THE EFFECTS OF PRONUNCIATION INSTRUCTION ON THE PRODUCTION OF SECOND LANGUAGE SPANISH: A CLASSROOM STUDY

A Dissertation submitted to the Faculty of the Graduate School of Arts and Sciences of Georgetown University in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Spanish and Portuguese

By

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Evidence suggests that pronunciation instruction is just as effective as grammar or vocabulary instruction (Lee et al., 2014; Thomson & Derwing, 2014). Despite supporting research, pronunciation instruction in the Spanish as a foreign language (L2) curricula is often excluded or relegated as a peripheral component, likely because practitioners do not have the proper training on how to teach it (Arteaga 2000; Lord & Fionda, 2014). Even though studies in Spanish L2 pronunciation instruction are still scarce, they have found that pronunciation instruction leads to gains in L2 native-like perception and production (Casino, 1996; González Bueno, 1997; Elliot, 1995, 1997; Lord, 2005, 2008 2010; Kissling 2013, 2014); however, most researchers agree that methodological refinement is needed before jumping to robust conclusions, especially in terms of length of intervention, diverse outcome measures or the inclusion of a control group.

The present study aims to address several of these issues by examining the effectiveness of second language pronunciation instruction on adult L2 learners of Spanish in a classroom. Eighty-three (n=83) learners of Spanish as a second language were recruited. Participants in the experimental condition (n=38) received instruction on commonly difficult segments in L2
Spanish for first language (L1) English speakers in a classroom setting from the beginning to the end of a semester (12 weeks). The outcome measures in this study included an acoustic analysis, as measured by a word-reading task on the development of voiceless plosives /p, t, k/; and also included human rating analysis, as measured by a controlled paragraph-reading task and a spontaneous picture-description task. Furthermore, this study explores the extent to which pronunciation contributes to intelligible speech in L2 Spanish. For that reason, experienced first language (L1) Spanish bilinguals rated elicited speech in terms of accentedness (i.e. linguistic nativelikeness) and comprehensibility (i.e. ease of understanding). In addition, this study seeks to shed light on the effectiveness of teaching pronunciation while considering the level of instruction (first, second, and third year students).

Results suggest that pronunciation instruction is beneficial to all voiceless plosives phones in the acoustic analysis. In the case of human rating analyses, results suggest that these effects are only perceived by raters at the controlled level in terms of accentedness. Finally, instruction was beneficial at the three curricular levels, suggesting that pronunciation instruction should be part of different stages in the Spanish L2 curricular sequence.

Results are discussed in terms of its theoretical, methodological and pedagogical implications. A special emphasis is given on the advantages of pronunciation instruction and a call for more teachers and practitioners to include it in the L2 Spanish classroom.
Dedicado a mi familia: Enrique, Ana María, Valentina y Linda.
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CHAPTER 1: INTRODUCTION

The present study aims to bridge several gaps in the literature by empirically testing the effectiveness of classroom-based pronunciation instruction in foreign language (L2) Spanish. First, the goal of this dissertation is to assess the effectiveness of pronunciation instruction in a classroom setting, from beginning to end of semester. It seeks to contribute to the current state of research on the effects of pronunciation instruction in L2 classrooms, but especially of pronunciation instruction in L2 Spanish. Existing literature suggests that pronunciation instruction, particularly in L2 English is just as effective as grammar or vocabulary instruction (Lee et al., 2014; Thomson and Derwing, 2014). The Spanish pronunciation instruction literature, which is still scarce and with only a handful of studies (i.e. Casino, 1996; González Bueno, 1997; Elliot, 1995, 1997; Lord, 2005, 2008 2010; Kissling, 2012, 2013, 2014) featured in peer-review journals, supports that pronunciation instruction is effective. Despite its scarcity, Spanish pronunciation instruction has presented promising results, in particular in the improvement of phonetic accuracy and achievement of native-like perception.

Along these lines, this study seeks to contribute to Spanish pronunciation instruction by addressing several research-design and methodological issues pointed out in previous studies, such as length of treatment, outcome measures, number of participants, and lack of control group.

Second, previous research on Spanish pronunciation instruction investigates development of L2 Spanish segments (and some suprasegmentals) in terms of native-like perception, native-like production, and global ratings; this study focuses on the last two. In order to evaluate the
effects of a semester of Spanish pronunciation instruction, native-like production is measured through acoustic analyses and global ratings by human raters’ analyses which measure the degree of perceived accentedness (i.e. linguistic nativelikeness), and comprehensibility (i.e. ease of understanding).

Most acoustic analysis studies in Spanish pronunciation instruction show that instruction has a positive effect, although not in all cases. Scholars have pointed out that factors such as length of treatment, having a control group, and different type of outcome measure can affect results. This study assessed Spanish L2 voiceless plosives /p, t, k/ for the acoustic analysis, as it is one natural class that has been problematic for native English-speakers learning Spanish (Zampini, 2014). In regards to human raters’ analysis, no study has measured to what extent Spanish pronunciation instruction has an effect on the constructs of accentedness and comprehensibility. The debate of whether pronunciation instruction’s main purpose is to help learners become more understandable or rather help them achieve accented-less speech has been central for almost two decades in pronunciation instruction (especially for L2 English). Scholars have argued that comprehensibility is a more realistic goal than accentedness (Derwing & Munro 2009, Levis 2005). This has been supported by findings claiming that L2 accented speech can be in fact quite comprehensible (Munro & Derwing, 1999, Crowther et al., 2014). They have also pointed out that in most situations of L2 usage, what really counts is L2 speakers’ ability to be understood, rather than the quality or native-likeness of their accent (Derwing & Munro, 1997; Jenkins, 2000; Munro & Derwing, 2011). Furthermore, Isaacs & Trofimovich (2012) note that
comprehensibility is “central to interlocutors communicative success in real-world context” (p. 475).

Accordingly, comprehensibility is an important construct that is absent but needs to be addressed in the Spanish pronunciation instruction literature. A problem with the lack of the literature in comprehensibility is that there is no consensus on what exactly comprehensible speech in L2 Spanish looks like, opposed to accented speech. It could be related to suprasegmentals factor only, or it may be that some segments are more important than others. What is certain from previous research (e.g. Saito et al., 2015) is that while accentedness is only related to phonetics domains, comprehensibility (or the lack of it) is related to all domains of L2 speech.

For this reason, comprehensibility is tackled in this study along with another construct: accentedness. Despite the critics, scholars have not dropped the study of the degree of foreign accent altogether. Most scholars point out that learners still have a strong desire to reduce the foreign accent of their speech, and despite the difficulty to achieve it for most L2 learners, it is still an important variable to take into account. Among other reasons, native speakers’ perception on foreign accent are undoubtedly intuitive, effortless to the point that native speakers can detect it from very little input presented to them. Rather than to make these two constructs antagonize each other, researchers suggest that a focus exclusively on accent by itself is not enough because (1) only few L2 learners achieve native-like pronunciation and (2) accented speech can be in fact very comprehensible. Focusing on both constructs, rather than accentedness only, can help researchers understand the multifaceted nature of L2 pronunciation.
In conclusion, this dissertation contributes important insights on the role of pronunciation instruction in Spanish. Moreover, it pushes an agenda for language practitioners to explore these secluded areas both in the classroom and in research, which in turn helps support the idea that pronunciation instruction is just as important as other areas of L2 instruction.
CHAPTER 2: BACKGROUND

Pronunciation instruction has shown improvement of L2 pronunciation in several languages (e.g. Pennington & Richards, 1986; Derwing et al. 1998; Moyer 1999; Saito 2011), including Spanish (e.g. Elliot 1995, 2003; Lord 2005, 2008; Kissling, 2013). Although, in some cases, reviews of empirical research of pronunciation instruction have observed mixed results (Lord & Fionda, 2014). Other reviews such as Lee et al.’s (2014) meta-analysis and Thomson & Derwing’s (2014) narrative review point out that instruction on pronunciation can be as effective as vocabulary, grammar or pragmatic instruction and that most empirical research has reached statistical significance. However, they also stress that methodological refinement is needed before jumping to robust conclusions. As Saito's (2012) review of L2 experimental studies and Lee et al.’s (2014) suggest, longer interventions, instruction that provides feedback and more controlled outcome measures yield significant results more often than treatment which do not feature one or all of these elements.

Pronunciation Instruction And SLA: A Brief Overview

Before the 1980s, pronunciation instruction had been subject to trends, and mostly relegated to pronunciation manuals rather than empirical research. Pronunciation instruction was not considered relevant during the grammar-translation method era, as the focus was in written texts and written modes of communication. In contrast, during the audio-lingual period, pronunciation instruction was understood as one of the most important skills to be learned.
Arteaga (2000), in her review of Spanish textbooks, illustrated this with examples of textbooks from these periods. In a textbook written during the grammar-translation method period, pronunciation instruction was included as an optional reference at the end of a manual, whereas in a textbook written during the audio-lingual period, the first chapter was solely dedicated to pronunciation. Technical concepts such as phoneme, allophone, voiceless stops, etc. were explained in detail, and then each subsequent chapter had a component dedicated on pronunciation.

As the communicative approach emerged in the 1980s, again the importance of pronunciation instruction was relegated to a minimum, as common non-communicative tasks used in pronunciation instruction such as drills were highly stigmatized. Nevertheless, there were a handful of researchers trying to reconcile this approach with the teaching of pronunciation. Celce-Murcia (1983, 1987) proposed activities using meaningful utterances while encouraging learners to monitor for their own pronunciation; Terrell (1989) employed this approach in L2 Spanish. But, for instance, the explanation targeting students’ own production of voiceless stops, as pointed out by Arteaga (2000), seem to contradict the focus on meaning which the communicative approach originally prescribed. However, many of the insights of this period would be used in subsequent research. Wong (1987), for example, indicated the importance of intelligibility as an attainable goal in pronunciation instruction.

It is worth noting, that most of the research on pronunciation of this period was devoted to suprasegmentals, for it was considered important for communication and affective response (Chen, 1992; Wong, 1986). De Bot (1983) explored the effects of audio-visual (pitch display)
and auditory-only feedback on production of English intonation. His results showed that audiovisual feedback had stronger effects than auditory-only feedback. This also became one of the first studies to feature CAPT (computer assisted pronunciation training) which became an element commonly used in subsequent research of pronunciation instruction by both practitioners and researchers. Anderson-Hsieh et al. 1992 also contributed in this line of research, and in his analysis of speech samples of 60 participants found that suprasegmentals are more important for pronunciation instruction than segments for global ratings in a specialized test.

It was not until the mid 1990s that phonetic instruction gained momentum in SLA, mainly by the contributions made by Murray Munro and Tracey Derwing. One of the pivotal papers that guide much of pronunciation instruction in subsequent years was Munro & Derwing (1995a). Although not a study on pronunciation instruction, they proposed pronunciation as a multidimensional construct, and that should be understood at least in terms of accentedness (i.e. linguistic native-likeness), intelligibility (the extent to which a speaker message is actually understood) and comprehensibility (ease of understanding or perceived intelligibility). These constructs have been used in pronunciation instruction studies in order to show that it is effective even in fossilized learners with long-term exposure to the L2 (Derwing et al., 1998).

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*a Comprehensibility and intelligibility, as O’Brien (2014) explained, both measure how understandable speech is, but they differ in the way they are operationalized: comprehensibility judgments rely on raters’ judgments while intelligibility requires listeners to provide evidence that they have understood.
In subsequent pronunciation instruction research, one of the most cited studies is one conducted by Derwing et al. (1998). The study examined how a 12 weeks ESL (English as a second language) course that included pronunciation instruction had an effect on comprehensibility, accent and fluency in 48 adult students with different L1 backgrounds. The study included different types of instruction to three groups. The first group received no pronunciation instruction and attended an ESL class (12 weeks, 20 hours per week) that focused on developing the traditional four skills. The second and third group did have pronunciation instruction each class for approximately 20 minutes. The second group received pronunciation instruction on global accent, focusing on features such as speaking rate, intonation, rhythm, word and sentence stress. Unlike the second group, the third group received instruction on individual segments.

The study had a pre-posttest design that included a controlled (reading aloud sentences) and a spontaneous (picture description) task. Gains in accentedness, comprehensibility and fluency (only in the spontaneous task) were rated by 48 native English speakers’ judges (with very high inter-rater reliability).

Results show that in a controlled task all groups improved in accentedness but only the segmental and global group improved comprehensibility. In the case of the spontaneous task, only the global group improved comprehensibility and fluency. At the end, researchers pointed out the importance of segmental and global instruction in pronunciation instruction as beneficial for ESL students.
Among the strengths of this study, it should be mentioned that it was first to compare the impact of segmental versus suprasegmental instruction, and also to present the effects of instruction on comprehensibility, fluency and accentedness. Further insights, include that having a strong accented speech does not necessarily correlate with difficulty in understanding (Derwing & Munro, 1997; Munro and Derwing 1995) and it also suggests that non-fluent speech can be comprehensible (Derwing et al., 2008).

It is clear that the insights obtained in these papers have motivated much of the research on pronunciation instruction in the 2000s and 2010s in particular when the analysis have been with raters on global pronunciation rather than by acoustic analysis. These ideas were subsequently framed in Levis’ (2005) Intelligibility Principle.

The main idea is that pronunciation instruction should be concerned with helping learners become more understandable rather than focusing on foreign accent reduction alone. It does not mean that accentedness has to be disregard, but Levis stated that it should not be seen as the only variable, and foreign accent should not be confounded with intelligibility. These ideas have influenced and shaped, much of the research on pronunciation instruction in the last decades, especially for L2 English (e.g., Derwing & Rossiter, 2003; Derwing et al., 2008; Munro & Derwing, 1995; Munro & Derwing 2011; Munro et al.1999; Parlak, 2010; Saito, 2007 Saito, 2011; Saito & Lister, 2011; Trofimovich et al., 2009).

As pronunciation instruction continues to evolve, important methodological refinement emerges. In the last years, this type of instruction has gained much more predominance as researchers become aware of the need of methodological refinements. Among these, we have
studies that discuss differences between traditional repetition and drills (Trofimovich & Gatbonton, 2006), the role of form-focused instruction, feedback, or explicit instruction (Saito & Lyster, 2012; Saito, 2013), the role of raters (Huang and Jun, 2015), as well as other areas.

Nowadays pronunciation instruction is expanding and continues to improve in terms of research methodologies in areas such as, but not limited to, length of treatment, outcome measures, participant demographics, classroom vs. laboratory studies, and use of technology. This refinement is reflected in the fact that observable effects on pronunciation instruction have increased over time, as pointed out by Lee et al. (2014). There has also been, however, a call for bigger samples, more diversity in terms of age, L1 and target language, the inclusion of delayed posttests and attention to other phonological features such as elision, linking and stress. In any case, almost all studies highlight the importance of pronunciation instruction in the L2 classroom. Levis (2005) pointed out that despite age effects still predicting pronunciation more than any other factor, motivation and pronunciation instruction still positively correlate with more native-like pronunciation.

**Pronunciation Instruction In L2 Spanish**

Studies of L2 pronunciation instruction have been continuously dominated by English as the target language. In Thomson & Derwing’s (2014) review, 74% of the 75 studies they reviewed examined ESL or EFL learners. In Spanish, although studies date back to the mid 90s, they are still scarce, and in many respects, whether pronunciation instruction is beneficial for L2 pronunciation in Spanish is still an empirical question.
The present study is concerned with pronunciation instruction of Spanish as an L2 in an instructed SLA context. First, a review of previous research with focus on Spanish pronunciation instruction is presented. Second, a comparison showcases the research methodology of pronunciation instruction in general with Spanish pronunciation instruction in order to shed some light on some fundamental questions.

Elliott (1995) investigated the effects of explicit instruction in L2 Spanish students (n=66) attending third-semester Spanish courses. This was a classroom study with both an experimental (n=43) and a control (n=23) group. The target structures were most of the segments that are considered difficult for L2 Spanish learners with L1 English: [a, e, i, o, u, p, t, k, b, ß, ð, ţ, r, n, s, z, w]. The study also collected and assessed data of nine positive and three negative statements about attitudes towards pronunciation.

Participants received explicit instruction (point, place and manner of articulation) and the rules were given deductively and inductively. Repetition (drills), jazz chants, rhymes, and tongue twisters were also included. In addition, there was a focus on corrective feedback (i.e. error correction, comparison with English, description of articulatory sound) and it was informed that they had an individual focus on students.

Instruction lasted 11 weeks with 10-15 minutes of pronunciation instruction in each class of 21 classes in total. The outcome measures in this study were 4 tasks used in the pre and posttest. Of these four, three were controlled tasks: (1) repetition of spoken words, (2) repetition of spoken sentences and (3) repetition of written words. The fourth task of the group was a spontaneous conversation. The analysis of the data consisted of rating on pronunciation by native
and near native speakers of Spanish. In task 1, 2 and 3, a sample of each sound per participant was chosen and scored based on a 3-point scale of incorrect, approximate and correct sound. Task 4 was scored on a 5 point scale from 1 (very poor accent) to 5 (native speaker).

The results showed significant improvement in the experimental group’s pronunciation, whereas the control group that received no additional instruction in phonetics did not make significant gains in the posttest. Subject attitude was not a predictor. Elliott concluded that pronunciation instruction with explicit instruction and corrective feedback are effective for L2 development, alongside with paying attention to different learning styles and individual differences in the classroom.

In 1997, Elliot presented an extension of his 1995 study. This time around, apart from the differences of experimental vs. control, Elliot (1997) focused on the differences of outcome measures (the three controlled tasks vs. the spontaneous task) and on the phonemes that were more likely to change. Results showed significant change only in the three controlled tasks but not in the spontaneous task. Regarding the selected phonemes, the liquids, stops and back vowels experimented significant change from pre to post-test.

González-Bueno (1997) examined the effects of pronunciation instruction in voiced and voiceless stops (/p, t, k, b, d, g/) of 60 L2 Spanish learners enrolled in a third semester Spanish class. Collection of data included oral interviews as pre- and post-tests. The treatment accompanied instruction with a brief period of explicit phonetic teaching including how difficult phones in Spanish are articulated, followed by sound discrimination and oral practice. González-Bueno’s results showed a reduction of VOT (voice onset time) values on all sounds in the
experimental group. He suggested that explicit instruction has a beneficial impact on L2 Spanish pronunciation.

Lord (2005) investigated the effects that instruction of explicit instruction and self-analysis had on 17 participants enrolled in an advanced Spanish phonetics course. The target structures were stops, approximants, rothics, diphthongs and suprasegmentals. The treatment consisted of a semester of phonetic instruction, practice, self-analysis software, and oral projects. The treatment lasted a full semester. The outcome measures were a reading aloud task and it was analyzed through acoustic analysis of spectrograms.

The researcher reported significant gains in all the target phones expect for ([p t k]). However, she did not include a control group, which makes it more difficult to assume that the improvements are made solely on phonetic instruction and not on input and practice alone.

Lord (2008) discusses the extent to which a collaborative podcasting project in an undergraduate Spanish phonetics class has an effect on L2 pronunciation abilities and attitudes towards pronunciation. Sixteen L2 Spanish speakers that worked in small groups had to record themselves every two weeks and complete a task that focused on a particular area of pronunciation (in relation to the course material) and the podcast also included tongue twisters, short readings, and personal reflection on students’ own pronunciation. Three judges (one native Spanish and two near-native Spanish speakers) assessed pronunciation abilities before and after the project. Attitudes and pronunciation were found to improve. The study did not include a control group so it is difficult to conclude that improvement is the result of the podcast project.
Lord (2010) sought to investigate the effects of L2 immersion combined with instruction on L2 pronunciation. In this study of 8 participants, half of the learners (n=4) took a Spanish phonetic course prior to departure to a L2 immersion setting and these experimented greater gains after the 8 weeks immersion experience. The target structures were the phones [b d g ß ð ã]. The outcome measures were a reading aloud task (list of words). And the data was acoustically analyzed on spectrograms, giving 0-1 value for inaccurate/accurate production.

The experimental group improved 17% more than control group in word list reading. Results suggest that a combination of instruction and full exposure in a study abroad setting had a greater effect than the effect of Phonetic instruction or immersion alone. However it is was not tested for significance due to the limited number of participants.

Saalfeld (2012) focused on the effects of explicit pronunciation instruction on suprasegmentals. The participants were L1 English speakers (n=26) learning Spanish as an L2. They were enrolled in a Second semester introductory Spanish course. The experiment had an experimental group (n=15) and control group (n=8). In addition, there were native speaker control groups in Spanish (n=8) and English (n=8). The target structure in the study was L2 Spanish stress perception. Participants had pronunciation instruction in their regular classroom which consisted of 10-15 minutes of instruction each day for 4 weeks; a total of 4 days a week, for a total of 4 hours of instruction.

The instruction consisted on aiding students’ awareness of the differences of Spanish and English stress, lexical access, or minimal pairs. It also included perceptual practice, producing target patterns and differences of meaning on stress contrast. Pre and posttest consisted on an
ABX task designed for stress placement judgment and reaction time. Thirty items of 3 sentences (not words) made of three minimal pairs. The results show no difference between experimental and control group. Results were inconclusive, and the researcher attributed it to the nature of the task (without distracters) and length of treatment.

Kissling (2013) investigated the effects of phonetic instruction on the production of Spanish segments in L2 students of Spanish (n=95). Students were enrolled in introductory, intermediate and advanced Spanish courses in the United States. The target structures were the development of plosives ([p t k ]), approximants ([β ð γ]) and rhotics ([ɾ r]) in L2 Spanish.

In this study the experimental group received computerized explicit instruction on articulation, perception, and production of the target sounds. Instruction consisted of (a) an introduction to articulatory phonetics, (b) explicit instruction of voiced stops, (c) approximants and (d) rhotics, including grapheme/morpheme correlation, explanations of place and manner of articulation that featured animated diagram of the oral tract. After sessions, there was a multiple choice comprehension test and a practice activity where students were asked to listen and repeat target words. The control group received the same input of target words but it did not include instruction.

The instruction lasted two weeks with two sessions each week. Delayed posttest was administered three weeks after treatment. The outcome measures were 28-item list of words that participants read aloud. No spontaneous task was administered. She argued that first year students would be cognitive overburdened by a spontaneous production task. For the analysis,
one independent rater judged in a 3-point scale the target sounds of participants for approximants and rhotics. Plosives were measured by VOT.

Results found that learners in both groups improved their pronunciation; therefore, there was no significant difference between the experimental and control group. The researcher pointed out limitations in terms of experimental task, class recruitment and timing. Her study is one of the few studies to incorporate a pre, post, and delayed post-test design.

Kissling (2014) examined the same treatment, target structure and participants of Kissling (2013) but in this case she investigated the effects of instruction on perception skills. The study followed Flege’s Speech Learning Model (1995), which states that the perception of subtle phonetic differences between L2 sounds and analogous sounds in the L1 is the first step in phonological acquisition. She used two outcome measures: (1) an AX task with target phones and distractors in different phonological environments (beginning and middle of syllables) and (2) a discrimination task, in which learners had to listen and write as accurate as possible what they heard. Results suggest that explicit phonetics instruction gave learners an advantage in terms of discrimination and identification of the target phones. Thus, the results support Flege’s model in the way that even though there was no observable production, it enhanced perception which is a predecessor of production.

In sum, Spanish L2 pronunciation instruction to date, though scarce, has contributed in identifying target phones (for L1 English speakers). In most studies, instruction is found to be effective. In terms of methodological issues, Spanish pronunciation instruction has featured both laboratory and classroom studies, and most studies have included control groups and long
interventions. However, these studies have approached pronunciation instruction under the nativeness principle, only focusing on foreign accent reduction. As a result, it is still unknown for Spanish L2 pronunciation what phonetic phenomena is important for comprehensibility.

