

# Pronunciation Study Habits of EFL Students in the Context of Costa Rican Public Higher Education\*

*Hábitos de estudio de pronunciación de estudiantes de Inglés como lengua extranjera en el contexto de la educación superior pública costarricense*

William Charpentier-Jiménez<sup>1</sup>

*Universidad de Costa Rica, San José, Costa Rica.*

- 
- Article of scientific and technological research  
Received: July 23<sup>th</sup>, 2023 - Approved: August 28, 2024
  - Master's Degree in English Language Teaching  
Professor  
E-mail: [william.charpentier@ucr.ac.cr](mailto:william.charpentier@ucr.ac.cr) –ORCID: <https://orcid.org/0000-0002-8554-7819>

**How to cite this article:** Charpentier-Jiménez, W. (2022). Pronunciation Study Habits of EFL Students in the Context of Costa Rican Public Higher Education. *Matices en Lenguas Extranjeras*, 16(1), pp 52-95. DOI: <https://doi.org/10.15446/male.v16n1.107377>.

Este trabajo se encuentra bajo la licencia Creative Commons Attribution 4.0.

## ABSTRACT

This study explores students' attitudes toward English pronunciation study habits at a Costa Rican public university. In spite of their relevance, these study skills have not received enough attention in the last few years. The sample consisted of 24 females and 9 males, all with a B2 level. The study employed a quantitative, direct needs assessment design. The researcher used a survey to obtain students' perspectives about their independent study habits. Students' attitudes were assessed on a 5-point Likert scale. The researcher interpreted data by using descriptive statistics. Data analyses suggest that: 1) there is some correlation between exposure to pronunciation study habits and students' preferences; 2) an important number of pronunciation study habits receive little attention; 3) students perceive study habits as an essential component for improving their pronunciation, but they do not dedicate enough time to study pronunciation independently; and 4) exposure to these study habits is not systematic during language learning. In agreement with the reviewed literature, these results demonstrate that pronunciation study habits are not consistently present in the curriculum, which can have implications for bilingualism development. In addition, the analysis shows that a more straightforward and organized type of instruction may broaden and improve students' independence. Lastly, these results indicate that a more organized curriculum that clearly emphasizes pronunciation study habits would favor ESL learners' speech education.

**Keywords:** *Bilingualism, English pronunciation, independent study, language learning, study skills.*

## RESUMEN

Este estudio explora las actitudes del estudiantado hacia los hábitos de estudio de la pronunciación en inglés en una universidad pública costarricense. A pesar de su relevancia, estas técnicas de estudio no han recibido suficiente atención recientemente. La muestra consistía en 24 mujeres y 9 hombres, todos con un nivel B2. Se utilizó un método cuantitativo con un diseño de evaluación de necesidades. El investigador utilizó una encuesta para obtener la perspectiva del estudiantado acerca de sus hábitos de estudio. Las actitudes del estudiantado fueron evaluadas en una escala Likert de 5 puntos. El investigador interpretó los datos utilizando estadística descriptiva. Los resultados indican que: 1) existe alguna correlación entre exposición a hábitos de estudio para la pronunciación y las preferencias del estudiantado; 2) un importante número de hábitos de estudio reciben poca atención; 3) el estudiantado considera los hábitos de estudio esenciales para mejorar su pronunciación, pero no dedican suficiente tiempo a estudiar la pronunciación independientemente; y 4) la exposición a estos hábitos de estudio no es sistemática durante el aprendizaje de lenguas, pudiendo afectar el desarrollo del bilingüismo. Conforme con la literatura revisada, estos resultados demuestran que estos hábitos de estudio no se encuentran consistentemente presentes en el currículo. Igualmente, el análisis muestra que una instrucción más directa y organizada podría mejorar la independencia del estudiantado. Finalmente, estos resultados indican que un currículo más estructurado que claramente enfatice los hábitos de estudio para la pronunciación favorecería la educación de la expresión oral del estudiantado de ILE.

**Palabras clave:** *Aprendizaje de lenguas, bilingüismo, pronunciación en inglés, técnicas de estudio.*

**PRONUNCIATION IS A GROWING TOPIC** of study in applied linguistics. Since English has acquired a reputation as a global language, achieving speech intelligibility has become essential (Irawan, 2023). Students must complete an advanced proficiency level to communicate and work in the global marketplace. In addition, pronunciation reveals more about a person's proficiency level since «pronunciation is the most noticeable factor when people communicate for the first time» (Talebzadeh & Gholami, 2015, p. 54). It «is the salient feature of our language competence. It is the lens through which we are viewed in each interaction we have» (Celce-Murcia et al., 2010, p. 279). Therefore, students must achieve the desired pronunciation to communicate effectively in academic or social settings, avoid misunderstandings, or be perceived as uneducated. Finally, improving one's skills helps students learn other skills better and faster. This happens because «automatic processing is involved when the learner carries out the task without awareness or attention» (Richards & Schmidt, 2010, p. 44). When students' pronunciation is deficient, they should self-monitor more closely. Among the various theories of self-monitoring, two self-monitoring theories deserve special attention. First, Levelt's Model of Speech Production provides a comprehensive framework for speech production, encompassing stages of conceptualization, formulation, and articulation. It emphasizes self-monitoring through an internal feedback loop to detect and correct errors, introducing the perceptual loop theory, where speakers use their comprehension system to monitor their own speech similarly to how they understand others' speech (Levelt, 1989). Second, Articulatory Phonology focuses on the coordination of articulatory gestures, suggesting that speakers monitor and adjust the spatial and temporal coordination of these gestures to ensure accurate speech production (Browman & Goldstein, 1992). Other authors mention that students often

focus «attention on the message just before or while it is uttered in order to check for accuracy, clarity and appropriateness» (Richards & Schmidt, 2010, p. 478). This could make them sacrifice fluency for clarity or pronunciation for grammar.

Additionally, some professors find it challenging to teach pronunciation. For example, some professors worry about «students' inactive participation and low English proficiency» (Chen & Goh, 2011, p. 6). Levis and Grant (2003) note that many English language instructors have difficulties deciding on pronunciation foci, providing individual pronunciation feedback, and designing interactive pronunciation instruction. According to Chen and Goh (2011), the problem becomes more evident in English as a Foreign Language (EFL) settings. In these cases, time and teaching resources are scarce, and classes are large and include students of varying abilities. Thus, the inherent difficulty of English pronunciation has increased the importance of study habits.

Teacher-centered classes hinder pronunciation development because students tend to distance themselves from learning (Chen & Goh, 2011). In other contexts, «there is insufficient time to address every aspect of learners' phonological difficulties in the classroom» (Munro & Derwing, 2006, p. 521) since there are many pronunciation features to address. A possible solution to this predicament is to develop study skills, which are defined as «abilities, techniques, and strategies which are used [...] for study purposes» (Richards & Schmidt, 2010, p. 565). Learning to learn becomes essential since it includes «the acquisition of attitudes, learning strategies and learning skills that will be applied in future learning situations and make future learning more effective» (Richards & Schmidt, 2010, p. 332). Thus, students, professors, and policymakers should

develop an awareness of students' study habits to improve language acquisition and pronunciation.

This study aims to contribute to this growing area of research by exploring students' study habits to improve their pronunciation. The findings will also contribute to a better understanding of what students and professors do to improve pronunciation. Equally important, the results may encourage the development of materials and documents to guide students in their autonomous learning. Currently, no BA in English or English teaching program explicitly advises students on how to study or what activities to engage in outside of class to enhance their pronunciation. Therefore, since no guidelines exist, professors' advice is not uniform or scarce, and students often struggle to find what works best for them. Moreover, as stated above, pronunciation teaching requires explicit recommendations for students to become autonomous learners and continue learning after university studies.

## Aims

The main objective of this article is to explore students' awareness of pronunciation study habits. In addition, this article also focuses on how students in a BA in English as a Second Language program at a public Costa Rican university perceive their own pronunciation study habits.

