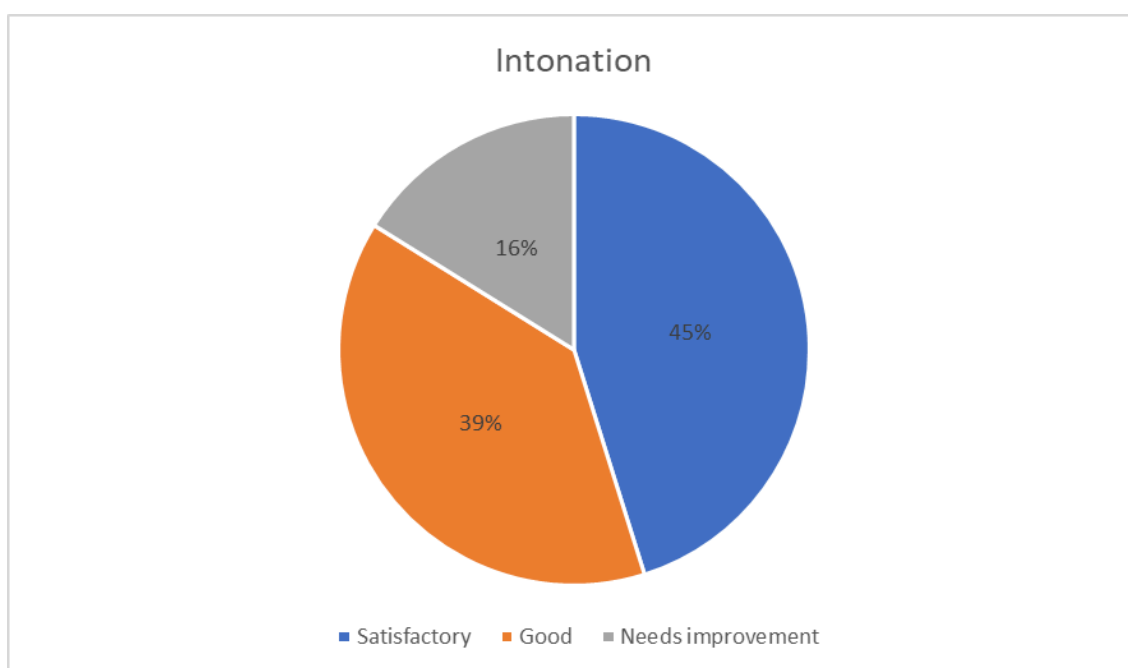
To begin with, in the intonation dimension, 45% (14 students) placed at a "Satisfactory" level, which is evidence that they achieved a significant performance compared to the pre-test. This group of students understood the appropriate use of melodic patterns in the pronunciation of words and phrases.

Likewise, 39% (12 students) obtained a good performance level, which indicates that a considerable part of the group achieved accurate and natural intonation, presenting few errors in this dimension. This result suggests a remarkable progress in pronunciation and in the adequate transmission of communicative intentions through speech.

In contrast, the remaining 16% (5 students) were placed in the Needs Improvement category, which reflects that they still present difficulties in this skill. In their oral productions, flat or inadequate intonations were observed, which affected the transmission of meaning and communicative intention.

In general terms, positive progress was observed in this dimension since the number of Needs Improvement levels improved, and more than half of the group of students reached Satisfactory and Good levels, indicating that they have a solid foundation in intonation, which allows them to communicate more clearly and effectively.

Figure 8

Dimension 2: Word Stress
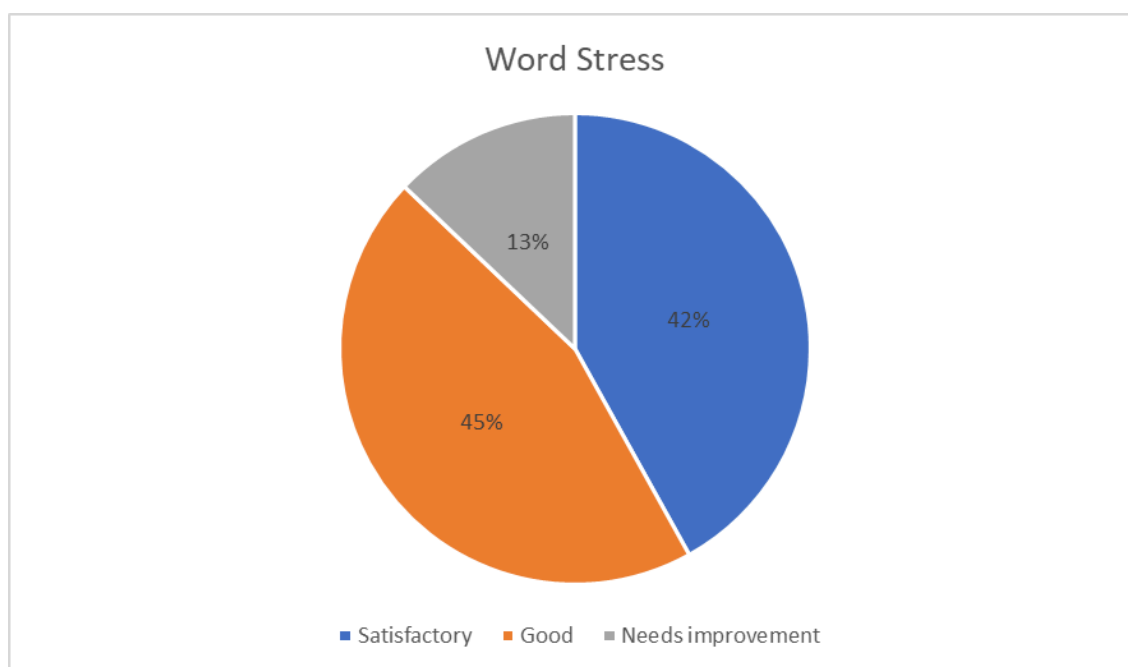
In the dimension of accentuation, which focuses on the correct placement of accents in words, notable progress has been observed among the students. In the evaluation carried out,