**Theory And Pronunciation Instruction**

As noted by Thomson & Derwing (2014), most research in pronunciation instruction has been atheoretical. Overall, researchers in pronunciation instruction have been asking what are the consequences of pronunciation instruction, but not why. This is no surprise due to the lack of research of pronunciation instruction compared to other aspects of language in SLA research. In cases where theory is acknowledged, they refer to theories of language development. This section will outline a brief summary of the most common frameworks that can help us better understand phonetic development and the implications for pronunciation instruction.

**Optimality Theory (OT).** L2 Speech research has been often concerned with how L2 learners create new phonemic categories in their L2 development. In generative approaches, researchers have sought to understand the role of L2 development, for instance, in terms of transfer and markedness effects. Eckman (1991) formulated two hypotheses in terms of typological markedness: the Markedness Differential Hypothesis (MDH), and the Structural Conformity Hypothesis (SCH). The MDH predicts the areas of difficulty of language learning. For instance, areas of the L2 that differ from the L1 and are more marked will be difficult to learn, but those areas of the L1 which are different but less marked will not be as difficult to learn. The SCH states that generalizations from the L1 will also be used in the L2 as the
generative school assumes, there are a set of linguistics universal that all language obey. These principles have been also used in optimality theory (OT) accounts of L2 development.

**Usage-Based Theory.** Another theory that can be used to account for L2 phonetic phenomena is usage-based theories, which assert that phonological patterns that emerge from experience and language use can also give us great insights on the phonetic knowledge that speakers accumulate in their lifetime. Bybee (1976), for example, concluded that phonetic variation is associated not only to dialects or languages but also can be associated to word frequency and to lenition. She found that some phonemes are deleted in high frequency words but not in low frequency words in the same context.

Pierrehumbert (2001) introduces Exemplar Theory, a formal framework that aims to be capable to capture the quantitative predictions of usage-based phonology. Originally introduced in psychology as a model of perception and categorization, Pierrehumbert further developed it into a perception-production model.

Exemplar theory states that each category represented in memory by a large cloud of remembered tokens. These tokens are organized in cognitive maps, which make memories of similar instances of that token closer together, and dissimilar ones are further apart. Therefore, tokens that are remembered display a wide range of variation with different physical manifestations (formant values for example) of that category. This framework has several implications. First, it assumes that as any other cognitive capacity, memory decays, meaning tokens heard yesterday are more vivid than the ones heard a decade ago. Secondly, when a new token is encountered, it will be classified accordingly to the similarity of tokens already stored.
Pierrehumbert illustrates these assumptions in the following example of when /ɛ/ and /ɪ/ are considered for an unknown vowel token. In the stored memory, a few token of /ɛ/ have a higher frequency than a few tokens of /ɪ/. In that case the winner is the one with more activated exemplar in the system, the winning label should be the one that is more probable than its competitors. And since high frequency labels are associated with more numerous exemplars, they will have more activated exemplar clouds, so in a situation of ambiguity, the model will predict a bias towards a high-frequency label. One of the main advantages of this model is that it provides us with a way to formalize detailed phonetic knowledge that a native speaker has of the categories in their language, as a result the acquisition of that knowledge can be understood as the acquisition of a large number of tokens (or memory traces of experience).

**Speech Learning Model.** Theory on L2 Speech Learning is usually situated in Flege’s Speech Learning Model (1995) or Best’s Perceptual Assimilation Model. These models are concerned on how the nature of the category changes over time according to different stages of L2 development.

Flege’s Speech Learning Model (e.g., 1995, 1999, 2002) explains that phonetic categories, long-term memory representations of sound, file language-specific aspects of speech sounds. On that account, speech sounds (regardless whether they are L1 or L2) exist in one phonological space where properties of L1 and/or L2 phones continue to develop and hold achievements for each category. The implications of this theory are that the mechanism that are involved in language learning will remain intact in life, therefore, these mechanisms may be used for L2 learning.
Another fundamental idea of SLM is that production is always constrained and preceded by perception. In L2 cases, L2 attunement will always occur first in perception. L2 perception has to become native-like in order for relevant sensorimotor skills activation for production. As Saito (2013) discussed, this perception of new segmental sounds eventually led learners to (a) create new phonetic categories in long-term memory and (b) generalize the newly acquired phonetic knowledge from familiar to new lexical contexts.

In addition, L2 speech researchers have delineated the process of L2 speech development at different stages, which contribute useful insights for pronunciation instruction. First, L2 learners pay most attention to suprasegmentals patterns of the L2 and start to recognize separated words from the input (Cutler et al. 1997; Kuhl, 2004). Then, they learn to decode words, and their perception and production of L2 sounds are influenced by lexical factors such as familiarity or frequency (Flege, 2005) This was reflected in Saito & Lyster (2012) as participants were able to better produce the target structure in familiar words. Subsequently, the stage of phoneme discrimination follows as learners’ vocabulary increases and they increase awareness of word size units. In time, these learners recognize patterns of sound in a large vocabulary size with more ease, growing less subject to lexical factors as they are able to develop an L2 system, which resembles one of native speakers.

**Intelligibility Principle.** Much of the research previously outlined (specially in ESL and EFL) took into account Levis’ (2005) Intelligibility Principle. In general, Levis states that in the Intelligibility Principle’s framework, pronunciation instruction primary concern should be in
helping learners become understandable in opposition of what he calls, the Nativeness Principle in which pronunciation instruction only concerns achievement of native-like pronunciation.

As the names indicate, these are not theories but principles (or at best frameworks), which prescribe how research should be conducted in pronunciation instruction. However, in recent studies, a few researchers began adopting theories such as Couper (2011) who takes cognitive phonology into account and Derwing et al. (2014) who works upon MacIntyre’s (2007) Willingness to Communicate framework.

**Conclusion.** Theory and empirical studies should be observed in a cyclical manner, recognizing how the theory supports data and vice versa. As defined by Hulstijn (2015), findings in hypothesis-driven empirical research will lead to (1) support of a theory, (2) no support thus rejection or alternation of a theory, (3) revision of the original idea or (4) a combination of the last two.

For instance, in Spanish L2 development theory can explain why L2 learners cannot perceive /β/ and /b/. Phonological generative theory would claim that it is because of markedness constrains. Exemplar Theory, would state that at its initial stage, an L2 Spanish learner, for example, hear tokens of /β/ but since these are tokens of very low frequency the model would associate with a token that is already stored, in this case most likely /b/. This model would also predict frequency effects, a great amount of input would result in a reorganization of the system. However, this model would not and does not predict the effect of pronunciation instruction in enhanced noticing, in comparison to implicit natural exposure to the system.
This is also corroborated by L2 speech development studies which observe that reduction of VOT in voiceless stops in L2 Spanish will occur naturally (Nagle, 2014). There is also an overwhelming agreement (both theoretical and empirically) that voiced approximants in L2 Spanish (β ð γ) are late acquired and highly resistant to improvement (Diaz-Campos, 2004; Nagle, 2013; Kissling 2013; Zampini 1993). These should guide research in pronunciation instruction, as it would seem of more value to turn focus (or at least help more to notice) to phonological phenomena in which natural input seem not to be enough for development.

Literature draws that theory motivates research methodology while at the same time accounting for the nature of results. Kissling (2013, 2014) justified perception exercises under the SLM, and her results could be explained by the same model, as she found that even though there were no production gains after 6 weeks of pronunciation instruction, there were perceptual gains in learners who received pronunciation instruction which in turn under this model would promote gains in production.

In summary, theory aids to understand not only the results of empirical research, but also the reasons that phenomena behave in one way and not another. Moreover, theory motivates research methodology. For instance, although a study of pronunciation instruction is not looking at perception as a dependent variable, under an SLM theory-driven research, researchers would still include related instruction that would help learners to perceive and discriminate sounds. Lastly, theory also motivates target forms, as well as all aspects of research from length of treatment, outcome measure or analysis.
**Accentedness And Comprehensibility**

Certainly one of the main gaps that this study seeks to contribute is in regard to the forms in which pronunciation is measured. Phonetic accuracy and global ratings are frequent forms of measurement for pronunciation instruction; however, Spanish pronunciation instruction literature reflects that in the majority of studies grammatical accuracy is found to be the form of measurement. This is problematic; as it makes it hard to make comparisons across studies and to see the extent that gains in grammatical accuracy of target phones extent to a better overall native-like pronunciation. Central to this view are the constructs of accentedness, comprehensibility, and intelligibility.

Accentedness has been used extensively in the literature. For Derwing et al. (1998), accentedness refers to the extent to which a listener’s judges second language speech to differ from native speakers (NS) norms. It can be said that studies in Spanish L2 pronunciation instruction have been focused implicitly on this construct, through acoustic analysis to obtain pronunciation accuracy or global ratings on pronunciation. With the exception of Lord (2008), no Spanish L2 pronunciation instruction study has focus on listener’s perception of accent.

Therefore, even though accentedness it is not considered as relevant in the communicative SLA literature as other aspect of L2 speech, there are factors that make the study of accent still relevant: (1) L2 leaners often have a strong desire to achieve native-like production and (2) native speakers often have an effortless intuition of what native and non-native speech look like. Therefore, accentedness can be seen as a window to many cognitive processes. Consequently, accentedness is a construct that should not be taken out of pronunciation
instruction research, but it should not be elevated it as the only element that L2 learners have to be concerned when learning L2 pronunciation.

Other important constructs of this study are comprehensibility and intelligibility. Derwing & Munro (1997) pointed out that accent and intelligibility are related but partially independent dimensions. Proof of this relies in the fact that in some instances heavily accented speech can be quite comprehensible and intelligible (Derwing & Munro, 1997; Munro & Derwing, 1995a, 1995b).

The use of comprehensibility and intelligibility has been fundamental in the research agenda of pronunciation instruction, to the point that many researchers have pointed out that pronunciation instruction should focus on these dimensions of speech. Therefore, pronunciation instruction should help learners to become more comprehensible rather than just to focus on reducing the degree of foreign accent (Thomson & Derwing, 2014; Saito, 2012). This also aligns with current SLA agenda, as others have argued that this push to native-likeness can also be the consequence of a native speaker bias (i.e. monolingual L1 speakers should be the yardstick of any L2 learning regardless the fact that a bilingual of multilingual is unlikely to been able to process a given language the same way as a monolingual) that has permeated the SLA research agenda for many decades (Ortega, 2013). In pronunciation instruction, some scholar have denounced that this native speaker bias has been the engine that has moved the accent-reduction industry (Levis, 2005; Munro et al, 1999) despite the fact that robust research has pointed out how foreign accent reduction can be an unrealistic goal for many L2 learners with very little consequences to the L2 communication overall. Regardless of the views, what it is certain is that
pronunciation should be seen as a multifaceted construct with many labels, and what it is certain from the literature is that seeing accent just by itself will be not enough.

Fundamental to this research is to define the differences between comprehensibility and intelligibility. As O’Brien (2014) explained, the two constructs measure how understandable is speech, but they differ in the way they are operationalized: comprehensibility judgments rely on raters’ judgments (e.g. a rating scale of how difficult or easy an utterance is to understand) while intelligibility requires listeners to provide evidence that they have understood (i.e. they have to transcribe what they hear). In the same line, Derwing et al. (1998) define comprehensibility as “listener judgments of how difficult is to understand an L2 speech production” and “a subjective assessment of ease or difficulty of comprehension as opposed to a measure of actual intelligibility”. Derwing & Munro (1997) call comprehensibility “perception of intelligibility. Keeping these definitions in mind, this study is concerned exclusively with comprehensibility; as defined in Derwing & Munro (2015), this study measures the ease or difficulty in which the listener experiences in understanding an utterance (p.5).

As it has been seen, L2 English research on these constructs has brought interesting insights. However, studies on comprehensibility are almost non-existent in L2 Spanish. Perhaps, scholars have assumed that Spanish L2 problematic phones for L1 English are not phonological but allophonic in nature, and while it might contribute to the degree of foreign accent, it won’t impede intelligible speech. However, this has to be yet empirically tested. There is only one study that has looked on comprehensibility and intelligibility: Rasmussen & Zampini (2010). Interestingly enough, they analyzed whether pronunciation instruction had effects on how they
understand the L1 of a Spanish dialect (Andalusian Spanish) rather than see whether the effects on instruction have any effects on how they are understood by other speakers.

Therefore, the central idea behind this strand of research on pronunciation instruction is that pronunciation instruction should be concerned with helping learners to become more understandable rather than focusing on foreign accent reduction alone. Thomson & Derwing (2014) stated: “we take the view that native-like pronunciation is an unrealistic goal, but that improved intelligibility and comprehensibility are achievable, and that L2 pronunciation research focusing on these speech dimensions is of more practical value than studies of accentedness alone” (p.10). They also “research on these speech dimensions (improved intelligibility and comprehensibility) is of more practical value than studies on accentedness alone” (Thomson & Derwing, 2014, p. 10). These researchers have pointed out the improbability in most learners (thou not all of them) to achieve L2 native-like speech, warning scholars and practitioners of the dangers to having native-likeness as the sole objective in pronunciation instructions: “Identifying native-like production as the central goal in pronunciation teaching inevitably leads to the conclusion that pronunciation is probably not worth teaching because of the limited likelihood of achieving that end” (Munro & Derwing, 2011, p.317). This is not surprising, as SLA research has also acknowledge that bilingual or multilingual speakers are unlikely to be able to process a language in the same manner as a monolingual, that the SLA research agenda is making shift towards a bi-multilingual turn; (Ortega, 2013).

However, other scholars have also warned us about the dangers of dropping the degree of foreign accent as a research variable (and few studies have done so anyways, at least it has been
used as comparison with intelligibility). Lord & Fionda (2014) pointed out the sociopragmatic consequences tied to pronunciation, which has been proven by numerous studies reporting that native speakers tend to downgrade non-native speakers because of the degree of their foreign accent (Lambert et al., 1960; Ryan & Carranza, 1975). Arteaga (2000) also warned to this respect: “assuming that the criterion of intelligibility is accepted as a minimal pronunciation standard, it is clear that intelligibility cannot be defined independently of native-like pronunciation. In order to ensure students’ intelligibility, the goal must be native-like pronunciation. Although few nonnatives can achieve 100% accuracy at all times, it seems obvious that there can be no other possible goal” (p.342). Therefore, it is important to look at pronunciation at least under these two key terms: accentedness and comprehensibility.

Although research on the study of accentedness and comprehensibility is promising, not many studies have addressed the linguistic correlates to accentedness and comprehensibility (Derwing & Munro, 1997; Munro & Derwing, 1999; Munro et al., 2006; Saito, Trofimovich & Isaacs, 2015; Isaacs & Trofimovich, 2012). To date, their results are still far from a detailed description of linguistic correlates, possibly because the linguistic correlates might differ from language to language. In any case, it is noteworthy that all these studies have arrived to same conclusion in that linguistic correlates for accentedness are mostly in pronunciation whereas comprehensibility is linked to grammatical and lexical variables as well. Isaacs & Trofimovich (2012) found that for L1 French learning English found that words stress accuracy correlated to high comprehensibility at all levels of L2 development while lexical richness and fluency correlated to low levels and grammatical and discourse-level measures correlated in advanced
levels. Saito et al. (2015) found that for L1 Japanese learners of English found that a grammar, vocabulary, fluency and pronunciation correlate to comprehensibility while accentedness only correlates to pronunciation. For Spanish, it is not yet clear whether instruction affects the constructs of accentedness or comprehensibility yet. Further research will have to determine to what linguistics domains Spanish L2 comprehensibility and accentedness correlate.

**Methodological Issues In Pronunciation Instruction**

Even though results are promising, there are still many methodological considerations that need to be addressed in pronunciation instructions. For instance, Lee et al.’s (2014) point out that pronunciation instruction research need larger samples, diversity of participants or longevity effects. In the following review, I will compare pronunciation instruction in all languages (specially L2 English) with L2 Spanish pronunciation instruction, in order to describe the gaps in the literature that this study aims to address.

**Participants.** In terms participants, most studies have ESL EFL participants, which is not surprising as it was commented before pronunciation instruction studies are mostly in L2 English. In addition, Derwing et al. (2012), point out that most studies feature diverse L1 background. This makes it hard to determine what’s important for each population of L1 speakers. In the case of L2 Spanish, studies are often conducted with the same L1 background.

Although there is a call for bigger samples, many studies in Spanish pronunciation counted with a large pool of participants (González Bueno 1997; Elliot,1995, 1997; Saalfeld,
2010: Kissling 2013, 2014). This study also addresses this issue, by using a considerably large pool of participants.

**Level Of Instruction.** Another important question in pronunciation instruction is, at which level should pronunciation be taught? There are not many studies that have compared effects on different levels of linguistic proficiency. Often just one level of instruction is chosen from a range of beginning to advance. Flege (1988) said that most naturalistic learning occurs in first year on the L2 environment, but it is unclear to what extent this apply in an instructed SLA context in which natural aural input is scarce in comparison to immersion. In addition, Derwing and Munro (2005) found that instruction yielded more rapid improvement in lower learners’ level.

In Spanish, Kissling (2012) found no difference among introductory, intermediate and advanced learners suggesting that all levels can benefit from pronunciation instruction. However, as she did not have spontaneous tasks, it is not known to what extent pronunciation instruction is effective when the focus and attention of learners include pronunciation and other areas of language. Lee et al. (2014) also found that all levels can benefit from pronunciation instruction, in the analysis of 84 participants in their empirical study. The present study also inquires whether curricular level of instruction plays a role in the three levels investigated.

**Target Form.** Another important debate in pronunciation instruction is what parts of speech are to be taught (phonemes, intonation, stress, rhythm, sound, etc.) and why. Most studies have focused on teaching segments. This fact is not surprising, as many researcher and
practitioners agree that they are easier to teach and learn (Levis, 2005; Saito, 2014; Lord & Fionda, 2014).

However, some scholars have pointed out that the teaching of suprasegmentals are more effective for pronunciation (Hahn, 2004) and they will have a stronger impact on global measures such as accentedness or comprehensibility (Kang 2010; Isaacs and Trofimovic, 2012). In Derwing & Munro (1998), a group received pronunciation instruction on segmentals and the other group received instruction on suprasegmentals. Results indicated that even though both groups improved in a controlled task, only the group that received instruction on suprasegmental improved on the spontaneous task. Nevertheless, they pointed out the importance on learning both segmentals and suprasegmental.

Lee et al. (2014) found bigger effects when segmental and suprasegmentals are taught together. Saito’s (2012) review found that instruction on segmental or suprasegmental leads to gains. In addition, he pointed out that rather than a segmental/suprasegmental distinction, pronunciation instruction should be aligned with learners’ background and first language. In addition, Consequently, it seems that the teaching of all parts of speech is beneficial.

For Spanish L2 pronunciation instruction, only two studies to date focused on improvement beyond the segmental level (Lord, 2008; Saalfeld, 2010). For segmentals, research showed a clear consensus on the target phone most problematic for L1 English speakers: vowels, voiceless stops, approximants, rothics, among others. Research on Spanish segmental development has been very productive over the last decades (e.g. Castino, 1992; Diaz-Campos, 2004; Nagle, 2014; Rose, 2010; Simoes, 1996; Zampini, 1993, 1998), so, it is not surprising that
L2 Spanish pronunciation instruction research has focused on these target structures. Certainly the preferred target structure in pronunciation instruction has been approximants: (Castino, 1996; González Bueno, 1997; Elliot, 1995, 1997; Lord, 2005, 2010; Kissling 2013, 2014) followed by voiceless plosives: (González Bueno, 1997; Elliot, 1995, 1997; Kissling 2013, 2014) rhotics: (Elliot, 1995, 1997; Casino, 1996 Kissling 2013, 2014) and vowels and/or diphthongs (Elliot, 1995, 1997; Lord, 2005). By contrast, to date there is no much consensus on how suprasegmentals should be taught or what are the areas of intonation that will be more challenging to L2 students. More research on Spanish L2 intonation is needed in order to understand L2 development and the differences between L1 and L2 intonation patterns. One study on this strand of research is Zárate-Sández (2015). He examined the differences of Spanish L1, L2 and heritage intonation and found differences in perception and production of prenuclear peak alignment and final boundary tone height. However, more research is needed in order to have a wider understanding of what areas of intonation and other suprasegmental phenomena are relevant for L2 Spanish pronunciation instruction. For these reason, this study will focus on the most common segmentals found in Spanish L2 pronunciation instruction research: voiceless stops, voiced approximants, and vowels.

**Length Of Treatment.** In terms of length of treatment, as expected longer interventions have yielded more substantially longer effects than shorter ones (Lee et al., 2014). And there is a call for longer interventions in pronunciation instruction, for among other aspect of SLA, pronunciation is one that can take time before actual learning is achieved. In Spanish pronunciation instruction, shorter interventions have only reached significance at the perceptual
level (Kissling, 2014) whereas longer interventions have led to gains in most cases (González Bueno, 1997; Elliot, 1995, 1997; Lord, 2005; Lord, 2008). To address this issue, this study collected data during one semester that included 12 weeks of pronunciation instruction.

Technology. Another highly debated topic in pronunciation instruction is whether laboratory or classroom-based studies are more effective. Lee et al. (2014) found classroom-based studies produced smaller effects than those in the laboratory, and they pointed out that both treatments are effective. However, Thomson & Derwing (2014) claimed that an ideal pronunciation instruction study should be conducted in a classroom for ecological validity, and to encourage practitioners to include pronunciation instruction in their classroom. These findings also apply for Spanish pronunciation instruction.

In addition, most studies done in laboratories have also included a technological component (CAPT). Technology has been used to complement teacher- or research-delivered instruction Lord (2008) or the sole provider of instruction (Kissling, 2012).

Generally, CAPT studies have consisted of providing learners with native-speaker segmental input they can imitate (e.g. Weinberg and Knoerr 2003; Pearson et al. 2011) and there are studies in Spanish pronunciation instruction using CAPT as the method (e.g. González-Bueno 1997; Lord 2005; Kissling 2013).

One type of instruction done with technology has been High Variability Phonetic Training (HVPT). (e.g. Bradlow et al. 1997). With this method, learners have to listen to L2 segmental contrasts offered in multiple contexts, produced by multiple native speakers (Thomson 2012). As expected, HVPT has shown to be quite effective when it comes to enhancing perception L2
skills, but it is uncertain whether this training is effective or transfers to production (see Thomson, 2011).

Another element that has often used CAPT is suprasegmentals, especially in terms of visual pitch and intonation enhancement (de Bot and Mailfert 1982; de Bot 1983; Hardison 2004, 2005; Hirata and Kelly 2004), and global speech characteristics (Hincks and Edlund 2009; Tanner and Landon 2009).

In general, both systems seem to be effective. Lee et al. (2014) found that computer-provided treatment and those involving spectrograms had small effects when compared of treatments provided by a teacher or a teacher-researcher. However, no study has compared the effects whether a combination of both treatments can be effective. Although technology has an important role in pronunciation instruction, it is not the focus of this study, as the treatment of this is study is classroom-based.

**Pedagogical Practices.** The type of treatment has been largely overlooked, as only recently researchers have begun to ask in what ways should we teach pronunciation. Lee et al. (2014) noticed that most studies do not provide great detail on instructional materials and activities. Many studies do not inform whether it was decontextualized drills, meaning oriented tasks or explicit instruction. As a result, the explanations are vague which makes it difficult for replication.