## LITERATURE REVIEW

The role of pronunciation instruction has been extensively studied in recent years. Several studies have focused on the theory of pronunciation and instruction (Blanche, 2004; Derwing & Munro, 2015; Hismanoglu, 2006; Milovanov et al., 2010; Morgan, 2003; Munro & Derwing, 2006; Sicola, 2008; Tominaga, 2009; Yao, 2008). Others have emphasized the use of technology to improve students' pronunciation (Ali, 2016; Charpentier-Jiménez,

2020; Levis, 2007; Lord, 2008). However, few attempts have been made to investigate students' study habits when learning English pronunciation. As a result, this section explores the most common pronunciation linguistic features in English, the possible sources of pronunciation problems, and the relationship between pronunciation and teaching. It also provides a broad overview of autonomous learning and its relationship to study habits.

### Pronunciation Features

Since its early stages, pronunciation theory has advanced significantly. However, not all language professors or students have studied the intricacies of the theory. For example, according to Fraser (2011), phonetics and phonology are «among the branches of linguistics with least impact on applied linguistics. [...] One reason for their lack of impact might be that they are often perceived as highly complicated topics, dominated by theoretical issues of limited relevance to practical applications» (p. 584). Both concepts contribute to our understanding of how pronunciation works. On the one hand, phonetics involves studying sounds and how they are produced, transmitted, and perceived (Richards & Schmidt, 2010). On the other hand, phonology tries to «demonstrate the patterns of distinctive sound found in a language, and to make as general statements as possible about the nature of sound systems in the languages of the world» (Crystal, 2008, p. 365). Although Matthews (2014) acknowledges that several factors make «the relation of phonetics to phonology [...] problematic» (p. 300), advanced language learners, especially those enrolled in an English or English Teaching major, should be acquainted with these concepts.

Although pronunciation learning includes various elements, several authors (Brown, 2022; Celce-Murcia et al., 2010; Lane & Brown, 2010; Roach, 2009) have described pronunciation features

from two main perspectives: segmentals and suprasegmentals. For example, Matthews (2014) mentions that segmentals deal with single units (vowels and consonants), while suprasegmentals «extend over more than one successive minimal element» (p. 391). Therefore, suprasegmental features of a language include stress, rhythm, and intonation but are not limited to these. On the other hand, segmentals are further divided into vowels and consonants. Despite author differences, English has 25 consonant and 21 vowel sounds (Celce-Murcia et al., 2010; International Phonetic Association, 1999). Having a good command of both linguistic features helps students improve their pronunciation and confidence when speaking.

### Pronunciation Problems

A variety of factors make learning proper pronunciation difficult. The most common are the learners' age; the quality and quantity of instruction and exposure to the target language; the learners' aptitude, attitude, and motivation toward learning; and the differences between the native and target languages (Celce-Murcia et al., 2010). Therefore, this section focuses on the differences between the native and target languages.

According to Juan-Checa (2017), some languages are more phonetic than others. This means they have a phonemic orthography, indicating that the written alphabet and pronunciation are similar. In this regard, Spanish is more phonetic than English. Additionally, Juan-Checa (2017) stated that «Spanish practically does not distinguish between short and long vowels» (p. 462). Spanish also uses only 18 consonant sounds, while English has 25; only 11 of these sounds are identical or very similar. Therefore, students face two main challenges. On the one hand, they have to deal with a written system that does not always help decide the correct pronunciation since this system differs drastically from



the students' set of rules. Furthermore, students tend to over differentiate, which Matthews (2014) defines as «the failure, in acquiring a second or foreign language, to suppress distinctions that are made in one's first or native language» (p. 282). As a result, language learners often develop an approximate system or interlanguage. Interlanguage is a linguistic system a person creates and uses while learning a second language; it often involves overgeneralizing the known rules of the target language or familiar patterns from the student's first language (Crystal, 2008; Richards & Schmidt, 2010). Therefore, it is normal for students to rely on their native language to communicate in the target language (L2). However, as previously mentioned, both systems do not always combine well, and «It's not easy to erase the default settings of your speech without a great deal of practice, as those who have undergone dialect coaching or tried to speak like a native in a foreign language know» (Shariatmadari, 2020, p. 185). In other words, students' familiarity with a set of Spanish pronunciation rules may mislead them, resulting in communication breakdowns and a lack of confidence.

### Teaching Pronunciation

The role of pronunciation in applied linguistics has been extensively explored. However, three prominent aspects deserve particular attention to aid pronunciation in the classroom: pronunciation and language policy, computer-assisted language learning (CALL) and mobile-assisted language learning (MALL). For example, in terms of pronunciation policies, authors have suggested integrating pronunciation into all classes (Kayaoğlu & Çaylak, 2013) while maintaining a separate class to concentrate on pronunciation features (Kayaoğlu & Çaylak, 2013; Naiman, 2003). In addition, Foote (2018) has advocated for hiring professors with certified qualifications and ethical practices in

pronunciation services. However, McGregor and Reed (2018) developed a more holistic perspective to integrate pronunciation. Their model consists of a 5-stage curriculum-design process for the integration of pronunciation. The authors' proposal includes taking institutional and learner factors into account and conducting a needs assessment «with awareness-raising and subsequent prioritization of features for improvement» (McGregor & Reed, 2018, p. 89). They also suggest providing adequate teacher training and developing students' autonomy to continue their learning process.

Furthermore, the use of technology to aid pronunciation has also garnered much attention in recent years. Although some teachers complain that teaching pronunciation is time-consuming, research shows that including it is feasible and does not hinder the achievement of other course objectives (Darcy et al., 2021). Charpentier-Jiménez (2020) points out that students urge technology implementation in class, especially on MALL devices. Other authors have emphasized how technology improves and aids in acquiring pronunciation features in class (Gordon, 2021; Saleh & Gilakjani, 2021; Zárate-Sánchez, 2020) and out-of-class contexts (Everly, 2019; Kartal & Korucu-Kis, 2020; Meisarah, 2020). A growing number of researchers have also focused on using automatic speech recognition for second language pronunciation training (Ali, 2016; Cucchiarini & Strik, 2018) and automated speaking assessment (Isaacs, 2018). Thus, as can be seen, pronunciation teaching has taken advantage of novel technologies, which also aid students improving their study habits and becoming independent learners.

Besides using technology, face-to-face pronunciation sessions are influenced by three main components. First, teachers perceive pronunciation training to be as important as other linguistic features (Foote et al., 2012), demanding in terms of material and class preparation (Nangimah, 2020), and challenging to teach, especially

in tertiary education contexts (Atar, 2018). Teachers may also be antagonistic toward the curriculum, textbook, or allotted time for teaching pronunciation (Couper, 2021). Moreover, some teachers, especially novices, believe they need more training or are unsure about teaching pronunciation (Bai & Yuan, 2019; Baker & Burri, 2016; Couper, 2017; Huensch, 2019). Second, students' perspectives play an essential role in pronunciation training. Students find pronunciation training highly important (Sardegna, 2020). Not only does pronunciation help with their communicative skills, but it also impacts their confidence (Kang, 2015). These are other reasons students demand more attention to pronunciation instruction in their study plans (Alghazo, 2015). Finally, techniques and activities can significantly influence how instruction is delivered. For example, Shabani and Ghasemian (2017) claim that teachers' personalities influence the techniques and activities they use in class. While some teachers advocate for more explicit pronunciation instruction (Mohsen, 2016; Pardede, 2018; Zhang & Yuan, 2020), others have sought newer and more innovative approaches to pronunciation, as the benefits of neuro-linguistic programming (Caballero & Rosado, 2018), the use of the motor skill approach (Messum & Young, 2021), and the implementation of Praat (a freeware program used by phoneticians) as a tool students can use (Boersma, & Weenink, 2024; Osatananda & Thinchana, 2021). Still, listening to improve pronunciation remains paramount (Hamad et al., 2019; Karyuatry et al., 2020; Mohsen, 2016), and using phonetic symbols to aid pronunciation remains beneficial in specific contexts (Mompean & Fouz-González, 2021).

