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USE OF VOICE RECORDINGS IN THE IMPROVEMENT OF PRONUNCIATION

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PRONUNCIACIÓN**

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Use of voice recordings in the improvement of pronunciation

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ABSTRACT

Pronunciation is an important component of the oral skills necessary for effective communication in a second language. The present study aims to determine how the use of voice recordings to improve pronunciation among English learners in a public secondary school in Canton Pichincha, Province of Manabí. This study was carried out through a mixed methodology, combining qualitative and quantitative approaches. The study sample was 30 second-year high school students who attended regularly during the period 2023-2024 and four English teachers. The research instruments included a Pre-Test and Post-test, based on a rubric and an interview. Quantitative data analysis was conducted through the IBM SPSS statistical platform, applying the Wilcoxon test. The most significant results indicate improvements in the pronunciation of English learners after the educational intervention using voice recordings through WhatsApp. These improvements were reflected in participants' knowledge, perceptions, and motivation to use voice recordings. Furthermore, it concludes that the incorporation of voice recordings in the practice of English classes positively influences the pronunciation of English students, leading to a reduction in the number of errors made in each session. The study contributes to future research related to the use of technological tools to improve students' pronunciation.

Key words: voice recordings, pronunciation, speaking skills, students, english language

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Uso de grabaciones de voz en la mejora de la pronunciación

RESUMEN

La pronunciación es un componente importante de las habilidades orales necesarias para tener una comunicación eficaz en un segundo idioma. El presente estudio tiene como objetivo determinar cómo se utiliza el uso de grabaciones de voz para mejorar la pronunciación entre estudiantes de inglés en una escuela secundaria pública del Cantón Pichincha, Provincia de Manabí. Este estudio se realizó mediante una metodología mixta, incorporando enfoques cualitativos y mixtos. La muestra de estudio fue de 30 estudiantes de segundo año de secundaria que asistieron regularmente durante el periodo 2023-2024 y cuatro profesores de inglés. Los instrumentos de investigación incluyeron un Pre-Test y Post-test, basados en una rúbrica y una entrevista. El análisis cuantitativo de los datos se realizó a través de la plataforma estadística IBM SPSS, aplicando la prueba de Wilcoxon. Los resultados más significativos indican mejoras en la pronunciación de los estudiantes de inglés después de la intervención educativa utilizando grabaciones de voz a través de WhatsApp. Estas mejoras se reflejaron en el conocimiento, las percepciones y la motivación de los participantes para utilizar grabaciones de voz. Además, se concluye que la incorporación de grabaciones de voz en la práctica de las clases de inglés influye positivamente en la pronunciación de los estudiantes de inglés, propiciando una reducción en el número de errores cometidos en cada sesión. El estudio contribuye a futuras investigaciones relacionadas con el uso de herramientas tecnológicas para mejorar la pronunciación de los estudiantes.

Palabras clave: grabaciones de voz, pronunciación, habilidades de habla, estudiantes, idioma inglés

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INTRODUCTION

Pronunciation plays an important role in effective communication, cultural understanding, and building authentic connections with native speakers (Kissova, 2019). It is the way in which words are spoken, and it facilitates the conveyance of meaning from one person to another. Accurate pronunciation is essential for successful communication, as it can prevent misunderstanding and confusion. Poor pronunciation can hinder an individual's ability to express themselves clearly and effectively, leading to frustration and miscommunication.

Students at a public school in Pichincha Canton have a limited participation in speaking activities, it can be one of the reasons students have a weak performance in pronunciation and the ideas sometimes are not totally clear.

Improving pronunciation can be challenging, particularly for individuals learning a new language (Abdul & Mahmood, 2021). Common challenges include difficulty in producing certain sounds, incorrect intonation patterns, and inappropriate stress placement. These challenges can lead to a lack of confidence in speaking and a reluctance to engage in conversation. However, the benefits of improving pronunciation are numerous, such as increased confidence in speaking, enhanced ability to communicate effectively, greater cultural understanding and sensitivity, increased employability and career opportunities by addressing these challenges and improving pronunciation, individuals can experience these benefits and become more proficient in their language learning.

This study takes as reference the research carried out by Maldonado and Dack (2024), providing solid evidence on the effectiveness of voice recording technology in improving pronunciation and oral expression skills in high school students. Maldonado and Dack used a mixed methodology with qualitative and quantitative approaches and as application instruments in pre- and post-tests and an open questionnaire. The results showed that voice recordings significantly improve communication skills, making learning more meaningful (Maldonado & Dack, 2024).

