

## Upskilling EFL Language Learners for Enhanced Pronunciation Proficiency

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### Abstract

This study investigates English pronunciation instruction through qualitative research that involved a purposive sample of 49 students and 21 instructors of diverse backgrounds. Inquiry used structured questionnaires to explore first- and second-hand experiences, perceptions, and recommendations for pronunciation training, which were triangulated with course material. Thematic analysis revealed reoccurring themes and prescriptive recommendations formulated. Quality assurance included member checking and peer debriefing to validate the study's credibility, while ethical considerations of confidentiality and anonymity of the participants were upheld. The findings suggest instructors focus on teaching basic phonetics versus student dependence on classroom participation and technology for practice. Themes of adjustments, affective hurdles, and interference in the L1 emerge as challenges for both groups. To enhance English pronunciation instruction, educators should integrate speech recognition software, online platforms, and mobile apps across disciplines; utilize oral presentations, recordings, peer feedback, and computer-assisted pronunciation testing Computer-Assisted Pronunciation Training (CAPT) for assessment; and create targeted resources addressing learners' specific L1 challenges while training teachers to adapt instruction to diverse student needs.

**Keywords:** IPA charts, Phonemic transcription, Phonetics, Speech recognition software

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## **Introduction:**

Language acquisition is essential for communication and pronunciation is perhaps the most important component. Achieving pronunciation proficiency is often challenging for learners and may impact their overall fluency and comprehension (Derwing & Mazzone, 2015; Yavas, 2011). Historically, pronunciation has been taught through the practice of repetition and through explicit instruction, both of which we now know are only part of the pedagogical puzzle. Advances in technology offer innovative ways of helping learners acquire improved pronunciation skills, moving us closer to the concepts of skilling, reskilling and upskilling.

Skilling involves introducing the beginning learners to the target language's phonetic system and foundation knowledge (Derwing & Munro, 2015). Reskilling targets learners with wrong pronunciation, but upskilling is more about refining the advanced knowledge found in comprehensive language studies. Exploration of these processes seeks to improve learning and acquisition as well as aid learners' self-confidence and motivation (Yavas, 2011).

This research brings together traditional practices and cutting-edge applications for the skilling, reskilling, and upskilling of language learners in pronunciation. By reporting on recent research and case studies, we identify best practices, technologies, and interventions for improvements to proficiency. The aim of this article is to report on what works, inform the development of pedagogy, and allow teachers and learners to make informed decisions on what the current state-of-the-art may be best for them.

Furthermore, assessing the impact of innovative interventions on pronunciation skills can propel language education forward. By melding current teachings with innovative outcomes, this research strives to offer practical guidance, enriching pronunciation training, and language learning outcomes. Understanding the importance of these processes is crucial for surmounting challenges and fostering effective communication, ultimately contributing to enhanced language education.

## Research Questions

1. What are the current trends and effective methodologies in pronunciation training for language learners?
2. How can technology and innovative strategies improve pronunciation proficiency among language learners?
3. What recommendations can be made for language educators to optimize pronunciation training practices?

## Literature Review

This literature review, "Skilling Language Learners: Understanding Pronunciation Proficiency," examines pronunciation as a critical component of language learning. The author details the many factors that shape the acquisition of good pronunciation, such as "age, exposure, and native language (Ioup, 2008), and discusses what language learners find difficult about mastering pronunciation — including that their first language might interfere with their acquisition of a second (Derakhshan & Karimi, 2015). The author review traditional ways of teaching pronunciation and then discuss how technologies, including CAPT programs, speech recognition systems, and VR/AR, have changed the teaching of pronunciation. They argue that teachers working with learners who are motivated to improve their pronunciation need "a variety of methods and activities" (Ioup, 2008) and that it benefits all language learners to look beyond the traditional classroom for ways to develop their speaking skills. The subsequent section explores frameworks designed to improve pronunciation proficiency.

## *Skilling Language Learners: Understanding Pronunciation Proficiency*

**The Importance of Pronunciation in Language Learning.** Pronunciation plays a crucial role in learning a new language, influencing communication and comprehension (Derwing & Munro, 2015), and the ability of learners to express themselves, comprehend, and join a group of language users in conversation. It also brings fluency and an understanding of spoken language to its users (Yavas, 2011). Learners with good pronunciation are generally perceived as having a higher level of language competency. Pronunciation errors can lead to miscommunication and a negative perception of the speaker (Derwing & Munro, 2015; Lee & Baker, 2016). Accurate pronunciation allows for clearer production of speech sounds and

the rhythm of the target language, thus allowing for differences in sounds and rhythms to be recognized in the speech of others (Celce-Murcia et al., 2010; Derwing & Munro, 2015). Accurate pronunciation is not just an add-on but an essential component of mastery of a language. Due to the significant contribution of pronunciation to the ability of learners to produce as well as comprehend speech sounds and rhythms of a new language, pronunciation teaching targeted at all language learners is a necessity. In fact, deliberate pronunciation practice leads to improved pronunciation, phonemic awareness, and, ultimately, to higher levels of learner motivation, confidence, and fluency (Derwing & Munro, 2015; Celce-Murcia et al., 2010; Yavas, 2011). Pronunciation, which is one of the most important factors for successful communication, building of competency, and language learning success, must not be overlooked. Therefore, pronunciation is something that has to be emphasized while teaching languages because it is crucial for the success of learners.

**Factors Affecting Pronunciation Acquisition.** A variety of interrelated aspects influence the outcomes of pronunciation acquisition for second language learners. One of these factors is the critical period hypothesis, which postulates that early childhood language exposure results in near-native speakers' pronunciations (Flege, 1995; Munro & Derwing, 1999). The first language (L1) of the learners is another factor: Similar phonetic features between the L1 and target language can facilitate the process of pronunciation acquisition, whereas dissimilarity may lead to less successful outcomes (Gass & Selinker, 2008; Derwing & Munro, 2015). A third factor is exposure to and immersion in the target language environment; learners who live in a community where the language is spoken or participate in immersive programs develop better pronunciation skills (Flege et al., 1999; Munro & Derwing, 2015). Furthermore, personal features such as motivation and beliefs about self-efficacy significantly influence learners' attempts to improve pronunciation (Derwing & Munro, 2015; Riazantseva, 2001). Teacher experience and teaching approaches are equally important. Pronunciation is facilitated by effective teaching strategies, feedback, and opportunities to practice that are given to learners by experienced teachers (Derwing & Munro, 2015; Thomson & Derwing, 2015). Factors like age, the first language background, language exposure, learner motivation, and teacher proficiency are very important for the correct pronunciation acquisition in the second language learning

process. Having understood them is useful in the design of effective instructional methods, improving the learners' pronunciation skills.