### Study Habits

Although the concept of study habits has not been widely researched, the role of autonomy has received considerable attention in recent years. Autonomy, defined as «the ability to take charge of

one's learning and to be responsible for decisions concerning the goals, learning processes, and implementation of one's language learning needs» (Richards & Schmidt, 2010, p. 44), includes study habits but can also occur during direct instruction. On the other hand, study habits are defined here as those autonomous, purposeful activities students carry out outside of class.

One of the main problems for students «in their attempts to study or practice autonomously [is] their limited abilities to monitor their speech for errors» (McCrocklin, 2016, p. 25). To overcome this situation, some authors have recommended implementing automatic speech recognition (ASR) (Evers & Chen, 2021; McCrocklin, 2016; Pérez-Castillejo, 2021), which has become more available in the last few years. Automatic speech recognition is «the process of speech-to-text transcription: the transformation of an acoustic signal into a sequence of words, without necessarily understanding the meaning or intent of what was spoken» (Renals & Hain, 2010, p. 299). Therefore, students can practice their pronunciation by dictating, issuing verbal commands, or having simple conversations with voice assistants. Although ASR is not perfect, students can access immediate, non-judgmental, and always-available feedback.

Pawlak (2010) mentions that learning pronunciation in a second or foreign language (L2) demands a certain degree of autonomy. To this end, some authors recommend using pronunciation learning strategies (PLS). For example, Peterson (2000) describes PLS as «steps taken by students to enhance their pronunciation learning» (p. 7), while Pawlak (2010) defines them as «deliberate actions and thoughts that are consciously employed, often in a logical sequence, for learning and gaining greater control over the use of various aspects of pronunciation» (p. 191). Thus, PLS are not necessarily used as study activities but rather with the broader term of autonomous learning. As a

result, PLS «could serve as a basis for constructing an inventory that could be deployed in different studies» (Pawlak & Szyszka, 2018, p. 316). They could serve as a basis for developing a more detailed or contextualized list of study habits on which students can rely to improve their pronunciation.

As can be seen, pronunciation encompasses several characteristics that learners should acquire to communicate effectively. Unfortunately, some of these characteristics have proven problematic for EFL and ESL learners, especially in contexts where exposure is limited. In addition, although exposure may come from different sources, it is recommended that students receive direct instruction and be presented with various materials and approaches to improve pronunciation. Finally, students should also develop autonomy to achieve intelligibility. Thus, study habits are a relevant component of independence and deserve more attention.

Despite the growing body of research on pronunciation in language learning, a critical review of the literature reveals a significant gap in the exploration of actual study habits, particularly those related to pronunciation, among English as a Second Language (ESL) learners. While numerous studies have emphasized the importance of pronunciation and its impact on language proficiency and communication (Derwing & Munro, 2015; Levis & Grant, 2003), less attention has been given to how students develop and engage with pronunciation study habits outside the structured classroom environment.

Moreover, existing research predominantly focuses on instructional strategies and teacher perspectives on pronunciation (Baker & Burri, 2016; Couper, 2017), neglecting the learner's autonomous engagement with pronunciation activities. This oversight is particularly notable in contexts like Costa Rica, where English is taught as a foreign language and opportunities for naturalistic language exposure may be limited.

This study addresses these gaps by investigating the self-directed pronunciation study habits of TESOL students at a public university in Costa Rica. It explores not only the types of study habits that students engage in but also their perceptions of the effectiveness of these habits in improving their pronunciation skills. By focusing on student-initiated study practices, this research contributes new insights into the autonomous learning strategies that are most beneficial for ESL learners, thereby providing a foundation for more targeted and effective language instruction strategies that can be incorporated into curriculum design and teaching practices.

## METHOD

### Participants

This study included adult Costa Rican students currently taking their third year in an English or English Teaching major at a public university. The researcher created an electronic mailing list of 39 students interested in participating in the study. Finally, 33 students decided to participate in the study. The age distribution was as follows: 26 participants were between 20 and 24 years old, 5 were between 25 and 30 years old, and 2 were between 31 and 35 years old. Regarding gender, the group included 24 females and 9 males. All participants shared a language proficiency of B2 level according to the Common European Framework of Reference for Languages (CEFR), indicating an upper intermediate grasp of the language. The participants were selected because they had already taken three or four courses devoted to pronunciation. The database included every participant who agreed to participate in the study. Participants did not receive any compensation for their collaboration. All participants speak Spanish as their first language.

## Materials

The materials included written consent and a 15-item descriptive survey incorporating a list of 20 study habits pertaining to pronunciation. The written consent was sent to students electronically. A checkbox labeled «agree to terms and conditions» was included to certify voluntary participation in the study. The list of 20 study habits was created after surveying the literature and informally consulting ten former students who had already completed their study plan. The final list was reduced to include all possible options students could access.

In addition, the 15-item descriptive survey was designed to analyze students' perceptions of the value of study habits and the guidance they have received from professors. The final version of the survey was pilot-tested with ten students who had already concluded their study plan, and the survey was later revised based on the results of the pilot testing.

The survey was divided into four sections: a) demographic information, b) students' study habits to improve pronunciation, c) the perceived importance of study habits in the program, and d) an optional open-ended question. The survey used two question formats: forced-choice and open-ended questions. Except for the open-ended question, items included checklists or Likert scales for all sections. For example, some items asked the participants to rate the program's stress on their study habits. These items were placed on a 5-point Likert scale that ranged from 1 (Poor) to 5 (Excellent). This format, or a similar one, was also used for other questions.

The last part of the survey contained one optional, open-ended question. This question invited participants to comment freely on their perspective of their study habits or the advice they received during the major. The total time to complete the survey was estimated at 8 to 10 minutes.

## Procedure

This study used a quantitative, direct needs assessment design, exploratory research. The researcher created a list of 20 study habits based on the literature consulted and the opinions of graduate students. The list was whittled down to include only practices participants could carry out. For example, the following practices are not possible in this context: remedial classes on campus, open language labs, or language immersion groups. In addition to time constraints, the number of study habits was limited by the need to elicit as many responses as possible.

The researcher requested voluntary participation from students to collect data. First, the purpose of the study was explained via Zoom. Afterward, students were directed to a link to submit an email indicating their willingness to participate in the study. Then, the first email containing written consent and a hyperlink to the online survey was sent. Next, students were instructed to read the survey carefully and complete the options or answer the questions, depending on the section. The survey was conducted in the following order: a) demographic information, b) study habits, c) the perceived importance placed on study habits in the major, and d) an optional open-ended question.

## Data Processing and Analysis

The data were processed and analyzed using Microsoft Excel 2016. Since the majority of items in the survey were Likert scales, the analysis conducted included a quantitative summary of students' answers. In addition, the analysis included descriptive statistics where nominal data, percentages, and the interquartile range were included to compare students' answers.



## ANALYSIS OF THE RESULTS

The following description of the results presents students' awareness of pronunciation study habits and their perceptions of their inclusion in the study plan. The first section includes participants' demographic information. The second section summarizes students' awareness of pronunciation study habits. Finally, the third section reports participants' perceptions of pronunciation study habits directly taught during the BA program.