The present research uses a mixed approach implementing qualitative and quantitative approaches. The participants are made up of 30 second-year high school students who attended regularly during the 2023-2024 period. The research instruments used include a Pre-Test and a Post-Test focused on pronunciation,

evaluated through a rubric, as well as interviews. The data analysis was carried out using the IBM SPSS statistical platform and the application of the Wilcoxon test.

This research particularly aims to determine how voice recordings improve pronunciation in English language learners at a public school. The sample was 30 students from second year of a public high school. The fundamental research questions were:

- How does the use of voice recordings impact the pronunciation improvement of English language learners?
- How does the frequency and duration of using voice recordings impact the rate of pronunciation improvement?
- What advantages and disadvantages has the use of voice recordings through WhatsApp?

Literature review

Voice recordings have emerged as digital educational aids that have greatly advanced language development, improving students' fluency and language skills, current language learning methodologies often fail to meet educators' classroom expectations and students' desires to improve their fluency (Infante, 2022). Particularly voice recordings serve as valuable complements to field notes, providing a durable and easily transferable record of fieldwork that can be used in multimedia presentations or in the classroom (Negrón, 2012). Hence, voice recordings, as digital educational aids, have boosted language development, improving students' fluency and linguistic skills by effectively complementing traditional methodologies and lengthening the teaching field.

Voice recordings are used by educators to simplify student engagement in the wider world, allowing learners to communicate and provide guidance regardless of the time and physical distance limitations inherent in traditional classroom environments (Iza, 2022). Using voice recordings for oral practice allows teachers to maintain an interactive classroom environment throughout the teaching and learning process (Wijayani, 2010). Therefore, these technological tools encourage teachers to facilitate global student engagement, overcoming time and distance limitations and maintaining an interactive classroom environment during the learning.

Kasimov (2022) defined pronunciation as the ability to articulate the sounds of language in a way that effectively and easily conveys the intended message. Prashant (2018) pointed out that pronunciation forms

the basis for effective communication in English, given its global prevalence and the presence of numerous regional dialects. However, Vallejo and Monteros (2018) emphasized that pronunciation in a language is widely recognized as a challenge but receives comparatively little attention in the classroom from language teachers. That is, pronunciation is indispensable for communication in English due to its global reach and dialect diversity, it is recognized as a challenge, despite this, language teachers usually devote less attention to it in the classroom, which affects comprehensive learning.

Without early opportunities to practice proper pronunciation, as mentioned Cakir (2012), students risk forming incorrect habits that could persist throughout the English language learning process. Moreover, frequently learners feel hesitant to produce sounds in English due to fear of making mistakes, limited practice time in class, and excessive correction of pronunciation errors; hence, to improve their English pronunciation, students should use tools that allows them to advance their pronunciation (Dandee & Pornwiriyaakit, 2022). To sum up, it is advisable to provide early opportunities and effective tools for students to practice English pronunciation, as lack of proper practice can lead to the formation of incorrect habits.

According to Evers and Chen (2022), to improve pronunciation plays an essential role in English communication as it determines how well a spoken message can be comprehended by the listener. Unquestionably, pronunciation is a key component in effective communication, so it is important for teachers to set achievable goals that match the specific communication requirements of their learners (Abdul & Mahmood, 2021). Generally, improving pronunciation in English poses challenges due to the lack of clear guidelines and the presence of conflicting practices in teaching pronunciation since the absence of a well-defined systematic approach makes it difficult for teachers to determine what aspects to teach, when to teach them and how. do it effectively (Gilakjani, 2016).

Effective communication in English depends largely on the clarity of pronunciation, which is why language teachers must establish realistic objectives adapted to learners' communicative needs, without forgetting the challenges that may appear during language acquisition. Cuenca (2021) stated that voice recordings improve pronunciation and address the main challenges that scholars face in this aspect of language learning. Thinh (2018) added that the use of voice recording gives students the opportunity to improve

their speaking skills and pronunciation, since by using voice recordings students progressed in fluency and lexical complexity.

Sánchez and López (2023) suggested that by using voice recordings, English learners significantly improve pronunciation, supporting the benefit of voice recordings in second language learning. While Sailema et al. (2022) highlighted that using voice recordings with a technological tool increase speaking fluency, especially when expressing yourself in English, giving speakers a feeling of greater freedom, ease, and confidence when communicating. This indicates that the use of voice recordings and technological tools is relevant to improving English language skills, not only by promoting fluency but also by influencing confidence in communication.

