

Full Length Research Paper

Exploring the effects of integrating a research-led activity in the English pronunciation class: An evaluative study with Argentinian pre-service teachers

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Received 12 February, 2024; Accepted 10 May, 2024

The present study aimed to examine the effect of implementing a Research-Led Activity (RLA) on the development of phonological awareness in students of a university-level English course in an English teaching program in Mar del Plata, Argentina. Seventeen students, aged between 19 and 26 years, with English language proficiency levels ranging from B2+ to C1, participated in the study. At the time of the research, these students were enrolled in the pronunciation course, Oral Discourse II, which is part of the second year of the Teaching English as a Foreign Language program at a state-owned university in Mar del Plata, Argentina. At the end of the instructional period, the students were asked to share their perceptions through an evaluative questionnaire designed to assess the impact of incorporating the RLA into their ODII class. The questionnaire included Likert scale questions and an open-ended question. The present study only concentrated on analyzing the responses to the open-ended question. The results revealed that the RLA not only promoted phonological awareness but also expanded the understanding of the intelligibility/comprehensibility constructs, facilitated the integration of theory with practice, and served as an effective link to research. Based on these findings, some pedagogical recommendations were given with the aim of enriching the teaching of English pronunciation and improving its integration into the educational context.

Key words: Research-led activity, English pronunciation, phonological awareness, theory-practice integration.

INTRODUCTION

In today's globalized world, there is a need for proficient second language (L2) users capable of effective communication with individuals from various cultural backgrounds. In light of this, educators may prioritize assisting L2 learners in enhancing their pronunciation skills to achieve clear and comprehensible speech, as opposed to striving for a native-like accent (Hahn, 2004; Derwing and Munro, 2015; Sardegna et al., 2018). This

article introduces an activity designed to enhance pronunciation skills in the context of English as a Foreign Language (EFL) education. The focus of this study revolves around the implementation of a Research-led Activity (RLA), which aims to foster phonological awareness and address the intricacies of L2 pronunciation in an innovative and dynamic manner while engaging pre-service teachers in research from an early

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stage.

The proposed activity targets both segmental and suprasegmental aspects. The objective is to move beyond the traditional approach to pronunciation instruction, which often emphasizes achieving native-like perfection. Instead, the study focuses on enhancing intelligibility (Levis, 2005, 2018) and comprehensibility (Munro and Derwing, 1995). The ultimate aim is to empower learners with the tools needed for effective communication in the global context of English.

It is worth noting that this study builds upon previous research conducted in the field (Luchini and Alves, 2021), which focused on analyzing pronunciation awareness among Brazilian L2 pre-service teachers. In that study, pronunciation awareness was evaluated through a research-led L2 pronunciation activity, wherein participants engaged in a rating task on L2 comprehensibility and subsequently provided reflective paragraphs outlining the linguistic factors influencing their ratings. The findings revealed that the majority of students demonstrated a qualitative understanding of language awareness, suggesting its potential contribution to the learning process. In line with this, the present study aims to assess the effectiveness of integrating a similar RLA in fostering phonological awareness among students enrolled in a Teaching English as a Foreign Language (TEFL) program in Argentina.

The present study begins by reviewing existing research in L2 pronunciation teaching to establish a foundation for this investigation. The methods section delineates the study's setting, participants, and assessment tools. Following this, the results of the evaluative questionnaire are presented, elucidating some of the benefits reported by the participants following the implementation of the RLA. Lastly, the study concludes with remarks underscoring the importance of embracing innovative approaches in L2 pronunciation teaching, highlight certain limitations, and suggest potential avenues for further research in this field.