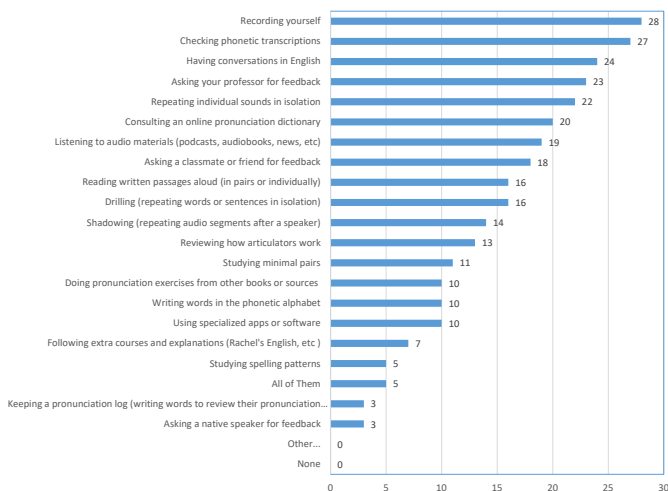
### Demographic Information

Of the 33 students who answered the survey, 23 (69.7%) were females and ten were males (30.3%). No student chose to be identified as non-binary or omitted to answer the question. Overall, 22 students (66.7%) reported their ages between 18 and 24. Ten students (30.3%) belonged to the 25 to 34 age range. One student (3%) was between 35 and 44. All students are native Spanish speakers and study English as a foreign language. Regarding studies, students enrolled in the BA in English ( $n = 30, 90.9\%$ ) or English teaching ( $n = 3, 9.1\%$ ). Both majors share the same core language courses, including pronunciation courses.

### Professors and Pronunciation Study Habits

To explore students' perceptions of pronunciation study habits, 20 behaviors or activities were extracted from a list of 25. Some items from the initial list were discarded based on the students' context and the pilot test. An initial question asked students if their professors' recommendations about pronunciation study habits had been good and sufficient. Data show that three students (9.1%) strongly agree with this perception, while 26 (78.8%) agree. Two students (6.1%) had a neutral opinion and two more (6.1%) disagreed with this idea. Professors' recommendations effectively reach more than 85% of the population interviewed.

Additionally, students ranked the study habits recommended by professors. As can be seen in Figure 1, only *recording yourself* and *checking phonetic transcriptions* received more than 75% ( $n \geq 25$ ) of opinions. These two activities are the ones that professors recommend the most. The second set of answers falls between 50% and 74% ( $n \geq 17, \leq 24$ ) of recommended practices. Mainly, these recommendations include human interaction. For example, *having conversations in English*, *asking professors for feedback*, and *asking a classmate or friend for feedback* are among the activities that professors recommend as good options to improve students' pronunciation. The third quadrant of recommendations falls between 25% and 49% ( $n \geq 9, \leq 16$ ). This section includes the highest number of recommendations ( $n = 8$ ). Some of the recommendations in this part are related to pronunciation exercises that can be done individually, as *shadowing*, *reading aloud*, or *drilling*. The final series of recommendations by professors belongs to the bottom 25% ( $n \leq 8$ ). Professors do not seem to recommend *following other courses*, *asking native speakers*, or *keeping a pronunciation log*. It is relevant to mention that five students mentioned that professors had recommended all the habits listed; however, no student could mention another habit not listed in the possibilities.

**Figure 1** Summary of study habits recommended by professors

*Note.*  $N = 33$ .

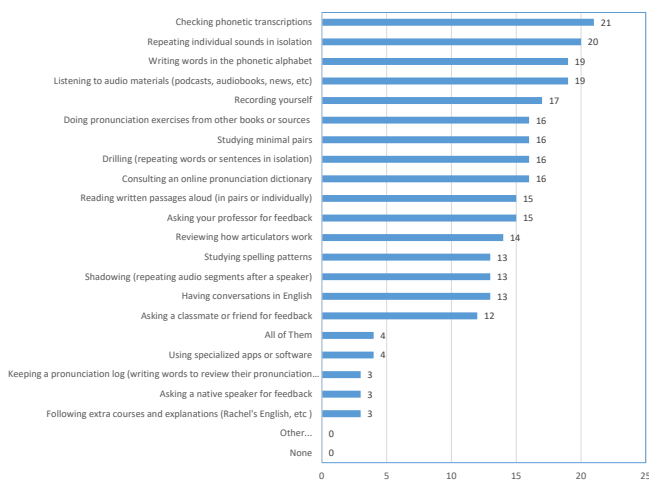
*Source:* Compiled by the author based on survey responses.

## Materials and Pronunciation Study Habits

Sometimes, professors do not directly mention pronunciation study habits; however, some of them are included in the course syllabus or in the materials that faculty have deemed necessary at some point. One of the questions in this section asked students if the recommendations about pronunciation study habits included in the syllabus or anthology had been good and sufficient. Data reflect that syllabi and materials do not necessarily include pronunciation study habits compared to professors' recommendations. Only 18 students (54.5%) agreed, while 13 (39.4%) remained neutral. Two students (6.1%)

disagreed with this notion. In sum, syllabi and materials seem to reach only half of the population adequately.

As before, students ranked the study habits recommended in the syllabus or the course anthology. As Figure 2 shows, no pronunciation study habits reached 75% ( $n \geq 25$ ) of opinions. The second series of answers falls between 50% and 74% ( $n \geq 17, \leq 24$ ) and emphasize metalinguistic components like *checking phonetic transcriptions* and *writing words in the phonetic alphabet* together with *repeating individual sounds in isolation* and *listening to audio materials*. Interestingly, for example, *recording yourself* ranked first in professors' recommendations but barely surpassed the 50% ( $n = 17$ ) of opinions here. The third set of recommendations (between 25% and 49%;  $n \geq 9, \leq 16$ ) includes eleven pronunciation study habits. This correlates with the perception students have regarding the incorporation of pronunciation study habits in course materials. Only *following extra courses and explanations*, *asking a native speaker for feedback*, *keeping a pronunciation log*, and *using specialized apps* or software received less than 25% ( $n \leq 8$ ) of recognition. Three of these activities are again at the bottom of the list of recommended pronunciation study habits. Similar to our previous analysis, four students mentioned that professors had recommended all the habits listed; however, no student mentioned a habit not listed in the questionnaire.

**Figure 2** Summary of study habits included in the syllabi or anthology

*Note.*  $N = 33$ .

*Source:* Compiled by the author based on survey responses.

### Pronunciation Study Habits Incorporated by Students

Data on students' opinions of study habits also presented students' perceptions of the use of time. For example, 19 students (57.6%) stated that they dedicate extra class time to studying pronunciation even if they have no related homework. On the other hand, 14 (42.4%) students admitted that they did not dedicate extra study time to pronunciation if it is not mandatory. When asked how many hours they dedicated to studying pronunciation per week, only one student (3%) chose more than eight hours. Another student (3%) selected between six and eight hours. Four students (12.1%) invested four to six hours. The majority of students ( $n = 14$ , 42.4%) allotted between two

and four hours of their time studying pronunciation. The second largest group ( $n = 11$ , 33.3%) devoted less than two hours. Finally, two students (6.1%) recognized that they did not dedicate time to practicing pronunciation. In addition, students were asked what language component they dedicated more time to. Table 1 shows that students place oral skills as the top linguistic feature. This indicates that oral skills are an essential aspect that students want to improve.

**TABLE 1** *Students' extra-class time investment according to the language component*

Scenario	n	%
Oral skills	9	27.3%
Writing skills	7	21.2%
Listening skills	5	15.2%
Vocabulary acquisition	5	15.2%
Grammar features	4	12.1%
Reading skills	2	6.1%
Other: a mix between vocabulary acquisition and oral skills	1	3%

*Note.*  $N = 33$ .

*Source:* Compiled by the author based on survey responses.