**Challenges Faced by Language Learners in Pronunciation.** Language learners often encounter great difficulty in developing accurate pronunciation in a second language due to numerous challenges in learning to produce and perceive the sounds, stress patterns, and intonation of the target language.

The influence of a learner's first language (L1) is a major challenge to accurate pronunciation (Derwing & Munro, 2015). Production of unfamiliar sounds and discrimination of sounds that are similar to ones in the L1 are often difficult. If a learner's L1 does not contain certain phonemes that are used in a new language, producing those sounds accurately can be difficult.

Accent interference can be caused by the different pronunciation rules between the target language and the learner's first language. Learners might unknowingly incorporate the pronunciation patterns from their L1, which can have an impact on the stress patterns of the target language (Derwing & Munro, 2015). The physical problem of pronunciation is another difficulty. Correct sound production requires careful manipulation of the articulators, which takes a lot of effort (Celce-Murcia et al., 2010). Also, the learners may have a hard time with perception, especially if the language they are targeting has sounds that are different from those in their L1, affecting their understanding.

Finally, acquiring stress, rhythm, and intonation patterns in the target language adds to the challenge. These patterns, which are a crucial aspect of sounding fluent, may be difficult to internalize - particularly given the complexity they acquire from cultural and pragmatic components (Celce-Murcia, Brinton, & Goodwin, 2010).

Self-consciousness and fear of making errors can also cause difficulties. The anxiety that derives from the thought of making an error or sounding different can lower students' confidence, reducing the likelihood of engaging in oral practice (Derwing & Munro, 2015).

Providing targeted pronunciation instruction, practice opportunities, and supportive feedback is essential in addressing these challenges. Direct instruction should focus on typical pronunciation difficulties experienced by learners, highlighting strategies for self-monitoring and self-correction.

A supportive learning environment will also impact students' confidence and willingness to engage in oral activities.

The phonetic acquisition in a second language is highly impeded by the various L1 influences such as motor control, perception, stress, intonation patterns, and learner self-consciousness. Knowing and tackling these using proper and adapted instructions and support is the way to boost learners' pronunciation and language know-how.

### ***Reskilling and Upskilling: Strategies for Improving Pronunciation Proficiency***

**Traditional Approaches to Teaching Pronunciation.** Traditional methods of teaching pronunciation in language learning, which include the Segmental Approach, Suprasegmental Approach, and Audiolingual Method, are based on explicit instruction and repetitive practice. The Segmental Approach directs attention to individual sounds. Using phonetic charts and minimal pairs, teachers show students how to produce sounds not found in their first language. It thereby implies that learners will improve pronunciation in general if they are able to simply produce these sounds (Celce-Murcia et al., 2010). The Suprasegmental Approach, in contrast, focuses on stress patterns, intonation, and rhythm. Teachers use drills for these elements as well, asserting that they are as crucial as the production of individual sounds in the service of intelligible communication (Celce-Murcia et al., 2010).

The Audilingual Method combines oral proficiency with the correct pronunciation by means of intensified recalls (Richards & Rodgers, 2014). On the other hand, the effectiveness of such traditional methods is a subject of debate as well. Studies have found that drills may not always correspond to the tone of real communication because they miss the integration of pronunciation into the more general set of language skills (Derwing & Munro, 2015).

In addition, these techniques rarely consider these social and pragmatic parts apart from pronunciation, including cultural norms and conversational formats that are important for communicating in clearly comprehensible and natural speech (Celce-Murcia et al., 2010). Considering the listed limitations, however, traditional approaches can be rather valuable in fostering the development of a basic idea on pronunciation, serving as a starting point for more conversational and engaging ones.

In summary, while traditional pronunciation teaching methods provide a basis of sound and pattern awareness, their inability to deal with the real-life communicative and social aspects of pronunciation implies that there is a need to integrate these approaches with the more comprehensive, communicative approaches for effective and lasting proficiency.

**Technology-Assisted Pronunciation Training.** Technology has considerably enriched language learning, especially pronunciation training, providing interactive, personalized, and enjoyable learning environments to learners. These interactive, personalized, and enjoyable learning environments are made possible by CAPT programs, Virtual Reality (VR), and Augmented Reality (AR) applications, as well as various mobile apps and online platforms. CAPT programs allow learners to receive instant feedback on their pronunciation through speech recognition technology so that learners can practice and improve at their own pace (Thomson & Derwing, 2015). VR and AR technologies provide immersive experiences for life-like practice, such as VR technology that allows for the first-hand experience of virtual communication scenarios and AR technology that offers the visual enhancement necessary for providing real-world guidance for pronunciation (Shen, 2018; Wang, Xiaofeng, & Qian, 2020.)

Apps and online platforms offer pronunciation practices, which can be found in various forms, such as quizzes, manuals, and progress indicators (Golonka, et al., 2014). These tools give learners appropriate practice and enable them to record their speech and compare it to that of native speakers. There are many positive effects of technology-assisted instruction. It provides personalized learning and instant feedback, thereby boosting student independence and self-esteem. These platforms provide clients with a calm, non-condemnatory place to practice, a crucial factor in getting rid of self-reproach.

Research corroborates the efficacy of these technologies in enhancing pronunciation. For instance, both the segmental and suprasegmental aspects of pronunciation have been affected significantly by CAPT programs (Gimeno et al., 2020; Tavakoli & Hejazi, 2020). VR and AR have increased learner engagement and motivation, as well as improved their pronunciation performance (Shen et al., 2018; Wang et al., 2020). Similarly, mobile applications and online platforms have had a positive impact on the accuracy and fluency of students' pronunciation (Golonka et al., 2014).

As outlined in this article, technology-assisted pronunciation training offers an array of tools that provide priceless help in the process of language learning with personalized feedback, greater autonomy, and exciting learning environments that can lead to significant progress in pronunciation skills. By integrating technology in pronunciation instruction, it is possible to enhance the experience of language learning significantly and help students achieve pronunciation that is both accurate and fluent.

**Speech Recognition and Feedback Systems.** Today, pronunciation training leverages advanced systems that provide real-time evaluation and feedback on the learner's speech. These speech recognition and feedback systems analyze the learner's spoken English and provide feedback, helping the learner practice and improve the clarity of spoken English pronunciation.

Speech recognition technology has advanced to the point where algorithms can process the spoken language, identify and transcribe the speech, and then compare the speech to models of native speakers to provide an assessment of how well the learner's pronunciation approximates that of a native speaker (Eskenazi, 2013). These systems can also assess aspects of pronunciation, such as vowel and consonant sounds, stress, and intonation.