Pronunciation teaching: Balancing the nativeness and intelligibility principles

Over the past fifteen years, the landscape of L2 pronunciation research and pedagogy has undergone significant shifts, largely influenced by two contrasting approaches (Levis, 2005). One of these approaches, known as the Nativeness Principle (Levis, 2005), posits that the paramount objective of pronunciation instruction is achieving a level of competence closely mirroring that of native speakers (Derwing and Munro, 2015). Conversely, the Intelligibility Principle contends that the emphasis should be on L2 learners' pronunciation being easily understood, even if a noticeable foreign accent persists (Derwing and Munro, 2005; Levis, 2018).

Traditional methodologies often align with the Nativeness Principle, placing a premium on learners

striving for pronunciation resembling that of native speakers; viewing native-like perfection as the ultimate goal. This involves engaging in activities such as phonetic transcription, dictations, and imitation exercises. In these exercises, students transcribe and take down dictations using phonetic symbols and conventions, and closely imitate native pronunciation. Instruction in traditional approaches typically relies on lecturing and decontextualized drills, with teachers dedicating a substantial portion of class time to explaining articulatory processes and phonological rules, often divorced from broader communicative contexts.

On the other hand, adhering to the Intelligibility Principle, recent studies in L2 pronunciation teaching explore how teachers can focus on phonological features that lead to intelligible productions (Derwing and Munro, 2005; Levis, 2018, 2020; Pennington and Rogerson-Revell, 2019). Instruction in line with this principle advocates for incorporating alternatives that promote noticing and language awareness, along with providing opportunities for learners to investigate and refine their receptive and productive pronunciation skills (Leow, 2015; Schmidt, 2012; Ullman, 2020).

Recognizing the efficacy of pronunciation instruction, which parallels vocabulary, grammar, and pragmatic teaching (Lee et al., 2015), emphasizes the importance of integrating it with other language skills to enhance learners' comprehensibility and intelligibility (Thomson and Derwing, 2015). Despite numerous articles highlighting the effectiveness of pronunciation instruction, they often lack in-depth explanations regarding the implementation process. This article addresses this gap by elucidating how to implement a RLA in the pronunciation classroom and evaluating their impact on developing phonological awareness in L2 learners.

Research questions

Recognizing the need for exploring innovative approaches that can genuinely enrich the development of pronunciation awareness in students, this study aims to investigate the following research questions:

1. How does incorporating a RLA into pronunciation classes impact students' understanding of intelligibility/comprehensibility constructs?
2. How does incorporating a RLA in pronunciation classes bridge the gap between theory and practice?
3. How do RLAs support future L2 teachers in developing research skills?

METHODS

Context and participants

In this study, a cohort of 17 student teachers, aged between 19 and 26 years ($M=21.69$), participated. These students were enrolled in Oral Discourse II (ODII), and English pronunciation course offered

during the first term of the second year within a TEFL program at a state-owned university in Argentina. The primary focus of ODII is to provide student teachers with a robust understanding of English suprasegmental phonology theory while enhancing their spoken English proficiency. Over the duration of the semester-long course, students receive a total of 8 h of weekly instruction, facilitated by four different teachers. Entrance into this class follows a successful completion of English Phonetics and Phonology I and II, which predominantly cover segmental phonology. Concurrently with ODII, students also engage in other courses pertaining to language development, teaching methodology, and English cultural studies. The English proficiency level of these students is equivalent to that of B2+/C1 in the Common European Framework of Reference for Languages.

Research-led activity

Within the context of ODII, students are also asked to complete four practical assignments. One of these assignments engages learners in a RLA, with the overarching goal of achieving three key objectives. Firstly, this assignment aims to foster research-led teaching by immersing students in an authentic research activity. Secondly, this activity enhances phonological awareness by integrating theoretical concepts with practical application. Lastly, it facilitates the development of students' intelligibility and comprehensibility skills, encouraging them to transcribe and analyze non-native speakers' productions.

The RLA proposed in this study aims to enhance students' learning process, by involving students in conversations among English speakers who have diverse first languages (L1s). In contrast to traditional activities that mostly involve native speakers of the language, where students simply transcribe what they hear, this activity highlights the reality that English functions as a lingua franca among speakers with varied L1s. For these individuals, English serves as the preferred communicative medium and, often, the only option available (Jenkins, 2000).