42% of the participants reached the "satisfactory" level, indicating that most of them managed to pronounce both simple words and compound sentences correctly, thus facilitating clearer and more understandable communication. On the other hand, 45% of the students were classified at the "good" level, suggesting that, although they faced some difficulties in accentuation, effective comprehension was achieved during their communicative interactions. Finally, 13% of the students were placed at the "needs improvement" level, reflecting the need for additional work and academic reinforcement to improve their ability to articulate sentences correctly.

This significant increase compared to the initial test is evidence that students have understood the rules applied in this dimension. This understanding translates into an improvement in terms of clearer and more effective pronunciation, which in turn has contributed to an increase in their confidence when speaking and pronouncing sentences, which is fundamental to achieve more effective and accurate communication, essential aspects in language learning.

Figure 9

Dimension 3: Fluency
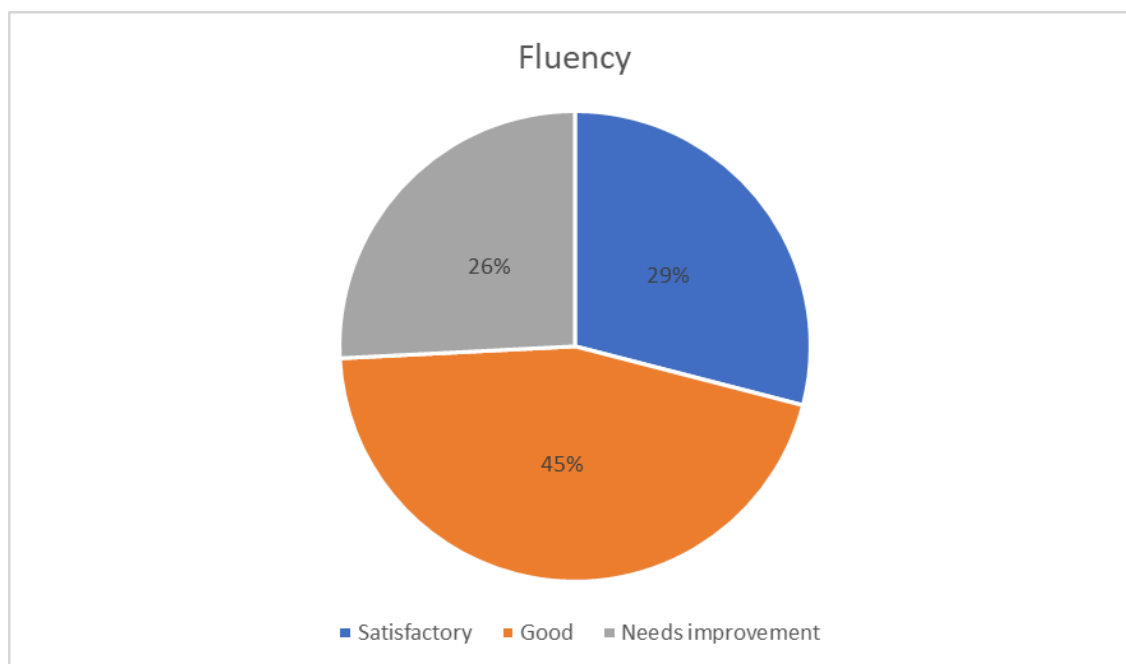
Regarding the fluency dimension, the results reveal that 29% (9) remained at the "Satisfactory" level, the same percentage recorded in the pre-test. This data suggests a consolidation in the performance of these students who maintained an acceptable fluency, presenting adequate pauses and a clear oral structure that facilitated the transmission of messages.

On the other hand, 45% (14) reached the "Good" level, which reflects a good command of fluency, using necessary pauses and understandable repetitions of words and phrases. This group represents a significant improvement since the majority were in the Needs Improvement category, evidencing concrete progress.

Finally, the remaining 26% (8) remained at the "Needs improvement" level, indicating that there are still students who have difficulty in fluency, producing fragmented sentences and prolonged pauses that affect the transmission of the message. However, in comparison with the results obtained from the initial test, a decrease in the number of students who

presented greater difficulties in this dimension is observed, suggesting a gradual advance in the improvement process.