Intelligent systems for feedback and speech recognition adjust the learning to each individual's needs. Tailor-made advice is provided with the help of accent correction software, which, instead of simply identifying errors, offers a more targeted approach to the aspects that need improvement by means of different displays (e.g., visual, textual comments or auditory cues), including in-depth analyses of both segmental and suprasegmental pronunciation features (Levis et al., 2019).

One of the advantages of this system is that it allows students to receive personal instruction and instant feedback and improves self-awareness. They are the mediums that allow students to correct themselves by providing them with first-hand feedback and enabling them to make instant alterations (Levis et al., 2019).

Research supports the use of these tools for improving pronunciation. Studies show that learners improved both their segmental and suprasegmental features when using such tools, with immediate feedback supporting their ability to focus on specific areas for improvement (Laufer

et al., 2016; Lee & Huang, 2018). These tools can also help motivate and engage learners due to their interactive nature. However, they have their limitations. Challenges exist for the tools' ability to recognize non-native dialects or accents, which may lead to inaccurate feedback for learners (Eskenazi, 2013). Additionally, the tools typically focus on acoustic features and may not account for all social and pragmatic elements of pronunciation. While there are certain limitations to this speech recognition system and feedback tools, they are a valuable aspect of training in pronunciation, with the technology providing immediate, feedback-driven personalized instruction. While not a panacea, the integration of these tools into teaching is likely to significantly improve learners' pronunciation accuracy and overall language proficiency.

## **Methodology**

### ***Design***

The data collection process in this study was rigorously conducted in accordance with qualitative research principles and a prescriptive approach; a series of clear and methodical steps were used to ensure comprehensive data gathering. These steps included the selection of participants using purposive sampling to seek individuals with a relevant background in the realm of pronunciation training, the design and administration of structured questionnaires to gather detailed insights into the participants' experiences and perceptions, and the systematic analysis of responses in order to identify salient themes and patterns. Through all of this, the procedures used were consistent with ethical standards in that informed consent was obtained, participants' privacy was protected and the anonymity of participants was preserved. The structured, ethical nature of the data collection process was essential to ensuring the trustworthiness and rigor of the study's findings. The research approach for this study, rooted in qualitative research principles, is in line with Creswell & Creswell (2017) and Maxwell's (2012) recommendations that qualitative designs are suited to addressing complex issues in their contexts. These scholars stress the worth of qualitative methods in portraying the multifold experiences and perspectives of learners that are really significant in understanding the difficulties of pronunciation training.

### ***Sample***

We used purposive sampling to pick out the participants with direct experience in implementing the initiatives in pronunciation training. This

group is made of up of a wide variety of language learners and teachers, including 49 students and 21 teachers. Thus, the group provides a great view on the subject since it is of the broad spectrum. It was not just the numbers that varied but the varied backgrounds affecting different age groups, language proficiency levels, and cultural contexts. This comprised a sample made up of diverse learners, which helped in designing a comprehensive description of the pronunciation training feature over different populations, which increased the depth and breadth of the study's insights.

### ***Data Collection***

The data collection was mainly done using questionnaires, a method of collecting data known to be effective in standardized data collection (Manfreda & Vehovar, 2012). The questionnaires were designed carefully; the questions were structured systematically and integrated in such a way that they would elicit thorough thoughts about the participants' experience in articulation teaching methods, their perception of effective techniques, and suggestions to improve pronunciation training. The survey has eight questions for teachers and six questions for students, which maintains a narrow enough focus while still being sufficient for data collection.

### ***Data Analysis***

Analysis of the questionnaire responses was essential to this study as it required a detailed and systematic examination of the data to identify recurrent themes or patterns. The careful scrutiny of the responses was fundamental in developing prescriptive recommendations to improve pronunciation instruction. By focusing on pedagogical strategies and techniques most commonly mentioned by participants, the study was able to offer practical and concrete advice. Language instructors and curriculum developers will find these insights particularly valuable as an empirically-derived foundation upon which to revise and reexamine their approaches to the teaching of pronunciation in light of the needs and experiences of learners, as reported in the study.

The qualitative aspect of the questionnaire analysis is all about the "in-depth" analytics that take place from the open-ended data. This first phase entails data accommodation in order to develop first impressions and identify threads (Baum et al., 2006), followed by the act of coding data pieces of significance (Saldaña, 2015). The codes are grouped and defined to capture the correct meaning of the data. Then, the results are scrutinized to ensure that they are all written in a consistent manner (Braun & Clarke, 2006). A brief discussion of the implications for the study, methods, and future directions brings the study to closure, all based on the suggestion of

using reflexivity (Malterud, 2001). This path is intended for experienced qualitative researchers, but tools like NVivo can be used for their support because they meet methodological standards and thus can help even professionals to extract nuanced meanings from the questionnaire data.

### ***Ethical Consideration***

The study was conducted with clear ethics accordance. The concept underlying these practices is to ensure the informed consent of all participants, which is the situation where all the participants know all the details about the study, their role, and their rights, and they voluntarily agree to participate in the study. Confidentiality was carefully upheld, which guaranteed that all clinical data collected were treated with utmost privacy and respect. On another note, participant anonymity was ensured, and no personal identifiers were presented in any reported or published documents, which protected the identities of the participants. The said ethical measures were necessary not only to maintain the impartiality of the research but also to protect the human rights, welfare, and interests of all concerned in the study.

The data collection process in this study was designed, in general, to capture a wide range of experiences and perspectives on pronunciation training so that the data were robust and reliable for analysis and interpretation. Thus, the methodological choices— including participant selection, questionnaire design, and ethical considerations— were consistent with the study's aim to explore and offer practical guidance on the integration of pronunciation skills in language learning.

### **Results and Findings**

Here, we provide an analysis of the data collected from our study on pronunciation proficiency in language learning. This section systematically investigates the effectiveness of various applications of teaching methods, the use of technological tools, as well as the effect of the different learner characteristics on the task of pronunciation acquisition. The results are presented in a clear manner, identifying major trends, patterns, and significant statistical correlations. The results of this study provide insight into the extent of effectiveness of diverse approaches to enhancing pronunciation skills among language learners.

## *Teachers' Responses*

**Table 1**

*What methods do you use to teach English pronunciation?*

Methods	Occurrences
Audiovisual Resources	8
Drills and Repetition	13
Dialogues and Conversational Practice	9
IPA Charts and Pronunciation Guides	21
Contextual Pronunciation Practice	8
Online Resources	7
Phonetic Transcriptions	21
Minimal Pairs	21
Mouth and Lip Movements	9
Tongue Positioning	4
Stress and Intonation Patterns	15
Pronunciation Software	14
Role-Playing and Drama	2

Table 1 shows the different methods for teaching English pronunciation. The frequency of each method is also indicated. There are three methods that stand out for being mentioned equally as often (21 times), "IPA Charts and Pronunciation Guides," "Phonetic Transcriptions," and "Minimal Pairs." This preference may indicate the need for techniques that can address the complex nature of English pronunciation. "Stress and Intonation Patterns" are mentioned 15 times, while "Pronunciation Software" is mentioned 14 times. This information could show that teaching pronunciation is more about its rhythmic aspects than the technical aspects. The recurring element of "Drills and Repetition" (mentioned 13 times) shows that there is plenty of relevance in the need to constantly practice pronunciation.