Participants also provided their perspectives on the importance of pronunciation study habits and oral skills. For example, 19 students (57.6%) strongly agreed that dedicating extra class time to studying pronunciation improved their skills. Nine (27.3%) agreed, while 5 (15.2%) had a neutral opinion. In addition, 15 students (54.5%) strongly believed that improving their pronunciation was one of their main goals. Again, nine students (27.3%) agreed with the same idea, and six (18.2%) had a neutral

opinion. Finally, the optional, open-ended question reveals that some students acknowledge that pronunciation teaching has room for improvement:

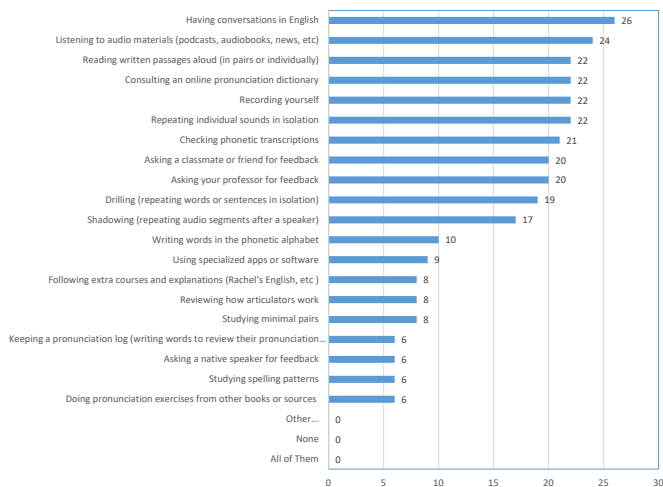
Participant 7. In order to improve pronunciation more than intonation itself, I believe that professors should take more time to work with student (*sic*) that need it. It is easy to single them out and it would be very positive for them if professors would take the time to correct them and teach them. (Participant 19)

Participant 8. Some oral courses focus more on how to do research than on how to develop our oral skills. (Participant 21)

This evidences that, although students regard pronunciation as a relevant and desirable skill to master, the time they dedicate to it and the type of instruction they receive may need improvement.

Evidence also suggests that students favor some pronunciation study habits when doing independent work. Figure 3 summarizes students' preferences. Following previous analyses, the interquartile range shows that only Having conversations in English received more than 75% ( $n \geq 25$ ) of opinions. The second set of answers ( $n \geq 17, \leq 24$ ) includes half of the study habits provided ( $n = 10$ ). In this case, students preferred more pragmatic and less metalinguistic activities. For example, asking for feedback, repeating sounds or phrases in different manners, and listening. The third quartile of study habits incorporated by students (between 25% and 49%;  $n \geq 9, \leq 16$ ) consists of only two choices: *Using specialized apps or software* and *Writing words in the phonetic alphabet*. However, the last quartile (25%;  $n \leq 8$ ) of answers includes seven habits. Among them, *Asking a native speaker for feedback* and *Keeping a pronunciation log* remain the least popular pronunciation study habits, appearing last in all three analyses. Finally, as in previous analyses, no student recommended a study habit not mentioned in the list provided.

**Figure 3** Summary of study habits acquired or further developed while taking English courses at the university



*Note.*  $N = 33$ .

*Source:* Compiled by the author based on survey responses.

This analysis provided insight into students' perceptions of pronunciation study habits. The findings also revealed which aspects were more salient or less popular, as well as the amount of time students devoted to improving their pronunciation outside of class.

## DISCUSSION

In light of the data analyzed, several conclusions can be drawn from this study. First, students consider pronunciation study habits as an effective tool to incorporate. However, they admit that they do not invest enough time in studying pronunciation. Some studies (Chen & Goh, 2011; Munro & Derwing, 2006;



Shariatmadari, 2020) have emphasized the importance of practice in improving pronunciation skills. Independent practice is essential to improving pronunciation; however, it also requires students to devote time to it, something that not all students do. Students also point out that the type of instruction they receive may sometimes be insufficient. The importance of instruction in language acquisition cannot be denied. Pronunciation training has unique characteristics as material development, planning, and the role of the professor (Darcy et al., 2021; Foote et al., 2012; McGregor & Reed, 2018; Nangimah, 2020) that need particular attention. If students notice that instruction may need improvement, solutions as faculty training, calibration, and material development will improve class and independent work.

Second, some pronunciation study habits consistently rank at the bottom of the lists. For example, *Asking a native speaker for feedback*, *Keeping a pronunciation log*, and *The following extra courses and explanations* were part of the last quartile range. Although these habits may be absent due to teachers' preferences and personalities (Shabani & Ghasemian, 2017), students need more changes to learn to monitor their production (McCrocklin, 2016). Combining these three study habits could help them learn or reinforce the subject matter from an optional extra course, check their pronunciation with a native speaker, and finally, review their mistakes using a pronunciation log. In addition, despite technology's benefits for oral skills (Ali, 2016; Charpentier-Jiménez, 2020; Levis, 2007; Lord, 2008), its use remains relatively low. For example, *Using specialized apps or software* ranks at the bottom of the third quartile in recommendations from professors and use on the part of students. It also ranks in the fourth quartile in materials and syllabi. This corroborates the fact that some pronunciation study habits have a low impact on students' acquisition of oral skills.

Third, a substantial discrepancy exists between what professors recommend, what students find in materials or syllabi, and what they actually do when studying independently. For example, only three activities from all data analyzed made it to the top quartile: *Having conversations in English*, *Checking phonetic transcriptions*, and *Recording yourself*. To improve their pronunciation, students should develop pronunciation learning strategies to overcome any flaws in their oral skills (Pawlak & Szyszka, 2018). The role of professors and course materials is to guide students in their learning process; however, students do not necessarily follow the advice given. *Asking a classmate or friend for feedback*, *Doing pronunciation exercises from other books or sources*, and *Having conversations in English* obtained inconsistent scores in at least one of the categories. Other categories, as *Checking phonetic transcriptions* and *Repeating individual sounds in isolation*, seem more balanced and useful in all categories. Although it is not possible to know why some categories are more uniformly distributed, this discrepancy should be taken into account and further examined.

Finally, the results obtained in this study call for curricular reform. For example, materials and professors' opinions need to be more consistent. These data could promote curricular changes in second language acquisition programs. By analyzing students' current practices and exposure in terms of pronunciation study habits, professionals in charge of the curriculum may consider the necessity of including pronunciation study habits in materials and syllabi. In addition, faculty could receive better training on how to guide students during their independent work. The researcher invites other language teaching institutions to replicate this study. Students need a more structured program to decide in a more informed manner how to prepare independently and improve their oral communication skills and pronunciation proficiency.

## CONCLUSIONS

This study aimed to explore the study habits of English as a Second Language students at a public Costa Rican university, particularly focusing on pronunciation, a critical component of language learning that has not been sufficiently emphasized in the curriculum. The findings reveal that while students recognize the importance of pronunciation study habits and their potential to enhance learning outcomes, there is a significant gap in the time and effort dedicated to this aspect of their studies.

Firstly, the data indicate that students perceive pronunciation study habits as vital for improving their English skills, aligning with previous research that underscores the importance of pronunciation in achieving effective communication and academic success (Chen & Goh, 2011; Munro & Derwing, 2006). Despite this recognition, the majority of students reported insufficient engagement with pronunciation outside of classroom settings, suggesting a disconnect between their perceptions and actual study practices.

Moreover, the results highlight a lack of systematic exposure to pronunciation study habits within the language instruction at the university. This observation suggests that while students are aware of the benefits of these habits, the current curriculum does not adequately support or promote these activities, leaving students to navigate their learning independently. This finding aligns with the literature, which suggests that pronunciation is often neglected in language teaching, with inadequate emphasis on developing autonomous learning skills that could bridge this gap (Levis & Grant, 2003; Derwing & Munro, 2015).

The study also contributes to the existing literature by providing insights into the specific pronunciation study habits that are most and least favored by students. Activities involving direct interaction and practical application, as having conversations

in English and checking phonetic transcriptions, were among the most valued. Conversely, less practical and more isolated activities, like keeping a pronunciation log, were less favored, which may reflect students' preferences for more engaging and interactive forms of learning.

In conclusion, the findings from this study not only reinforce the importance of pronunciation study habits in ESL education but also highlight significant areas for improvement in how these habits are integrated into language programs. To bridge the identified gaps, it is recommended that curriculum developers and educators enhance the systematic inclusion of pronunciation activities and support students in becoming more autonomous learners. Future research should continue to explore effective strategies for integrating pronunciation study habits into language learning, with a focus on developing practical and engaging approaches that align with student preferences and educational outcomes.