Figure 10

Dimension 4: Accuracy
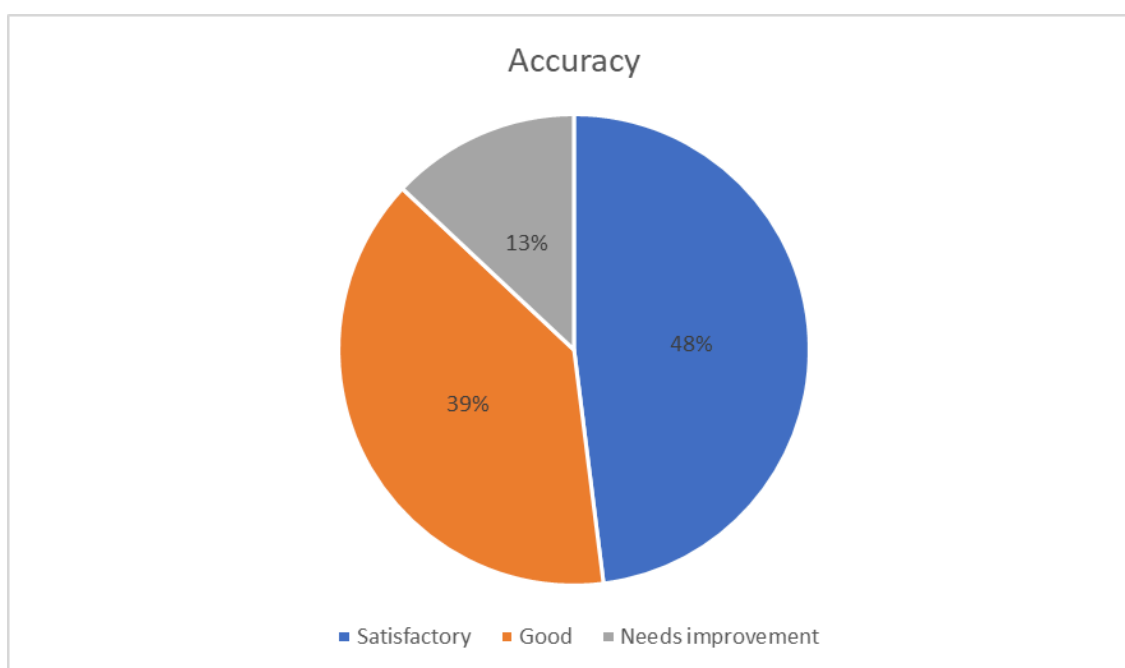
As for the accuracy dimension, which refers to precision in pronunciation and the appropriate use of sounds, it showed stable results in the group of students analyzed. Although there were no significant changes in the levels of accuracy, it was evident that the students have a solid base in certain contents. However, there are still confusions that contribute to the appearance of errors.

The data obtained indicate that 48% of the students are at the "satisfactory" level, 39% at the "good" level and 13% at the "needs improvement" level. This distribution shows that, despite the lack of progress in the initial evaluation, students have maintained their

performance in this dimension. This fact implies that the implementation of audiovisual resources, such as videos and images, has not had the expected impact on the improvement of pronunciation accuracy.

However, it is relevant to note that, although the accuracy dimension did not show progress, the use of these resources has contributed significantly to the improvement of other dimensions of learning, such as intonation, word stress, and fluency. This suggests that, despite the stability in accuracy, the integration of audiovisual tools in the educational process has facilitated a notable advance in the production of speech sounds.

Figure 11

General analysis of the post-test.
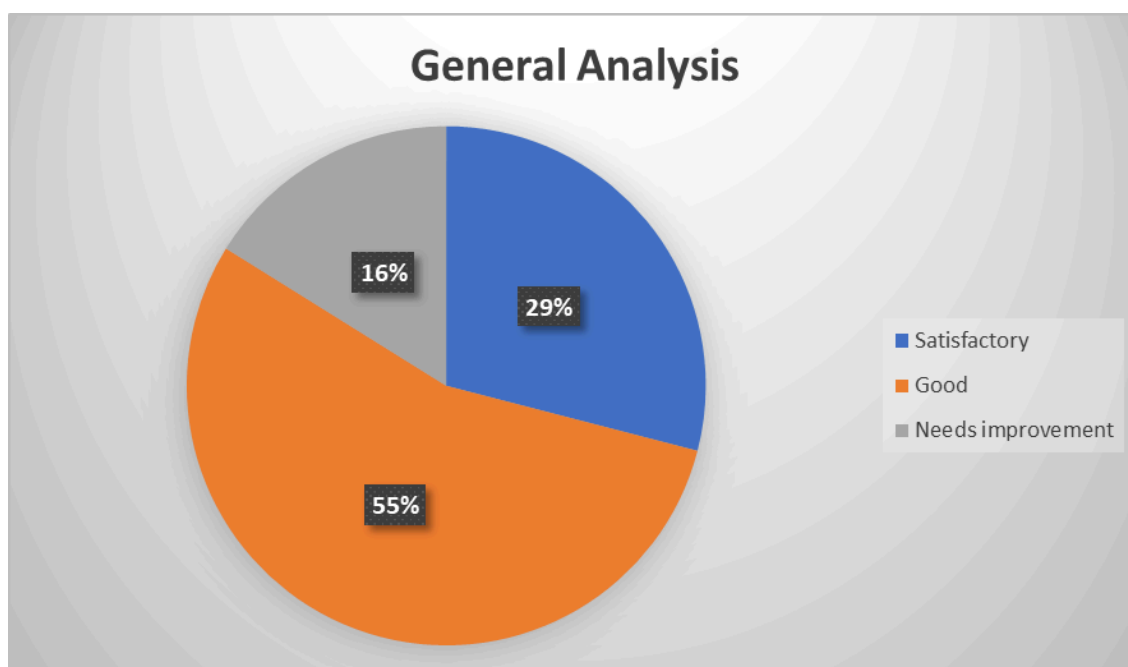
The overall results of the post-test reflect that, out of a total of 31 students, 29% (9 students) reached a "Satisfactory" level of proficiency. This shows an efficient performance in

oral production. On the other hand, 55% (17 students) obtained a "Good" performance, while 16% (5 students) were positioned at the "Needs improvement" level.

Hypothesis testing

In order to determine whether the application of the classroom system based on the use of audiovisual resources had a significant effect on the improvement of the pronunciation of the phonemes /s/ and /z/ in the English language, the paired t-test was used. This tool made it possible to identify possible significant differences in the performance of a group of students before and after an educational intervention. Thus, by means of this analysis, the impact of the pedagogical proposal on oral production is evidenced, emphasizing the dimensions of intonation, word stress, fluency, and accuracy. The results are objectively supported by means of a quantitative analysis.