Celce-Murcia et al.’s (2010) offer a methodological approach called “presentation, practice, production” (PPP) in which they prescribed that instruction should go from controlled practice to communicative use of target pronunciation features. In other aspect, researchers have
discussed developing perceptual skills (e.g. Champagne-Muzar et al. 1993) the impact of recasts (Saito and Lyster 2012) or the impact of explicit instruction (Saito 2013). Overall, most studies feature extensive drills and explicit instruction of how sounds are produced, sometimes with explanation of articulatory phonetics. In addition, most studies have reported intensive practice.

Explicit instruction (EI) is ubiquitous in pronunciation instruction and many studies have shown the benefits of it. Research has pointed out that the explicit understanding of problematic structures in the L2 will eventually enhance the subsequent acquisition of the implicit knowledge (Henry et al., 2009; Saito, 2013). EI can also help to notice the perceptual differences of L1 and L2 sounds, which the SLM (Flege, 1995, 2002) predicts as the first step in L2 phonological development. Derwing and Munro (2005) pointed out that EI is important in order to students to notice their own production and those of native speakers.

Among studies that have separated EI and other factors, Kissling (2012) concluded that EI + input and practice is more beneficial than input and practice alone for perception of L2 sounds. Saito (2013) that a combination of EI + FonF instruction was more beneficial than FonF instruction alone in terms of improvement and production of words that were not covered in the treatment. This study includes carefully designed and replicable materials, and it includes a detailed explanation of the procedures and data collection.

**Contextualized And Decontextualized Practice In Pronunciation Instruction.**

Pronunciation instruction deals with the acquisition of the minimal units of speech that do not carry meaning by themselves (expect intonation that carry pragmatic meaning or tone). Therefore, whether the effects of meaningful compared with decontextualized practice have not
been as central to the literature as in other areas of SLA. Even though this debate has not been as prominent in the literature, there are some studies that have brought some valuable insights.

Exploring the differences between the traditional drills and communicative approaches to pronunciation instruction are scarce, they have been discussed it since the 1980s. After many years of research, Celce-Murcia proposed the PPP (Celce-Murcia et al., 2010). Another proposal for effective treatment in pronunciation instruction has been Focus on Form (FonF), also called Form-Focused Instruction (FFI). Focused tasks refers to practicing pronunciation form while being involved in meaning-oriented communicative activities.

In pronunciation instruction, FonF has not been easy to define, so I will mention how previous literature has defined it. Doughty and Williams (1998) and Saito (2012) use the following description: Focus on Form is a type of instruction in which teachers draw learners’ attention to form not exclusively in controlled contexts (i.e., when practicing the form is the only task), but also in communicative contexts (i.e., when practicing pronunciation while being involved in meaning oriented communicative activities). Often, researchers study the effects of FonF in comparison to Focus on FormS instruction (FonFS) in which teachers only provided controlled activities (students asked to practice pronunciation: mechanical drills and repetition. However, controlled context are not excluded in FonF but they are complemented by communicative tasks. Therefore FonF consists of a wide range of instructional options which include (a) focused tasks (i.e., communicative activities which are designed to create many obligatory contexts and elicit learners’ use of a specific linguistic feature in comprehension and production; VanPatten, 2004), (b) corrective feedback (i.e., provision of corrective feedback in
response to students’ linguistic errors; Lyster, 2007), and (c) explicit instruction (i.e., provision of metalinguistic information before FonF lessons; Spada & Lightbown, 2008).

Saito (2012) explained that FonF is more effective than FonFS due to the following factors: it is hypothesized that it helps students establish form-meaning mappings (VanPatten, 2004) and also it promotes proceduralization of their declarative knowledge (Lyster, 2007). On the other hand, the literature has shown that explicit instruction followed by decontextualized practice is effective only at controlled levels (e.g. Elliot, 1997; Derwing et al., 1998). Saito (2012) also proposed that FonF instruction should at least (1) focused tasks (i.e., practicing pronunciation form while being involved in meaning-oriented communicative activities), (2) corrective feedback and (3) explicit instruction.

Trofimovich & Gatbonton (2006) explored the differences between controlled and meaning-oriented practice by exploring the differences between drills and form-focused instruction (FonF). Instead of exploring which type of instruction learners benefit the most, Trofimovich & Gatbonton (2006) explored the roles of repetition and focus on form related to L2 speech processing. This paper involved two experiments. In the first one, they investigated the role of repetition using an auditory word-priming experiment\(^b\), which they argued is a good

\(^b\) According to Trofimovich & Gatbonton (2006), in a typical auditory word-priming experiment, “listeners are exposed to a set of spoken stimuli in a first task and are tested on another set containing both previously heard and new stimuli in a second task. In this second task, native listeners often demonstrate auditory word priming, a phenomenon of unconscious and unintentional processing facilitation, whereby they benefit from repeated (previously heard) linguistic material”. (p.521)
indicative of the sensitivity of form rather than meaning. Sixty L2 learners of Spanish of low and high L2 pronunciation accuracy completed the tasks in which response latency was lower in repeated than in unrepeated words both in L1 English and L2 Spanish (and it was significantly for the high pronunciation accuracy group). These results suggest the beneficial role of repeated L2 phonological information.

The researchers pointed that since language processing involved attention to form and meaning (Van Patten, 1990), the second experiment was intended to check how repetition worked when participants were paying attention either to form or to meaning. It was similar to the first experiment, but they separated the participants in a FonF group (in which participants had to rate the perceived clarity on a 7-point scale) and in a Focus on meaning (FonM) group (in which participants had to rate the degree of “pleasantness” of the word). Results suggested that high-accuracy learners benefited from phonological information regardless of being in the FonF and FonM group, and low-accuracy learners did not benefit when they were requested to focus on the meaning of the word.

In light of these results, they described a communicative framework for L2 pronunciation instruction that should include activities that are (1) communicative, (2) repetitive and (3) functionally formulaic, which should account for meaningful repetition and FonF activities within a communicative context. In addition, they offered an example of learning English suprasegmentals in which communicative L2 interaction can also be considered as repetitive practice.
Other studies that have included explicitly FonF instruction are Saito & Lyster (2012), Saito (2012) and Saito (2013). Even though form-focused instruction, feedback, or explicit instruction were addresses in previous studies, these were the first to operationalized these variables separated to see their effects.

Saito & Lyster (2012) investigated the effects of form-focused instruction with or without feedback and a control group without (FonF). Sixty-Five Japanese ESL learners received a 4 hours’ treatment designed to notice and practice the target form: (English /ʌ/ which is known for being very difficult for Japanese learners). FonF instruction was operationalized as a treatment which included (1) meaning-oriented instruction (English argumentative skills and card game with minimal pairs of target structure) designed to encourage students to notice and practice the target feature and (2) corrective feedback in the form of recasts. Their results showed that the group that received FonF instruction and feedback improved and outperform the other two groups not only in the controlled but also in the spontaneous task.

Saito (2013) included explicit instruction as well. He explored the effects in similar conditions on the effects of the same target form on three groups: one received Explicit Instruction (EI) and FonF instruction, the other only received FonF instruction, and the third was the control group. Results show that the group who received EI and FonF instruction improved with large effects the other two groups.

In addition, in Saito’s (2012) analysis of 15 studies of L2 Pronunciation instruction, he describes another four studies that he indicates that FonF instruction approach was used even though such studies do not mention that such instruction took place. For instance, in Derwing et
al. (1998), Saito identified the second group (the global group) as a FonF group because of the use of musical component in order to understand English rhythm and syllables patterns. The third group (the segmental group), on the other hand, had a more traditional approach including repetition, identification and discrimination tasks. In the case of the spontaneous task, only the global group (with a FonF instruction) improved comprehensibility and fluency. Another examples of FonF studies are the creation of podcasts with meaningful activities in Lord (2008), although it is worth noticing to mention that the communicative activities were metalinguistic in nature since it was a course of Spanish phonology.

In sum, there is no consensus in the literature on what a focused tasks in FonF instruction is, as it can take many approaches as long as there is a communicatively activity involved which also encourage the noticing of the target structure. Therefore, although prescribed by these scholars, implementing a FonF instruction will be problematic in this study, as it is not primary concerned with looking the effects of types of instruction.

However, for this study, some important insight for this corpora will be taken into account. Saito (2012) proposed that FonF instruction should at least (1) focused tasks (i.e., practicing pronunciation form while being involved in meaning-oriented communicative activities), (2) corrective feedback and (3) explicit instruction. (2) and (3) will be included in the pronunciation instruction practice implemented in the experimental group. For (1), we have to take into account that the L2 Spanish classroom curricula in which participants of this study are enrolled are mostly communicative in nature. Therefore, communicative practice will be understood as participants practicing with key vocabulary included in the syllabi for that during
the first 10-20 of pronunciation instruction, and then they will have to practice it during the remaining of the class. In sum, even though the tasks in the treatment might be more in line with drilling and focus on forms practices, the study will explore how the treatment can be implemented alongside a communicative syllabus in the L2 classroom.

**Outcome Measures.** The outcome measures in pronunciation instruction have been another hotly debated topic in the literature. Lee et al. (2014), Thomson & Derwing (2014) and Saito (2012) pointed out that controlled measures, (e.g. reading lists of individual words or sentences for the pre-, post- and delayed posttest) are much more common in pronunciation instruction, and they make a strong call for more studies will less controlled outcome measures. In addition, studies employing controlled outcome measures produced larger effects than more spontaneous ones. For instance, in studies using both types of tasks, Derwing et al. (1998) found that the two tasks used to elicit speech samples had different results, and a type of instruction has a stronger effect on spontaneous task and it also suggested that the degree of attention that L2 speakers have available to devote to pronunciation affects their performance. To understand treatment effects, these researchers suggest that future studies of pronunciation instruction should include different types of outcome measures. Another proof for that has to do with the type of instruction. Saito (2012) pointed out that FonFS tends to lead to improvement only at a controlled level (e.g., Elliott, 1997; Saito, 2011), but FonF enables learners to achieve improvement both at controlled and spontaneous levels (Derwing et al., 1998; Saito & Lyster, 2012). In Spanish pronunciation instruction, only Elliot (1995, 1997) had one spontaneous task
in addition to less controlled ones. The present study aims to contribute to the current research by including controlled and spontaneous tasks in the design.

**Analysis.** Finally, it is important to mention the type of analysis that is has been carried out in pronunciation instruction. Most of the studies have two types of analysis: acoustic analysis (discrete features, speech signal, VOT formants for vowels dipthongization, or pitch), often when the target structure(s) are discrete elements such as one or more particular segment (e.g. Saito & Lyster, 2012); rating analysis, often when they measure global pronunciation analysis (Derwing et al., 1998); and sometimes they have a mixed model (Kissling, 2013). Thomson & Derwing (2014) noticed that human listeners are used more often than acoustic measures in pronunciation instruction, but usually they assessed global accent ratings instead of acoustic measures.

Pronunciation instruction in Spanish has included both types of analyses, but they often have only focus on pronunciation acoustic accuracy rather than global accent. In addition, despite the fact that pronunciation instruction studies focusing on accentedness, comprehensibility, intelligibility and fluency have soared in the last decades, specially for L2 English, this strand of research has not been address in L2 Spanish. For this reason, what makes Spanish speech comprehensible in opposition to accented Spanish speech remains an unaddressed empirical questions. In addition, we do not know whether the effects of instruction will have any effect on it. This dissertation will include both type of analysis: acoustic and human raters.

**Raters.** Even though studies suggest that teaching experienced (Kang, 2012) and musically trained raters (Issacs & Trofimovich, 2011) play a role when assigning ratings of
pronunciation, other studies have point out that there is no need to provide raters with special training (Derwing and Munro, 1995), as they are able to judge pronunciation with very high inter-rater reliability (Munro, 1995). Untrained raters can identify non-native speech from unknown languages (Major, 2007) or from speech presented backwards (Munro et al., 2010). In addition, most L2 learners will be more concerned on listener judgments on naive raters, as they represent a greater population.

There is an overwhelming consensus in the literature that native speakers, phonetically trained or not, are able to detect the degree of foreign accent. Additionally, their ratings are intuitive, fast and effortless (Saito et al., 2015). In addition, when judging accentedness, recent studies have shown that accent ratings are tied only to pronunciation domains (Munro et al. 2010; Saito et al., 2015), in opposition to comprehensibility ratings, that can be tied to more domains (vocabulary, morphology, etc.). Interestingly enough, some studies have even suggested that when judging accent, raters tend to focus mostly in segmental accuracy rather than a combination of segmental, prosodic, and temporal characteristics of L2 speech (Munro & Derwing, 2006; Saito et al., 2015). Although this dissertation will not be concerned in the difference between type of raters, it is important to acknowledge that this is a factor, and the choice of raters is an important part in any study of pronunciation instruction when using human rating analyses.

**Target Phones**

The treatment consisted of the explicit teaching and practice of the following phones in L2 Spanish: voiceless plosives (or stops) /p, t, k/, approximants [β, ð, γ], and vowels /a, e, i, o,
Certainly, these are not the only phones problematic for native English-speakers learning Spanish. To name a few, Díaz-Campos (2014) indicates that English inventory lack the following segments: palatal /ʝ/ and velar /χ/ fricative or trills /r/ among many other differences. Plus, there are regional variations which increase the difficulties for L2 learners. These phones were chosen because (1) they have been used as target phones in previous pronunciation instruction research (Elliot, 1995, González-Bueno, 1997; Kissling 2013, 2015; Lord, 2005, 2008, 2010); (2) they have been well attested to be problematic and late acquired for L1 English, and it has been suggested that for most learners input alone is not sufficient (e.g. Castino, 1992; Díaz-Campos, 2004; Rose, 2010; Simoes, 1996; Zampini, 1993, 1998); (3) there are no significant differences across regional varieties of Spanish, and (4) from a pedagogical perspective, these 9 phones are grouped in 3 natural classes with common acoustic and articulatory features. Therefore, the properties of a given phone are more likely transferable to a phone in the same natural class.

**Voiceless Plosives /p, t, k/**. In English, these phonemes are aspirated in syllable-initial position and in stressed syllables creating the allophones [pʰ, tʰ, kʰ]. However, aspiration does not occur in Spanish. This difference is underlined in voice onset time (VOT). Zampini (2014) defines VOT as “a temporal acoustic cue of stop consonant and refers to the time that elapses between the release of the stop and the beginning, or onset, of the vocal cord vibration” (p.113). Zampini also indicated that aspiration occurs because English voiceless plosive usually are produced with long VOT values of approximately 30 to 100 milliseconds (ms), whereas in Spanish voiceless plosives are produced with short VOT values of 0 to 25ms. Long VOT
durations are classified as long-lag stops and short VOT durations are classified as short-lag stops. Lisker and Abramson (1964) showed that for NSs VOT values range from 0 to 15 ms for /p, t/ and from 15 to 55 ms for /k/. Therefore, native speakers of English have to shorten their VOT values in Spanish.

Approximants [β, ð, γ]. The phonemes /b/, /d/, and /g/ are realized as voiced stops only in a limited number of environments: (1) after a pause, (2) after a nasal consonant and (3), only in the case of /d/, after a lateral consonant. In the rest of the environments, the phonemes are realized as approximants ([β̞, ð̞, γ˕], henceforth represented without the undertrack). According to Hualde (2005), the difference between approximants and fricative consonants is that the constriction of the passive and active articulators is not narrow enough to produce friction and articulator only “approximates” to each other. In English, the phonemes /b/, /d/, and /g/ have a different allophonic distribution. Although some alternations occur (e.g. /d/ in unstressed context is realized in most cases a flap in General American English) but in most cases they are realized as voiced stops. English has the fricative sound /ð/, similar to the Spanish approximant, but unlike Spanish, it is separated phoneme.

Vowels /a, e, i, o, u/. Spanish has five vowels in their system, which is the most common number cross-linguistically (Zsiga, 2012). Vowels in Spanish are always tense, back vowels are always rounded, and variation among dialects is rare. By contrast, English vowels are more numerous (the number varies by dialect), there is tense/lax distinction, back vowels can be unrounded, among other articulatory and acoustic properties. Consequently, learners have to adjust to a less complex system. One of the goals of this part will be to make students aware of
lack of vowel tension, lack of nasalization in most cases, optionality of diphthongization in tense vowels (in most cases tense vowels in English are pronounce as diphthongs), and absence of vowel reduction. All these elements have been identified as problematic for L1 English (Arteaga, 2000; Quilis and Fernández, 1992). In addition, this study puts an emphasis of the consistency of spelling and pronunciation in Spanish. In most cases, the modules indicate how a vowel letter in English can have many pronunciations while in Spanish a vowel always has one corresponding pronunciation.
CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

The Present Study

The focus of the present study is to investigate the effectiveness of a treatment that consists of one semester classroom-based pronunciation teaching in L2 Spanish. First, this study aims to contribute by addressing several methodological issues in the field of pronunciation instruction as previously pointed out by scholars. Following suggestions by Thomson and Derwing (2014), the design of this study seeks to provide a large sample of participants, a control group, and descriptive details of participants and procedures. Second, this classroom-based study compares an experimental group that received lessons and practice on Spanish pronunciation to a controlled group that did not. As a result, this study aims to contribute with ecological validity which will encourage more teachers and practitioners to include pronunciation in their L2 classroom. And third, this study seeks to evaluate the effectiveness of the treatment by two different outcome measures: acoustic analysis and human rater analysis. Acoustic analyses were completed by comparing changes in VOT in voiceless plosives. Human rater analyses were conducted for both accentedness (i.e. linguistic native-likeness) and comprehensibility (i.e. ease of understanding).

Even though type of instruction is not assessed, the study to careful consideration of research when designing the teaching materials. Saito’s (2013) suggestions, for instance, point out that a pronunciation treatment should help students to raise awareness of new sounds in the L2 at the phonetic and perceptual level; and should encourage the practice of these new sounds in a communicative way.
In sum, the results of this study should have theoretical and pedagogical implications for the role of pronunciation instruction in L2 Spanish, and the level in which pronunciation instruction should be taught.

**Research Questions**

The two research questions will focus in the two types of analysis. Research Question 1 will explore the advantages of pronunciation instruction as measure acoustically by a word reading task. RQ1 aims to assess how instruction has an impact on one particular target structure, voice onset time (VOT) in voiceless plosives /p, t, k/. Therefore, this research question is subdivided by tree, one for each target phone. Research Question 2 will see the advantages of instruction, by means of human raters analyses on the constructs of perceived accentedness and comprehensibility in speech elicited by a controlled and a spontaneous task. Therefore, this research question is subdivided by four, two per type of construct (accentedness and comprehensibility), and two per type of task (controlled word-reading, and spontaneous picture-description tasks).

In sum, the research questions that will guide this study are the following:

1a. Does pronunciation instruction in L2 Spanish improve learners’ ability to produce *bilabial voiceless plosives /p/, as measured by a word reading task? If so, does it depend on the curricular level?
1b. Does pronunciation instruction in L2 Spanish improve learners’ ability to produce dental voiceless plosives /t/, as measured by a word reading task? If so, does it depend on the curricular level?

1c. Does pronunciation instruction in L2 Spanish improve learners’ ability to produce velar voiceless plosives /k/, as measured by a word reading task? If so, does it depend on the curricular level?

2a. Does pronunciation instruction in L2 Spanish improve learners’ perceived accentedness, in speech elicited by a paragraph-reading task? If so, does it depend on the curricular level?

2b. Does pronunciation instruction in L2 Spanish improve learners’ perceived accentedness, in speech elicited by a picture-description task? If so, does it depend on the curricular level?

2c. Does pronunciation instruction in L2 Spanish improve learners’ perceived comprehensibility, in speech elicited by a paragraph-reading? If so, does it depend on the curricular level?

2d. Does pronunciation instruction in L2 Spanish improve learners’ perceived comprehensibility, in speech elicited by a picture-description task? If so, does it depend on the curricular level?

Participants

Context. The recruitment of participants (n=83) for the present study took place at a private university in the Mid-Atlantic United States. Participants recruited were enrolled in
courses in the Spanish as a foreign language program, which offers courses that include L2 Spanish courses of different curricular levels (introductory, intermediate and advanced) and tracks (intensive and non-intensive), and various upper-division classes in areas such as literature, cultural studies and linguistics. These courses last a 15-week semester and each require 2.5 (non-intensive) or 5 hours (intensive) of class instruction a week plus several hours of course work outside of the classroom. A placement exam is taken by students prior to beginning their first Spanish class at the university.

For this study, the majority of participants (n=70) were recruited from six non-intensive classes, however few students (n=13) from other sections but same curricular levels also responded to the recruitment. At the end, a total of nine classes were representative of the three L2 curricular levels at the university: three introductory, three intermediate, and three advanced non-intensive courses. The labels introductory, intermediate and advanced, are in reference to the name of the courses at the university in which participants were enrolled (e.g. Introductory Spanish), which refer in this case to an L2 curricular sequence at this university and not communicative competence of the learners. It is important to note that these labels should not be confused with the level of proficiency of the learners, specially the terms intermediate and advanced. Therefore, in place of the existing university curricular level names, participants and their enrolled levels in this study will be referenced to as first year, second year, and third year, accordingly, as it is labeled in Kissling’s (2012) study. The assigned names are in line with placement exam levels and with the place of the participant in the Spanish L2 curricular sequence at the university at the time of the study.
**L2 Learners.** The study began with the recruitment of a total of 101 Spanish L2 learners. Of the initial recruited, 16 did not follow through and missed the posttest or withdrew from the class. Another 2 were eliminated from the analysis for not meeting the background criteria, including the exclusion of a student that reported Spanish was spoken in her household since birth. In order to meet the participant criteria and be included in the analysis, participants had to have less than three months’ exposure of Spanish in a foreign Spanish speaking country, were between 18-25 years of age, and had not received or would not be concurrently enrolled in a course in phonetics and phonology at the time of the study. Moreover, their principal language of instruction through their education was not Spanish.

Initial recruitment of participants included informational visits to first year, second year, and third year classrooms where participants were informed that the study was designed to test the effectiveness of instruction on their speaking skills. Participation in the study included the completion of an initial questionnaire, speaking pretest, speaking posttest, and exit questionnaire. Out of the nine participating courses, one of each curricular level had corresponding phonetic modules already embedded as part of the semester’s coursework. As the study proceeded, the experimental group completed the modules of the study during regular class time. The control group is made up of student participants in the remaining six classes, two of each curricular level. All participants, experimental and control, completed the initial questionnaire and exit questionnaire online within 48 hours of their pretest and posttest. The pretest and posttest were completed in a quiet room at the university outside of the classroom and class time. Their participation in the pretest and posttest of the study earned them extra credit.
The study seeks to find the difference, if any, between students enrolled in the same semester of Spanish who receive an explicit phonetic treatment to those students without it. In the nine courses, there were seven instructors, two which taught two courses each (one within the experimental and one within the control group). Apart from the treatment and having different instructors, all students within their curricular level received the same curriculum, classroom time, outside classwork, and materials. Therefore, the conditions in the control group did not vary.

All participants were recruited and treated under the research protocol approved by the offices of Human Subjects Protection at Georgetown University (IRB #2015-1474)

L2 Learners’ Biodata. To begin participation in the study, participants completed an initial online background questionnaire which provided demographics, current and past Spanish course enrollment at the university, and language background (Appendix 1). As previously mentioned, 2 participants were eliminated from the study based on reported information not meeting the study requirements. As a result, 83 total participants were included in the analysis, 54 female and 29 male. Based on the information provided in the background questionnaire, the mean age of the participants was 19.24 (range 18-23). Furthermore, the students in the control condition had completed on average 1.24 college language courses (range: 0-5), while students in the experimental condition had completed 1.84 courses (range:0-4).