On the contrary, "Dialogue & Conversational Practice," "Audiovisual Resources," "Mouth and Lip Movements," and "Contextual Pronunciation Practice" get only moderate attention (from 8 to 9 occurrences). From this statement, we may infer that there is a balanced approach to the practical, interactive, and visual learning methods.

"Online Resources" is mentioned the smallest number of times at seven uses, with "Tongue Positioning" noted four times, revealing a potentially more niche application. Interestingly, "Role-Playing and Drama" is the

least used in two occurrences, perhaps due to a hyper-specific focus or the obvious need for more resources and time. The overall table, however, provides us with a range of teaching methods employed to illustrate the varied approaches to English pronunciation training.

**Table 2**

*How do you integrate technology or innovative strategies in your pronunciation lessons?*

Technology or Innovative Strategies	Occurrences
Pronunciation Videos	3
Language Learning Software	4
Accent Variation Resources	1
Pronunciation Apps	3
Online Pronunciation Guides	6
Voice Recording and Self-Assessment	5
Virtual Reality (VR) and Augmented Reality (AR)	0
Online Pronunciation Communities	0

Table 2 details technology and innovative strategy alignment for pronunciation used in lessons to varying degrees. The most common tool is Online Pronunciation Guides, which is found six times and suggests a preference for accessibility and web-based resources. This is followed by Voice Recording and Self-Assessment, which was found five times and may suggest a way to allow students to hear and critique their pronunciation.

Pronunciation Videos, Pronunciation Apps, and Language Learning Software each had moderate attention with 3 to 4 mentions, more than likely offering visual and interactional elements helpful to learning. It is interesting to note, however, that Accent Variation Resources are very rarely seen, with one occurrence likely do to their limited availability or a certain prioritization within the field of pronunciation teaching.

Nevertheless, "Virtual Reality (VR) and Augmented Reality (AR)," as well as "Online Pronunciation Communities," are not mentioned whatsoever, thus implying either prejudice, unawareness, or an academic approach to pronunciation training. These omissions may also result from financial or technological constraints in individual classrooms. Ultimately, it is true that technological and innovative strategies are being employed in pronunciation activities; however, it seems that the adoption of these technologies is variable and is more tailored towards traditional web-based and recording tools than cutting-edge technologies.

**Table 3**

*From your experience, which methods or tools have been most effective in improving students' pronunciation?*

Methods and tools	Occurrences
Language Learning Software	8
Phonetic Transcriptions	16
Minimal Pairs	21
Audiovisual Resources	14
Voice Recording and Self-Assessment	19
Pronunciation Apps	1
Online Pronunciation Communities	0

Table 3 shows the perceived effectiveness of different methods and tools for improving student pronunciation, as evidenced by the number of responses each one received. Notably, "Minimal Pairs" was the most frequently mentioned, with 21 responses suggesting that they are believed to be particularly effective in helping students hear the subtle differences in pronunciation. "Voice Recording and Self-Assessment" was the next-highest with 19 responses and is indicative of the emphasis placed on student monitoring and iterative learning.

"Phonetic Transcriptions" and "Audiovisual Resources" were also deemed to be very effective, garnering 16 and 14 responses, respectively. These probably allow students to see the sounds and to actually hear them with clear, concrete examples, thereby facilitating comprehension and practice.

Nevertheless, "Virtual Reality (VR) and Augmented Reality (AR)" and "Online Pronunciation Communities" are not mentioned whatsoever, thus implying either prejudice, unawareness, or an academic approach to pronunciation training. These omissions may also result from financial or technological constraints in individual classrooms. In general, while technology and new methods of pronunciation learning are being employed, the adoption of new technologies leans more towards pre-internet age tech than the modern era, such as the adoption of newer teaching platforms and traditional recording tools.

Interestingly, online pronunciation communities are not historically mentioned at all, which could imply a lack of awareness or availability or a preference for more structured or individualized learning approaches over community-based ones. Overall, the emphasis appears to be a mix of

traditional and technological methods with a heavy emphasis on practical, auditory, and visual aids for pronunciation practice.

**Table 4**

*How do you measure the effectiveness of your pronunciation teaching?*

Methods	Occurrences
Self-Assessment and Reflection	2
Pronunciation Assessments	21
Speech Recognition Software	0
Recorded Speech Samples	2
Peer Evaluation	0

Table 4 illustrates the methods used to gauge the effectiveness of pronunciation teaching, showing a strong preference for particular methods.

Of the 29 total descriptions, "Pronunciation Assessments" is by far the most cited, at 21, suggesting that a structured evaluation of some sort is the predominant means of measuring improvement of students' pronunciation. This reliance on "Pronunciation Assessments" suggests that formal assessments of some sort are viewed as a trustworthy measure for improvement in pronunciation skills.

The next two most frequently cited are "Self-Assessment and Reflection" and "Recorded Speech Samples," at two each, indicating that these methods are less favored or less used. Frequently, these less-frequently cited methods are particularly valuable in gaining insights about how individual students are progressing as well as in which areas they need to because of differences in terms of the progress that may not be reflected in the more objective/omnibus approach to assessing "Pronunciation Assessments."

However, we should note that "Speech Recognition Software" and "Peer Evaluation" are not mentioned, which might happen due to an insufficient accessibility level to them, doubts about their effectiveness, or their undesirable value compared to the traditional assessment methods.

On the whole, then, the data in Table 4 would seem to reflect a strong preference for formal, structured modes of assessment in evaluating the effect of pronunciation teaching and less enthusiasm for self-reflective models or for those based on peer evaluation.

**Table 5**

*What challenges do you face in teaching pronunciation to EFL students?*

Challenges	Occurrences
Lack of Exposure	21
Vowel and Consonant Sounds	8
Stress and Intonation	20
Time Constraints	4
Motivation and Engagement	15
Lack of Confidence	18
Limited Resources	20

The various challenges that are encountered when teaching pronunciation to EFL (English as a Foreign Language) students are presented in Table 5. A range of issues totaling different frequencies is shown. The most cited challenge, noted 21 times, is "Lack of Exposure." This illustrates that a significant obstacle is the limited opportunities students have to hear and practice English in real-life contexts. The fact that there is a lack of immersion can be a stumbling block to the natural acquisition of pronunciation skills.