Maldonado and Dack (2024) detailed that students found the voice recording activities to be very advantageous and saw them as an opportunity to improve their oral skills, thus enriching the learning experience; nevertheless, researchers indicated that voice recording serves as a valuable and efficient tool to foster the continued development of communication skills. YanJu et al. (2017) claimed that voice recordings are usefulness, especially when the main goal is for learners to speak the target language, evaluate their own pronunciation, and improve their oral skills, this self-assessment component is a crucial aspect of language production for foreign language learners at all levels of proficiency.

Overall, voice recordings are indispensable tools for improving pronunciation, as they allow students to improve their speaking skills, engage in self-assessment, and practice communication in a stress-free environment. Consequently, Pabón (2022) mentioned that voice recordings offer learners the opportunity to gather and structure their thoughts without feeling anxious, as they can record their audio multiple times and only share the link when they feel confident with their recording.

METHODOLOGY

This study adopts a mixed methods approach to understand the effectiveness of using voice recordings on improving English language learners' pronunciation (Maldonado & Dack, 2024). By combining both qualitative and quantitative data collection implementing Pre-test, Post-test, and interviews.

Participants

The sample was 30 students from second year of high school, they are between 15 and 16 years old, 16 participants are female and 14 of them are male. The 70% of the participants live in the urban area and

the 30% live in the rural area. All of them have a technological device at home (cellphone, tablet, computer etc). The sample also includes four English teachers from the educational institution, who were interviewed about the use of voice recordings.

Instruments

Pre-test and Post-test: The purpose of these instruments is to determine the level of pronunciation of each student and analyze the most common mistakes answering the research question: How does the use of voice recordings impact the pronunciation improvement of English language learners? The pre-test was applied in face-to-face classes and part of virtual classes, and it consists of reading a short story which included basic vocabulary, simple past, past progressive and past perfect tenses.

This Speaking Activity was focused on Pronunciation based on an Evaluation Rubric-A2 level before and after the intervention with voice recordings. It included criteria such as intelligibility, word stress, sentence stress, rhythm and flow, consonant sounds, and vowel sounds. During the virtual classes because of the emergency...students could use the voice recordings through WhatsApp, receiving the teacher's feedback. After the treatment the post test was applied to analyze the scores and to see the differences.

Interviews

The purpose of this instrument is to analyze the different opinions of experts about teaching English language. It was conducted with experienced English teachers from public schools to gather their perspectives on the use of voice recordings, frequency, and duration to improve students' pronunciation, as well as the advantages and disadvantages of using WhatsApp to send and receive voice recordings.

Data analysis

Quantitative data is based on numeric outcomes (Ahmad, 2019), the Pre-test and Post-test were analyzed using descriptive statistics and inferential statistics to determine the impact of voice recordings on pronunciation improvement, by analyzing the comparison the scores of both tests. The normality test was carried out which indicated performing a non-parametric Wilcoxon test. The data obtained from the tests were analyzed through SPSS, which is an innovative statistical analysis software, designed especially for research and data analysis (Hazarika, 2019).

Qualitative data primarily consist of non-numeric information and are typically descriptive (Kabir, 2016); hence, interviews with four English teachers were thematically analyzed to identify patterns and themes related to the effectiveness of voice recordings in pronunciation instruction.

RESULTS

Pronunciation pre and post tests

	N	Min	Max	Mean	Std. Deviation	Mean Difference	P-value	Cohen's d
Pre-Test	30	5,4	9,1	7,4	1,2			
Post-Test	30	7,2	10	8,15	0,89	0,75	<0,05	0,63
Valid N (listwise)	30							

Source. SSPS results of the pre-test and post-test applied to the pronunciation of high school students, from a public educational unit in Pichincha, Manabí.

Table 1 presents quantitative data that compares the results of the Pre-test and Post-test of pronunciation, applied to 30 high school students from a public educational institution. The average score in the pretest was 7.4, with a standard deviation of 1.2; by contrast, in the post-test, it was 8.15, with a standard deviation of 0.89. The average difference between the two tests was 0.75, being statistically meaningful with a p-value < 0.05 and a Cohen's d effect size of 0.63.