In the initial questionnaire students were also asked to report their time abroad in a Spanish-speaking country. Out of the 83 participants, 36 participants reported that they have never visited or lived abroad in a Spanish-speaking country, 18 in the experimental condition and
18 in the control condition. The majority of participants (n=43) reported that they had spent between 1 to 4 weeks in a Spanish-speaking country, 19 in the experimental and 24 in the control condition. These trips were family vacations, mission trips or short study abroad trips. Most claimed that their language experience had not been influenced by these trips, because they had little or no opportunity to use the language actively, as they spend most of their time with English speakers. However, one participant disclosed to have used Spanish actively during that time. The other four participants (two in the experimental and two in the control condition) reported having spent more than four weeks abroad in a Spanish speaking country. The purpose of these travels for 3 of the 4 participants were language immersion and for one it was an interim medical program. These participants reported to have studied Spanish and used the language actively with their host families and colleagues, and at the medical site, also with patients.

Part of their language background included reporting of speaking or understanding of language(s) other than Spanish and English, and self-rated proficiency of said language(s). A total of twenty-four participants were found to speak and understand a language other than Spanish or English. Seven reported to speak Chinese (Mandarin or Cantonese), and self-rated their speaking and listening abilities from intermediate to native-like. Five reported to speak French, with self-reporting ranging from basic knowledge to near-native. Four were speakers of Korean, one self-rated their speaking and listening skills as native, and the other three as near native. Three participants spoke Hindi, two with intermediate speaking and listening skills, and another one reported having native proficiency. Two participants reported to speak Latin at intermediate and advanced listening-speaking proficiency, respectively. Lastly, one student
reported to have advanced proficiency in Romanian, one reported to have native proficiency in Polish, and one reported to have native proficiency in Bangla.

**Teachers.** The nine classes were taught by seven instructors, two of those instructors taught multiple sections. The instructors were born in the United States, Spain, Colombia and Venezuela. The instructors were college-educated and had formal education in Spanish. Instructors of throughout each curricular level taught the same curriculum and the same amount of work load was expected. One instructor taught the two sections of first year, one in the control and one in the experimental condition. Another instructor taught two sections of second year, also one in the control and one in the experimental condition. Four instructors were native Spanish speakers and three were non-native Spanish speakers with near-native proficiency. Two of the native Spanish speakers were Spanish-English bilingual one from birth and the other since early-childhood. In this study, I take the view that being a native speaker is not a requisite to teach pronunciation. As Derwing and Munro (2015) stated, “teachers who learned the language are generally excellent models” and the practice of only using native speakers could “reinforce the notion that there is something inherently wrong with having an L2 accent” (p.81).

**Baseline Data.** Baseline data of Spanish native speakers was created through the use of an online background questionnaire which collected demographic information, language background and experience abroad (Appendix 3). The baseline data includes information reported by 6 native speakers (NSs) of Spanish raised in Spain, Colombia, Cuba, Chile and the United States with a mean age of 33 (range 23-33). This pool of Spanish NSs were all bilingual English either by birth or by learning English later in life; Four were first exposed to English
through foreign language classes and two were born in the United States and were exposed to English and Spanish since birth. In order to better represent and compare the pronunciation of English speakers learning Spanish, bilinguals (Spanish-English) were considered as the baseline rather than monolingual Spanish speakers as monolinguals and bilinguals represent a dynamic continuum rather than a clear-cut binary, as do native and non-native speakers. Each participant attended one data collection session in which they completed one of the three experimental tasks. English proficiency was self-assessed and reported proficiency level at the of the time study for each participant was found to be near-native or native.

**Experimental Design**

This study was a pretest–intervention–posttest design. As other classroom studies (e.g. Derwing et al., 1998; Lord, 2008; Saito & Lyster, 2012) this is a quasi-experimental study; participants were not randomly assigned to the control (CON) and experimental (EXP) groups because the treatment was administered in class to the sections assigned to be in the experimental group. A student’s experimental or control participation was determined based on he or she’s enrollment in an experimental treatment or control treatment course. One class in each level (first year, second year and third year) was used as the experimental condition (EXP). Originally one class in each level (first year, second year and third year) was also to be used as the control condition (CON). However, due to the fact that not all learners in the control condition were available to participate in the study participants from another class, for each curricular level, were also recruited.
**Experimental Group (EXP).** The syllabi for the experimental (EXP) group embedded pronunciation treatment via twelve modules (Appendix 7), one per week, during 15 -20 minutes of class time during one semester. Before the introduction of the modules, participants completed a background questionnaire and a pre-test. The three instructors teaching in the experimental condition received preparation on how to prepare and teach the modules. Two of them received careful explanation on how to implement and teach the modules in regards of phonetics differences, the design and section of the modules, the time allotted for each module and exaggerated pronunciation practices for the introduction of each module. One teacher was a trained applied phonetician, therefore, the preparation she needed was not as extensive as the detailed preparation the as the other two instructors received. Nonetheless, she was also prepared in the way that modules should be implemented and taught. As part of the introduction of the modules in the classrooms, the principal investigator attended and co-taught the first two sessions in which the modules were scheduled.

During the incorporation of the modules in the classroom, instructors of first and second year levels were also instructed not to review some appendixes in their workbooks that were focused on phonetics and pronunciation. Once the modules were completed, participants took a posttest and completed an exit questionnaire (Appendix 6). The basic design and implementation of this study was the following:

**Week 1**

Background questionnaire

**Pretest:** word-reading task, paragraph-reading task and picture description task.
Week 2-14

Treatment: 12 modules (one per week), administered to 3 courses and 3 curricular levels (i.e. 1x first year, 1x second year, 1 x third year).

Week 15

Posttest: word-reading task, paragraph-reading task and picture description task.

Post-completion questionnaire.

In the following sections, the descriptions of the modules presented in the experimental (EXP) treatments will be described.

Pronunciation Treatment. Before proceeding with the details of this study, it is important to define what is the treatment and what it will encompass in this research. This is not a trivial matter, as Thomson & Derwing (2014) point out, many studies do not inform with ample detail the nature and scope of their pedagogical interventions, and comparison between them are in many cases problematic. In most cases, pronunciation instruction studies have included all or some of the following elements: (1) explicit phonetic instruction (Kissling, 2012, 2013, 2014; Lord, 2005, 2008), (2) developing perceptual skills (Ausín and Sutton, 2010; Zampini, 1998) and (3) production practice. Production practice was in some cases controlled and/or decontextualized like in the case of drills (Castino, 1996), error-correction (Elliot, 1995,1997), or chants, rhymes and tongue twisters (Derwing et al., 1998; Elliot,1995,1997), among others. In
other cases, production practice was in the form of communicative use of language such as form-focused instruction (Saito, 2007), or recasts (Saito 2013).

Although a common element in pronunciation instruction studies, this dissertation does not include explicit phonetic instruction. Most studies define phonetic instruction as the teaching of explicit linguistic information, such as point, mode of articulation, vocal fold vibration, tone patterns, among other phonetic phenomena. For instance, Lord (2008) presented research of a complete phonetic course which included articulation of Spanish sounds, understanding of the concept of phones or contrast English-Spanish. The goal was to “provide the students with a working knowledge of the sound system in Spanish” (p.493). As research shows, there are advantageous gains of having a solid knowledge of Spanish phonetic instruction. For instance, Ausín and Sutton (2010) and Kissling (2012) found that explicit phonetic instructions helped learners achieve native-like perception. However, Kissling also found that explicit phonetic instruction, practice and feedback was equally beneficial to a group who received the same practice and feedback without phonetic instruction. Therefore, it is not clear whether explicit phonetic instruction can contribute to L2 production, which is the focus of this study. In addition, phonetic instruction can be time-consuming, considering the time-constrain for pronunciation instruction in the classroom, and overwhelming and difficult to understand for learners who might have no prior knowledge to phonetics and phonology.

Nevertheless, Saito (2013) included a similar element, namely, explicit (phonetic) information (EI). EI’s main purpose, according to Saito, is to promote noticing and awareness of the difference of two sounds at the phonetic level, including exaggerated pronunciation to
highlight its perceptual difference. The materials in this study implement a similar approach, which is more suitable to an L2 class that most likely does not have knowledge of the field of phonetic and phonology.

The materials also included current methodological approaches to classroom-based pronunciation instruction, such as the Presentation, Practice, Production model (Celce-Murcia et al., 2010), Form-Focused Instruction (Saito, 2007, 2013) and awareness-raising practices (Couper, 2011; Nibert, 2014). The modules also were based on Nibert’s (2014) four-step approach, as it was designed specifically for L2 Spanish: (1) awareness-raising about notion of letter-sound correspondences; (2) awareness of facts of L1; (3) awareness of facts of L2; and (4) application and practice. The materials used for the treatment consisted of twelve modules deliberately created for this dissertation. Each module will be divided in three sections, and each section is intended to tackle parts of the scope of the study.

The contents of the modules are summarized in Table 1. The first nine modules included a phone or phones that were the focus of the session, and they also incorporated phone(s) to review from previous lessons. Overall, it was intended that the modules to review were of the same natural class as the main focus, allowing students to focus on the same articulatory and acoustic features for the newly introduced phones and those that were for review each week. The last three modules were intended for review, with the exception of Module 11 that not only included new elements of vowels but it also reviewed past ones. In other words, the first nine modules presented a new phone or phones (3 for /p, t, k/, 3 for [β, δ, γ], and 3 for /a, e, i, o, u/), and the remaining three were used to review the contents of previous modules.
Table 1. Instructional modules and its contents

<table>
<thead>
<tr>
<th>Module</th>
<th>Main focus</th>
<th>Contents</th>
<th>Module</th>
<th>Main focus</th>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Voiceless Bilabial Plosive /p/</td>
<td>Module 7</td>
<td>Voiced Velar Approximant [y] Review [ð] - [β]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Voiceless Dental Approximant [ð]</td>
<td>Module 8</td>
<td>Closed and Open Vowels /a/ /i/ /u/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Mid-Front Vowel /e/</td>
<td>Module 9</td>
<td>Voiceless Velar Plosive /k/ Review /p/ - /t/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Voiceless Dental Plosive /t/</td>
<td>Module 10</td>
<td>Review Voiced Approximants [β] - [ð] - [ɣ]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Mid-Back Vowel /o/</td>
<td>Module 11</td>
<td>Review Avoiding centralization, diphthongization, laxation and nasalization in vowels /a/-/e/- /i/-/o/ /u/</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ultimately, each module was divided into three sections: A, B and C. Each section was designed with specific goals in mind, and it was developed to address specific theoretical and pedagogical issues (Appendix 7).

**Section A.** Each module began with an introduction, Section A, which was designed to explicitly introduce the target structures. Section A was composed of two or more columns in which phonetic and allophonic differences of learners’ L1 and L2 were juxtaposed in order to
create student awareness of the differences in the languages. For each column, there were 4-6 examples of words that contained the target phone. This section aimed to aid students build familiarity with unknown phonetic phenomena that occur in L2 Spanish while comparing it with the L1 English equivalent. In the case of voiceless plosives, the emphasis was put on the lack of aspiration in all contexts. Moreover, the modules showed the allophonic distribution of approximants and plosives. As for vowels, the emphasis was given on the consistency of the sound-letter correspondence in Spanish. Lastly, Section A included one or more side notes. These side notes included additional information, especially in regards to orthographic distribution, practical tips on what kind of pronunciation to avoid or to use, etc.

This awareness-raising training (linked to the explicit instruction of these phones) has been ubiquitous in the literature of pronunciation instruction, and it has often reported significant results. For instance, Thomson and Derwing (2014) stated that, “explicit instruction of phonological forms can have a significant impact, likely because it orients learners’ attention to phonetic information, which promotes learning in a way that naturalistic input does not” (p. 14).

The treatment in this section puts the emphasis on perceptual awareness of the facts about the L1 and L2. Although some terminology is included (aspiration, diphthongization, tense and lax vowels, etc.), as previously commented, such terminology is intended to be kept to a minimum due to time constraints in the L2 classroom. The terminology used was intended to assist students in learning of the acoustic differences of English and Spanish. In this case, IPA characters are used instead of other nomenclature adapted to L2 Spanish (as some textbooks do),
so learners would not be confused if they decided to go further in their studies and take a linguistic or phonetic course in the future.

Section B. The introduction of each module is followed by a section created to target perception and production. In every module, Section B, contained a list of nine pairs of English-Spanish cognates (e.g. president – *presidente*). This section was devised for students to first listen to the pronunciation of the presented words in English and Spanish, and second to repeat each word pair. In order to introduce consistency, each instructor received an audio-file for each module that included the nine pairs of cognates. This file was to be played to each classroom in place of each instructor possibly introducing variation if each read the lists. The protocol called for instructors to ask students to pay attention to how each word was pronounced in each language. After listening, participants were then requested to pronounce each pair with the goal of producing each one as close to the model as possible.

The goal of this section was to reinforce the learning of the target structure since they had already been exposed to the facts about L1 and L2 pronunciation. Cognates were purposely selected to allow students to better perceive the difference in both languages, and with the idea that the familiarity of the words could enhance their orientation to the phonetic information.

The choice to include a perception-production practice is grounded on theoretical accounts on L2 Phonetic development. As discussed in Chapter 2, Flege’s SLM (1995) indicates that consequently when difficulty exists for students in perceiving L2 sounds it leads to students also facing difficulties in their L2 production. Essentially, Flege also theorizes that accurate L2 perception will eventually develop into accurate L2 production.
Section C. Section C was developed with the aim to connect the treatment with content-based instruction and the communicative methodology that is often implemented in the L2 classroom. Form-focused instruction (FFI) is an approach that has been recently adopted for pronunciation instruction's studies. Saito (2012) states that FFI occurs “when teachers made some kind of effort to draw learners’ attention to form not only in controlled contexts (i.e., when practicing form is the only task) but also in communicative contexts (i.e., when practicing pronunciation form while being involved in meaning-oriented communicative activities)” (p.845). As stated in Chapter 2, FFI has been hypothesized to promote learning by engaging students in noticing target features while using meaningful discourse, which in turn it helps students to proceduralize their declarative knowledge (DeKeyser, 2003, 2007; Lyster, 2007).

Even though much research is still needed before jumping to robust conclusions on the effects of FFI on pronunciation instruction, recent studies have shown improvement in pronunciation treatments when using an FFI approach (Saito & Lyster, 2012; Saito, 2013). These studies place FFI as an optimal approach for the L2 classroom; in this study, this model encourages students to apply what they learn in the modules to the rest of the communicative activities during the remaining allotted classroom time.

Keeping FFI in mind, this section consisted of 12 words or phrases that featured the weekly target phone. These items were also part of the vocabulary that each class was to learn throughout that week, as included in each syllabus. Evidently, the vocabulary of Sections C in each module was different according to the curricular level, first, second & third year. However, the number and type of target items were equivalent. In the first nine modules, instructors
instructed learners to pay attention to previously covered target structures. The remaining three modules (i.e. 10, 11, 12) were a review of modules 1-9; therefore, no recycling was needed.

This section is also subdivided in three parts (i, ii, and iii). The idea of these parts was to transition from a traditional drill practice to a communicative activity in which the target structure would be used indirectly. Part (i) is similar to Section B, as it asked students to produce the items as accurately as possible, in pairs or with the instructor if possible. In Part (ii), students were asked to have a brief discussion on why the vocabulary listed in this section is important for the topics covered during that week. Finally, in Part (iii), students were asked to complete an activity of their textbook that was scheduled to be completed in the syllabus for that week (in all sections, including the control group). Students were also encouraged to pay attention to the pronunciation while completing this task. Table 2 shows the number of tokens containing the target phones in the modules.

**Table 2. Tokens of target phones in instructional modules**

<table>
<thead>
<tr>
<th>Tokens Per Section</th>
<th>Section A &amp; B</th>
<th>Section C (customized per level)</th>
<th>Total Of Tokens</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>/p/ /t/ /k/ /b/ [β] /d/ [ð] /g/ [γ] /a/ /e/ /i/ /o/ /u/</td>
<td>1st Year</td>
<td>2nd Year</td>
</tr>
<tr>
<td></td>
<td>20 25 20 15 13 11 17 15 18 14 33 16 28 14</td>
<td>48 21 10 3 18 7 27 3 3 21 31 14 13 7</td>
<td>34 25 15 6 8 12 29 2 5 20 40 19 16 10</td>
</tr>
<tr>
<td></td>
<td>68 46 30 18 31 18 44 18 21 35 64 30 41 21</td>
<td>54 50 35 21 21 23 46 17 23 34 73 35 44 24</td>
<td></td>
</tr>
<tr>
<td></td>
<td>54 50 35 21 21 23 46 17 23 34 73 35 44 24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
To summarize, a regular session implementation goes as follow: (0) the weekly module handout is given by the instructor in class. At the beginning of the next class, (1) the teacher starts with a short introduction, as presented in Section A. The instructor would ask if students had trouble hearing the perceptual differences in English and Spanish. The instructor provided both a natural and an exaggerated pronunciation model, in order to put emphasis to the perceptual differences. Then, (2) students complete Section B and are asked to pay attention to the phone(s) covered during that week. They listen to the audio files and they then are required to evaluate their pronunciation among each other. Subsequently, (3) students complete Section C. Part (iii) will mark their transition from the module to their regular scheduled activities for that class.

In this study all sections were designed to be completed in class in order to control that students successfully complete all the modules. However, for future implementation of these or similar modules in the L2 classroom, in order to have more communicative-oriented practice during classroom time, it is suggested that only Section C (or even only Section C, Part iii) be completed during classroom time, as Sections A and B may be introduced as homework assignments in preparation for the class.

**The Control Group (CON).** The control group attended the same curricular levels as the experimental group. The syllabi were the same per curricular level in the experimental and control conditions except the control group did not include the treatment. The vocabulary
introduced in Section C of the modules for the experimental treatment were already part of the curriculum of the course. For that reason, regardless of the experimental condition, all learners were expected to read, hear, and practice the assigned vocabulary and use it in communicative situations for activities and tasks during classroom time and homework assignments. Apart from not being exposed to the target phones in Sections A and B, learners in the control condition were never told which phones were the linguistic target of the study, which of course constitute an important difference of the conditions. It is also likely that given the nature of the curricula in this course, it is very likely that students practiced the vocabulary words in a communicative, contextualized way, rather than learning from a list in isolation\(^c\). Furthermore, the instructors in these courses emphasized communication and fluency rather than pronunciation accuracy.

**Measures**

The pre and posttest were identical for time and experimental condition. The separation of the pre-test and posttest was approximately 12 weeks, which reduced the possibility that similar task outcomes were results of memory effects.

Analyses on pronunciation treatment outcomes have usually been done by acoustic analyses or human rating methods. Acoustic analyses examine acoustic proprieties such as frequency values of formants, intensity, duration etc. Human rating methods usually involve native-speaker listeners (or non-native in some studies) rating non-native-speaker speech samples. Both of these methods offer advantages and disadvantages. Acoustic analyses offer a

\(^c\) Nevertheless, these vocabulary words were included in the list of vocabulary words in the learners’ textbooks.
reliable and accurate way to measure change in the acoustic proprieties between the pre and posttest sessions. However, as Saito and Lyster (2012) argue, “it is unclear how such changes in acoustic properties can actually impact NS listeners’ comprehension of L2 speech production (which is arguably the ultimate goal of pronunciation teaching)” (p.601). Therefore, human rating methods are also important, in order to have a holistic picture on the effects of the treatment.

Human ratings methods have been used in most of the studies cited. However, studies in Spanish pronunciation have in most cases used acoustic analysis (Elliot, 1997 is an exception). Additionally, to date no study has used human rating method to assess global ratings on accentedness and comprehensibility.

Therefore, in order to explore the effects of the treatment from different perspectives, three production tasks were used in each session: (1) a word-reading task, (2) a paragraph-reading task\(^d\), and (3) a picture-description task. The word-reading task was used for the acoustic analysis of Research Question 1. The paragraph-reading and picture-description tasks were used for the human rating analysis for accentedness and comprehensibility of Research Question 2. The paragraph-reading task was designed to measure controlled performance and the picture-description task was designed to elicit learners’ spontaneous speech production.

The questionnaires were completed online at the time of the pretest and posttest, or within 48 hours of each corresponding test. The pretest and posttest were completed in a quiet room in a one-on-one meeting with the researcher. The researcher recorded the three tasks as WAV files,

\(^d\) In the word-reading and paragraph-reading tasks, learners have to read aloud the words/sentences in order to elicit their speech.
sampling rate of 44KHz and sampling size of 16bit, using the software Praat (Boersma & Weenink, 2016). A unidirectional microphone was used (Samson Go-Mic). The instructions were given in English and the target words and sentences were not pronounced or repeated by the researcher.

**Acoustic Analysis (Word-Reading Task).** This word-reading task consisted of an acoustic analysis of one of the natural classes included in the materials: Voiceless Stops /p, t, k/. This task consisted of a 12-item list of words that participants read aloud (Appendix 3). The list incorporated 4 tokens for each target phone in initial position. It also included 9 English-Spanish cognates so students would be familiar with their meaning. On top of that, a low-frequency word per target phone was included. To control for familiarity, participants were asked to translate familiar and unfamiliar words. All target items were extracted from word initial consonant-vowel (CV) syllables. Some of the syllables were stressed and some were unstressed. This configuration was chosen because English speakers will aspirate in word-initially syllables (Hualde, 2005). In addition, flapping does not affect word-initially /t/ in English as it does medial /t/. For example, in one of the task items many participants pronounced *tutor* /tuˈtor/ as its English equivalent [ˈtʰuːrəɹ], making it impossible to calculate VOT. However, in initial position, participants always pronounced it as a voiceless stop.

VOT of /p, t, k/ was measured calculating the time that elapses from the release of the stop closure to the beginning of periodic vocal fold vibration as displayed in waveforms and

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\(^{6}\) Learners familiarity with the word-reading task items was assessed by calculating the accuracy in a random sampling of 20% of the data. On the pretest, learners translated the cognates English-Spanish with 94% accuracy compared with 0% accuracy of low-frequency words.

\(^{7}\) Flapping is a phonological process found in American English in which consonants /t/ and /d/ may be pronounced as an alveolar flap [ɾ], particularly between vowels.
spectrograms using the software Praat. Figure 1 provides a waveform and spectrogram of a short-lag stop (9ms) taken from one of the baseline native Spanish speaker data. Figure 2 provides a waveform and spectrogram of a typical long-lag stop (68ms) by a Spanish learner taken from the pretest session. These figures illustrate that for the long-lag stop a burst of airflow at stop release delays the beginning of voicing of the following segment and for the short-lag stops the delay is substantially shorter.

Figure 1. Illustration of a word-initial short-lag stop.
Finally, an average VOT value was computed per target character for each participant at each data collection point.