Statistical assumptions

Null hypothesis (H0): If a classroom system based on the use of audiovisual resources as a methodological strategy is developed, it will not contribute to the improvement of the pronunciation of the phonemes /s/ and /z/ in English in tenth-grade students, class 'A', of the N.A. high school, during the school year 2025-2026.

Alternative hypothesis (H1): If a classroom system based on the use of audiovisual resources as a methodological strategy is developed, it will contribute to the improvement of the pronunciation of the phonemes /s/ and /z/ in English in tenth-grade students, class 'A', of the N.A. high school, during the school year 2025-2026.

Paired t-test analysis (overall results)

Table 1

Complete data and differences (pre-test vs post-test)

Nº	Pre-test (X_1)	Post-test (X_2)	Difference ($d_i = X_2 - X_1$)
1	6.50	8.25	1.75
2	5.00	7.00	2.00
3	5.75	8.00	2.25
4	5.25	7.00	1.75
5	5.75	7.25	1.50
6	6.75	7.00	0.25
7	6.50	7.50	1.00
8	5.00	6.50	1.50
9	5.75	6.25	0.50
10	6.25	8.00	1.75
11	6.00	6.75	0.75
12	5.50	8.00	2.50
13	7.25	8.50	1.25
14	6.75	5.50	-1.25
15	6.50	7.00	0.50
16	7.00	7.25	0.25
17	7.00	7.00	0.00
18	6.75	8.75	2.00
19	5.50	7.50	2.00

20	7.00	7.50	0.50
21	5.25	6.25	1.00
22	3.75	4.50	0.75
23	6.00	7.00	1.00
24	4.75	4.50	-0.25
25	6.00	7.25	1.25
26	6.75	8.75	2.00
27	6.25	9.25	3.00
28	7.25	7.75	0.50
29	4.50	4.50	0.00
30	6.00	8.25	2.25
31	5.50	5.50	0.00

- This table shows the difference between the initial and final scores of the students before and after the intervention.

- The vast majority of students, 28 out of 31, or 90%, show a positive improvement in their overall grade.

- There are notable differences between the performance of the first and second tests (X1 - X2), with more than half of them exceeding a one-point difference, reflecting a considerable, although not overwhelming, improvement.

Table 2

Key statistical calculations

Statistician	Value
Pre-Test Average	5.99
Post-Test Mean	7.10
Mean difference (d̄)	1.10
Standard deviation of differences	0.95
T-value (t-student)	6.46
Degrees of freedom (df)	30
Critical t-value (two-tailed, $\alpha = 0.05$)	±2.045
P-value (two tails)	3.91×10^{-7}

Analysis by dimensions

Table 3

1. Intonation

Level	Pre-test	Post-test	Difference	% Pre	% Post	% Difference
Satisfactory	0	14	+14	0.00%	45.16%	+45.16%
Good	10	12	+2	32.26%	38.71%	+6.45%
Needs improvement	21	5	-16	67.74%	16.13%	-51.61%

- Significant progress. Students can now say simple words or phrases clearly and naturally, with appropriate intonation.

Table 4

2. Word stress

Level	Pre-test	Post-test	Difference	% Pre	% Post	% Difference
Satisfactory	0	13	+13	0.00%	41.94%	+41.94%
Good	13	14	+1	41.94%	45.16%	+3.23%
Needs improvement	18	4	-14	58.06%	12.90%	-45.16%

- Positive outcome evident. One of the most successful dimensions, students achieved clear and understandable pronunciation, which represents an important advance in their ability to communicate more effectively.

Table 5

3. Fluency

Level	Pre-test	Post-test	Difference	% Pre	% Post	% Difference
Satisfactory	9	9	0	29.03%	29.03%	0.00%
Good	9	14	+5	29.03%	45.16%	+16.13%
Needs improvement	13	8	-5	41.94%	25.81%	-16.13%

- There is minimal, if any, improvement; this dimension remains one of the most complex for students. This could be due to the lack of contrast practice and exposure to the language.

Table 6

4. Accuracy

Level	Pre-test	Post-test	Difference	% Pre	% Post	% Difference
Satisfactory	15	15	0	48.39%	48.39%	0.00%
Good	12	12	0	38.71%	38.71%	0.00%
Needs improvement	4	4	0	12.90%	12.90%	0.00%

- It did not show significant progress or setbacks, which indicates that, although there was no worsening, there was no notable improvement in this aspect either. Some possible reasons could be that, although students know the grammatical patterns and rules, they still have difficulties in applying them correctly in practice, which translates into confusion and errors.

Comparison by dimensions (pre-test vs post-test)

Table 7

Averages by dimension

Dimension	Pre-test mean	Mean Post-test	Difference	% Improvement	T-value	P-value
Intonation	5.23	7.29	+2.06	39.4%	7.43	0.0000
Word stress	5.39	7.39	+2.00	37.1%	7.75	0.0000
Fluency	6.45	6.81	+0.36	5.6%	1.01	0.3212
Accuracy	6.90	6.90	0.0	0.0%	—	—

- Intonation and word stress were the dimensions that showed significant improvement.

- In fluency, there was a slight improvement, but not significant.

- As for accuracy, there was no change.