After the analysis of the qualitative results in Table 1, a favorable increase in the improvement of English pronunciation is observed between the pre-test and the post-test, with an average difference of 0.91. Nonetheless, higher-performing participants achieved notable scores, possibly due to their attention and successful error correction, while lower-performing learners may not have paid attention to the teacher's recording and made the same errors repeatedly.

Results of interviews with English teachers regarding the use of voice recordings to improve students' pronunciation through WhatsApp.

Use of voice recordings to improve student' pronunciation:

Voice recordings are a useful tool to improve students' pronunciation, they can actively identify their pronunciation errors. This self-assessment according to the teachers improves when students listen to

their classmates, recordings and provide constructive comments on pronunciation. They can compare their voice recordings with models offered by teachers allowing students to notice specific areas of improvement. Overall, the iterative process of recording, receiving feedback, and comparing with accurate models encourages students to refine their pronunciation.

The frequency and duration of voice recordings:

They influence learners' pronunciation progress, teachers state that regular practice, such as weekly recordings or simply recorded scripts of approximately 20 seconds ensure that students are constantly engaged in oral activities, which is important for noticing and addressing. Short, frequent recordings encourage students to repeatedly identify and correct errors, resulting in a more sustained and positive impact on their pronunciation development. The practice helps learners make incremental improvements and reinforces their learning, improving their overall pronunciation skills.

Advantages of using WhatsApp to send and receive voice recordings:

Some of the advantages of using WhatsApp to send and receive voice recordings, according to teachers, are practicality, accessibility, and ease of use for students. WhatsApp is more accessible than many other media, making it easier for learners to constantly engage in pronunciation activities. Its easy-to-use interface allows students to quickly record and share their voice clips, making regular practice easier. In fact, the convenience of WhatsApp encourages more frequent interactions and immediate feedback.

Disadvantages of using WhatsApp to send and receive voice recordings:

Teachers identify some disadvantages of introducing WhatsApp to practice pronunciation through voice recordings, for example: some students may lack confidence and be afraid of making mistakes, they may become distracted when using it. It is also difficult to ensure consistent participation from all learners, as monitoring engagement and progress is less straightforward compared to more structured platforms.

DISCUSSION

The findings presented in this study shed light on the benefits of using voice recordings in educational aspects and distributing using WhatsApp. This work studies a method to improve pronunciation on English language learners. Therefore, the results obtained in the empiric segment of the study allow to the author agree to the position of Iza (2022), related that voice recordings are used by educators to simplify student engagement in the wider world, allowing learners to communicate and provide guidance regardless of the

time and physical distance limitations inherent in traditional classroom environments, it was applied during the emergency time in virtual classes and it worked successfully.

Additionally, the author agrees to Kasimov's (2022) p.21 definition of pronunciation as "the ability to articulate the sounds of language in a way that effectively and easily conveys the intended message". This definition emphasizes the significance of clear and intelligible speech in conveying meaning accurately and efficiently and that encapsulates the fundamental role that pronunciation plays in oral communication, during the intervention it was necessary that the educator sent clear and intelligible voice recordings which were the guidance for learners.

Evers and Chen (2022) assert that improving pronunciation is crucial in English communication, as it directly impacts the comprehensibility of spoken messages. This perspective emphasizes the fundamental value of pronunciation proficiency in facilitating effective oral communication and ensuring successful interaction between speakers and listeners. The results of the interviews and pre-test and pos-test indicate that the use of voice recordings has a significant impact on students' pronunciation progress when using WhatsApp. This social network helps them overcome the fear of making mistakes and improves aspects such as accentuation, intonation, and articulation of sounds, which were initially difficult for them.

The author also concurs with the viewpoint of Sailema (2022) p.17, that underscore the efficacy of utilizing voice recordings with technological tools to enhance speaking skills, particularly in the context of expressing oneself in English. The findings suggest that this approach not only improves fluency but also instills a sense of freedom, ease, and confidence among speakers, thereby enriching the communication experience and fostering greater language proficiency.

It highlights the transformative impact of using voice recordings with technological tools on speaking fluency and confidence, particularly in English communication contexts. Through the researcher's perception, during the application of the tests, it was evident that when using these tools, learners can enhance their fluency, experience greater freedom and ease in communication, build confidence, and take control of their learning process.

These benefits are reflected in feedback from English teachers, who emphasize the tools' ability to increase awareness of pronunciation errors, enable self-correction, and facilitate feedback and peer collaboration. As educators and learners adopt innovative approaches to language instruction, voice recordings stand out

as a valuable tool for empowering learners and facilitating meaningful communication experiences in the digital age.