Next are "Stress and Intonation" and "Limited Resources," each with 20 mentions implying problems in teaching stress and intonation and also inadequate or lack of teaching materials or facilities. The most recurrent problem is that of "Lack of Confidence," which was represented 18 times because it represents the psychological obstacles that the students could encounter in the process of practicing and improving their pronunciation.

"Motivation and Engagement" was clearly paramount, included 15 times, underlining that keeping students fired up and participating in working on their pronunciation is a significant challenge. The more specific challenge of teaching "Vowel and Consonant Sounds" was mentioned less often, representing just 8 of the occurrences, but is still a noticeable feature of pronunciation teaching.

"Time Constraints" is mentioned only four times, so although it is a factor, it may not be as significant as other issues. In sum, the data in Table 5 shows that there is a complex array of challenges involved in teaching pronunciation, although there is a particular emphasis on issues linked to exposure, resource availability, and the psychological aspects of learning.

**Table 6**

*How do you address diverse needs and proficiency levels in pronunciation training?*

Addressing Diverse Needs and Proficiency Levels	Occurrences
Initial Assessment	1
Encourage Self-Directed Learning	18
Individualized Learning Plans	2
Differentiated Instruction	0
Speech Recognition Technology	0
Pronunciation Models	17

Table 6 illustrates the strategies adopted to cater to diverse needs and proficiency levels in pronunciation training. Not every approach was employed with the same frequency as others and was considered only marginally or not at all. Perhaps not surprisingly, "Encourage Self-Directed Learning" is by far the most mentioned strategy (cc=18), suggesting a strong belief in the importance of autonomy and the individual's ability to take control and responsibility for their learning, assessing their problems and seeking out and deciding on a number of courses of action for improving the pronunciation of the English suprasegmental features in a way that is appropriate to their individual needs, pace, and style.

Conversely, "Individualized Learning Plans" and "Initial Assessment" are mentioned only 2 and 1 times, respectively. This could imply that while these methods are recognized, they might not be widely implemented, possibly due to constraints such as time, resources, or the feasibility of tailoring plans to each student in diverse classrooms.

Noteworthy is that "Differentiated Instruction" and "Speech Recognition Technology" are not mentioned at all. This might suggest that there is no knowledge of, access to, or a predilection for less high-tech/more traditional differentiations of the methodologies. The absence of the differentiated instruction bullet may also mean that there is no detailed list of how to use other forms of differentiation, such as project-based, game-based, and challenge-based instruction, and still cover the necessary standards.

In conclusion, the data from Table 6 reflects a trend towards independent learning and the use of standard pronunciation models as two main strategies for dealing with diverse needs and proficiency levels in pronunciation training.

**Table 7**

*What improvements or changes would you suggest in the current approach to teaching English pronunciation?*

Suggested Improvements	Occurrences
Increased Use of Technology	21
Practical Real-Life Scenarios	21
Increased Exposure to Authentic Materials	21
Assessment of Real Communication	10
Increased Emphasis on Early Exposure	21
Integrated Pronunciation Across Skills	16
Targeted Assessment	2
Video Tutorials	4
Interactive and Engaging Activities	14
Teacher Training	15
Learner Autonomy	18
Ongoing Professional Development	15
Pronunciation Communities	1
Student Input	0

As shown in Table 7, teachers offered a variety of suggestions for improving the current approach to teaching English pronunciation. A few suggestions tended to have broad agreement across the board, but others were not as salient. The four most frequently mentioned suggestions made 21 times each were Increased Use of Technology, Practical Real-Life Scenarios, Increased Exposure to Authentic Materials, and Increased Emphasis on Early Exposure. In other words, teachers thought that the future of English pronunciation teaching would bring increased attention to modern tools, context from the real world, and early and consistent exposure to authentic English language materials.

'Learner Autonomy' is another well-recommended one, with 18 mentions focusing on the development of independent learning skills among students. "Integrated Pronunciation Across Skills" and "Teacher Training" are noted 16 and 15 times, respectively, demonstrating the desire for an all-around approach to language teaching and a demand for closer attention to teacher proficiency in pronunciation instruction.

With 14 and 15 mentions, respectively, it signals that dynamic teaching methods and an emphasis on ongoing skill development and learning are recognized as key in pronunciation pedagogy. On the flip side,

"Assessment of Real Communication" and "Video Tutorials" are only suggested 10 and 4 times, respectively. It seems that these tools, while recognized, are seen as potential supplements to pronunciation teaching as opposed to key components.

"Targeted Assessment" and "Pronunciation Communities" are only used a few times each, signaling that they may be an underutilized or undervalued aspect of the teaching process.

Interestingly, "Student Input" receives no mentions, potentially indicating a lack of emphasis on direct feedback or involvement from students in shaping pronunciation teaching methods. Overall, the data from Table 7 suggests a call for a more technology-driven, experiential, and student-centered approach to teaching English pronunciation.

**Table 8**

*Any specific recommendations for resources or training that could help teachers?*

Recommendations	Occurrences
Pronunciation Guides and Textbooks	18
Pronunciation Software and Apps	21
Online Courses and Webinars	3
Phonetic Transcription Resources	21
Text-to-Speech Software	15
Accent and Dialect Resources	4
Professional Development Programs	15
Online Pronunciation Communities	1
Language Exchange Partnerships	0

Table 8 presents recurring phrases that were used for resources or training that could be useful for the pronunciation element of language teaching. Hits to the data show an apparent preference for "Pronunciation Software and Apps" and "Phonetic Transcription Resources," with 21 mentions each – reflecting the strong belief in the beneficial use of technology in pronunciation pedagogy and the importance of phonetic transcription for pronunciation teaching.

"Pronunciation Guides and Textbooks," with 18 hits, also appears to sustain a traditional reliance on these resources for more structured guidance and reference. "Text-to-Speech Software" and "Professional Development Programs" are afforded significant hits, with 15 mentions for

each – acknowledging the benefits of technological support and the need for ongoing teacher training and skill development.

In contrast, "Accent and Dialect Resources" are less frequently suggested, with just four mentions, while "Online Courses and Webinars" receive minimal attention, cited only three times. This might reflect a perception of these resources as less critical or a preference for more hands-on or direct methods of learning and teaching pronunciation.

"Online Pronunciation Communities" and "Language Exchange Partnerships" are hardly mentioned or not mentioned at all, with 1 and 0 occurrences, respectively. The lack of reference could be illustrative of inattentiveness to those resources or a belief in more staid or intimately delivered learning and teaching aids.

Overall, as seen in Table 8, there is a preference for a mix of the traditional and modern with a large lean into tools enhanced by technology, along with a significant emphasis on the need for professional development for instructors in this subject area.