Table 8

Paired t-tests by dimensions

Dimension	t-value	Significance (p < 0.05)	Mean difference (d)
Intonation	7.43	Sí (p < 0.001)	1.33 (large)
Word stress	7.75	Sí (p < 0.001)	1.39 (large)
Fluency	1.01	No (p = 0.321)	0.18 (very small)
Accuracy	—	No hubo cambio	0.00 (null)

The improvements observed in the intonation and word stress dimensions of English pronunciation proved to be highly significant, with a considerable impact on student

performance. Both dimensions showed increases greater than 1 full point, accompanied by t-values greater than 7.4 and p-values of 0.0000, evidencing that the differences found were statistically highly significant.

As for the fluency dimension, there was a slight improvement of 0.35 points, which did not reach statistical significance. Accuracy showed no change between pretest and posttest measurements, reflecting a complete stagnation in the development of students phonetics and grammatical accuracy.

To validate these observations, a paired sample t-test was applied to compare the pretest and posttest scores for the pronunciation of English /s/ and /z/ phonemes. The analysis yielded a mean difference of 1.10 points, with a standard deviation of 0.95 points, indicating a substantial overall improvement.

The t-statistic obtained was 6.46, with a p-value $= 3.91 \times 10^{-7}$, a value well below the significance level $\alpha = 0.05$, which allows us to reject the null hypothesis and confirm that the intervention had a positive and statistically significant effect.

In conclusion, the implementation of a classroom system supported by the use of audiovisual resources had a favorable and proven impact on the improvement of the pronunciation of the phonemes /s/ and /z/ of the English language among the participating students.

Discussion of results

The purpose of the study was to implement a classroom system based on the use of audiovisual resources as a pedagogical strategy to improve the pronunciation of the phonemes /s/ and /z/ in tenth-grade students of General Basic Education, class A, of an educational institution located in Santa Rosa, El Oro, during the period 2025–2026.

This proposal arose from the results obtained from the pre-test, which showed notorious deficiencies in the dimensions of intonation, accentuation, fluency, and accuracy, reflecting a marked weakness in the oral production of English.

In the intonation dimension, considerable improvements in student progress were observed. The "Satisfactory" level increased from 0% to 45%, while the "Needs Improvement" level decreased from 68% to 16%. This result reflects that the audiovisual resources contributed positively to the students´ ability to use appropriate tonal variations when communicating in English.

On the other hand, in the word stress dimension, the results were notoriously positive, since the level of "satisfactory" increased from 0% to 42%, and there was a considerable reduction from 58% to 13% in "Needs improvement". It reveals substantial progress in the correct handling of accentuation in words containing the phonemes /s/ and /z/, which favored effectiveness in the communicative process.

Regarding the fluency dimension, a stability was observed in the percentage of students reaching the "Satisfactory" level, remaining at 29% in both the pre-test and post-test. However, there was a considerable decrease in the "Needs improvement" level, which

dropped from 42% to 26%. This change suggests that a portion of the students improved performance, advancing to the "Good" level, demonstrating a positive but slight change in speech continuity and naturalness.

As for the accuracy dimension, the percentages at all levels were maintained in both the pre-test and post-test. The lack of variation in the results is attributed to the fact that the intervention focused mainly on other dimensions that presented greater initial deficiencies. But the fact that they managed to maintain "satisfactory" and "good" performance from the beginning reflects that they already possessed a solid foundation in the mastery of the phonemes /s/ and /z/.

From the statistical approach, a t-test was applied to compare the initial pre-test and final post-test scores. The results showed a statistically significant difference (t=6.46; P=3.91×10^{-7}) with 30 degrees of freedom, allowing us to reject the null hypothesis and confirm that the intervention had a significant effect. The measure of differences was 1.10 points, with a standard deviation of 0.95. These values far exceed the critical t value (±2.045), validating the efficacy of the application. The analysis also showed that, on average, students improved their pronunciation by 18.5% with respect to the pretest.

In short, the classroom system had a marked impact on the pronunciation of the phonemes /s/ and /z/, as it showed progress in the dimensions of intonation, accentuation, and fluency. This was quantitatively confirmed by means of the paired student t-test, which statistically demonstrated the efficacy of the intervention (t=6.46; p<0.001), with an average improvement of 18.5%, thus validating the effectiveness of the pedagogical proposal.

Conclusions

The present research was developed from a pedagogical proposal aimed at improving pronunciation in tenth-grade students of General Basic Education, class "A", through the implementation of a class system based on the use of audiovisual resources. This approach arose as a response to several problems identified in the educational context, among which stand out the lack of motivation of students towards learning English, the predominance of classes focused exclusively on the teaching of grammar and vocabulary, the scarce systematic practice of pronunciation, and the limited management of didactic and pedagogical resources by the teacher, especially with regard to the teaching of pronunciation.

The first specific objective focused on providing a theoretical basis for the use of audiovisual resources to improve the pronunciation of the phonemes /s/ and /z/ in the English language. Based on the analysis of various authors, it became evident that audiovisual resources, such as videos, games, instructional films, presentations, and digital platforms, not only facilitate the construction of knowledge and language skills but also encourage active participation, motivation, comprehension, and immediate feedback. This is due to their characteristics of interactivity, dynamism, and ability to adapt to different learning styles.

In relation to the second objective, this allowed us to diagnose the level of mastery of oral production of the phonemes /s/ and /z/ in general basic education students. The results of the diagnosis revealed significant deficiencies in key aspects such as intonation, word stress, speech fluency, and accuracy in the use of these phonemes. These results highlighted the need to design and implement a contextualized pedagogical intervention consistent with the real needs observed in the educational community.

The third objective focused on the implementation of a classroom system based on the use of audiovisual resources. This intervention resulted in a flexible, participatory, and formative pedagogical proposal aimed at strengthening specific linguistic aspects, such as intonation, accentuation, fluency, and accuracy in the pronunciation of the phonemes worked on. The activities were designed with a progressive approach in order to gradually develop the students' phonological competence.