**Human Rating Analysis.** Certainly, in a study that uses human raters to assess the degree of accentedness and comprehensibility, the language background of the rater influences the outcome of the study. Huang & Jun’s (2015) study explored the differences in ratings among inexperienced and experienced native English speakers (NESs) and advanced non-native English speakers. Their study found that L1 background and experience do significantly influence language score when rating proficiency (p.24) and consequently revealed that the experienced NES rated best in differentiating other NES from L2 English speakers. In applying this notion to accentedness and comprehensibility, selecting appropriate type of raters in terms of backgrounds and experience was an important task.
For this study, bilingual speakers, English-Spanish, with a strong background in Spanish and experience in L2 Spanish (both teaching and accustomed to L2 speech) were selected. Having the L2 Spanish teaching experience was an important detail as Isaacs & Trofimovich (2012) indicates that “experienced teachers would be abler to identify a fuller range of aspects of speech that they consider when scoring comprehensibility than novice raters (p.487)”. Since no study has assessed the effects on teaching pronunciation on the constructs of accentedness and comprehensibility, or the reliability and validity of its raters inferences, these two studies provide an initial stage for the selection of its raters.

**Raters.** This study recruited five (n=5) bilingual native speakers (3 females, 2 males). One reported to be between 18-24 years old and the other four to be between 25-35. Three raters were born and raised in Spanish-speaking countries where they lived most of their lives in (Spain, Argentina and Colombia). The other two raters were born and raised in the United States to Spanish-speaking families, and reported to be Spanish-English bilinguals since birth. In their self-evaluation reports, all indicated to have native proficiency in Spanish and native or near-native proficiency in English in all four skills: writing, reading, listening and speaking. Three claimed to use Spanish and English respectively in 50% of their daily interactions, and the other 75% Spanish and 25% English. Following Huang & Jun’s (2015) guidelines, these raters were required to (a) be current or past Spanish as a second language teachers, (b) have worked in that profession for at least one full year, and (c) self-report high levels of familiarity with foreign accent.
For human rating analyses, two tasks were employed: a controlled (paragraph-reading) and an extemporaneous (picture-description) speech task, as described further in their respective sections.

**Paragraph-Reading Task.** First, students completed the paragraph-reading task, in which students read a short passage out loud. The passage was composed of three sentences, of which only the one in the middle was used for the analysis (Appendix 4). In addition, the task was intentionally designed to include all the target structures while excluding some difficult phones that are outside of the scope of the present study. Table 3 shows the number of unique tokens with the target forms included.

<table>
<thead>
<tr>
<th>/p/</th>
<th>/t/</th>
<th>/k/</th>
<th>/b/- [β]</th>
<th>/d/-[ð]</th>
<th>/g/- [y]</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>/a/</td>
<td>/e/</td>
<td>/i/</td>
<td>/o/</td>
<td>/u/</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>20</td>
<td>14</td>
<td>13</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

**Picture Description Task.** Finally, students completed a picture description task. The task employed was “The Suitcase Story” (Derwing et al., 2009; Appendix 5). This task has been employed in previous studies to measure extemporaneous speech. To control with the lack of familiarity with the task, the first five seconds were deleted, and the remaining time was targeted for the analysis. Participants were given a small amount of planning time before being recorded. In addition, a vocabulary of key items was given. This was done so lack of vocabulary will not have a detrimental effect on the ratings of comprehensibility and accentedness.
Accentedness And Comprehensibility Ratings. The effects of the paragraph-reading and picture-description tasks were assessed through gains on accentedness and comprehensibility, measured by human raters of different backgrounds. A 9-point scale was used, as it has become the standard (Saito et al., 2015). For accentedness, the scale was from 0 (native-like pronunciation) to 9 (very strong accent). For comprehensibility, the scale was from 0 (very easy to understand) to 9 (very hard to understand).

In total, the data of these tasks included 344 recordings produced by the 83 Spanish non-native speakers and 6 Spanish native speakers. When presented to the raters, the audio files were randomized. First, raters were given 3 samples to practice, one by a native speaker and two by non-native speakers. After familiarizing themselves with the tasks the participants employed, the raters assessed accentedness and comprehensibility to the 344 collected assessments. They were not told that this was a developmental study, so they were unaware that some samples were used in a pretest and others in a posttest. Raters made the evaluations using an online survey, while listening to the audio files stored in a cloud-service application. They were informed that the data set represented a broad set of ability levels, from native speaker to first-year student. They were encouraged to employ the entire scale.
CHAPTER 4: RESULTS

For Research Question 1 and 2, repeated measures analysis of variance (RMANOVAs) were used to compare the effects and interactions of test time, instructional condition, and curricular level. For RQ1 (A, B & C), three RMANOVAs were used to analyze VOT on each phone. For RQ2 (A, B, C, & D), four RMANOVAs were used to analyze the accentedness and comprehensibility ratings of the paragraph-reading and picture-description tasks. For the seven analyses, the within-groups factor was time of test (pretest and posttest) and the between-groups factors were instructional condition (experimental and control) and curricular level (first, second and third year). Histograms and Q-plots were inspected to check for normality of distribution on the data and the assumption was met. Since the within-groups factor has only two levels (pre and posttest), Mauchly’s test did not apply, and sphericity was assumed.

Research Question 1: Acoustic Analyses

Research Question 1 was subdivided in three subsections (A, B & C) in order to explore the effects of the treatment individually per phone. The average VOTs produced for the target phones /p, t, k/ by speakers is presented in Table 4 and those separated by curricular level are presented in Table 5. In order to examine if learners in the control and experimental condition differ in their VOT’s values in their pretests, independent samples T-Test were employed. Results indicated no significant difference in the pretest session in any of the phones between the experimental and control condition.
Table 4. Average voice onset time in production of stop consonants (milliseconds)

<table>
<thead>
<tr>
<th></th>
<th>EXP (n=38)</th>
<th>CON (n=45)</th>
<th>NS (n=6)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M(SD)</td>
<td>M(SD)</td>
<td>M(SD)</td>
</tr>
<tr>
<td>/p/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>42 (18)</td>
<td>44 (17)</td>
<td>16 (7)</td>
</tr>
<tr>
<td>Post</td>
<td>21 (16)</td>
<td>44 (18)</td>
<td></td>
</tr>
<tr>
<td>/t/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>48 (17)</td>
<td>51 (20)</td>
<td>16 (6)</td>
</tr>
<tr>
<td>Post</td>
<td>26 (14)</td>
<td>50 (29)</td>
<td></td>
</tr>
<tr>
<td>/k/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>54 (17)</td>
<td>57 (17)</td>
<td>29 (9)</td>
</tr>
<tr>
<td>Post</td>
<td>40 (15)</td>
<td>55 (18)</td>
<td></td>
</tr>
</tbody>
</table>

Table 5. Average voice onset time in production of stop consonants by level (milliseconds)

<table>
<thead>
<tr>
<th></th>
<th>First Year</th>
<th>Second Year</th>
<th>Third Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EXP (n=13)</td>
<td>CON (n=13)</td>
<td>EXP (n=11)</td>
</tr>
<tr>
<td></td>
<td>M(SD)</td>
<td>M(SD)</td>
<td>M(SD)</td>
</tr>
<tr>
<td>/p/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>48 (21)</td>
<td>46 (19)</td>
<td>40 (16)</td>
</tr>
<tr>
<td>Post</td>
<td>25 (21)</td>
<td>45 (14)</td>
<td>20 (15)</td>
</tr>
<tr>
<td>/t/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>57 (15)</td>
<td>53 (20)</td>
<td>45 (18)</td>
</tr>
<tr>
<td>Post</td>
<td>33 (19)</td>
<td>50 (19)</td>
<td>23 (8)</td>
</tr>
<tr>
<td>/k/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre</td>
<td>59 (14)</td>
<td>61 (19)</td>
<td>55 (17)</td>
</tr>
<tr>
<td>Post</td>
<td>47 (16)</td>
<td>60 (19)</td>
<td>36 (12)</td>
</tr>
</tbody>
</table>

As commented in the previous chapter, the main difference of the production of voiceless stops in English and Spanish is that, in English, voiceless stops are realized phonetically as long-lag stops (approximately 30-100ms) and in Spanish they are usually realized as short-lag stops (approximately 0-25ms). Consequently, an interesting comparison would consist in detecting
whether learners’ VOTs approach or reach short-lag values. The problem that this comparison poses is that it would work for /p/ and /t/ but not necessarily for the voiceless velar stop /k/. For this segment, native speakers can produce short and long-lag VOTs values. Lisker & Abramson (1964) reported that VOTs of /k/ can range from 15 to 55ms in Spanish and from 50 to 135 in English.

Having these issues in mind, instead of comparing short/long-lag values in the pre and posttest, the descriptive comparison will be made observing how the average of learners’ VOTs approached or reached VOTs’ ranges from the baseline data. Table 6 presents the range and average VOTs produced for the target phones by native speaker participants. Based on this range, the lowest and highest average range of VOTs were computed and used for the comparison. Consequently, for /p/, the range which to compare learners was set at 9-24ms; for /t/ the range was set at 12-24ms; and for /k/ the range was set for 21-41ms.

<table>
<thead>
<tr>
<th>Participant</th>
<th>/p/ range</th>
<th>/t/ range</th>
<th>/k/ range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>min</td>
<td>max</td>
<td>M(SD)</td>
</tr>
<tr>
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<td>4</td>
<td>11</td>
<td>32</td>
<td>19 (9)</td>
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<td>5</td>
<td>5</td>
<td>17</td>
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<td>21 (6)</td>
</tr>
<tr>
<td>All Participants</td>
<td>9</td>
<td>24</td>
<td>16 (7)</td>
</tr>
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</table>

Table 6. Range and average VOT for Spanish native speakers’ baseline data (milliseconds)
RQ1A: Does pronunciation instruction in L2 Spanish improve learners’ ability to produce bilabial voiceless plosives /p/, as measured by a word-reading task? If so, does it depend on the curricular level?

The results of the RMANOVA are presented in Table 7. On the word-reading task for voiceless bilabial stop /p/, there was a main effect for time $F(1,77) = 59.56$, $p < .001$, with a large effect size ($n_p^2 = .42$). There was also an interaction of time and condition $F(1,77) = 55.83$, $p < .001$ with a large effect size ($n_p^2 = .41$). In both cases, there was high statistical power (1.00). These results indicate that the posttest VOT values in the experimental condition ($M = 20.86$, $SD = 15.83$) declined significantly from their pretest values ($M = 41.59$, $SD = 17.76$); while in the control condition, VOT scores did not seem to experience any reduction. Clearly, there is a significant difference between effectiveness of condition, and based on the means, the experimental reduced their VOT values while the control condition did not. Therefore, those in the experimental condition performed significantly better than those in the control condition.

However, the interaction of time and level; and the interaction of time, condition and level were not significant (all $F \leq .37$, all $p \geq .7$). But since the interaction of time and condition was significant, this suggests that the reduction of VOT values was equally effective in participants of first, second and third year in the experimental condition, which implies that curricular level did not have a significant effect. This may also be corroborated in the between-subjects effects in which level and condition, and level are non-significant.

Nevertheless, it is also important to emphasize that the number of participants per groups is reduced when separated by curricular level. Therefore, it is uncertain to know if this lack of
main effects is due to lack of observed power to detect a true effect in the interaction of time and level (.10), and in the interaction of time, condition and level (.58).

Table 7. RMANOVA of word-reading task: /p/

<table>
<thead>
<tr>
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<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>$n_p^2$</th>
<th>Power</th>
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</thead>
<tbody>
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<td><strong>Between Subjects</strong></td>
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<td></td>
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<tr>
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<td>.85</td>
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<td>.14</td>
<td>.89</td>
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<tr>
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<td>.24</td>
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<td>4239.01</td>
<td>55.83</td>
<td>&lt;.001</td>
<td>.41</td>
<td>1.00</td>
</tr>
<tr>
<td>Time X Level</td>
<td>56.54</td>
<td>2</td>
<td>28.27</td>
<td>.37</td>
<td>.69</td>
<td>.01</td>
<td>.10</td>
</tr>
<tr>
<td>Time X Condition X Level</td>
<td>8.615</td>
<td>2</td>
<td>4.30</td>
<td>.05</td>
<td>.94</td>
<td>.001</td>
<td>.58</td>
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<td>Error (Time)</td>
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<td>77</td>
<td>75.91</td>
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</table>

The word-reading task scores are plotted in Figure 3. Learners in the experimental condition reduced their VOT average score considerably, reaching the average native speakers’ range (set at 9-24ms). After the treatment, the average VOT of the experimental condition (M=20.86) considerably approached the average score of the native speaker baseline (M=15.90), while the control condition has virtually no decrease in the VOT values from the pre to the posttest.
Figure 4 plots the word-reading task scores, separated by curricular level. Even though the RMANOVA showed no statistical difference between levels, the plots show that there is a descriptive trend which suggests that VOT reaches lower values as curricular level increases. VOT scores in the posttest from third year participants (M=18) are lower than those of second year participants (M=20). And second year participants’ scores are lower than first year participants’ scores (M=25).
Figure 4. Word-reading task for /p/ by curricular level.

Participants’ individual trajectories are shown in Figure 5. It can be seen that the vast majority of learners in the experimental condition reached VOT values between the range of the native speakers’ baseline, and a few others approached this range. There are only a small number of outliers. By contrast, in the trajectories in the control condition, only a few participants reduced their VOTs, but the vast majority maintained (or even increased) their VOT values. Improvement seem to occur in the experimental condition across all curricular levels.

Figure 5. Individual trajectories for word-reading task for /p/.
Overall, the RMANOVAS completed for /p/ indicated that there is an effect of time, which varies by instructional condition but not by curricular level. To summarize, the data suggest that treatment improves learners’ ability to produce native-like bilabial voiceless plosives /p/, as measured by a word-reading task. Curricular level is not a factor, but there is a descriptive trend that shows that instruction is slightly more effective as the curricular level increases.

RQ1B. Does pronunciation instruction in L2 Spanish improve learners’ ability to produce dental voiceless plosives /t/, as measured by a word-reading task? If so, does it depend on the curricular level?

The results of the RMANOVA are presented in Table 8. On the word-reading task for voiceless dental stop /t/, there was a main effect for time $F(1,77) = 76.02, p <.001$, with a large effect size ($\eta_p^2 = .49$). There was also an interaction of time and condition $F(1,77) = 55.94, p <.001$ with a large effect size ($\eta_p^2 = .42$). In both cases, there was high statistical power (1.00). These results indicate that the posttest VOT values in the experimental condition ($M = 26.08, SD = 14.07$) declined significantly from their pretest values ($M = 48.12, SD = 17.13$); while in the control condition, VOT scores did not seem to experience any reduction. Similar to /p/, there is a significant difference between effectiveness of condition. Based on the means, the experimental condition reduced their VOT values while the control condition did not. Therefore, those in the experimental condition performed significantly better than those in the control condition.
Just as it happened with /p/, the interaction of time and level; and the interaction of time, condition and level were not significant (all $F \leq 1.39$, all $p \geq .25$). This suggests that curricular level did not have a significant effect because reduction of VOT values was equally effective in participants of first, second and third year in the experimental condition. This may as well be corroborated in the between-subjects effects in which level and condition, and level are non-significant. As with /p/, the reduced number of participants when separated by group and level make it uncertain to know if this lack of main effects is due to lack of observed power (.14 for Time x Level, and .31 for Time x Condition x Level).

Table 8. RMANOVA of word-reading task: /t/

<table>
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<tr>
<th>Source</th>
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<th>MS</th>
<th>F</th>
<th>p</th>
<th>$n_p^2$</th>
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<td><strong>Between Subjects</strong></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Intercept</td>
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<td>527.68</td>
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<td>.87</td>
<td>1.00</td>
</tr>
<tr>
<td>Condition</td>
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<td>7501.47</td>
<td>12.63</td>
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<td>.14</td>
<td>.93</td>
</tr>
<tr>
<td>Level</td>
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<td>2</td>
<td>1163.60</td>
<td>1.96</td>
<td>.14</td>
<td>.04</td>
<td>.39</td>
</tr>
<tr>
<td>Condition X Level</td>
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<td>2</td>
<td>687.67</td>
<td>1.15</td>
<td>.31</td>
<td>.02</td>
<td>.23</td>
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<td>Error</td>
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<td>593.67</td>
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<tr>
<td><strong>Within Subjects</strong></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Time</td>
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<td>76.02</td>
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<td>55.94</td>
<td>&lt;.001</td>
<td>.42</td>
<td>1.00</td>
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<td>Time X Level</td>
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<td>.02</td>
<td>.14</td>
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<td>Time X Condition X Level</td>
<td>211.90</td>
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<td>105.95</td>
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<td>.03</td>
<td>.31</td>
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<td>Error (Time)</td>
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<td>75.81</td>
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</table>

The word-reading task scores for /t/ are plotted in Figure 6. Learners in the experimental condition reduced their VOT average score considerably, approaching the averaged native speakers’ range (set at 12-24ms). After one semester of pronunciation instruction, the average VOT of the experimental condition (M=26.08) considerably approached the average score of the
native speakers’ baseline (M=16), while the control condition has virtually no decrease in the VOT values from the pre to the posttest.

![Graph showing word-reading task for /t/.](image)

**Figure 6.** Word-reading task for /t/.

Figure 7 plots the word-reading task scores, separated by curricular level. Even though the RMANOVA showed no statistical difference between levels, the plots also show a descriptive trend. In this analysis, however, VOT scores in the posttest from third year participants (M=22) are only slightly lower than second year participants (M=23), but third and second year participants’ scores are considerably lower than first year participants’ scores (M=33).
Participants’ individual trajectories are showed in Figure 8. Also similar to /p/, it can be seen that the vast majority of learners in the experimental condition reached VOT values between the range of the native speaker baseline, while a few others approached this range. In addition, there are also only a small number of outliers. By contrast, in the trajectories in the control condition, only a few participants reduced their VOTs, and the vast majority maintained or increased their VOT values. This figure also suggest that instruction is equally effective across curricular level, as it was the case for /p/. 

**Figure 7. Word-reading task for /t/ by curricular level.**
Overall, the RM ANOVAS completed for /t/ indicate that there is an effect of time, which varies by instructional condition but not by curricular level. To summarize, the data suggest that Spanish pronunciation instruction improves learners’ ability to produce native-like dental voiceless plosives /t/, as measured by a word-reading task. Curricular level is not a factor, but there is a descriptive trend that shows that instruction is slightly more effective to second and third year participants than to first year participants.

RQ1C: Does pronunciation instruction in L2 Spanish improve learners’ ability to produce voiceless plosives /k/, as measured by a word-reading task? If so, does it depend on the curricular level?

The results of the RMANOVA are presented in Table 9. On the word-reading task for voiceless velar stop /k/, there was a main effect for time $F(1,77) = 31.88, p < .001$, with a large effect size ($\eta^2_p = .29$) and high statistical power (1.00). There was also an interaction of time and
condition \( F(1,77) = 24.33, p < .001 \) with a large effect size \( \eta^2_p = .23 \) and high statistical power (.99). These results indicate that the posttest VOT values in the experimental condition (\( M = 40.26, \text{SD} = 14.65 \)) declined significantly from their pretest values (\( M = 54.44, \text{SD} = 17.27 \)); while in the control condition, VOT scores did not seem to experience any reduction. Similar to \(/p/\) and \(/t/\), there is a significant difference between effectiveness of condition. Based on the means, the instructional condition is performing better than the control. Therefore, those in the experimental condition performed significantly better than those in the control condition.

In addition, as it happened with \(/p/\) and \(/t/\), the interaction of time and level; and the interaction of time, condition and level were not significant (all \( F \leq 1.06 \), all \( p \geq .35 \)). This suggests that since the reduction of VOT values was equally effective in participants of first, second and third year in the experimental condition, curricular level did not have a significant effect. This may also be corroborated in the between-subjects effects in which level and condition, and level are non-significant. As with \(/p/\) and \(/t/\), the reduced number of participants when separated by group and level make it uncertain to know if this lack of main effects is due to lack of observed power (.14 for Time x Level, and .22 for Time x Condition x Level).

### Table 9. RMANOVA of word-reading task: /k/

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>( \eta^2_p )</th>
<th>Power</th>
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<tbody>
<tr>
<td><strong>Between Subjects</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>43666.81</td>
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<td>43666.81</td>
<td>882.89</td>
<td>&lt;.001</td>
<td>.920</td>
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<td>Condition</td>
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<td>6.76</td>
<td>0.01</td>
<td>.08</td>
<td>.72</td>
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<td>Level</td>
<td>2666.43</td>
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<td>1333.22</td>
<td>2.68</td>
<td>.07</td>
<td>.06</td>
<td>.51</td>
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<tr>
<td>Condition X Level</td>
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<td>186.17</td>
<td>.37</td>
<td>.68</td>
<td>.01</td>
<td>.10</td>
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</tr>
<tr>
<td>Time</td>
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<td>31.88</td>
<td>&lt;.001</td>
<td>.29</td>
<td>1.00</td>
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</table>

85
The word-reading task scores for /t/ are plotted in Figure 9. Learners in the experimental condition reduced their VOT average score considerably, approaching the averaged native speakers’ range (set at 21-41ms). After one semester of pronunciation instruction, the average VOT of the experimental condition (M=40.26) approaches considerably the average score of the native speakers’ baseline (M=28.7), while the control condition has virtually no decrease in the VOT values from the pre to the posttest.

![Figure 9. Word-reading task for /k/.](image)

**Table 9. (cont.)**

| Time X Condition | 1855.77 | 1 | 1855.77 | 24.23 | <.001 | .23 | .99 |
| Time X Level     | 79.95   | 2 | 39.97   | .52   | .59   | .01 | .14 |
| Time X Condition X Level | 162.34 | 2 | 81.17   | 1.06  | .35   | .27 | .22 |
| Error (Time)     | 5895.87 | 77| 76.57   |       |       |     |     |
Figure 10 plots the word-reading task scores, separated by curricular level. Even though the RMANOVA showed no statistical difference between levels, also in this case, the plots show a descriptive trend. For /k/, pronunciation instruction seems to have a stronger impact on second year students’ posttest (M=36ms), followed by third-year (M=37ms), and it is less effective in first-year participant scores (M=47ms). In any case, all curricular levels improved more in the experimental than in the control condition.

Participants’ individual trajectories are shown in Figure 11. As with /p/ and /t/, it can be seen that the vast majority of learners in the experimental condition reached VOT values between the range of the native speakers’ baseline, and a few others approached this range. The plots suggest that the number of outliers is higher than /p/ and /t/, but by no means does it compare to the trajectories in the control condition, in which only a few participants reduced their VOTs, and the vast majority maintained or increased their VOT values.
Overall, the RMANOVAS completed for /k/ indicated that there is an effect of time, which varies by instructional condition but not by curricular level. To summarize, the data suggest that Spanish pronunciation instruction improves learners’ ability to produce native-like velar voiceless plosives /k/, as measured by a word-reading task. Curricular level is not a factor, but there is a descriptive trend that shows that instruction is slightly more effective to second and third year participants than to first year participants.

**Research Question 2: Human Raters Analyses**

Research Question 2 was subdivided in four subsections (A, B, C & D) in order to explore separately the effects of instruction on accentedness and comprehensibility in the two different types of tasks. Table 10 summarizes the results separated by task and experimental condition. The average ratings separated by curricular level for accentedness is presented in
Table 11, and for comprehensibility is presented in Table 12. T-test were also used in the pretest in order to see if there were differences between the experimental and control condition. No difference was found in terms of task (paragraph-reading, picture-description) and construct (accentedness, comprehensibility).