### Limitations and Future Directions

This study has two main limitations that deserve attention. First, the study focused on a BA in English and a BA in English teaching, where students learn the language and learn to analyze the language from a more linguistic or academic perspective. The syllabi concentrate on metalinguistic features as transcriptions. Students also have specific oral courses that are usually the most demanding in terms of credits and time. Therefore, these results may not be generalized to what occurs in other programs that focus on general English or English for occupational purposes, among others.

Second, the number of groups and professors in this university is usually large and diverse compared to other universities with the same majors as this study includes. For example, there are

usually eight groups in the first courses, and oral courses may go from seven to three groups, depending on the level. Therefore, the type of previous exposure students received may have been different and affected the results. For example, some students may have had a professor who consistently stressed pronunciation study habits, while others focused on more traditional activities.

Researchers should replicate this study in other language programs according to students' language needs and level. For example, not all populations need to learn how to transcribe or read phonetic transcriptions. In addition, not all students may have access to language apps or native speakers. Therefore, other pronunciation study habits may be taken into account to fit specific language programs.

Further research should also be undertaken to determine the impact of including pronunciation study habits more systematically in a language program. In addition, professors' opinions should be explored to discover why they advise students to use some pronunciation study habits but not others and why some are not included in course materials more systematically.

## REFERENCES

- Alghazo, S. M. (2015). Advanced EFL Learners' Beliefs about Pronunciation Teaching. *International Education Studies*, 8(11), 63. <https://doi.org/10.5539/ies.v8n11p63>
- Ali, S. (2016). Towards the development of a comprehensive pedagogical framework for pronunciation training based on adapted automatic speech recognition systems. In S. Papadima-Sophocleous, L. Bradley, & S. Thoučsny (Eds.), *CALL communities and culture – short papers from EUROCALL 2016* (pp. 7–13). Research-publishing.net. <https://doi.org/10.14705/rpnet.2016.eurocall2016.530>

- Atar, C. (2018). Should we teach pronunciation explicitly in L2/EFL classrooms? *International Journal of Contemporary Educational Research*, 5(2), 95–102. <https://doi.org/10.33200/ijcer.486044>
- Bai, B., & Yuan, R. (2019). EFL teachers' beliefs and practices about pronunciation teaching. *ELT Journal*, 73(2), 134–143. <https://doi.org/10.1093/elt/ccyo40>
- Baker, A., & Burri, M. (2016). Feedback on Second Language Pronunciation: A case study of EAP teachers' beliefs and practices. *Australian Journal of Teacher Education*, 41(6), 1–19. <https://doi.org/10.14221/ajte.2016v41n6.1>
- Blanche, P. (2004). Using dictation to teach pronunciation. *Linguagem & Ensino*, 7(1), 175–191.
- Boersma, P., & Weenink, D. (2024). Praat: Doing phonetics by computer [Computer program]. Version 6.3.09. <http://www.praat.org/>
- Browman, C. P., & Goldstein, L. (1992). Articulatory phonology: An overview. *Phonetica*, 49, 155–180. <http://dx.doi.org/10.1159/000261913>
- Brown, A. (2022). *Activities and exercises for teaching English pronunciation*. Routledge. <https://doi.org/10.4324/9781003092247>
- Caballero, D. R., & Rosado, N. (2018). Neurolinguistic programming and regular verbs past tense pronunciation teaching. *English Language Teaching*, 11(11), 1. <https://doi.org/10.5539/elt.v11n11p1>
- Celce-Murcia, M., Brinton, D., & Goodwin, J. M. (2010). *Teaching pronunciation: a course book and reference guide* (2nd ed). Cambridge University Press.
- Charpentier-Jiménez, W. (2020). Adult students' perceptions of Mobile Assisted Language learning in Oral English Courses. *Revista de Lengua Modernas*, 31. <https://doi.org/10.15517/rfm.voi31.40873>
- Chen, Z., & Goh, C. (2011). Teaching oral English in higher education: Challenges to EFL teachers. *Teaching in Higher Education*, 16(3), 333–345. <https://doi.org/10.1080/13562517.2010.546527>

- Couper, G. (2017). Teacher cognition of pronunciation teaching: Teachers' concerns and issues. *TESOL Quarterly*, 51(4), 820–843. <https://doi.org/10.1002/tesq.354>
- Couper, G. (2021). Pronunciation teaching issues: Answering teachers' questions. *RELC Journal*, 52(1), 128–143. <https://doi.org/10.1177/0033688220964041>
- Cucchiari, C. & Strik, H. (2018). Automatic speech recognition for second language pronunciation training. In O. Kang, R. Thomson, & J. Murphy (Eds.), *The Routledge Handbook of Contemporary English Pronunciation*, (pp. 556-569). Routledge. <https://doi.org/10.4324/9781315145006-35>
- Crystal, D. (2008). *A dictionary of linguistics and phonetics* (6th ed). Blackwell Pub. <https://doi.org/10.1002/9781444302776>
- Darcy, I., Rocca, B., & Hancock, Z. (2021). A window into the classroom: How teachers integrate pronunciation instruction. *RELC Journal*, 52(1), 110–127. <https://doi.org/10.1177/0033688220964269>
- Derwing, T. M., & Munro, M. J. (2015). *Pronunciation fundamentals: evidence-based perspectives for L2 teaching and research*. John Benjamins Publishing Company. <https://doi.org/10.1075/llt.42>
- Everly, P. (2019). Expanding pronunciation instructional time beyond the classroom: Microsoft Office 2016 OneNote Class Notebook as an interactive delivery platform. *TESOL Journal*, 10(2), e00421. <https://doi.org/10.1002/tesj.421>
- Evers, K., & Chen, S. (2021). Effects of automatic speech recognition software on pronunciation for adults with different learning styles. *Journal of Educational Computing Research*, 59(4), 669–685. <https://doi.org/10.1177/0735633120972011>
- Foote, J. A., Holtby, A. K., & Derwing, T. M. (2012). Survey of the teaching of pronunciation in adult ESL programs in Canada, 2010. *TESL Canada Journal*, 29(1), 1. <https://doi.org/10.18806/tesl.v29i1.1086>

- Foote, J. (2018). Ethics and the business of pronunciation instruction. In P. Avery & S. Ehrlich (Eds.), *The Routledge Handbook of Contemporary English Pronunciation*, (pp. 284-297). Routledge. <https://doi.org/10.4324/9781315145006-18>
- Fraser, H. (2011). Phonetics and phonology. In J. Simpson (Ed.), *The Routledge handbook of applied linguistics* (pp. 584-596). Routledge.
- Gordon, J. (2021). Pronunciation and task-based instruction: Effects of a classroom intervention. *RELC Journal*, 52(1), 94-109. <https://doi.org/10.1177/0033688220986919>
- Hamad, M. M., Metwally, A. A., & Alfaruque, S. Y. (2019). The impact of using youtubes and audio tracks imitation YATI on improving speaking skills of EFL learners. *English Language Teaching*, 12(6), 191. <https://doi.org/10.5539/elt.v12n6p191>
- Hismanoglu, M. (2006). Current perspectives on pronunciation learning and teaching. *Journal of Language and Linguistic Studies*, 2(1), 101-110.
- Huensch, A. (2019). Pronunciation in foreign language classrooms: Instructors' training, classroom practices, and beliefs. *Language Teaching Research*, 23(6), 745-764. <https://doi.org/10.1177/1362168818767182>
- International Phonetic Association (Ed.). (1999). *Handbook of the International Phonetic Association: a guide to the use of the International Phonetic Alphabet*. Cambridge University Press.
- Irawan, L. A. (2023). Learning habits and speech intelligibility of EFL learners. *EDULANGUE*, 6(1), 73-88. <https://journal.uinmataram.ac.id/index.php/edulangue/article/view/7407/2756>
- Isaacs, T. (2018). Fully automated speaking assessment: Changes to proficiency testing and the role of pronunciation. In O. Kang, R. Thomson, & J. Murphy (Eds.), *The Routledge Handbook of Contemporary English Pronunciation*, (pp. 570-584). Routledge. <https://doi.org/10.4324/9781315145006-36>