The third objective, oriented to the design and implementation of a classroom system based on the use of audiovisual resources, was developed under a communicative and progressive approach that articulated the phases of exposure, guided practice, and contextualized production. Through the integration of playful, collaborative activities supported by technological tools, we were able to strengthen phonological awareness, improve the precise articulation of the phonemes /s/ and /z/, and increase the students' motivation towards oral expression in English. This proposal, based on pedagogical, didactic, and psychological principles, favored the development of a dynamic and meaningful learning environment, demonstrating that the appropriate use of digital resources is an effective strategy for teaching pronunciation in real school contexts.

Finally, the fourth objective is based on the verification of the impact of the implemented classroom system. The results obtained showed significant improvements, especially in the dimensions of intonation and word stress, which in turn supports the hypothesis put forward in this research. As for the fluency dimension, progress was observed, although to a lesser extent. However, in the accuracy dimension, no relevant changes were recorded, which can be attributed to the fact that the students already presented an acceptable command since the application of the pre-test.

Recommendations

According to the results obtained on the use of audiovisual resources to improve the pronunciation of the phonemes /s/ and /z/ in the English language, it is recommended that teachers integrate these resources into their pedagogical practices, since in addition to improving the accurate articulation of sounds, they also contributed to the development of communicative skills.

However, given that there was one dimension that did not show significant improvements, it is suggested that future research incorporate complementary pedagogical strategies, such as the use of educational software, interactive applications, oral games (such as tongue twisters, rhymes, and riddles), dramatization of dialogues, development of own recordings, and development of dialogue notebooks.

In addition, it is recommended to provide training on the proper use of these tools in order to ensure their proper implementation in the classroom. The mastery of these resources promotes more natural, fluent, and effective oral communication and strengthens the student's confidence in expressing themselves in English.

References

Alvarado, J. (2021). *Estrategias innovadoras para la enseñanza de la pronunciación del inglés en El Oro*. Congreso Internacional de Educación y Tecnología.

Ausubel, D. (1983). *Psicología Educativa: Un punto de vista cognoscitivo*. Trillas.

Bates, A. W. (1998). *Technology, open learning and distance education*. Routledge.

Beatty, K. (2010). *Teaching and Researching: Computer-Assisted Language Learning*. Routledge.

Brown, J. W. (1972). *AV instruction: Technology, media, and methods*. McGraw-Hill.

Caicedo-Quinteros, S. I. (2023). Estilos de aprendizaje para mejorar el idioma inglés. *Revista Arbitrada Interdisciplinaria Koinonía*, 8(Supl. 2), 788-805. https://doi.org/10.35381/r.k.v8i2.2970

Castañeda, M. (2018). *Investigación educativa: Diseño y práctica.* Ediciones Universitarias.

Castillo, L. (2021). Ecuador mantiene un bajo nivel de dominio del idioma inglés. *El Comercio*. https://www.elcomercio.com/tendencias/sociedad/ecuador-idioma-dominio-ingles-estudiantes.html

Celce-Murcia, M., Brinton, D. M., & Goodwin, J. M. (2010). *Teaching Pronunciation: A Course Book and Reference Guide* (2nd ed.). Cambridge University Press.

Cevallos, M. J. (2019). Análisis del nivel de competencia en inglés de estudiantes de secundaria en Ecuador. *Revista de Educación y Lenguas*, 12(1), 45-60.

Chagoya, E. R. (2008). *Métodos y técnicas de investigación*. Gestiopolis. https://www. gestiopolis. com/metodos-y-tecnicas-de-investigacion.

Council of Europe. (2020). *Common European Framework of Reference for Languages: Learning, teaching, assessment – Companion volume*. Council of Europe Publishing. https://www.coe.int/lang-cefr

Cuban, L. (1986). *Teachers and machines: The classroom use of technology since 1920*. Teachers College Press.

Derwing, T. M., & Munro, M. J. (2015). *Pronunciation Fundamentals: Evidence-based perspectives for L2 teaching and research*. John Benjamins Publishing.

EF Education First. (2023). *EF English Proficiency Index*. https://www.ef.com.ec/epi/

García León D F., Villamar Salazar M A., (2022). *Sistema de clases para el mejoramiento de la pronunciación del idioma inglés*. [Trabajo de titulación, Universidad Técnica de Machala, Facultad de Ciencias Sociales]. 68 p.

Gilakjani, A. P. (2012). The significant role of multimedia in motivating EFL learners' interest in English language learning. *International Journal of Modern Education and Computer Science*, 4(4), 57-66.

González Hernández, W. (2023). The Teaching-Learning Process or the Teaching Process and the Learning Process. *Culture & Psychology*, 29(1), 96-115. https://doi.org/10.1177/1354067X221097610

Guanoluisa Almache, F. A., Bosquez Remache, J. D., Esparza Pijal, S. B., & Benavides Salazar, C. F. (2023). Apuntes sobre los métodos de investigación y técnicas de recolección de datos utilizadas en la investigación jurídica. *Bibliotecas. Anales de Investigación*, 19(Esp. 2), 1–17. http://revistas.bnjm.sld.cu/index.php/BAI/article/view/760/653

Heinich, R., Molenda, M., & Russell, J. D. (1993*). Instructional media and the new technologies of instruction.* Macmillan.

Hernández Sampieri, R., Fernández Collado, C., & Baptista Lucio, M. (2014*). Metodología de la investigación (6ª ed.).* McGraw-Hill.

Hikmah, Durratul. (2019). Media For Language Teaching and Learning in Digital Era. *International Journal of English Education and Linguistics (IJoEEL)*. 1. 36-41. 10.33650/ijoeel.v1i2.963.