Through the analysis of these conversations, students not only have the opportunity to merge theory with practice but also raise awareness of their oral productions. This dual focus aims to enhance their intelligibility and comprehensibility, recognizing the dynamic role English plays as a bridge language among speakers of different mother tongues (Jenkins, 2000). Also, this activity provides an opportunity for students to explore research aspects, thus preparing them for the potential dual role of teachers and researchers in the future. The pedagogical steps involved in the implementation of this RLA are outlined in this study.

Sequence of steps involved in the RLA

1. Students start by listening to a recorded conversation between two international students. The task assigned to these international students involved responding to the question "What would you do if you earned a lot of money?" while viewing images depicting various ways to spend the money. The recordings were sourced from various countries, including Vietnam, Ukraine, Honduras, Peru, Korea, China, Jordan, and Bangladesh.
2. Following the listening exercise, students were tasked with transcribing the conversation. They were given the option to use Sound Scriber (a Windows program designed to facilitate the transcription of digitized sound files, <https://public.websites.umich.edu/~ebreck/code/sscriber/>), or any other transcription software of their choice.
3. Once the transcription was completed, students were required to identify instances of breakdowns in the conversation between the two speakers.
4. Then, students were challenged to categorize these breakdowns

using Jenkins' LFC proposal (2000), referring to segmentals, suprasegmentals, and articulatory settings.

5. To complete this assignment, students were instructed to give a presentation to their classmates. Alongside the presentation, they were required to provide a handout summarizing the main points, which should include a concise theoretical background of the participants' native languages, a comparison of their findings and results with Jenkins' findings, their conclusions, and a reference list of consulted sources.

In assessing this RLA, regarded as a course assignment, teachers sought evidence of theoretical understanding demonstrated in students' presentations. In these presentations, teachers evaluated students' transcriptions and their identification of communication breakdowns among speakers, as well as their linkage of these breakdowns with Jenkins' LFC proposal (2000). In addition, the assessment process encompassed the way students used language, particularly their pronunciation, to express their ideas.

Instrument for data collection

At the end of the course, students were asked to complete an evaluative course questionnaire. The aim of this questionnaire was to gather students' perceptions on both ODII and the RLA, facilitating an assessment of the effectiveness of incorporating this activity into the pronunciation class. To preserve confidentiality, the evaluative process was carried out anonymously. The questionnaire comprised three Likert scale questions and one open-ended question. For the purposes of this study, the focus is solely on the analysis of the open question. This decision was motivated by the desire to gain insights into the students' perceptions of completing this RLA, providing a comprehensive understanding of their experiences and perspectives in relation to this activity. The open question asked students to refer to the strengths and weaknesses of carrying out this type of activity in this class.

RESULTS AND DISCUSSION

The study is to explore the impact of integrating a RLA on fostering phonological awareness among pre-service teachers. Based on the comments provided by the students, it was observed that in general this teaching practice had a positive impact on their learning experiences and their perceptions regarding their pronunciation development.

Positive impact

It seems that this activity proved instrumental in bridging the gap between theory and practice for students. They highlighted the importance of seeing theoretical concepts applied in real-life scenarios, thereby establishing a tangible link between academic understanding and practical implementation. Consequently, it fostered a more comprehensive and practical learning experience. In reference to this, students A and B provided the following testimony:

Student A: *I believe this activity was great to integrate*

theory and practice. I liked that we did not only read the theory, but that we were given an activity to put that theory into practice. By carrying out our research, we were able to see how the theory works in real life.