- Juan-Checa, J. J. (2017). *Comparing phonetic difficulties by EFL learners from Spain and Japan*. <https://doi.org/10.6035/ForumRecerca.2017.22.27>
- Kang, O. (2015). Learners' perceptions toward pronunciation instruction in three circles of World Englishes. *TESOL Journal*, 6(1), 59–80. <https://doi.org/10.1002/tesj.146>
- Kartal, G., & Korucu-Kis, S. (2020). The use of Twitter and Youglish for the learning and retention of commonly mispronounced English words. *Education and Information Technologies*, 25(1), 193–221. <https://doi.org/10.1007/s10639-019-09970-8>
- Kayaoğlu, M. N. & Çaylak, N. (2013). What is needed for correct pronunciation: a model or a concern? *Egitim Arastirmalari-Eurasian Journal of Educational Research*, 53, 269-290. <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=61a0e1299fae70c299f3cd9fc3583ac3a4dd4a77>
- Karyuatry, L., Nurkamto, J., & Rochsantiningasih, D. (2020). Authentic materials for freshmen students: A case of speaking class in a private university. *International Online Journal of Education and Teaching (IOJET)*, 7(2), 553-565.
- Lane, L., & Brown, H. D. (2010). *Tips for teaching pronunciation: A practical approach*. Pearson Longman.
- Levelt, W. J. M. (1989). *Speaking: From intention to articulation*. MIT Press.
- Levis, J. (2007). Computer technology in teaching and researching pronunciation. *Annual Review of Applied Linguistics*, 27. <https://www.proquest.com/docview/197926498?sourcetype=Scholarly%20Journals>
- Levis, J. M., & Grant, L. (2003). Integrating pronunciation into ESL/EFL classrooms. *TESOL Journal*, 12(2), 13–19. <https://doi.org/10.1002/j.1949-3533.2003.tb00125.x>

- Lord, G. (2008). Podcasting communities and second language pronunciation. *Foreign Language Annals*, 41(2), 364–379. <https://doi.org/10.1111/j.1944-9720.2008.tb03297.x>
- Matthews, P. H. (2014). *The concise Oxford dictionary of linguistics* (Third edition). Oxford University Press.
- McCrocklin, S. M. (2016). Pronunciation learner autonomy: The potential of Automatic Speech Recognition. *System*, 57, 25–42. <https://doi.org/10.1016/j.system.2015.12.013>
- McGregor, A. & Reed, M. (2018). Integrating pronunciation into the English Language curriculum: A framework for teachers. *The CATESOL Journal*, 30(1), 69–94.
- Meisarah, F. (2020). Mobile-Assisted Pronunciation Training: The Google Play Pronunciation and Phonetics Application. *Script Journal: Journal of Linguistics and English Teaching*, 5(2), 70–88. <https://doi.org/10.24903/sj.v5i2.487>
- Messum, P., & Young, R. (2021). Teaching students to pronounce English: A motor skill approach in the classroom. *RELC Journal*, 52(1), 169–178. <https://doi.org/10.1177/0033688220964107>
- Milovanov, R., Pietilä, P., Tervaniemi, M., & Esquef, P. A. A. (2010). Foreign language pronunciation skills and musical aptitude: A study of Finnish adults with higher education. *Learning and Individual Differences*, 20(1), 56–60. <https://doi.org/10.1016/j.lindif.2009.11.003>
- Mohsen, M. A. (2016). The use of help options in multimedia listening environments to aid language learning: A review: Help options. *British Journal of Educational Technology*, 47(6), 1232–1242. <https://doi.org/10.1111/bjjet.12305>
- Mompean, J. A., & Fouz-González, J. (2021). Phonetic symbols in contemporary pronunciation instruction. *RELC Journal*, 52(1), 155–168. <https://doi.org/10.1177/0033688220943431>
- Morgan, C. (2003). *Musical aptitude and second language phonetics training: Implications for teaching methodology* [Unpublished doctoral dissertation]. Simon Fraser University.

- Munro, M. J., & Derwing, T. M. (2006). The functional load principle in ESL pronunciation instruction: An exploratory study. *System*, 34(4), 520–531. <https://doi.org/10.1016/j.system.2006.09.004>
- Nangimah, M. (2020). How should we counter challenges in teaching pronunciation for EIL? *JET (Journal of English Teaching)*, 6(1), 24–39. <http://ejournal.uki.ac.id/index.php/jet/article/view/1357/1156>
- Naiman, N. (2003). A communicative approach to pronunciation teaching. In O. Kang, R. Thomson, & J. Murphy (Eds.), *Teaching American English pronunciation* (pp. 163-171). Oxford University Press.
- Osatananda, V., & Thinchana, W. (2021). Using Praat for English pronunciation self-practice outside the classroom: Strengths, weaknesses, and its application. *LEARN Journal: Language Education and Acquisition Research Network*, 14(2), 372-396.
- Pardede, P. (2018). Improving EFL students' English pronunciation by using the explicit teaching approach. *JET (Journal of English Teaching)*, 4(3), 143. <http://ejournal.uki.ac.id/index.php/jet/article/view/852/688>
- Pawlak, M. (2010). Teaching foreign language pronunciation: Issues in research focus and methodology. In E. Wanick-Klimczak (Ed.), *Issues in accents of English 2: Variability and norm* (pp. 169-183). Newcastle upon Tyne: Cambridge Scholars Publishing. 169-183.
- Pawlak, M., & Szyszka, M. (2018). Researching pronunciation learning strategies: An overview and a critical look. *Studies in Second Language Learning and Teaching*, 8(2), 293–323. <https://doi.org/10.14746/ssllt.2018.8.2.6>
- Pérez-Castillejo, S. (2021). Automatic speech recognition: Can you understand me? In T. Beaven & F. Rosell-Aguilar (Eds.), *Innovative language pedagogy report* (pp. 121–126). Research-publishing.net. <https://doi.org/10.14705/rpnet.2021.50.12.46>

- Peterson, S. S. (2000). *Pronunciation learning strategies: A first look* [Unpublished research report]. ERIC. <https://eric.ed.gov/?id=ED450599>
- Renals, S., & Hain, T. (2010). Speech recognition. In A. Clark, C. Fox, & S. Lappin (Eds.), *The handbook of computational linguistics and natural language processing* (pp. 299-332). Wiley-Blackwell. <https://doi.org/10.1002/9781444324044.ch12>
- Richards, J. C., & Schmidt, R. W. (2010). *Longman dictionary of language teaching and applied linguistics* (4th ed). Longman.
- Roach, P. (2009). *English phonetics and phonology: a practical course* (4th ed). Cambridge University Press.
- Saleh, A. J., & Gilakjani, A. P. (2021). Investigating the impact of computer-assisted pronunciation teaching (CAPT) on improving intermediate EFL learners' pronunciation ability. *Education and Information Technologies*, 26(1), 489-515. <https://doi.org/10.1007/s10639-020-10275-4>
- Sardegna, V. G. (2020). Pronunciation and good language teachers. In C. Griffiths & Z. Tajeddin (Eds.), *Lessons from Good Language Teachers* (1st ed., pp. 232-245). Cambridge University Press. <https://doi.org/10.1017/9781108774390.021>
- Shabani, K., & Ghasemian, A. (2017). Teacher's personality type and techniques of teaching pronunciation. *Cogent Education*, 4(1). <https://doi.org/10.1080/2331186X.2017.1313560>
- Shariatmadari, D. (2020). *Don't believe a word: the surprising truth about language* (First American edition). W. W. Norton & Company.
- Sicola, L. (2008). *No, they won't just sound like each other! NNS-NNS negotiated interaction and attention to phonological form on targeted L2 pronunciation tasks* [Unpublished doctoral dissertation]. University of Pennsylvania
- Talebzadeh, H., & Gholami, L. (2015). The Relationship between English Pronunciation Self-Concept and English Learning. *International Letters of Social and Humanistic Sciences*, 60, 54-59.