### ***Students' Responses***

The students' questionnaire included six main items concerning pronunciation. The students were allowed to choose multiple responses that would apply to them.

**Table 9**

*How do you currently practice English pronunciation?*

How?	Occurrences
home	5
Classroom	13
Movies	11
Apps	8
All of these	10
None of these	2

Table 9 reveals the many and varied ways that people practice the pronunciation of English. Classroom settings appear most often with 13 instances, reiterating the traditional role of formal education in language acquisition. Learning pronunciation from movies occurs 11 times, not far behind, showing the many ways that media is used as a surrogate for learning a language, offering up a kind of multimedia (Rosetta Stone). The

use of 'apps' 8 times shows the increased role of technology in language, but one that is often secondary or complimentary to social interaction.

'At home' receives only five findings, and surprisingly, considering the home is often cited as a natural setting for language education, it is not the most dominant in this case, suggesting that it is underutilized or may be less efficient than otherwise structured or immersive methods. Option 'All of these' has ten responses. It appears a good number of respondents combine their English pronunciation practice with other methods of language learning for a more comprehensive language experience. Conversely, only two said 'None of these'. "It seems that English pronunciation practice is turning into language practice for a lot of us."

**Table 10**

*How important do you think pronunciation is in learning English?*

Importance of Pronunciation	Occurrences
Very important	32
Important	17
Not important	1

Diverse perspectives on the significance of pronunciation in English language acquisition can be seen in Table 10. Thirty-two respondents believe that to be "Very important." This suggests that a common perception is that pronunciation accuracy is critical to comprehend and communicate effectively in English. A further 17 consider it to be "Important". This may suggest that they recognize the part that pronunciation plays but perhaps with less intensity than the previous group.

On the extreme end of the opinion spectrum is a single respondent who sees pronunciation as "Not important." A lack of weighting of pronunciation in the process of language acquisition means that this respondent sees no value in such an aspect of English learning. It is possible that this perspective belongs to someone who places greater importance on other speaking elements, like grammar or vocabulary. It may also be possible that the weight of communication being lost due to pronunciation is considered minimal by the respondent or something that can be compensated for, given other elements are communicated clearly. Either way, the dominant perspective of the data above is that pronunciation is important in learning the English language.

**Table 11**

*What methods or tools have you found most effective for improving your pronunciation?*

Effective Tools	Occurrences
Phonetic Training	17
Speech Recognition Technology	16
Tongue Twisters and Reading Aloud	16
Language Exchange or Conversation Partners	20
Listening and Imitation Exercises	37
Pronunciation Apps	19
Recording and Self-Assessment	11
Professional Coaching	8
Speech Recognition Technology	4

In Table 11, you will find the responses regarding a list of skills and tools that were identified as effective in improving students' pronunciation of English. Among the tools, "Listening and Imitation Exercises" were the most popular, with 37 endorsements. This method is clearly perceived as effective in helping students mimic the accurate pronunciation of sounds, words, phrases, and sentences. "Language Exchange or Conversation Partners" also received strong support with 20 mentions. This suggests that students clearly value the interactive, immediate form of feedback on pronunciation provided through this method. "Phonetic Training" and "Pronunciation Apps" were also widely accepted, with 17 and 19 votes respectively. This would suggest a preference for structured, technology-aided forms of learning.

Curiously, equal weight is given to the quotations containing the words "Speech Recognition Technology" and "Tongue Twisters and Reading Aloud," with 16 mentions each, showing that the technological as well as oral methods are both highly valued. The purpose of "Pronunciation" is heard by 11 respondents in the form of an "introspective method for developing linguistic skills."

Unsurprisingly, "Speech Recognition Technology" is the most popular, with 18 references in total. On the other end, "Professional Coaching" lags far behind with only eight references, which could be perceived as having lower accessibility or necessity. The inclusion of an additional four mentions of "Speech Recognition Technology" is an interesting point, as it could either mean a separate appreciation or a field working with the data made a categorization error. All in all, this data shows a diverse range of

effective methods, all pointing toward a significant emphasis on immersive and interactive techniques.

**Table 12**

*What are the biggest challenges you face in learning English pronunciation?*

Challenges	Occurrences
Phonemic Differences	15
Stress and Intonation Patterns	15
Rhythm and Fluency	16
Lack of Phonetic Consistency	13
Influence of Mother Tongue	17
Limited Practice Opportunities	17
Confidence and Anxiety	20
Age Factor	7
Resource Availability	5

What can be drawn from these figures in Table 12 is that the major challenge seems to be "Confidence and Anxiety" — 20 mentions — which is very telling. It seems that psychological factors such as self-esteem, the ability to relax, nervousness, etc., considerably inhibit the learning of pronunciation. These concerns are likely rooted in apprehension regarding the potential for self-embarrassment or causing embarrassment to the instructor or peers. Two challenges received 17 mentions: "Influence of Mother Tongue" and "Limited Practice Opportunities," and it is clear what they refer to; and "Rhythm and Fluency" and "Intelligibility" each received 16 mentions: It is clear what they refer to.

"Phonemic Differences" and "Stress and Intonation Patterns" got 15 references, which may imply that students have to make extra efforts when learning to pronounce distinctive sounds and intonation patterns in English compared to speakers of their mother tongue. "Lack of Phonetic Consistency" was stated by 13 people among them. This is a clear indication that the English pronunciation rules are surely very complex.

Less frequently mentioned obstacles were the "Age Factor," with seven instances suggesting that pronunciation might be seen as more difficult by older learners, and "Resource Availability," noted by five respondents, indicating that learners see the materials available to them as less accessible or effective. As a group, these different possible explanations represent a multifaceted set of potential impediments to English

pronunciation learning that include linguistic, psychological, and practical dimensions.

**Table 13**

*Have you used any innovative technologies or strategies to overcome these challenges?*

Innovative Technologies / Strategies	Occurrences
Speech Recognition and Feedback Systems	16
AI-Powered Language Learning Apps	12
Speech Analysis Software	15
Pronunciation Learning Communities	13
Pronunciation Guides with Multimedia	14
Augmented Reality (AR) and Virtual Reality (VR)	12
Natural Language Processing (NLP) in Language Learning	9
Gamification of Pronunciation Practice	6
Customizable Pronunciation Models	3
Automatic Transcription and Feedback	3

Data in Table 13 shows an active adoption of various innovative technologies and methods in dealing with the challenges of English pronunciation learning. "Speech Recognition and Feedback Systems" take the top spot with 16, instructive of their use in providing more exacting pronunciation analysis and correction, followed closely by "Speech Analysis Software," with 15, reflecting its efficacy in giving more nuanced insights into pronunciation patterns.