The interrater reliability of the five experienced raters were overall consistent in the ratings of the 332 speech samples of L2 participants. For the paragraph-reading task, raters demonstrated high reliability indexes (Cronbach alpha) for accentedness ($\alpha = 0.84$) and comprehensibility ($\alpha = 0.77$). For the picture-description task, raters also demonstrated high reliability indexes (Cronbach alpha), for accentedness ($\alpha = 0.78$) and comprehensibility ($\alpha = 0.83$). These reliability indexes reached or exceeded the benchmark value of 0.70–0.80 (Larson-Hall, 2010) and were considered sufficiently consistent. For the 12 speech samples of the baseline data, all raters unanimously assigned 1 point to both accentedness and comprehensibility to every native speaker, reaching a 100% of agreement. Thus, ratings were averaged across the five raters to compute 8 scores for each speaker (2 x task, 2 x time, 1 x accentedness, 1 x comprehensibility).

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<th>TASK</th>
<th>ACCENTEDNESS</th>
<th>COMPREHENSIBILITY</th>
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<td>CON (n=45)</td>
</tr>
<tr>
<td>Paragraph-reading</td>
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<tr>
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<td>5.9 (1.3)</td>
</tr>
<tr>
<td>Post</td>
<td>5.3 (1.5)</td>
<td>5.7 (1.4)</td>
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</tbody>
</table>
Table 10. (cont.)

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<tr>
<th>TASK</th>
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<th>Post</th>
</tr>
</thead>
<tbody>
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<td>Picture-description</td>
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<td></td>
<td>1.0 (0.0)</td>
<td>4.1 (1.3)</td>
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</tr>
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<td>4.4 (1.2)</td>
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<td>1.0 (0.0)</td>
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</table>

Table 11. Average scores on accentedness by curricular level

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<th>Second Year</th>
<th>Third Year</th>
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<tbody>
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<td>EXP (n=13)</td>
<td>CON (n=13)</td>
<td>EXP (n=11)</td>
</tr>
<tr>
<td>Paragraph-reading Pre</td>
<td>7.2 (0.6)</td>
<td>7.0 (1.0)</td>
<td>5.9 (1.3)</td>
</tr>
<tr>
<td>Post</td>
<td>6.5 (0.5)</td>
<td>7.0 (0.9)</td>
<td>5.2 (1.4)</td>
</tr>
<tr>
<td>Picture-description Pre</td>
<td>6.9 (0.8)</td>
<td>7.1 (0.5)</td>
<td>6.2 (0.7)</td>
</tr>
<tr>
<td>Post</td>
<td>6.6 (0.6)</td>
<td>6.8 (0.9)</td>
<td>5.8 (1.0)</td>
</tr>
</tbody>
</table>

Table 12. Average scores on comprehensibility by curricular level

<table>
<thead>
<tr>
<th>TASK</th>
<th>First Year</th>
<th>Second Year</th>
<th>Third Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EXP (n=13)</td>
<td>CON (n=13)</td>
<td>EXP (n=11)</td>
</tr>
<tr>
<td>Paragraph-reading Pre</td>
<td>5.3 (0.7)</td>
<td>4.8 (0.9)</td>
<td>4.0 (1.1)</td>
</tr>
<tr>
<td>Post</td>
<td>4.6 (0.6)</td>
<td>4.8 (1.0)</td>
<td>3.5 (1.2)</td>
</tr>
<tr>
<td>Picture-description Pre</td>
<td>6.0 (1.2)</td>
<td>5.9 (0.7)</td>
<td>5.0 (1.1)</td>
</tr>
<tr>
<td>Post</td>
<td>5.3 (0.9)</td>
<td>5.4 (0.9)</td>
<td>4.1 (1.0)</td>
</tr>
</tbody>
</table>
RQ2A. Does pronunciation instruction in L2 Spanish improve learners’ perceived accentedness in speech elicited by a paragraph-reading task? If so, does it depend on the curricular level?

The paragraph-description task’s scores for accentedness are plotted in Figure 12. After one semester of pronunciation instruction, the average degree of foreign accent of the experimental condition is moderately reduced. Compared to the control condition, the improvement is slightly more effective in the experimental condition.

Results of the RMANOVA are presented in Table 13. On the paragraph-reading task for accentedness, there was a main effect for time $F(1,77) = 13.15, p > .05, \eta_p^2 = .14$, with high statistical power (1.00). In addition, there was an interaction of time and condition $F(1,77) = 3.85, p = .05 \eta_p^2 = .04$ and medium statistical power (.49). As with the acoustic analysis, there is a significant difference between effectiveness of condition and clearly, based on the means, the experimental condition is doing better than the control.
Figure 12. Means of paragraph-reading task for accentedness.

Table 13. RMANOVA of paragraph-reading task: Accentedness

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>$n_p^2$</th>
<th>Power</th>
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</thead>
<tbody>
<tr>
<td><strong>Between Subjects</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>5354.13</td>
<td>1</td>
<td>5354.13</td>
<td>2333.23</td>
<td>&lt;.001</td>
<td>.96</td>
<td>1.00</td>
</tr>
<tr>
<td>Condition</td>
<td>3.68</td>
<td>1</td>
<td>3.68</td>
<td>1.60</td>
<td>.20</td>
<td>.02</td>
<td>.24</td>
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<tr>
<td>Level</td>
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<td>32.67</td>
<td>&lt;.001</td>
<td>.45</td>
<td>1.00</td>
</tr>
<tr>
<td>Condition X Level</td>
<td>3.41</td>
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<td>1.70</td>
<td>.74</td>
<td>.47</td>
<td>.01</td>
<td>.17</td>
</tr>
<tr>
<td>Error</td>
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<td>2.29</td>
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<td></td>
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<tr>
<td><strong>Within Subjects</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>4.25</td>
<td>1</td>
<td>4.25</td>
<td>13.15</td>
<td>&lt;.001</td>
<td>.14</td>
<td>.94</td>
</tr>
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<td>Time X Condition</td>
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<td>1.24</td>
<td>3.83</td>
<td>.05</td>
<td>.04</td>
<td>.49</td>
</tr>
<tr>
<td>Time X Level</td>
<td>0.69</td>
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<td>0.34</td>
<td>1.06</td>
<td>.34</td>
<td>.02</td>
<td>.23</td>
</tr>
<tr>
<td>Time X Condition X Level</td>
<td>0.65</td>
<td>2</td>
<td>0.32</td>
<td>1.01</td>
<td>.36</td>
<td>.02</td>
<td>.22</td>
</tr>
<tr>
<td>Error (Time)</td>
<td>24.90</td>
<td>77</td>
<td>0.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

On the other hand, the interaction of time and level; and the interaction of time, condition and level were not significant (all $F \leq 1.06$, all $p \geq .34$). In the same line that with the acoustic analyses, this results also suggest that participants of first, second and third year in the...
experimental condition, curricular level did not have a significant effect. However, in the between-subjects effects there was a main effect on level. The pairwise comparisons in Table 14 shows that first-year students’ scores on accentedness were significantly higher than second and third year’s students, and second-year students’ scores were also significantly different than third year students’. This is expected\(^8\) as higher level of curricular should give an advantage on global ratings, due to longer language exposure. However, Figure 13 can help us to understand why these interactions (time and level; and time, condition and level) were not significant.

Descriptively, only first year and second year student scores seem to moderately improve because of instruction. Third year students’ scores did not seem to improve because of instruction. Therefore, there a descriptive indication that instruction has an effect on first and second-year students. However, as with the acoustic analyses, more participants per curricular level are needed in order to reach robust conclusions.

### Table 14. Pairwise comparisons of paragraph-reading task: Accentedness

<table>
<thead>
<tr>
<th>Comparisons</th>
<th>MD</th>
<th>SE</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>lower</td>
</tr>
<tr>
<td>Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Year - 2nd Year</td>
<td>1.30</td>
<td>.29</td>
<td>&lt;.001</td>
<td>.57</td>
</tr>
<tr>
<td>1st Year - 3rd Year</td>
<td>2.32</td>
<td>.28</td>
<td>&lt;.001</td>
<td>1.60</td>
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<tr>
<td>2nd Year - 3rd Year</td>
<td>1.02</td>
<td>.28</td>
<td>&lt;.01</td>
<td>.31</td>
</tr>
</tbody>
</table>

Adjustment for Multiple Comparisons: Scheffe

\(^8\) Similar significance between curricular level is also found for the data in Research Question 2B, 2C and 2D
In sum, in the case of a controlled paragraph-reading task, participants in the experimental conditions slightly improved their perceived comprehensibility. These results suggest that there is an effect of time, it does vary by condition, but it does not by level. However, descriptively, the data seem to suggest that instruction might have a stronger effect on first and second-year students.

RQ2B. Does pronunciation instruction in L2 Spanish improve learners’ perceived accentedness in speech elicited by a picture-description task? If so, does it depend on the curricular level?

The picture-description task’s scores for accentedness are plotted in Figure 14. After one semester of pronunciation instruction, the average degree of foreign accent of the experimental condition is moderately reduced. The control condition has a slight improvement as well, but it is only 0.2 points.
Figure 14. Means of picture-description task for accentedness.

The results of the RMANOVA (Table 15) also confirm what descriptive statistics suggest. On the picture-description task for accentedness, there was a main effect for time $F(1,77) = 3.85, p = .05, n_p^2 = .04$, and medium statistical power (.49). However, unlike the paragraph-reading task, there was not an interaction of time and condition $F(1,77) = .07, p = .79, n_p^2 = .001$, and low statistical power (.05). Likewise, the interaction of time and level; and the interaction of time, condition and level were not significant (all $F \leq 1.24$, all $p \geq .29$).

In sum, in the case of a spontaneous elicitation tasks, participant in both conditions slightly improved their perceived comprehensibility. These results suggest that although there is an effect of time, it does not vary by condition or level. It seems that instruction does not have an effect when students are asked to perform a spontaneous elicitation task, in other words, when
students must put their attention not only to pronunciation, but they also are forced to retrieve their grammatical and lexical knowledge.

Table 15. RM ANOVA of picture-description task: Accentedness

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>$n^2_p$</th>
<th>Power</th>
</tr>
</thead>
<tbody>
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<td></td>
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<td>5749.92</td>
<td>4816.39</td>
<td>&lt;.01</td>
<td>.98</td>
<td>1.00</td>
</tr>
<tr>
<td>Condition</td>
<td>1.41</td>
<td>1</td>
<td>1.41</td>
<td>1.18</td>
<td>.28</td>
<td>.01</td>
<td>.18</td>
</tr>
<tr>
<td>Level</td>
<td>99.61</td>
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<td>49.80</td>
<td>41.71</td>
<td>&lt;.001</td>
<td>.52</td>
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</tr>
<tr>
<td>Condition X Level</td>
<td>3.45</td>
<td>2</td>
<td>1.72</td>
<td>1.44</td>
<td>.24</td>
<td>.03</td>
<td>.30</td>
</tr>
<tr>
<td>Error</td>
<td>91.92</td>
<td>77</td>
<td>1.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Within Subjects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Time</td>
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<td>1.28</td>
<td>3.85</td>
<td>.05</td>
<td>.04</td>
<td>.49</td>
</tr>
<tr>
<td>Time X Condition</td>
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<td>.02</td>
<td>.07</td>
<td>.79</td>
<td>.001</td>
<td>.05</td>
</tr>
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<td>Time X Level</td>
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<td>.24</td>
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<td>.48</td>
<td>.019</td>
<td>.17</td>
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<td>Time X Condition X Level</td>
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<td>.41</td>
<td>1.24</td>
<td>.29</td>
<td>.031</td>
<td>.26</td>
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<td>Error (Time)</td>
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<td>77</td>
<td>.33</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RQ2C. Does pronunciation instruction in L2 Spanish improve learners’ perceived comprehensibility, in speech elicited by a paragraph reading task? If so, does it depend on the curricular level?

The paragraph-reading task’s scores for comprehensibility are plotted in Figure 15. After one semester of pronunciation instruction, the average degree of perceived comprehensibility of the experimental condition is slightly reduced. However, the control condition also reduced the degree of perceived comprehensibility as measured by experienced native-speaker raters.
The results of the RMANOVA are presented in Table 16. On the paragraph-reading task for comprehensibility, there was a main effect for time $F(1,77) = 10.35$, $p = .002$, $n_p^2 = .11$, and high statistical power (.88). However, there was not an interaction of time and condition $F(1,77) = 2.08$, $p = .15$, $n_p^2 = .02$, and low statistical power (.29). In the case of a spontaneous elicitation tasks, participant in both conditions slightly improved their perceived comprehensibility. In addition, the interaction of time and level; and the interaction of time, condition and level were not significant (all $F \leq 1.77$, all $p \geq .17$).

These results suggest that although there is an effect of time, it does not vary by condition or by level. While pronunciation instruction seems to have an effect on perceived accentedness in a controlled paragraph-reading task, it does not seem to have an effect on perceived comprehensibility.
Table 16. RM ANOVA of paragraph-reading task: Comprehensibility

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>$n_p^2$</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercept</td>
<td>2417.5</td>
<td>1</td>
<td>2417.54</td>
<td>1762.65</td>
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<td>.95</td>
<td>1.00</td>
</tr>
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<td>.21</td>
<td>.15</td>
<td>.69</td>
<td>.002</td>
<td>.06</td>
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<td>Level</td>
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<td>59.56</td>
<td>43.42</td>
<td>0.000</td>
<td>.53</td>
<td>1.00</td>
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<tr>
<td>Condition X Level</td>
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<td>.75</td>
<td>.55</td>
<td>0.57</td>
<td>.01</td>
<td>.13</td>
</tr>
<tr>
<td>Error</td>
<td>105.60</td>
<td>77</td>
<td>1.37</td>
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</tr>
<tr>
<td>Within Subjects</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>3.38</td>
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<td>3.38</td>
<td>10.35</td>
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<td>Time X Level</td>
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<td>.29</td>
<td>.90</td>
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<td>Time X Condition X Level</td>
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<td>.57</td>
<td>1.77</td>
<td>.17</td>
<td>.04</td>
<td>.36</td>
</tr>
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<td></td>
</tr>
</tbody>
</table>

RQ2D. Does pronunciation instruction in L2 Spanish improve learners’ perceived comprehensibility in speech elicited by a picture description task? If so, does it depend on the curricular level?

The picture-description task scores for comprehensibility are plotted in Figure 16. The results are similar to those in the paragraph-reading task. After one semester of pronunciation instruction, the average degree of perceived comprehensibility on both conditions (experimental and control) is reduced.
The results of the RM ANOVA are presented in Table 17. On the picture-description task for comprehensibility, there was a main effect for time $F(1,77) = 13.62$, $p=.001$, $\eta^2_p = .15$, and high statistical power (.95). As expected, there was not an interaction of time and condition $F(1,77) =1.41$, $p =.23$, $\eta^2_p = .01$, and low statistical power (.21). In the case of a spontaneous elicitation tasks, participants in both conditions slightly improved their perceived comprehensibility. In addition, the interaction of time, condition and level was not significant (all $F= 1.85$, all $p=1.6$). Nonetheless, there was an interaction for time and level, $F(2,77) = 3.21$, $p=.04$, $\eta^2_p = .07$. This, however, does not have a relationship with instruction, as it is expected that third-year students’ perception of comprehensibility is higher than that of first-year students, it is descriptively presented in Table 12.

Figure 16. Means of picture-description task for comprehensibility.
These results suggest that although there is an effect of time, it does not vary by condition. Although it varies by level, this variation does not interact with time or level. A semester of pronunciation instruction does not seem to have an effect on a spontaneous (and controlled) task.

Table 17. RMANOVA of picture-description task: Comprehensibility

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
<th>$n_p^2$</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Between Subjects</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>3150.81</td>
<td>2713.89</td>
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<td>0.20</td>
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<td>.07</td>
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<td></td>
<td></td>
</tr>
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<td>6.12</td>
<td>13.62</td>
<td>&lt;.001</td>
<td>.15</td>
<td>.95</td>
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<td>0.63</td>
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<td>.01</td>
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<td>Time X Level</td>
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<td>1.44</td>
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<td>Time X Condition X Level</td>
<td>1.66</td>
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<td>0.83</td>
<td>1.85</td>
<td>.16</td>
<td>.04</td>
<td>.37</td>
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<tr>
<td>Error (Time)</td>
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<td>77</td>
<td>0.44</td>
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</table>
CHAPTER 5: DISCUSSION AND CONCLUSIONS

Summary Of Results

The first research question asked whether pronunciation instruction in L2 Spanish would improve learners’ ability to produce voiceless stops /p, t, k/, and to what extent it depended on the curricular level. The data was consistent on the three voiceless stops’ segment development during a semester. The data indicated that learners in the experimental conditions improved their pronunciation of all voiceless stops. Therefore, pronunciation instruction seems to provide an advantage in the word-reading task, as compared to the control group which did not receive such instruction.

Furthermore, the data did not suggest that learning from pronunciation instruction was influenced by curricular level. Participants in the experimental condition reduced their VOT in first, second, and third year. Nevertheless, all phones seem to have a descriptive trend that show that the effectiveness of pronunciation is higher as the curricular level increases. The descriptive trend might have not been detected due to the lack of observed power when all participants were broken into their respective six groups (first, second, or third year) creating 3 controlled groups and 3 experimental groups.

Overall, results of RQ1 suggests that pronunciation instruction is beneficial in the development of voiceless stops /p, t, k/, across all curricular level (first, second, third year), and a descriptive trend in the data suggest that instruction might be slightly more effective as the curricular level increases.
The second research question asked whether pronunciation instruction in L2 Spanish would improve learners’ perceived accentedness and comprehensibility in speech elicited by a paragraph-reading task and a picture-description task, and to what extent it depended on the curricular level. In this case, the data suggested that pronunciation instruction provided a moderate advantage only to accentedness in a controlled level, by means of speech elicitation by the paragraph-reading task. Instruction does not seem to give an advantage to accentedness when the speech was elicited from the picture-description task. Additionally, the data suggested that instruction does not give an advantage to perceived comprehensibility, both in the controlled and spontaneous level.

Similar to the acoustic analyses, the data did not suggest that learning from pronunciation instruction was influenced by curricular level. Only in terms of accentedness at the controlled level, the data indicated descriptively that pronunciation instruction is more advantageous to first and second year students.

Overall, results of RQ2 suggested that pronunciation instruction was beneficial only to improve the perceived foreign accent at the controlled level. The data also suggested that instruction did not have an effect on comprehensibility.

**Theoretical Implications**

Since the design of the study involved two different type of analyses (acoustic and human raters), results of these analyses are discussed separately in light of two frameworks: Flege’s (1995) Speech Learning Model (SLM), and Levis’ (2005) Intelligibly Principle.
Flege’s model was conceived as a model of L2 learning. In the acoustic analysis, VOT in voiceless stops was chosen because this model predicted that these contrasts in English and Spanish would cause perceptual and production difficulties. The SLM assumes that Spanish learners of an L1 English background would have problems to produce accurate Spanish stops because the phonetic dissimilarity is mainly based on VOT duration differences, thus it is a very small difference, and these learners would have difficulties in perceiving the differences. This would impede the creation of an L2 category, thus merging the categories in their L1 and L2. Furthermore, this theory also predicts that exposure to the language over time will result in accurate production (which is always assumed to be preceded by accurate perception). Studies in Spanish L2 development have given empirical support to these predictions (e.g. Diaz-Campos, 2014; Reeder 1998). However, the control group in this study, which was exposed only to naturalistic input, did not improve their production of VOT. Indeed, this could be explained by the fact that exposure to Spanish in the L2 classroom was limited. Most students in this study do not have more aural input other than the 2.5 hours per week, plus the time they might have spent doing homework during the semester.

In this case the SLM predicts that the L2 categories will not develop due to limited amount of exposure. Learners in the control group also did not show differences in the pretest-posttest across curricular level, suggesting that previous exposure in the classroom did not help students to develop the production abilities, in contrast to other learning contexts (living abroad, immersion, study abroad, etc.) that usually have positive results. By contrast, the experimental group did approach and reach native-speakers’ VOT range. Therefore, the results suggest that
drawing the attention to the target forms in terms of production and perception has an effect on participants’ production of VOT. The perception exercises contained in the modules might have helped discriminate the difference of VOT in English and Spanish and accurately perceive the long short lag contrast, which in time, as the model predicts, results in accurate production. This study did not account for the effect of perception, but it held the view of the SLM that perception precedes production, as it was reflected in the design of the materials. This of course needs more empirical evidence as support. Nonetheless, Zampini’s (1998) results suggested that accurate production could precede perception. And Kissling (2012) found that only two weeks of phonetic training can have an impact of L2 perception. In any case, these results suggest that combined listening and speaking practice of the target input has an effect, which limited L2 input in the classroom has not.

From an intelligibility principle perspective (Levis, 2005), these results can be informative but inconclusive in the golden standard that pronunciation instruction should help learners to become more understandable rather than to focus in accent reduction alone. The results indicate that there is a significant acoustic change in learners, as showed in the word-reading task, but the data also suggest that this change is only slightly noticeable for the construct of accentedness when students performed a controlled sentence reading-aloud task. Other classroom studies (Derwing et al., 1998) with very similar scope and outcome measures showed that a semester increased improved comprehensibility and decreased foreign accent perception. In this study, after a semester of instruction, change began to occur, but it is only
noticeable by speakers on accentedness at the controlled level. However, it is important to keep in mind certain issues before ruling out the effects on perceived comprehensibility.

First of all, most studies in perceived accentedness and comprehensibility have been done with English as the target language. English is well-known for featuring many cross-linguistically marked consonants, a complex system of vowels, and an orthographic system which for most cases native and non-native speakers have to learn by heart the spelling of most words. Spanish, on the other hand, with few exceptions, has a relatively straightforward letter-to-sound correspondence, a stable system of vowels, and most of their consonants are cross-linguistically unmarked. Studies that have investigated the linguistic correlates to comprehensibility in L2 English (Issac & Trofimovic, 2012; Saito et al., 2015) have indicated that pronunciation is only one of the many factors (with vocabulary, grammar, fluency, etc.) that correlate to comprehensibility; accentedness is much more linked to pronunciation. Therefore, a possibility exists that given the phonetic characteristics of Spanish, pronunciation is not a critical factor for perceived comprehensibility. Further studies are needed in order to assess linguistic correlates to perceived comprehensibility and accentedness in L2 Spanish (to date, no study has addressed these issues).

Furthermore, the outcome measures of this study indicated that acoustic change (at least on VOT) occur in a month despite the fact that this change is only perceivable by human raters in terms of accentedness at the control level. Therefore, it is a step in the right direction. It is important to notice that this study only analyzed one variable acoustically, VOT. There is no analysis of the acoustic changes in vowels and approximants. This could have also had an impact
on the outcomes, especially of the paragraph-reading task, in which the target acoustic variables were controlled.

Moreover, the intelligibility principle holds the view that pronunciation instruction should enhance learners’ comprehensibility over accent reduction alone. Therefore, significant results from the acoustic analysis are only of relevance if further studies indicate that VOTs reduction can enhance comprehensibility. One could argue that it is possible that adjusting VOT would make a contribution over increased comprehensibility, as L2 students tend to confuse Spanish short-lag voiceless stops with English voiced stops (Zampini, 1998). However, more research is needed in order to see whether the acoustic analysis of VOT development of this study has an impact on perceived comprehensibility.

Nonetheless, putting aside the issue of comprehensibility, it is important not to disregard the value of instruction on perceived accentedness all together. Under the intelligibility principle perspective, comprehensibility is more important because (1) from a communicative point of view, comprehensibility is more relevant, (2) L2 accented-less speech is rare and often an unachievable goal, and (3) comprehensible speech in most cases is possible.