Student B: [...] *As regards strengths, this research, personally, has helped me a lot to understand the importance of having a good pronunciation to be intelligible enough. I think I said it in class also, but I really liked doing this. It was very interesting to analyze the pronunciation of different speakers from different countries, because that could happen to us in real life too!*

Some students emphasized the importance of engaging in research-related activities, highlighting their potential relevance in future endeavors. Given the limited exposure to research within TEFL program, it is crucial to offer opportunities for students to grasp research methodologies. This recognition reinforces the necessity of integrating such activities in the pronunciation class, enabling pre-service teachers to gain practical insights and skills essential for their future as educators and researchers. In reference to this, students C and D provided these testimonies:

Student C: [...] *Even though it was not easy to carry out the research, it was great to be exposed to this kind of activity, because some of us may want to be researchers in the future. And presenting our findings to our peers made us conscious of all the implications of the theory.*

Student D: *It was a great activity to introduce ourselves into research. Reading the theory worked pretty well enough to make the necessary connections. [...]*

Some students also showcased that participating in this type of activity contributed to an increased awareness of their own oral expressions and those of other non-native speakers of English. They also noted that these type of research-driven activities foster a deeper grasp of the concept of intelligibility, emphasizing the idea that accent does not play a pivotal role in establishing effective communication. Instead, they acknowledged that effective interaction can still be achieved even with a strong accent. In regard to this notion, two students mentioned the following:

Student E: *One of the strengths of this activity is the possibility to reflect on both our own production and other's. There are different aspects (such as intonation and characteristics of languages) that we had to reflect in order to prepare the presentation. Also, transcribing the conversation helped to understand better the concept of intelligibility.*

Student F: [...] *Doing the research also made me realize you don't need native-like pronunciation in order to be understood.*

Another student emphasized that participating in these

activities was essential for comprehending the theory and practicing his pronunciation, thereby aiding in the development of his pronunciation skills, particularly his intonation. The student highlighted how these improvements were not only relevant within the context of ODII but also across other courses belonging to the same program:

Student G: *It helped me understand the theory and practice my pronunciation, as well as choosing the correct intonation when I speak not only in this course but in other courses. Analyzing intonation phrases is still one of my biggest weaknesses and I feel that I can improve that.*

Challenges encountered

While some students acknowledged encountering challenges in gathering information regarding the diverse L1s of the speakers, others expressed difficulties in discerning the reliability of web-based information. While understanding that research demands diligence and meticulous scrutiny of various sources, certain students proposed that teachers offer future guidance in these areas. They expressed optimism that in the ensuing years, there would be increased support from their teachers to assist them in exploring sources and acquiring effective strategies for locating pertinent information. In reference to this, they pointed out:

Student I: *One of the weaknesses of carrying out this activity was trying to search for appropriate and easy to understand papers that referred to the phonological system of the student's mother tongue. At least the L1 languages my group had to work with (Japanese and Arabic) have extremely complex systems to understand. Particularly, it was challenging to find easy to follow information about suprasegmental features. But once we could understand the basics of those L1s, it was much easier to understand what the speakers were saying in the recording since we were aware of the pronunciation issues they could encounter in the process.*

Student J: *Regarding weaknesses, what we mostly found difficult was looking for reliable papers and information to expand on the analysis of the data.*

Based on this information, it is important to acknowledge that while this activity offers several advantages, there are also some challenges that cannot be overlooked and thus require attention from teachers.

Advantages of incorporating the RLA into the pronunciation class

The information coming from the questionnaire indicated

that the RLA contributed to raise students' awareness of their pronunciation skills, bridged theoretical concepts with real-world applications, and fostered a connection to research.

These findings suggest that incorporating such activities into the English pronunciation class offers several benefits. One advantage is the potential link between theory and practice. Learners, who are encouraged to apply theory in communicative tasks, facilitates pronunciation practice in meaningful contexts, enhance their understanding of how pronunciation operates in discourse (Mora and Mora-Plaza, 2023; Morley, 1994). This RLA provides a platform for learners to directly connect theoretical concepts with practical, real-world applications. Participating in activities that allow learners to apply theoretical concepts to practical situations in meaningful contexts promotes a deeper grasp of intelligibility, which can contribute to the development of L2 pronunciation.