"AI-powered language Learning Apps" and "Augmented Reality (AR) and Virtual Reality (VR)" are both represented by 12 mentions, which means AI and interactive or immersive technologies are major in language learning. I suppose these technologies could take advantage of a dynamic, enjoyable method that helps with pronunciation.

Fourteen and 13 participants identified "Pronunciation Guides with Multimedia" and "Pronunciation Learning Communities" as something they would find most valuable. In this, we can see the value provided by so-called "comprehensive learning resources" and "community support," particularly in a domain such as pronunciation, which is challenging for so many learners to master.

"Natural Language Processing (NLP) in Language Learning" was the choice of 9 respondents. This suggests an emerging interest in more sophisticated, AI-driven language learning tools. Fewer mentions of

"Gamification of Pronunciation Practice" (6), "Customizable Pronunciation Models" (3), and "Automatic Transcription and Feedback" (3) suggest these are niche but growing areas of interest. They may thereby reflect either their novelty or limited availability in the market. The data reflects a diverse and technology-oriented approach to the multifaceted challenges of English pronunciation.

**Table 14**

*What kind of support or resources do you wish you had for better pronunciation practice?*

Resources Needed	Occurrences
Feedback from Native Speakers	24
Pronunciation Guides with Audio	17
Interactive Language Learning Apps	23
Video Tutorials	24
Access to Language Exchange Partners	12
Online Pronunciation Communities	9
Customizable Pronunciation Models	8
Cultural Insights	6
Transcription and Analysis Tools	7
Supportive Language Teachers	14
Pronunciation Challenges and Exercises	15
Gamified Pronunciation Practice	11
Access to Authentic Materials	4

Table 14 presents a clear need for a variety of resources to help improve English pronunciation. The most popular choices overall are "Feedback from Native Speakers" and "Video Tutorials" (24 mentions each). This shows that respondents place a high value on direct help from experts and visual learning. "Interactive Language Learning Apps" are also much sought after, with 23 responses: the importance of pronunciation practice that is engaging and technology-driven is very clear.

"Pronunciation Guides with Audio" are seen as essential by 17 people, showing that clear examples (that can be heard) are preferred in helping learn the correct pronunciation. Similarly, 15 people were looking for "Pronunciation Challenges and Exercises," and 14 people wanted "Supportive Language Teachers.": this shows how important structured practice and professional assistance are.

The data illustrates that there is a significant demand for community-based learning as 12 mentions of "Access to Language Exchange Partners" and nine mentions to "Online Pronunciation Communities" show. It also means that people prefer learning environments that are interactive and social. "Customizable Pronunciation Models," "Cultural Insights," "Transcription and Analysis Tools," and "Gamified Pronunciation Practice" have a moderate search trend, suggesting that they are niche but important assets in the market.

"Access to Authentic Materials" is the least mentioned, with just four occurrences, which could reflect either a lesser perceived need or an unawareness of its potential benefits in pronunciation practice. Overall, the data reveals a strong predilection for personalized, interactive, and technology-enhanced resources to aid in the effective practice of English pronunciation.

### **Discussion**

The teachers' answers on English sound pronunciation teaching methods, technology adaptation, the assessment of techniques used, difficulties, diversity strategies, improvements, and the recommended resources show a complex pattern with both strong points and spaces for improvement. There is an overemphasis on conventional methods like "IPA Charts" and "Phonetic Transcription" among various phonetic approaches, but the incorporation of technology and metaverse is growing with "Online Pronunciation Guides." However, many technologies, for example, "VR and AR," are underutilized, indicating the possibility of further development. The assessment of students is mainly based on formal evaluations.

Considered as areas of challenges were "Lack of Exposure" and "Limited Resources," which point to major impediments to successful teaching, while some suggested strategies such as "Self-Directed Learning" and "Pronunciation Models" address the differing needs of learners, and yet more individualized approaches like "Differentiated Instruction" earned less frequent attention. Recommendations meant to inform change appeared in such forms as "Increased Use of Technology" and "Practical Real-Life Scenarios," underlining the importance of contemporizing and contextualizing teaching practices, while those materials recommended were primary elements of phonetic understanding and technology-driven aids. In sum, while current practices showed a robust foundation in many respects, the significance of integration of interactive technologies,

diversification of approaches for evaluation and support, and reinforcement of strategies and resources appear crucial to effectively meet the complexities and challenges of English pronunciation training.

The areas that were recognized as areas of concern were "Lack of Exposure" and "Limited Resources," which are the main obstacles to learning, and some came up with ideas such as "Self-Directed Learning" and "Pronunciation Models" to address the learners' differences, whereas more personalized strategies like "Differentiated Instruction" were still suggested less frequently. There were proposed actions that were made to guide change, and the forms that appeared were "Increased Use of Technology" and "Practical Real-Life Scenarios," which highlighted the need to modernize and put teaching practices into context. The recommended materials were essentially two-fold, which were elements of phonetic understanding and technology-oriented aids. The practices of the current teaching approach were indeed a sound basis in the aforementioned aspects, but it is critical to integrate interactive technologies, diversify approaches of assessing and supporting, and reinforce strategies and resources to respond successfully to the complexities and requirements of English pronunciation teaching.

The research overwhelmingly points to pronunciation as a pivotal piece of language acquisition, and students, too, echoed its critical role in well-rounded communication. The wide array of effective strategies students identified, from intense listening exercises to hands-on use of speech recognition technology, brings this key skill to light in all its multiple dimensions. The difficulties students faced with confidence, interference from their native languages, and a limited number of opportunities to practice spoke to the complex mix of psychological and practical barriers learners must grapple with in order to articulate their intentions accurately.

However, participants appear to be willing to meet these challenges with the proactive incorporation of innovative technologies and approaches, especially those that are interactive and community-driven. Perhaps most importantly, their expressed desire for a wide array of resources, including those that provide native speaker feedback, interactive apps, and video tutorials, highlights the central role that personalization and technology appear to play in the effective practice of pronunciation. In summary, the results presented here suggest a need for English pronunciation instruction that carefully and thoughtfully integrates traditional pedagogical methods and the latest innovative technologies for the broadest possible spectrum of learner needs and preferences.

## Conclusions and findings

The findings from both respondents, teachers, and students show diverse aspects of English pronunciation teaching and learning. For teachers, traditional phonetic methods with strong uses of IPA charts and phonetic transcriptions are common, but there is a shift towards integration of technology and online pronunciation guides of particular importance. The integration of more interactive technologies, such as VR and AR, is noticeably absent. The methods by which knowledge is assessed are far more formal, and there is a distinct lack of diversification of the tools used for assessment, particularly with the absence of tools like speech recognition software and peer evaluation. The primary challenges were exposure and a significant lack of resources. Not as prevalent were more individualized techniques like differentiated instruction, but strategies like self-directed learning and pronunciation models were clearly visible, as were efforts to meet the requirements of a variety of learners.