Hovland, C. I., Lumsdaine, A. A., & Sheffield, F. D. (1949). *Experiments on mass communication.* Princeton University Press.

Jimenez Estrada, L. A. (2024). *Estudio de la pronunciación del inglés como lengua extranjera en estudiantes del 5° grado de secundaria en una I. E. de Chepito-Mórrope* [Tesis de pregrado, Universidad Nacional Pedro Ruiz Gallo]. Repositorio Institucional UNPRG. https://hdl.handle.net/20.500.12893/13810

Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL*, 20(3), 271-289.

Labrada Batchelor, L. C., Batchelor Ramos, M. M., & Quintana Jiménez, R. M. (2021, 1 de septiembre). La pronunciación en las niñas y los niños del grado preescolar; un reto actual para el logopeda. *Dilemas contemporáneos: Educación, Política y Valores*, 9(1), 1-15. https://doi.org/10.46377/dilemas.v9i1.2834

López Falcón, A. L., & Ramos Serpa, G. (2021). Acerca de los métodos teóricos y empíricos de investigación: significación para la investigación educativa. *Revista Conrado*, 17(S3), 22-31.

Lumsdaine, A. A., & Glaser, R. (1960). *Teaching machines and programmed learning: A source book.* National Education Association.

Mahmood, H. A.-S. (2021). *The importance of Pronunciation in English Language Teaching* [Dissertation]. Salahaddin University.

Martínez, R. (2022). Formación docente en la enseñanza del inglés en Ecuador: Retos y oportunidades. *Revista de Investigación Educativa*.

Martin-Rubio, X. (2021). Audacity and Praat as Pedagogical Tools: Analysing Fluency and Pronunciation Accuracy. *Philologia*, 19(1), 37–50. https://doi.org/10.18485/philologia.2021.19.19.4

Mashrabovna, U. M., & Sherzodbekovna, H. M. (2023). Using audiovisual materials in teaching foreign language. Journal of new century innovations, 28(2), 119-122.

Mayer, R. E., & Moreno, R. (2002). Aids to computer-based multimedia learning. *Learning and Instruction,* 12(1), 107-119.

McAnany, E. G. (2016). Schramm, Wilbur. *The International Encyclopedia of Communication Theory and Philosophy*, 1–4. Wiley. https://doi.org/10.1002/9781118766804.wbiect023

Ministerio de Educación del Ecuador. (2016). *Plan Nacional de Inglés*. Recuperado de Ministerio de Educación.

Ministerio de Educación del Ecuador. (2021). *Currículo priorizado con énfasis en competencias comunicacionales, matemáticas, digitales y socioemocionales: Educación General Básica, Subnivel Medio* [PDF]. https://www.educacion.gob.ec

Ministerio de Educación, Formación Profesional y Deportes. (2025). *Las cifras de la educación en España. Curso 2022-2023 (Edición 2025).* https://www.educacionfpydeportes.gob.es/servicios-al ciudadano/estadisticas/indicadores/cifras-educacion-espana/2022-2023.html

Mishan, F., & Timmis, I. (2015). *Materials Development for TESOL.* Edinburgh University Press.

Moreira-Aguayo, P. Y., & Venegas-Loor, L. V. (2020). Desarrollo de competencias comunicativas del idioma ingles. *Dominio De Las Ciencias*, 6(4), 1292–1303. https://doi.org/10.23857/dc.v6i4.1537

Mukumbek, M. M. (2021). Importance of intonation in English pronunciation. A*ctual problems of applied sciences journal world,* (1 (17), 59–62. https://doi.org/10.31219/osf.io/9vwc6

Munna, A. S., & Kalam, M. A. (2021). Teaching and learning process to enhance teaching effectiveness: a literature review. *International Journal of Humanities and Innovation (IJHI),* 4(1), 1–4. https://doi.org/10.33750/ijhi.v4i1.102

Olagbaju, O.O. & Popoola, A.G. (2020). Effects of audio-visual social media resources supported instruction on learning outcomes in reading. *International Journal of Technology in Education (IJTE)*, 3(2), 92-104.

Ortega-Chávez, W., Gamarra-Mendoza, S., & Yon-Delgado, M. R. (2021). Enfoque de investigación sistémica Vs. enfoque de investigación científica: análisis comparativo de su efectividad: Array. *Maestro Y Sociedad*, 18(3), 967–983. https://maestroysociedad.uo.edu.cu/index.php/MyS/article/view/5388

Osorio Gómez, L. A., Vidanovic Geremich, M. A., & Finol De Franco, P. M. (2021). Elementos del proceso de enseñanza – aprendizaje y su interacción en el ámbito educativo. *Revista Qualitas* , 23(23), 001 - 011. https://doi.org/10.55867/qual23.01

Pacheco Delgado, J. A., & Ramírez Morales, G. M. (2021). *System of audiovisual teaching resources for the improvement of regular and irregular verbs pronunciation in the past tense*. UTMACH, Facultad de Ciencias Sociales, Carrera de Pedagogía de los Idiomas Nacionales y Extranjeros.