A current dilemma confronting numerous universities involves the endeavor to assist educators in their transition to becoming researchers (Burns and Westmacott, 2018). Crossing the threshold from being a university teacher to evolving into a self-assured, driven, and publishing researcher remains a persistent challenge (Archer, 2008; Bai and Hudson 2011; Tran et al., 2017). Engaging in this RLA serves to link student teachers with the research process, providing a concise introduction to its workings and offering an opportunity to explore their affinity for research endeavors.

Teachers should systematically guide pronunciation learning by incorporating reflection and promoting increased awareness among learners (Sardegna and McGregor, 2017). Participating in this RLA enabled students to increase their phonological awareness and to gain a profound understanding of the notion of intelligibility. It has encouraged them to contemplate the idea that effective communication remains attainable even with a noticeable accent. Additionally, these activities played a role in heightening awareness concerning their own oral productions as well as those of other non-native English speakers.

Engaging students in research-driven activities such as the one deployed in this study serves as a vital bridge between theoretical knowledge and practical application in education (Hein, 2010). Through active participation in research-based learning, students develop critical thinking and multidisciplinary integration skills, fostering a deeper understanding of complex topics (Schön, 1983). This approach promotes ownership of learning, preparing students for future academic and professional pursuits. By contextualizing theory within real-world scenarios, research-driven activities provide students with a comprehensive and practical learning experience, equipping them with the skills and knowledge necessary for success in an increasingly dynamic world (Healey et al., 2018).

Limitations of using the RLA in the L2 pronunciation class

While this study has revealed certain advantages and insights associated with RLAs in L2 pronunciation, it is important to acknowledge its limitations. Firstly, the relatively small sample size of 17 student teachers participating in the course may be considered a constraint, potentially limiting the generalizability of the findings to a broader population. Future research endeavors involving larger and more diverse participant groups could provide a more inclusive perspective on the effectiveness and implications of this RLA.

Secondly, the implementation of this activity, as outlined in this study, may inherently demand a substantial amount of time. Both students and teachers need to allocate ample time for tasks such as transcription, analysis, and oral presentations. This demand on time could pose challenges, especially in courses characterized by tight schedules or large class sizes.

Thirdly, the complexity of analyzing how various L1s may influence English oral productions introduces another limitation. Students are tasked with investigating the workings of other languages and comparing them to English, potentially leading to misconceptions in their oral presentations without sufficient guidance from teachers. In view of this, teachers should consider providing additional support and guidance to students in future iterations of such activities.

CONCLUSIONS AND POSSIBLE FUTURE WORKS

This study assessed the impact of incorporating an RLA into the pronunciation class and analyzed its outcomes. It is important to recognize the significant benefits of RLAs, which range from improving understanding of intelligibility/comprehensibility concepts to seamlessly merging theory with practice. Additionally, RLAs aid in developing phonological awareness and serve as a platform for research exploration. Through these activities, students not only have enhanced their critical thinking and interdisciplinary skills but they have also gained independence in their learning process, preparing them for future academic and professional pursuits. By grounding theory in real-life situations, RLAs provide students with a comprehensive and practical learning experience, equipping them with essential skills for exploring today's dynamic world.

Reflecting on the questionnaire responses, participants clearly confirmed the positive impact of RLAs on their pronunciation, comprehension, and confidence in spoken English. However, it is important to acknowledge the limitations of this study, including its small sample size and focus on a single classroom context. Looking ahead, future research could explore the potential of RLAs across larger and more diverse student populations while

investigating additional factors influencing their effectiveness. Suggestions for future studies may include examining the long-term effects of RLAs on pronunciation proficiency and exploring variations in instructional design. By continuously refining innovative pedagogical approaches like RLAs, educators can contribute significantly to the advancement of language teaching and learning practices, benefiting both students and educators alike in their quest for excellence.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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