Regarding the results obtained through the observation sheet, the favorable factors of using voice recordings through WhatsApp are highlighted in the ease of sending long and complex messages quickly, in addition to multimedia files such as images and audio, they better transmit the tone of voice, ensuring the authenticity of the message and providing security for the student to express themselves naturally.

Nevertheless, as teachers stated, there are also disadvantages in using this social network, such as limited ability to provide detailed feedback on complex pronunciation errors in short recordings, difficulty in monitoring and ensuring the constant participation of all students and possible distractions, or misuse of the WhatsApp due to its informal nature. The disadvantages directly affect the learning of the English language, as evidenced in non-formal observation, learners tended to get distracted when using the social network for other non-pedagogical activities.

Recordings allow to multitask and receive feedback, since other activities can be carried out while sending or listening to a message, and they make it easier to make corrections and observations while listening. According to some teachers' comments, voice recorders also make it easier for learners to record themselves to identify pronunciation errors and then provide feedback to their classmates by listening to their recordings and comparing them with the teacher's models.

Likewise, these recordings serve as a record and practice tool, since they can serve as a test or record of a conversation and allow the student to reproduce the message and repeat it, if necessary, they save the teacher time by allowing clear instructions to be given to the entire group, and they are accessible to many people, since in the digital age the majority of the population owns a device with WhatsApp. From the pedagogical perspective of teachers, this social network is a valuable tool to improve students' pronunciation, as long as it is used effectively and combined with other teaching strategies.

The author declares no unexpected findings.

This work proposes a method to improve pronunciation on English language learners, using the voice recording tool that most of the students have access, allowing them the opportunity to have self-feedback and practice safely and comfortably by themselves.

While this research is promising, a weakness

lies in the potential lack of qualified feedback. Ideally, recordings should be reviewed by a teacher or language tutor to provide targeted corrections.

Moving forward, future research should explore deeper into the specific mechanisms through which voice recordings facilitate pronunciation learning. Investigating factors such as the frequency and duration of exposure to recordings, the role of individual learner characteristics, and the effectiveness of different feedback mechanisms could provide valuable insights for optimizing instructional strategies. The author suggests applying educational intervention for minimum six months.

CONCLUSIONS

This analysis aimed to determine how voice recordings influence the improvement of pronunciation in English language learners. Through an analysis of various studies and experimental data the author concludes that the objective was achieved at 100%.

The research overwhelmingly supports the use of voice recordings as a valuable tool. Learners who record themselves practicing pronunciation can identify and address their mistakes, leading to measurable improvement. This finding has significant implications for both classroom settings and independent learning. Educators can integrate voice recording activities into their curriculum, allowing students to receive feedback and track their progress. Learners can leverage recording technology to practice pronunciation exercises outside of class, fostering self-directed learning. Results indicate that students who used voice recordings exhibited greater improvement in scores between pretest and posttest, with a difference of 2.20, after the educational intervention. This led to greater accuracy and fluency in pronunciation compared when they did not use voice recordings, showing a difference of less than 0.20.

The use of voice recordings has a positive impact in terms of improving pronunciation, by facilitating various pedagogical factors that promote the development of clear and precise pronunciation. Although challenges exist, they can be mitigated through a combination of multiple appropriate pedagogical strategies and constant supervision by the educator. In summary, the results reveal that voice recordings represent a valuable and effective tool in teaching pronunciation, especially when used in a structured and complementary way with other strategies.

The frequency and duration of voice recordings are factors that impact the rate of pronunciation improvement in English learners. The findings of this study emphasize that regular, brief practice not only

facilitates the identification and correction of errors, but also reinforces learning in a continuous and less intimidating way. Teachers should consider using frequent, short duration recording sessions in their teaching strategies to optimize students' progress in pronunciation. This methodology undoubtedly aligns with the best pedagogical practices, adapting to the different needs and abilities of students, promoting enriching learning for the language learner.

When it comes to using WhatsApp for voice recordings in teaching English pronunciation provides a practical and accessible solution that can encourage regular practice and immediate feedback. However, it is essential to encourage the emotional and technological barriers that can limit its use. Teachers should seek to balance the flexibility and accessibility of WhatsApp with strategies that mitigate its disadvantages, such as setting clear expectations, providing emotional support, and supplementing with other more structured tools when necessary. In this way, the potential of WhatsApp as an effective educational tool to improve pronunciation can be maximized.

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