[https://www.researchgate.net/publication/282900212\\_The\\_Relationship\\_between\\_English\\_Pronunciation\\_Self-Concept\\_and\\_English\\_Learning#fullTextFileContent](https://www.researchgate.net/publication/282900212_The_Relationship_between_English_Pronunciation_Self-Concept_and_English_Learning#fullTextFileContent)

- Tominaga, Y. (2009). An analysis of successful pronunciation learners: In search of effective factors on pronunciation teaching. *Journal of Pan-Pacific Association of Applied Linguistics*, 13(1), 127-140.
- Yao, H. (2008). *An interview study of native Chinese-speaking English as a foreign language university students' experience of acquiring English pronunciation* [Unpublished doctoral dissertation]. University of Kansas.
- Zárate-SándeZ, G. (2020). Bringing pronunciation back into the ESL/EFL classroom: Current research trends and recommendations for teachers and teacher trainers. *Argentinian Journal of Applied Linguistics*, 8(2), 78-94.
- Zhang, R., & Yuan, Z. (2020). Examining the effects of explicit pronunciation instruction on the development of L2 pronunciation. *Studies in Second Language Acquisition*, 42(4), 905-918. <https://doi.org/10.1017/S0272263120000121>

## Appendix 1

Study Habits in the BA in English and English Teaching at a Costa Rican Public University.

The purpose of this survey is to determine to what extent pronunciation study habits have been properly addressed in the B.A. in English and English Teaching. It also seeks to discover what perception students have regarding this issue.

This survey should take no more than 10 minutes of your time. All answers are anonymous. Your participation in this brief survey is greatly appreciated.

### Written Consent

I hereby confirm that I have read the written consent titled “Fourth Year Students’ Perception of Pronunciation Study Habits” and accept to participate in this study.

1. Mark only one option.

Participate  Do not participate

### Demographic Information

The University of Costa Rica does not discriminate on the basis of sexual orientation, gender identity/expression, age, or national origin. In order to track the reach and effectiveness of our learning experiences and ensure we address the needs of all, please consider the following questions:

2. What is your gender?

Male

Female

Non-binary / third

Prefer not to say Other:

3. What is your age?

Below 18

18 – 24

25 – 34

35 – 44

45 – 54

Above 54

Prefer not to say

4. What is your native language?

Spanish

English

- Prefer not to say
- Other: \_\_\_\_\_

5. What major are you enrolled in?
- English only
  - English Teaching only
  - Both
  - Prefer not to say

### Pronunciation Study Habits Recommended by Professors

Answer the following questions taking into account any advice professors have given you about pronunciation study habits in any course of the study plan.

6. Please indicate your level of agreement with the following statement: "Professors' recommendations about pronunciation study habits have been good and sufficient."
- Strongly Agree
  - Agree
  - Neutral
  - Disagree
  - Strongly Disagree
7. What types of pronunciation study habits have your professors recommended you? Please choose all that apply.
- All of them
  - None
  - Recording yourself
  - Studying minimal pairs
  - Studying spelling patterns
  - Having conversations in English
  - Reviewing how articulators work

- \_\_\_ Checking phonetic transcriptions
- \_\_\_ Using specialized apps or software
- \_\_\_ Asking your professor for feedback
- \_\_\_ Asking a native speaker for feedback
- \_\_\_ Writing words in the phonetic alphabet
- \_\_\_ Repeating individual sounds in isolation
- \_\_\_ Asking a classmate or friend for feedback
- \_\_\_ Consulting an online pronunciation dictionary
- \_\_\_ Drilling (repeating words or sentences in isolation)
- \_\_\_ Shadowing (repeating audio segments after a speaker)
- \_\_\_ Reading written passages aloud (in pairs or individually)
- \_\_\_ Doing pronunciation exercises from other books or sources
- \_\_\_ Listening to audio materials (podcasts, audiobooks, news, etc)
- \_\_\_ Following extra courses and explanations (Rachel's English, etc )
- \_\_\_ Keeping a pronunciation log (writing words to review their pronunciation later) Other:

### **Pronunciation Study Habits Recommended in the Syllabus or Course Anthology**

Answer the following questions taking into account your studies in the BA in English or English Teaching. Please consider the core block courses (oral courses, writing courses, literature courses, and grammar courses) in Lenguas Modernas only.

8. Please indicate your level of agreement with the following statement: "The recommendations about pronunciation study habits included in the syllabus or anthology have been good and sufficient."
  - \_\_\_ Strongly Agree
  - \_\_\_ Agree
  - \_\_\_ Neutral



- Disagree  
 Strongly Disagree
9. What types of pronunciation study habits have you seen in the course syllabi or anthologies? Please choose all that apply.
- All of them  
 None  
 Recording yourself  
 Studying minimal pairs  
 Studying spelling patterns  
 Having conversations in English  
 Reviewing how articulators work  
 Checking phonetic transcriptions  
 Using specialized apps or software  
 Asking your professor for feedback  
 Asking a native speaker for feedback  
 Writing words in the phonetic alphabet  
 Repeating individual sounds in isolation  
 Asking a classmate or friend for feedback  
 Consulting an online pronunciation dictionary  
 Drilling (repeating words or sentences in isolation)  
 Shadowing (repeating audio segments after a speaker)  
 Reading written passages aloud (in pairs or individually)  
 Doing pronunciation exercises from other books or sources  
 Listening to audio materials (podcasts, audiobooks, news, etc)  
 Following extra courses and explanations (Rachel's English, etc)  
 Keeping a pronunciation log (writing words to review their pronunciation later) Other:

## Pronunciation Study Habits Incorporated by Students

Answer the following questions based on your own study habits.

10. How many hours of extra class time per week do you dedicate to improving your pronunciation?
- Less than 2 hours
  - Between 2 and 4 hours
  - Between 4 and 6 hours
  - Between 6 and 8 hours
  - More than 8 hours
  - I do not dedicate extra class time to work on pronunciation.
11. Please indicate your level of agreement with the following statement: "I dedicate extra class time to study pronunciation even if I have no homework related to pronunciation."
- Yes
  - No
12. Please indicate your level of agreement with the following statement: "Dedicating extra class time to studying pronunciation improves my pronunciation skills."
- Strongly Agree
  - Agree
  - Neutral
  - Disagree
  - Strongly Disagree
13. Please indicate your level of agreement with the following statement: "Improving my pronunciation is one of my main goals."
- Strongly Agree

- Agree
- Neutral
- Disagree
- Strongly Disagree

14. To what language component do you dedicate most of your study time?

- Grammar features
- Listening skills
- Oral skills
- Reading skills
- Vocabulary acquisition
- Writing skills
- Other: \_\_\_\_\_

15. What types of pronunciation study habits have you acquired or further developed while taking English courses at UCR? Please choose all that apply.

- All of them
- None
- Recording yourself
- Studying minimal pairs
- Studying spelling patterns
- Having conversations in English
- Reviewing how articulators work
- Checking phonetic transcriptions
- Using specialized apps or software
- Asking your professor for feedback
- Asking a native speaker for feedback
- Writing words in the phonetic alphabet
- Repeating individual sounds in isolation
- Asking a classmate or friend for feedback

- Consulting an online pronunciation dictionary
- Drilling (repeating words or sentences in isolation)
- Shadowing (repeating audio segments after a speaker)
- Reading written passages aloud (in pairs or individually)
- Doing pronunciation exercises from other books or sources
- Listening to audio materials (podcasts, audiobooks, news, etc)
- Following extra courses and explanations (Rachel's English, etc)
- Keeping a pronunciation log (writing words to review their pronunciation later)
- Other: \_\_\_\_\_

**16.** Please add any other comment you believe necessary.