For a moment assume what the data suggests: (1) Adjusting to native-like voiceless stops (and possibly vowels and approximants) reduce foreign accent perception but does not have an advantage on perceived comprehensibility, and (2) Spanish voiceless stops are teachable and lead learners to approach native-like patterns. If this were the case, the intelligibility principle would not account the relevance of this type of cases. Certainly, as Derwing and Munro (2015) asserted, errors (in pronunciation) are real and have serious consequences, and undoubtedly the
most important are when they produce communication breakdowns. Undoubtedly, this type of “errors” should be in the top of the priorities to language practitioners. Unfortunately, it is beyond the scope of this study to investigate to what degree non-native VOT patterns in L2 Spanish produces communicative breakdowns. However, this study showed that a few minutes of classroom time, in which students’ attention is drawn to these patterns can result in positive effects. This should be a compelling reason for practitioners to include these segments in a curriculum, even in the case that its benefits are only tied to socio-pragmatic reasons of achieving native-like patterns.

Methodological And Pedagogical Implications

Indisputably, the main contribution that this study offers is that phonetic instruction has an effect on the production of L2 phones after a semester of classroom-based pronunciation instruction. Studies in Spanish L2 pronunciation instruction have mixed results on production of L2 phones. This study aimed to address several methodological issues that have been identified by scholars in previous research. Thomson and Derwing (2014) stated that “an ideal quantitative [pronunciation instruction] study should: (i) provide enough detail about participants and procedures to allow replication; (ii) have large enough samples to conduct statistical analyses, including effect sizes; and (iii) employ a control group to verify that improvement is a result of instruction” (p.2). In Lee et al.’s (2015) meta-analysis, they also identified that the major shortcomings of pronunciation research included that most studies have small sample size with low statistical power. In Spanish pronunciation instruction, only Kissling’s (2012) study has had
a larger sample pool than this study. Therefore, this study not only provided significant results on the effects of pronunciation instruction in the acoustic analysis, but it was also accompanied with correspondingly high statistical power.

The inclusion of a control group was also a significant factor, as it adds validity to the claim that instruction had a positive effect. However, because it is a classroom study, it is more difficult to control than a laboratory research. The L2 classroom is often as diverse as represented in this study, for example, 20% of students have another language at different levels of proficiency. It is unclear whether knowledge of a different L1 or an additional L2 can have an impact on the results. Besides, external exposure to input is hard to control, particularly in a study that spans over a semester from the first to the last data collection.

On the other hand, studies conducted in a classroom setting are ideal for ecological validity. Regardless of these possible covariates, this study suggested that adding 10 to 20 minutes per week to teaching Spanish pronunciation can have an impact at the end of the semester. This is an implication that should be appealing for language instructors and course developers in a Spanish as foreign language context. Natural input is limited in a foreign language environment, and classroom time is devoted primarily to communication activities.

The present study contributes to the positive outcomes of inclusion of teaching pronunciation. Optimistically, language teachers and program coordinators will be persuaded by the advantages of teaching pronunciation in the Spanish L2 classroom enough to implement their own instruction. With time it would ideally result in an instruction as common as grammar or vocabulary instruction in today's L2 classroom. To date, pronunciation instruction in the Spanish
L2 classroom is scarce, probably due to lack of materials and/or because teachers’ lack of training and knowledge on how to teach pronunciation (Lord and Fionda, 2014). As an example, in the exit questionnaire of this study, only 5% of the students reported to have had any type of pronunciation instruction in the L2 classroom in the past. Most likely, it was instruction which often only involves error-correction or drills. Only 2 participants reported to have had some pronunciation training before.

In addition, the modules in this study did not substantially disrupt the communicative L2 classroom in which the students were immersed. Considering the limited L2 input they have, drawing attention to difficult L2 areas can have positive effects. It is also noteworthy to mention that even though the sections of these modules (A, B, C) were done in class, language practitioners could assign Section A and B as homework, and only work on Section C in class which has more communicative components. Likewise, these sections could be added to online platforms already existing in most post-secondary education L2 programs. For instance, AX or AXB task could be also added to the modules in order for students to self-assess how well they can perceive their difference from their L1 to their L2. Certainly, it would not be a novel approach, as the communicative classroom often assign the review of grammar of vocabulary as homework, leaving classroom-time to communicative activities. The benefits of adding a relatively short period of classroom time to the teaching of pronunciation outweighs the costs.

The outcome measures chosen for this study might have influenced the results. While in the word-reading task, VOT was measured acoustically, listeners in paragraph-reading and picture-description tasks were not directed to judge any particular target segment. Listeners were
instructed only to assess a global rating without further indication on what they should focus on. For instance, after completing the analysis, raters indicated that excessive pausing and hesitation was one of the factors that they found most important for lower points on comprehensibility.

Previous research has identified other phonetic phenomena that is problematic for L1 English learners of L2 Spanish: lack of intervocalic tapping, trills, laterals in coda position, fricative velars, and stress. Surely, pronunciation instruction cannot only include the target phones included in this study. It is possible that more L2 segmentals and suprasegmentals need to be added in order for listeners be able to perceive differences in a 9-point scale of comprehensibility (and accentedness at the spontaneous level).

More segments and suprasegmentals were not added due to time constrains. Otherwise, this would have caused review of past segmentals to appear with less frequency, considering that only 15-20 minutes per class over a 12-weeks period were devoted to pronunciation instruction. This could cause learners trouble in retaining what they learnt at the beginning of the semester, or create an overwhelming situation for the learner with information overload. It is important to consider that this is a classroom study, in which participants received pronunciation training as a peripheral part of the curriculum (it was not required as part of the curriculum, thus, students did not need it in order to obtain a competitive grade). Therefore, a comprehensible language curriculum, should include more segmentals and suprasegmentals, over the span of several semesters, in the same way that grammar and vocabulary is constantly reviewed and put to practice over several semesters in a foreign language program.
Another key implication is taken in consideration based on the parallel-coordinates plots in Chapter 4 (Figures 4.3, 4.6, and 4.9). These plots shed light on a central issue. Despite the fact that most students in the experimental condition seemed to reach or approach native-speaker patterns of VOTs after instruction, there was a great deal of variation as well. Tailoring the teaching of pronunciation to individual needs has already been highlighted in previous research. Thomson and Derwing (2014) indicated that “Teachers should individualize instruction, assigning work to students who need it, while others focus on different tasks. However, this scenario requires skilled instructors who can determine the pronunciation needs of a given learner.” (p. 14). Similarly, it is clear for the data that not all students needed the same amount of input, as many students produced short-lag stops in the pre-test.

Students self-reports also provided evidence of these individual differences. When asked how helpful were the modules in the exit questionnaire, participants in the experimental condition gave the following scores (on a scale of 1 to 10): fifteen students scored the modules between 8 to 10 points, sixteen between 5 to 7 points, and, five students between 2 to 4 points. Two students gave them no points. Therefore, the questionnaire results support that pronunciation instruction has a different impact depending on the individual student and it is important to attend to these individual needs. Teachers should be attentive with students who struggle with pronunciation, and attend to them individually.

The data also suggest that curricular level was not a factor, and learners of each level improved equally in the experimental condition. Kissling (2012) found similar results in Spanish L2 perception and production after phonetic instruction. This suggests that pronunciation
instruction can be inserted at any stage of the language learning process, and curriculums in the Spanish as foreign language should start developing materials across levels and semester, with several target phones and when possible drawing attention to form in communicative activities.

Conclusion

In conclusion, the data in both analyses strongly suggest that after a semester of pronunciation instruction, phonetic accuracy develops, and that development is perceived by raters in terms of accentedness at a controlled level. One of the goals of this dissertation is to contribute to the knowledge of pronunciation instruction in general but specially in regards to L2 Spanish. As Lee et al. (2014) discussed, more pronunciation instruction studies are needed that have target languages other than English.

The main goal of the present study was to contribute to the existing research by evaluating the putative effects of pronunciation instruction in the L2 classroom. Results align with this claim, as 4 of the 7 analyses completed in this study demonstrated that pronunciation instruction has an effect. Although results suggest that pronunciation instruction has no effect on perceived comprehensibility, it is important to notice that we need to advance in our understanding of this construct in order to assess to what extent pronunciation can contribute to perceived comprehensibility. However, these short 15-to-20-minutes classroom-based interventions have an effect on foreign accent whether it is measured acoustically or by human rating outcome measures. It is hoped that the results of this study will encourage further research and the implementation of L2 Spanish pronunciation instruction in the classroom.
Limitations And Further Research

This study aimed to see the effect of the teaching of Spanish L2 pronunciation of three natural classes of segments: voiceless stops, approximants and vowels. These segments were chosen because they were found to be problematic to English L1 students of Spanish and have been explored in previous research. Undoubtedly, future research needs to explore the acoustic effects of these phones and others that might be problematic to L2 learners of Spanish in more depth. Other segments addressed in pronunciation instruction in L2 Spanish for L1 English have been fricative velar /x/ (Castino, 1996), trills and taps /ɾ, r/ (Elliot, 1995, 1997; Kissling, 2012; Lord, 2010), and palatal nasal /ɲ/ (Elliot, 1995, 1997. Other phonetic phenomena problematic for English L1 that have not been prominent in the literature should be addressed, such as non-velarization of laterals in coda position (Hualde, 2005) or syllabification (Arteaga, 2000). In addition, apart from Saalfeld (2012), not many studies in Spanish pronunciation instruction have studied the effects of instruction beyond the word level. Future research should start exploring the effects of instruction of prosodic aspects such as phonotactics, stress (word and sentence level) and intonation.

Even though type of instruction was not a variable addressed in the study, a combination of explicit phonetic information with a focus of awareness raising of the differences of L1-L2 (Section A), traditional drilling activities (Section B) and a Focus on Form instruction component (Section C) have an impact on the development of L2 pronunciation. Further research will have to parse these variables and assess which one has a stronger effect, or whether a combination of these three types of instruction is more effective than separated. In this line, Saito
(2013) found that a combination of explicit phonetic instruction and focus on form instruction had a bigger impact than a group that received explicit phonetic instruction alone.

Another limitation has to do with the acoustic analysis. A controlled task such as the word-reading task carries advantages and limitations. Since these tasks required learners to read isolated words and phrases from a printed list, it might not reflect spontaneous speech and can cause exaggerated learning effects from instruction. However, Elliot (1997) suggested that instruction was more likely to affect a controlled task than a spontaneous task, and Saito’s (2012) review of studies on pronunciation instruction that used controlled outcome measure were also found more likely to show improvement. In sum, controlled outcome measures are highly informative, but should also be accompanied with spontaneous speech tasks in order to be more representative of natural speech patterns.

Spontaneous and controlled outcome measures were only used for the human listener analysis. The data suggest that instruction had significant effects only on perceived accentedness at the controlled level. There were no gains in comprehensibility, unlike previous research in L2 English that has shown that a semester of pronunciation instruction can help to improve comprehensibility (Derwing et al., 1997, 1998; Kennedy and Trofimovich, 2010). It could be possible that for L2 Spanish, more semesters and longitudinal studies are needed in order to see the effects of instruction in perceived comprehensibility. But in addition, further research is needed in order to better understand this construct. To this end, I propose the following avenues to extend our knowledge in perceived comprehensibility and also in perceived accentedness in L2 Spanish.
First, although recruiting experience L1 raters has its advantages (see Chapter 3), it is important to extend raters’ background (Huang & Jung, 2015). It was hypothesized that bilingual experienced L1 raters were able to identify native vs. non-native accurately and might have been able to identify a fuller range of speech (Isaacs and Trofimovich, 2012). However, these raters could have also been used to accented L2 speech. Consequently, they might have been more lenient with ratings of L2 speech than perhaps inexperienced and/or monolingual L1 raters as it was the case in Huang & Jung (2015). In addition, the literature also calls for L2 learners as raters (Munro et al., 2006; O’Brien, 2014). These raters are also likely to provide thought-provoking insights on the way they rated L2 speech.

Previous research has shown that in some cases L2 learners tend to be harsher on their rating of judgment of accent (Huang & Jung, 2015; Rossiter, 2009). This type of research goes in line with Levis (2005) “sensitive of context” presented as part of his Intelligibility Principle. Choosing a variety of raters seeks to account for a wider range of speakers that second language learners will encounter while using their L2. We cannot forget the background of the L2 learners that participated in this study (college students taking instructed SLA Spanish in the United States). It is very likely they will use Spanish mostly with other L2 learners in their classroom, at least in the first stages of their development. As it was seen in the learners’ biodata, only a handful of them travel abroad and communicate actively with L2 speakers. So accented speech could have been highly understandable by other L2 learners. Therefore, a wide arrays of raters is important in order to tailor their needs to the extensive variety of listeners they will encounter in their L2 usage and development.
Secondly, a deeper understanding on the constructs of comprehensibly and accentedness is needed. Only in recent years, scholars have started to explore linguistic correlates to accentedness and/or comprehensibility (Issacs & Trofimovich, 2012; Saito, K., & Shintani, 2016, in press; Saito, Trofimovich, & Issacs, 2015, 2016). These studies used English L2 speakers with different L1 backgrounds. Most likely, this area in the literature will continue expanding over the next year, but it is worth noting that to date all these studies agree that comprehensibility correlates to grammatical, lexical domains and pronunciation, while accentedness strongly correlates to pronunciation. Researchers need to investigate if these findings also apply for L2 Spanish. Knowing the linguistic correlates to these two constructs will help us inform language teachers of what phonetic elements are needed to be highlighted. In the case of comprehensibility, we need to have a deeper understanding of the linguistic correlates of comprehensibility in L2 Spanish, and the role of pronunciation in it.

A better understanding of linguistic correlates to accentedness and comprehensibility will allow researchers and practitioners to do what Levis (2016) called “setting instructional priorities”. In other words, the pronunciation targets in books and materials should be the ones that help students develop comprehensibility (and only secondly to be more native-like). In other words, it is important to know which phonetic and phonological phenomena have a higher functional load (Brown, 1988). Concerning the target segments in this study (although further research is needed), it is likely that voiceless plosives and vowels should have more priority than approximants in the classroom. Approximants allophones in this study have their stops

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Levis (2016) defines functional load as “how much work two phonemes do to distinguish words in a language.”

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allophones counterparts, and an incorrect pronunciation is not likely to interfere with communication. By contrast, Spanish voiced stops can be confused with English voiceless stops; and tense vowels tend to be diphthongized in English while in Spanish they can occur with or without diphthongization (and they can also be minimal pairs).

Finally, a few other areas need to be addressed. In terms of methodological design, longevity effects by means of a delayed post-test should be included in future research. Also, there is much needed research on the intersection of pronunciation instruction and individual differences. As it was previously commented, we need to tailor instruction to the necessities of each particular student, as some of them are prone to struggle with pronunciation more than others. In addition, we need to address individual factors such as motivation, language awareness, language (and phonological) aptitude, working memory or phonological short-term memory.
APPENDICES

1. **Background Questionnaire**

*Please complete the following questionnaire. The information you provide will be kept confidential and used only for the purposes of the study. Please circle your answer for multiple choice questions.*

**Demographics:**

- Age: _______ Gender: M / F
- Your class level: Freshman / Sophomore / Junior / Senior

Do you have any hearing or speech impairments? Yes / No
- If yes, please explain. ______________________________________________________
  ______________________________________________________
  ______________________________________________________

**Language Experience and Use:**

1. Which of the following describe you the best?
   a. I was born in a Spanish-speaking country
   b. At least one of my parents was born in a Spanish-speaking country
   c. None of the above

2. What is your first language(s)?

3. How old were you when you first started studying Spanish?

4. At what age did you start learning Spanish

5. What level of Spanish are you currently taking? Intro II / Intermediate II / Advanced II

6. How many semesters of Spanish have you taken in college?

7. Name the Spanish courses you have taken in College
   Course name ________________________________
   Course name ________________________________
8. Have you had any instruction in Spanish sounds or Spanish pronunciation – for instance, with a language teacher, private tutor, or computer program? If yes, please describe the instruction.
______________________________________________________________________________

9. Have you had any instruction in Linguistics, Phonetics, or Pronunciation? Yes / No
If yes, please describe the instruction.
______________________________________________________________________________

10. Describe briefly any experience you have had in Spanish-speaking countries, including where, how much time you were there and the purpose of the visit (travel, study abroad, living, etc.).
______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

11. Have you studied any languages besides Spanish? Yes / No

If yes, rate your proficiency in that language

Language: ________________________________

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<th>Intermediate</th>
<th>Advanced</th>
<th>Native-like</th>
<th>Native</th>
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2. **Background Questionnaire For Native Spanish Speakers**

*Please complete the following questionnaire. The information you provide will be kept confidential and used only for the purposes of the study.*

Age: ___   Sex: M / F

1. Where were you born? _________________

2. Where have you lived other than your place of birth, and for how long?
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

3. Which of the following describe you the best? Choose all that apply.
   – I was born in a Spanish-speaking country
   – I heard and used only Spanish between the ages of 0 – 5
   – At least one of my parents was born in a Spanish-speaking country
   – I heard and used Spanish and English between the ages of 0 – 5
   – I heard and used only Spanish between the ages of 0 – 5, and I became English-Spanish bilingual between the ages of 5-12
   – I consider Spanish my native language and English my dominant language
   – None of the above

4. What other languages do you know? Please explain how old you were when you started learning or using each language, the total amount of time or experience you have with it, how you used it (e.g., in school, with friends, etc.), and about how proficient you currently are in it.
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

5. Have you ever taken a class in, or otherwise received training in, phonetics or phonology? If yes, please explain.
______________________________________________________________________________
______________________________________________________________________________
6. Do you have experience teaching Spanish as a second language? If yes, please explain at which level (primary school, high school, college…) and for how long.
3. **Word-Reading Task**

1. papel
2. política
3. posibilidad
4. pana
5. tomate
6. tutor
7. taco
8. tabarra
9. casa
10. colección
11. capitán
12. cábala
4. **Paragraph-Reading Task**

_Ante las complicaciones que ha experimentado en la mitad de su mandato_ [por una vez me gustaría que el presidente pudiera cumplir a tiempo una sólida política de cambios graduales, cuyo gabinete prometió a nivel federal para devolver la confianza al gobierno. Es fundamental que el presidente sepa cumplir junto a su gobierno con sus promesas de campaña.]
5. Picture description Task

VOCABULARY

**Maleta**: suitcase  
**Estrellarse**: to run/bump into each other  
**Corbata**: Tie

**Ropa**: Clothes  
**Ciudad**: city  
**Levantarse**: to get up

**Caminar**: To walk  
**Gafas**: glasses  
**Irse**: go away

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6. Debriefing Questionnaire

Please complete the following questionnaire. The following questions refer to the modules you used during the semester that taught you Spanish pronunciation.

1. Please rate the modules over all

1  2  3  4  5  6  7  8  9  10

2. How difficult were the modules?

Very Easy   1  2  3  4  5  6  7  8  9
10        Very Difficult

3. How interesting were the modules?

Very uninteresting 1  2  3  4  5  6  7  8  9
10        Very interesting

4. How helpful were the modules?

Very unhelpful 1  2  3  4  5  6  7  8  9  10
Very helpful

5. How likely are you to use what you learned from the modules inside or outside of class?

Very unlikely 1  2  3  4  5  6  7  8  9  10
Very likely
6. How hard was learning the differences in English/Spanish of the following sounds?

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<th>Easy</th>
<th>Hard</th>
<th>Very Hard</th>
<th>I can't hear the differences yet</th>
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<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>o</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>u</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

7. After the modules, which of the sounds do you think you CAN'T PERCEIVE correctly in Spanish?

- o p
- o t
- o k
- o b
- o d
- o g
- o a
- o e
- o i
- o o
- o u
8. After the modules, which of the sounds do you think you can PERCEIVE correctly, but you are not able to pronounce?

- o p
- o t
- o k

- o b
- o d
- o g

- o a
- o e
- o i

- o
- o u

9. After the modules, which of the sounds do you think you can PERCEIVE and PRONOUNCE correctly?

- o p
- o t
- o k

- o b
- o d
- o g

- o a
- o e
- o i

- o
- o u

10. Did the lessons include information that you have heard or been taught before? If so, what exactly?

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
11. How could the lessons be improved? Which sounds do you think should also be included?

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

12. Is there anything else you’d like to add, about the lessons?

______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________
7. **Instructional Modules (First Year)**

- Module 1: Voiceless Bilabial Plosive /p/ (First Year)
- Module 2: Voiced Dental Approximant [ð] (First Year)
- Module 3: Mid-Front Vowel /e/ (First Year)
- Module 4: Voiceless Dental Plosive /t/ (First Year)
- Module 5: Mid-Back Vowel /o/ (First Year)
- Module 6: Voiced Bilabial Approximant [β] (First Year)
- Module 7: Voiced Velar Approximant [ɣ] (First Year)
- Module 8: Closed and Open Vowels /a/ /i/ /u/ (First Year)
- Module 9: Voiceless Velar Plosive /k/ (First Year)
- Module 10: Review, Voiced Approximants (First Year)
- Module 11: Review, Vowels (First Year)
- Module 12: Review, Voiceless Plosives (First Year)

---

All modules were created by the author of this dissertation, and are free to use for educational purposes.
Módulo 1: pronunciación del sonido p

A. INTRODUCCIÓN

En inglés hay 2 formas de pronunciar este sonido:
- Con aspiración: [pʰ]
  - Al principio de una sílaba acentuada
- Sin aspiración: [p]
  - En los demás contextos

En cambio, en español solo hay 1 forma:
- Sin aspiración: [p]
  - En todos los contextos

<table>
<thead>
<tr>
<th>inglés</th>
<th>español</th>
</tr>
</thead>
<tbody>
<tr>
<td>port</td>
<td>puerto</td>
</tr>
<tr>
<td>compare</td>
<td>comparar</td>
</tr>
<tr>
<td>Paraguay</td>
<td>España</td>
</tr>
<tr>
<td>pool</td>
<td>Paraguay</td>
</tr>
</tbody>
</table>

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en inglés y la uniformidad en la pronunciación en español.

B. PERCEPCIÓN Y PRODUCCIÓN

i. Escucha los siguientes cognados en inglés - español, identifica la diferencia en ambos idiomas del sonido /p/.

<table>
<thead>
<tr>
<th>inglés</th>
<th>español</th>
</tr>
</thead>
<tbody>
<tr>
<td>paper</td>
<td>papel</td>
</tr>
<tr>
<td>problem</td>
<td>problema</td>
</tr>
<tr>
<td>possible</td>
<td>posible</td>
</tr>
<tr>
<td>possibility</td>
<td>posibilidad</td>
</tr>
<tr>
<td>personal</td>
<td>personal</td>
</tr>
<tr>
<td>impossible</td>
<td>imposible</td>
</tr>
</tbody>
</table>

ii. Practica pronunciar estas palabras en ambos idiomas, y compáralo con la grabación.

1. paper – papel
2. problem – problema
3. possible – posible
4. possibility – posibilidad
5. personal – personal
6. impossible – imposible
7. persistent – persistente
8. president – presidente
9. politics – política

¡Ojo!: A menudo los anglohablantes confunden el sonido [p] con el sonido de las letras b/v. Intenta diferenciar entre estos dos sonidos: Ve la letra pe

C. PRÁCTICA Y DISCUSIÓN

i. Practica la pronunciación de estas palabras con un compañero de clase.

ii. Discute con tu compañero de clase el significado de estas palabras, y cuales son importantes para los temas tratados en clase.

iii. Completa las actividades de la página 198-201 del libro. Presta atención a la pronunciación de estas palabras.