Ping, L., & Tao, N. (2025). Innovative approaches to English pronunciation instruction in ESL contexts: integration of multi-sensor detection and advanced algorithmic feedback. *Frontiers in Psychology*, 15. https://doi.org/10.3389/fpsyg.2024.1484630

Piñas Rivera, L. C., Fuertes Vara, M. D., López Rengifo, C. F., Fuertes Vara, W. H., & Aguirre Chávez, F. (2022). El método histórico lógico en la enseñanza de las ciencias naturales. *Revista Inclusiones*, 9(2), 522–534. https://revistainclusiones.org/index.php/inclu/article/view/3272

Ramos Oliveira, A. M. (2021). *El acento, el ritmo y la entonación en la enseñanza del español como LE*. Cervantes.es. https://cvc.cervantes.es/ensenanza/biblioteca_ele/publicaciones_centros/PDF/saopaulo_2008/02_ramos.pdf

Ramos, M. M., & Méndez, M. M. (2020). La influencia de los recursos audiovisuales para el aprendizaje autónomo en el aula. *Anuario Electrónico De Estudios En Comunicación Social Disertaciones*, 13(1). https://doi.org/10.12804/revistas.urosario.edu.co/disertaciones/a.7310

Reyes Blácido, I., Guerra, E. D., Ciriaco Reyes, N., Corimayhua Luque, O., & Urbina Olortegui, M. (2022). Métodos científicos y su aplicación en la investigación pedagógica. *Dilemas contemporáneos: Educación, Política y Valores*, 9(2), 1–19. https://doi.org/10.46377/dilemas.v9i2.3106

Rojas, V. M. (2011). *Metodología de la Investigación: diseño y ejecución (1 ed.)*. Ediciones de la U. Obtenido de https://gc.scalahed.com/recursos/files/r161r/w24802w/Nino-Rojas-Victor-Miguel_Metodologia-de-la-Investigacion_Diseno-y-ejecucion_2011.pdf

Roquet, H., & Gil, M. (2006). Diseño de materiales audiovisuales para la enseñanza del inglés. Editorial GRAÓ.

RTVE.es. (2024, March 19). Inglés, una asignatura aún pendiente para los jóvenes entre 18 y 20 años: "El sistema español no está dando el nivel".

https://www.rtve.es/noticias/20240319/nivel-ingles-jovenes-espanoles-sistema-educativ o/16022377.shtml

Torres, L. (2019). *Autoeficacia y percepción de la pronunciación en estudiantes de inglés en El Oro.* Tesis de Maestría, Universidad Técnica de Machala.

Tutillo-Piña, J. M., García-Herrera, D. G., Castro-Salazar, A. Z., & Erazo-Álvarez, J. C. (2020). Genially como herramienta interactiva para el aprendizaje de verbos en Inglés. *Revista Arbitrada Interdisciplinaria Koinonía*, 5(5), 250–266. https://doi.org/10.35381/r.k.v5i5.1042

Valencia-Naranjo, N., & Robles-Bello, M. A. (2022). Habilidades comunicativas y de relación en la educación superior de disciplinas dirigidas al asesoramiento. *RIED-Revista Iberoamericana de Educación a Distancia*, 25(1), 323–341. https://doi.org/10.5944/ried.25.1.31327

Velázquez Ventura, E. M., Yorca Nieves, M., & Ruz Hernández, A. (2023). Desarrollo de habilidades de pronunciación en inglés en estudiantes de Cultura Física. *Pensar y Crecer*, 2(3).

Vizcaíno Zúñiga, P. I., Cedeño Cedeño, R. J., & Maldonado Palacios, I. A. (2023). Metodología de la investigación científica: guía práctica. *Ciencia Latina Revista Científica Multidisciplinar*, *7*(4), 9723-9762. https://doi.org/10.37811/cl_rcm.v7i4.7658

Zabalza, M. A. (2007). *La enseñanza universitaria: El escenario y sus protagonistas*. Narcea.

Annexes

1. **Rubric**

Rubric			
Dimension	Satisfactory (8-10)	Good (6-7.99)	Needs improvement (0-5.99)
Intonation	The student uses appropriate intonation that facilitates comprehension. Additionally, they follow basic intonation patterns in questions, words and sentences.	The student attempts to use intonation but struggles to do so, which sometimes results in a monotonous tone in words and phrases.	The student does not use intonation correctly, which makes their speech sound flat most of the time and does not reflect communicative intent.
Word Stress	The student correctly applies word stress that contains the /s/ and /z/ sounds.	The student generally applies stress correctly, although they occasionally become confused about when to stress. However, the message remains clear.	The student does not apply stress correctly, which affects message comprehension.
Fluency	The student uses fluent speech with appropriate pauses.	The student makes frequent but understandable pauses and repetitions.	The student produces many fragmented phrases and excessively long pauses.
Accuracy	The student knows when to use the /s/ and /z/ sounds in words and sentences.	The student sometimes makes consistent errors in pronouncing and identifying the phonemes, but overall the message is understandable.	The student frequently replaces or omits the sounds and does not understand when to use each one.

2. **Observation guide**

General information:

- **Observers:** Ammy Jara y Scarleth Eras

- **Grade:** 10th "A"

- **Number of students:** 31 students

● **Date:** May 22, 2025

● **Duration of the activity:** 90 min

● **Activity:** Pre-test

N°	Actions to be evaluated	Yes	No
1	The student uses rising and falling intonation in statements and questions.		x
2	Students pay attention to the stress in words that contain the /s/ and /z/ sounds.		x
3	Students avoid excessive pauses or silences while communicating or pronouncing sentences.		x
4	Students distinguish the use of the phonemes /s/ and /z/.		x
5	Students participate actively in oral activities.		x
6	Students show confidence when pronouncing words in English.		x

3. **Photos**

- **Diagnostic session—pre-test**

2025/05/22 11:08
Santa Rosa, Ecuador

- **Introduction to the phonemes /s/ and /z/**

- **Class 2. Plural nouns with /s/ and /z/ sounds**

- **Class 3. Application in Context, present simple verbs in the third person singular.**

   Post-test