Recommendations are mainly based on both modernization and contextualization of the teaching practices, with resources being more focused on technology-driven aids and phonetics, which Thomson and Derwing (2015) emphasized in their research. In summary, there is room for such integration of interactive technologies, a wide diversity of assessment methods, and a rich supply of resources and strategies to deal with the intricacies of the pronunciation training of English more appropriately.

Students, on the other hand, most frequently leverage the classroom setting, using audio and video media, movies in particular, and increasingly, technology through apps and pronunciation software. However, practice at home still lags in usage. A shared understanding of the importance of pronunciation in language learning consistently positions it as fundamental to successful communication (Prashant, 2018). Students single out a broad array of tools they find helpful, from listening exercises to speech recognition technology, poignantly speaking to the multifaceted nature of mastering pronunciation. Challenges, including confidence struggles and native language interference, paint a complex reality for learners; the proactive embrace of innovative technologies and strategies reasserts their willingness to overcome them.

This desire for diverse resources illustrates the importance of personalized resources and technology to facilitate effective pronunciation practice in English and beyond. What is clear from the above study is that there is a great need for a balanced approach to English pronunciation instruction, one that enables learners to utilize traditional tools and resources to develop clear articulation skills while at the same time leveraging technology to personalize instruction and give each learner what they most need to succeed (Grant & Basye, 2014).

The first question is addressed by the findings. It outlines the current trends in pronunciation training for language learners. It details what methodologies are used and which ones are most effective. It focuses on foundational phonetic methods, integration of technology, challenges faced by educators, and suggestions for improvement.

The second question is also answered by the findings that show how technology and innovative strategies can make the pronunciation of language learners better. It draws attention to the increasing impact of technology in pronunciation training, the availability of effective tools, and the necessity of a balanced approach that includes both traditional and modern methods.

The third question is addressed overall by the findings, with recommendations for language educators woven throughout. What are the current and effective methods? The study offers future direction for language educators to optimize the opportunities created by more diverse assessment methods, access to more tech-driven support, modernization of teaching practices, and localized effective resources. However, a separate list of explicit language for how language educators can optimize pronunciation training practices would facilitate greater detail.

### **Challenges and Future Directions**

The multifaceted nature of challenges in English pronunciation teaching demands that teachers seek innovative and adaptive pedagogical approaches. These encompass methods that address the lack of practice and exposure, the confidence or anxiety-related psychological barriers that learners face, and an inclusive approach that caters to different learner needs. Teachers are also required to develop strategies to enable their learners to cope with the influence of their first language and any possible native language interference. They may need to provide help for their learners to be able to adapt phonetically, and at times, they may be required to address the chronic problem of all English language teachers to

provide material when often resources may be scarce. They are also faced with the different learning requirements of various age groups.

Moving forward, the use of interactive technologies, the different types of assessments, and the expansion of community-based learning activities can provide ways of making pronunciation instruction more effective. Specialized resources in the form of interactive apps and multimedia guides can serve as means of personalized learning experiences for learners, and programs aimed at helping learners find autonomy and self-directed skills can stimulate greater engagement and motivation. The critical necessity for continuous professional development for educators should be mentioned here because it is only through ongoing professional development that educators will be able to adequately integrate all of these methods and technologies into their pronunciation practices. As the future pans out and these future directions are successfully navigated, this will enable more inclusive, effective, engaging, and learner-empowering English pronunciation instruction.

### **Limitations**

The research strategy used for the observation of pronunciation training is centered on qualitative study, following the ethical regulations and showing methodological rigor.

1- Purposive sampling for the selection of participants, whilst good at identifying people with valuable experience, has the downside of introducing bias, which makes the assumption that outcomes can be generalized from the study difficult. Due to the small size of the sample, it limits the possibility that it can fully represent the vast variegation (diversity) of the people studying languages, teachers, as well as the overall insight that may be missing from the broader population not covered.

2- Data collection research is primarily administered through questionnaires (self-report-based method). It may bring the vulnerability to biases among the participants, which can be intentional, like socially desirable responses, or unintentional, like incorrect recalling, which can distort the data reliability and the overall result.

3- There are questions that would capture data, narrowing the information surface exclusively to what the researcher anticipates to be significant. By adopting this method, one would lose depth of research on the discovery of

unpredicted areas and aspects of pronunciation training whose surface may appear after embracing more objective and open methods of data collection like interviews or general observations.

The above-mentioned restrictions, in many senses, highlight the weaknesses in the methodology of the research, which cuts the field of study wide and gives a partial picture to the reader, which in return emphasizes the significance of the critical evaluation of the study to make it a meaningful contribution to the pronunciation training research.

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## ملخص

تتناول هذه الدراسة تعليم النطق باللغة الإنجليزية من خلال البحث النوعي الذي شمل عينة مستهدفة من 49 طالبًا و21 معلمًا من خلفيات متنوعة. وقد استُخدمت الاستبيانات المنظمة لاستكشاف التجارب والتصورات والتوصيات الخاصة بتدريب النطق، والتي تم تدعيمها بمحتوى مقررات اللغة الإنجليزية. وقد كشف التحليل الموضوعي عن ظهور مواضيع متكررة أثمرت عن صياغة توصيات تطويرية. وقد شمل ضمان الجودة التحقق من قبل الأعضاء والمناقشة مع الأقران للتأكد من مصداقية الدراسة، بينما تم الحفاظ على الاعتبارات الأخلاقية للسرية وعدم الكشف عن هوية المشاركين. وتشير النتائج إلى ضرورة تركيز المعلمين على تعليم الأصوات الأساسية بدلاً من الاعتماد فقط على مشاركة الطلاب في الفصل والتكنولوجيا أثناء التدريب. وقد ظهرت مواضيع مثل التعديلات والعقبات العاطفية والتداخل في اللغة الأم كتحديات لكلا المجموعتين. ولتحسين تعليم النطق باللغة الإنجليزية، يجب على المربين دمج برامج التعرف على الكلام، والمنصات الإلكترونية، وتطبيقات الهاتف المحمول عبر التخصصات؛ واستخدام العروض الشفهية، والتسجيلات، والتغذية الراجعة من الأقران، واختبارات النطق بمساعدة الكمبيوتر للتقييم؛ وإنشاء موارد مستهدفة تعالج تحديات اللغة الأم الخاصة بالمتعلمين مع تدريب المعلمين على تكييف التعليم مع احتياجات الطلاب المتنوعة.

الكلمات المفتاحية: جدول الرموز الصوتية، والرسم الصوتي، وعلم الصوتيات، وبرامج التعرف على الكلام