<table>
<thead>
<tr>
<th>inglés</th>
<th>español</th>
</tr>
</thead>
<tbody>
<tr>
<td>puede</td>
<td>prestar servicio</td>
</tr>
<tr>
<td>permite</td>
<td>complejo</td>
</tr>
<tr>
<td>prohibe</td>
<td>proteger</td>
</tr>
<tr>
<td>público</td>
<td>podía</td>
</tr>
<tr>
<td>puede</td>
<td>prestan servicio</td>
</tr>
<tr>
<td>permite</td>
<td>complejo</td>
</tr>
<tr>
<td>prohibe</td>
<td>protegen</td>
</tr>
<tr>
<td>público</td>
<td>podían</td>
</tr>
</tbody>
</table>

9. produccución
10. responsable
11. puros cubanos
12. imperio español

131
A. INTRODUCCIÓN

En inglés hay 2 formas de pronunciar este sonido:

| d fuerte: | d relajada: |
| [d] | [d] |

- principio de frase o después de un sonido consonántico:
- en los otros contextos

<table>
<thead>
<tr>
<th>Spanish</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daniel</td>
<td>radio</td>
</tr>
<tr>
<td>medicinal</td>
<td>medicine</td>
</tr>
<tr>
<td>dough</td>
<td>edition</td>
</tr>
<tr>
<td>distance</td>
<td>accident</td>
</tr>
</tbody>
</table>

En español hay 2 formas diferentes de pronunciarlos:

| d fuerte: | d suave: |
| [d] | [ð] |

- principio de frase o después de un sonido consonántico:
- en los otros contextos

<table>
<thead>
<tr>
<th>Spanish</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daniel</td>
<td>médico</td>
</tr>
<tr>
<td>dado</td>
<td>dado</td>
</tr>
<tr>
<td>lindo</td>
<td>radio</td>
</tr>
<tr>
<td>decisión</td>
<td>miedo</td>
</tr>
</tbody>
</table>

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en español y en inglés.

B. PERCEPCIÓN Y PRODUCCIÓN


b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

c. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención al sonido d y p.

C. PRÁCTICA Y DISCUSIÓN

a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención al sonido d y p.

b. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.


1. enojado  5. dolor de cabeza  9. a menudo
2. silbando  6. tener miedo  10. preparar desayuno
3. permanecer callado  7. película  11. enfadado
4. pasarlo mal  8. compañera de cuarto  12. ponerse rojo
Módulo 3: pronunciación de la vocal e

A. INTRODUCCIÓN

<table>
<thead>
<tr>
<th>En inglés</th>
<th>En cambio, en español</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. set, peck, bed, dress</td>
<td>1. elefante, peso</td>
</tr>
<tr>
<td>2. see, free, meet, extreme</td>
<td>2. queso</td>
</tr>
<tr>
<td>3. fear, peer, tier, beer</td>
<td>3. lee</td>
</tr>
<tr>
<td>4. elephant, melted, remain</td>
<td>4. puede</td>
</tr>
<tr>
<td>5. elephant</td>
<td>5. mesa</td>
</tr>
<tr>
<td>6. express</td>
<td>6. perro</td>
</tr>
</tbody>
</table>

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en inglés y la uniformidad en la pronunciación en español.

B. PERCEPCIÓN Y PRODUCCIÓN

a. Escucha los siguientes cognados en inglés - español, fijate lo similar que es en español, y lo diferente que es en inglés.

- Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

1. elephant – elefante
2. federal – federal
3. extreme – extremo
4. express – expres
5. president – presidente
6. paper – papel
7. hotel – hotel
8. essential – esencial
9. repeat – repetir

B. PERCEPCIÓN Y PRODUCCIÓN

a. Escucha los siguientes cognados en inglés - español, fijate lo similar que es en español, y lo diferente que es en inglés.

- Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

1. elephant – elefante
2. federal – federal
3. extreme – extremo
4. express – expres
5. president – presidente
6. paper – papel
7. hotel – hotel
8. essential – esencial
9. repeat – repetir

C. PRÁCTICA Y DISCUSIÓN

a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención a la pronunciación de las letras <e>, <d>, y <p>.

b. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase, y qué significan.


1. patinaje
2. meditar
3. esquiar
4. pescar
5. problemas cardíacos
6. saber nadar
7. jardín
8. pescar en el río
9. andar en patineta
10. escalar montañas
11. hacer camping
12. tener un picnic
Módulo 4: pronunciación del sonido t

A. INTRODUCCIÓN

En inglés hay 3 formas de pronunciar este sonido:

<table>
<thead>
<tr>
<th>Con ascisión:</th>
<th>Sin ascisión:</th>
<th>Relajado:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[tʰ] (Al principio de una sílaba acentuada)</td>
<td>[t] (generalmente después de consonante o final de sílaba)</td>
<td>[θ] (Entre vocales o sílaba no acentuada)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>atomic</th>
<th>sport</th>
<th>atom</th>
</tr>
</thead>
<tbody>
<tr>
<td>tone</td>
<td>state</td>
<td>city</td>
</tr>
<tr>
<td>tell</td>
<td>stone</td>
<td>tomato</td>
</tr>
<tr>
<td>time</td>
<td>fort</td>
<td>photograph</td>
</tr>
</tbody>
</table>

En cambio, en español solo hay 1 forma:

<table>
<thead>
<tr>
<th>Sin ascisión:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[t] (En todos los contextos)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>átomo</th>
<th>tomate</th>
<th>fotografía</th>
</tr>
</thead>
<tbody>
<tr>
<td>estado</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en inglés y la uniformidad en la pronunciación en español. Práctica la pronunciación del español no aspirada en todos los contextos.

B. PERCEPCIÓN Y PRODUCCIÓN

i. Escucha los siguientes cognados en inglés - español, identifica la diferencia en ambos idiomas del sonido /t/.
ii. Practica pronunciar estas palabras en ambos idiomas con un compañero de clase.

1. tomato – tomate
2. taco – taco
3. total – total
4. lottery – lotería
5. torture – tortura
6. tutor – tutor
7. telephone – teléfono
8. terrible – terrible
9. temple – templo
10. temple – templo

¡Ojo!: en inglés, algunas veces el sonido t se pronuncia como “ch” en “chop”. También debes evitarlo en español con respecto a la t.

C. PRÁCTICA Y DISCUSIÓN

i. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención al sonido <t> y <p>.
ii. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.
iii. Completa la actividad Conversación A, B,C (p.239-241) del libro. Presta atención a la pronunciación de estas palabras.

1. bicicleta
2. fin de semana pasado
3. bicicleta
4. acostaron
5. compraron
6. limpiaron
7. levantaron
8. prepararon
9. invitados
10. tenemos - tuvieron
11. supermercado
12. apartamento
A. INTRODUCCIÓN

En inglés hay 7 formas de pronunciar la letra o.

| 1 | no, coat, low, know, home |
| 2 | pool, book, cook, good |
| 3 | hop, body, lock |
| 4 | boo, who, boot, loop |
| 5 | flood, someone, comfort |
| 6 | boy, choice, toy, joy |
| 7 | now, count, how |

En cambio, en español solo hay 1 forma de pronunciarla:

| 1 | oso polar |
| 2 | horror |
| 3 | cosa |
| 4 | hospital |
| 5 | perro |
| 6 | piano |
| 7 | casa |

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en inglés y la uniformidad en la pronunciación en español.

*Dependiendo del dialecto puede haber menos o más formas.

¡Ojo! Aunque la pronunciación en español es similar a (1) en inglés, debes evitar incluir un diptongo. Un diptongo es una vocal más otra vocal más corta.

<table>
<thead>
<tr>
<th>Correcto</th>
<th>Incorrecto</th>
</tr>
</thead>
<tbody>
<tr>
<td>no</td>
<td>nov</td>
</tr>
<tr>
<td>perro</td>
<td>perro*</td>
</tr>
<tr>
<td>torero</td>
<td>torero*</td>
</tr>
</tbody>
</table>

B. PERCEPCIÓN Y PRODUCCIÓN

a. Escucha los siguientes cognados en inglés - español, fíjate lo similar que es en español, y lo diferente que es en inglés.

b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

1. horror – horror
2. hotel – hotel
3. office – oficina
4. color – color
5. opera – opera
6. hospital – hospital
7. other – otro
8. social – social
9. adoption – adopción

C. PRÁCTICA Y DISCUSIÓN

a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención al sonido <o> y <e>.

b. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.

c. Completa la actividad Actividad A, B, C (p. 251-252) del libro. Presta atención a la pronunciación de las siguientes palabras.

1. daño
2. herida
3. lesión
4. peligro
5. ejercicio
6. esquiar
7. comer
8. tomar
9. solo
10. televisión
11. escalar
12. montañas
La pronunciación del español

Módulo 6: pronunciación del sonido b

A. INTRODUCCIÓN

En inglés hay 2 formas de pronunciar este sonido:

- **b fuerte**: [b] (En todos los contextos)
  - boat
  - combine
  - bingo
  - beer

- **b suave**: [β] (En los demás contextos)
  - bote
  - bueno
  - vino
  - Colombia

En cambio, en español solo hay 1 forma:

- **b fuerte**: [b] (principio de frase o después de m, n)
  - caballo
  - árbol
  - lavo
  - favor

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en español y la uniformidad en la pronunciación en inglés.

B. PERCEPCIÓN Y PRODUCCIÓN

a. Escucha los siguientes cognados en inglés - español, compara la diferencia entre /b - v/ (significado) en inglés, con la diferencia /b - β/ (contextual) en español.

b. Practica pronunciar estas palabras en ambos idiomas con un compañero de clase.

1. **boat** – **bote** [b - b]
2. **favor** – **favor** [v - β]
3. **rebel** – **rebelde** [b - β]
4. **possible** – **posible** [b - β]
5. **bank** – **banco** [b - b]
6. **vote** – **voto** [v - b]
7. **visible** – **visible** [v - b]
8. **balance** – **balance** [b - b]
9. **severe** – **severo** [v - β]

C. PRÁCTICA Y DISCUSIÓN

a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención a las letras <d>, <sh>, <s> y <v> y sus sonidos en español [d, ñh y β]

b. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.

c. Completa la actividad **Vistazos Culturales (p.262-263)** del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

1. **Bolivia**
2. **indígenas**
3. **hablar**
4. **cónodr**
5. **tradición**
6. **novela**
7. **gobierno**
8. **población**
9. **vivir**
10. **tribus**
11. **celebrar**
12. **antepasado**
La pronunciaciACIÓN del español

Módulo 7: pronunciación del sonido g

A. INTRODUCCIÓN

<table>
<thead>
<tr>
<th>En INGLÉS</th>
<th>En cambio, en ESPAÑOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>hay 1 forma de pronunciar este sonido:</td>
<td>hay 2 formas diferentes de pronunciarlo;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>g fuerte:</th>
<th>g suave:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[g]</td>
<td>[ɣ]</td>
</tr>
</tbody>
</table>

*Principio de frase o después de n*
<table>
<thead>
<tr>
<th>gato</th>
<th>lago</th>
</tr>
</thead>
<tbody>
<tr>
<td>[g]</td>
<td>[ɣ]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>En los demás contextos</th>
</tr>
</thead>
<tbody>
<tr>
<td>gase</td>
</tr>
<tr>
<td>[g]</td>
</tr>
</tbody>
</table>

En los demás contextos
<table>
<thead>
<tr>
<th>gato</th>
<th>amiga</th>
</tr>
</thead>
<tbody>
<tr>
<td>[g]</td>
<td>[ɣ]</td>
</tr>
</tbody>
</table>

¡Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en español y la uniformidad en la pronunciación en inglés.

B. PERCEPCIÓN Y PRODUCCIÓN

a. Escucha los siguientes palabras y compara la diferencia entre [g – y] en español.
   b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

1. **gradual** - gradual [g]
2. **navigate** - navegar [ɣ]
3. **gota** [g] - la gota [ɣ]
4. **gratis** [g] - es [ɣ]
5. **agregar** [ɣ]
6. **ganga** [g - g]
7. **ambiguous** - ambiguo [ɣ]
8. **gato** [g] - el gato [ɣ]
9. **amargo** [ɣ]

C. PRÁCTICA Y DISCUSIÓN

a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención al las letras <g>, <b>, <v> y <d>. Recuerda la diferencia de pronunciación de estos sonidos en español comparados con la uniformidad del inglés.
   b. Completa la actividad A, B, C (p. 282) del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

<table>
<thead>
<tr>
<th>1. arrogante</th>
<th>4. extravagante</th>
<th>7. conservadora</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. decidida</td>
<td>5. divertida</td>
<td>8. cabezona</td>
</tr>
<tr>
<td>3. sabia</td>
<td>6. humilde</td>
<td>9. atrevido</td>
</tr>
</tbody>
</table>

¡Ojo!: antes de [e, i]
hay dos opciones:
• Si va antes de gu se pronuncia g (sin pronunciar la u)
guerra, guisado
• En otros casos se pronuncia como j
   general, gitanillo
La pronunciación del español

Módulo 8: pronunciación de las vocales a, i, u

### A. INTRODUCCIÓN

Al igual que con la e y o, en inglés las vocales a, i, u tienen diferentes pronunciaciones. En cambio, en español solo hay 1 forma de pronunciar cada una de estas vocales:

<table>
<thead>
<tr>
<th>inglés</th>
<th>español</th>
</tr>
</thead>
<tbody>
<tr>
<td>bar</td>
<td>irritar</td>
</tr>
<tr>
<td>bit</td>
<td>mio</td>
</tr>
<tr>
<td>push</td>
<td>puro</td>
</tr>
<tr>
<td>scare</td>
<td>bate</td>
</tr>
<tr>
<td>irritate</td>
<td>fiesta</td>
</tr>
<tr>
<td>pure</td>
<td>insult</td>
</tr>
<tr>
<td>formula</td>
<td>localizar</td>
</tr>
<tr>
<td>parties</td>
<td>imán</td>
</tr>
<tr>
<td>fruit</td>
<td>fruto</td>
</tr>
<tr>
<td>illustrate</td>
<td>jarra</td>
</tr>
<tr>
<td>under</td>
<td>quier n</td>
</tr>
<tr>
<td>aisle</td>
<td>ilustr ar</td>
</tr>
</tbody>
</table>

¿Puedes percibir la diferencia en inglés? Compara las diferencia de pronunciación en inglés y la uniformidad en la pronunciación en español.

### B. PERCEPCIÓN Y PRODUCCIÓN

i. Escucha los siguientes cognados en inglés-español, fijate lo similar que es en español, y lo diferente que es en inglés.

<table>
<thead>
<tr>
<th>inglés</th>
<th>español</th>
</tr>
</thead>
<tbody>
<tr>
<td>actor</td>
<td>actor</td>
</tr>
<tr>
<td>analyze</td>
<td>analizar</td>
</tr>
<tr>
<td>angel</td>
<td>ángel</td>
</tr>
<tr>
<td>island</td>
<td>isla</td>
</tr>
<tr>
<td>important</td>
<td>urgente</td>
</tr>
<tr>
<td>usua l</td>
<td>- usual</td>
</tr>
</tbody>
</table>

ii. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

1. actor – actor
2. analyze – analizar
3. angel – ángel
4. island – isla
5. important – urgente
6. miserable – miserable
7. united – unido
8. urgent – urgente
9. usual – usual
10. miserable – miserable

### C. PRÁCTICA Y DISCUSIÓN

i. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención al las vocales a, i, y u.

ii. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.

iii. Completa la actividad Lectura cultural (p.275) del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

<table>
<thead>
<tr>
<th>inglés</th>
<th>español</th>
</tr>
</thead>
<tbody>
<tr>
<td>inmigrantes</td>
<td>tasa alta</td>
</tr>
<tr>
<td>atrasan</td>
<td>hispanohablante</td>
</tr>
<tr>
<td>abandonar</td>
<td>instituciones</td>
</tr>
<tr>
<td>estadísticas</td>
<td>bilingüe</td>
</tr>
<tr>
<td>casi</td>
<td>el crisol</td>
</tr>
<tr>
<td>asimilarse</td>
<td>aportar</td>
</tr>
<tr>
<td>bilingüe</td>
<td>orgullo</td>
</tr>
</tbody>
</table>

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La pronunciación del español

Módulo 9: pronunciación del sonido k

A. INTRODUCCIÓN

En inglés hay 2 formas de pronunciar este sonido:

Con aspiración: [kʰ]
(Sonido al principio de una sílaba acentuada)

Sin aspiración: [k]
(En los demás contextos)

En cambio, en español solo hay 1 forma:

Sin aspiración: [k]
(En todos los contextos)

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en inglés y la uniformidad en la pronunciación en español.

B. PERCEPCIÓN Y PRODUCCIÓN

i. Escucha los siguientes cognados en inglés - español, identifica la diferencia en ambos idiomas del sonido /k/.

ii. Practica pronunciar estas palabras en ambos idiomas con un compañero de clase.

1. collection – colección
2. combine – combinar
3. concert – concierto
4. culture – cultura
5. curious – curioso
6. company – compañía
7. complete – completo
8. candid – cándido

C. PRÁCTICA Y DISCUSIÓN

i. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención al los sonidos p, t y k (ya sea escrita con c, qu o k).

ii. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.

iii. Completa la actividad Practica (p.269) y Conversación C (p.271) del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

1. acostumbrarse
2. aprender
3. comenzar
4. empezar
5. pensar
6. ponerle una multa
7. explicar
8. insistir
9. correr
10. partido
11. invitar
12. económica

¡Ojo!: En español, el sonido /k/, se puede escribir con C, QU y K:

casa, casa, cuerpo
queso, quiero
kiosco, kilo

Como en muchas palabras la “c” también suena como s en antes de e o i: “ciudad, cena”
La pronunciación del español

Módulo 10: repaso de d, b, y g

A. INTRODUCCIÓN
Recuerda los dos tipos de pronunciación de estas consonantes de acuerdo al contexto. ¿Cuál de los sonidos suaves existe en inglés? ¿Cuál es el más difícil?

<table>
<thead>
<tr>
<th>d fuerte: [d]</th>
<th>d suave: [θ]</th>
<th>b fuerte: [b]</th>
<th>b suave: [β]</th>
<th>g fuerte: [g]</th>
<th>g suave: [ɣ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>principio de frase o después de t o n</td>
<td>en los otros contextos</td>
<td>principio de frase o después de m, n</td>
<td>(En los demás contextos)</td>
<td>principio de frase o después de n</td>
<td>En los demás contextos</td>
</tr>
<tr>
<td>Daniel</td>
<td>radio</td>
<td>bote</td>
<td>caballo</td>
<td>gato</td>
<td>lago</td>
</tr>
<tr>
<td>dado</td>
<td>dado</td>
<td>bueno</td>
<td>dar</td>
<td>tengo</td>
<td>algo</td>
</tr>
<tr>
<td>indio</td>
<td>médico</td>
<td>vino</td>
<td>lavo</td>
<td>gas</td>
<td>amigo</td>
</tr>
<tr>
<td>decisión</td>
<td>Colombia</td>
<td>favor</td>
<td>gota</td>
<td>higado</td>
<td></td>
</tr>
</tbody>
</table>

B. PERCEPCIÓN Y PRODUCCIÓN
a. Escucha los siguientes cognados en inglés - español, compara la diferencia en todos estos contextos.
b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

C. PRÁCTICA Y DISCUSIÓN
a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención a la pronunciación fuerte y suave de estos sonidos.
b. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.
c. Completa la actividad Describir y comentar (p.282) del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

| 1. aprobar | 5. goloso | 9. la sobredosis |
| 2. desaprobación | 6. el vicio | 10. hacer daño |
| 3. contrabando | 7. el tabaco | 11. la dieta |
| 4. dependencia | 8. el cigarrillo | 12. emborracharse |
La pronunciación del español

Módulo 11: Repaso de las vocales

A. INTRODUCCIÓN: Como has visto, el español es consistente en la pronunciación de las vocales, mientras que en inglés hay varias formas de pronunciar cada letra. También en español debes evitar ciertas características del inglés que los anglohablantes apenas perciben. Escucha la diferencia de pronunciación en inglés y español.

1. Centralización
2. Diptongación
3. Relajación
4. Nasalización

En cada uno de los ejemplos, ¿puedes ver que en español en los cuatro ejemplos cada letra suena igual, mientras que en inglés suenan diferentes? Escucha y practica.

B. PERCEPCIÓN Y PRODUCCIÓN
a. Escucha los siguientes cognados en inglés - español, fijate lo similar que es en español, y lo diferente que es en inglés:

1. elephant - elefante
2. verb - verbo
3. union - unión
4. express - expreso
5. general - general
6. color - color
7. hotel - hotel
8. actor - actor
9. repeat - repetir

b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

C. PRÁCTICA Y DISCUSIÓN
a. Vuelve a practicar estas palabras, prestando atención a la pronunciación de las vocales.

1. fórmula
2. fónica
3. le, se, me
4. puro, música
5. del
6. sin
7. por
8. banda
9. ten
10. insulto
11. blando
12. elefante

En este caso, fíjate que en inglés las vocales destacadas suenan igual. La vocal neutra [ə] Aquí, en inglés la consonante nasal posterior nasaliza la vocal, pero no en español.
La pronunciación del español

Módulo 12: repaso de **p, t, y k**

### A. **INTRODUCCIÓN**

Para estas consonantes, la diferencia es que en español suenan sin aspiración. Identifica la pronunciación aspirada del inglés y compárala con el español.

<table>
<thead>
<tr>
<th>Con aspiración: [pʰ]</th>
<th>Sin aspiración: [p]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al principio de una sílaba acentuada</td>
<td>En todos los contextos</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Con aspiración: [tʰ]</th>
<th>Sin aspiración: [t]</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Al principio de una sílaba acentuada]</td>
<td>(En todos los contextos)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Con aspiración: [kʰ]</th>
<th>Sin aspiración: [k]</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Al principio de una sílaba acentuada]</td>
<td>(En todos los contextos)</td>
</tr>
</tbody>
</table>

### B. **PERCEPCIÓN Y PRODUCCIÓN**

1. **i.** Escucha los siguientes cognados en **inglés - español**, compara la diferencia entre la aspiración en inglés y la no aspiración en español.
2. **ii.** Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

- 1. **paper** – papel
- 2. **problem** – problema
- 3. **possible** – posible
- 4. **lottery** – lotería
- 5. **torture** – tortura
- 6. **tutor** – tutor
- 7. **complete** – completo
- 8. **candid** – cándido
- 9. **captain** – capitán

### C. **PRÁCTICA Y DISCUSIÓN**

1. **i.** Practica la pronunciación de estas palabras con un compañero de clase. Presta atención a las **consonantes subrayadas**. Posteriormente discute qué palabras son claves para los temas tratados en clase.

- 1. **lo impresionante**
- 2. **lo interesante**
- 3. **lo curioso**
- 4. **lo más espectacular**
- 5. **lo cómico**
- 6. **lo ridículo**
- 7. **por - para**
- 8. **lo sorprendente**
- 9. **situación**
- 10. **lo importante**
- 11. **mentira**
- 12. **terapia**
8. **Instructional Modules (Second Year)**

- Module 1: Voiceless Bilabial Plosive /p/ (Second Year)
- Module 2: Voiced Dental Approximant [ð] (Second Year)
- Module 3: Mid-Front Vowel /e/ (Second Year)
- Module 4: Voiceless Dental Plosive /t/ (Second Year)
- Module 5: Mid-Back Vowel /o/ (Second Year)
- Module 6: Voiced Bilabial Approximant [β] (Second Year)
- Module 7: Voiced Velar Approximant [ɣ] (Second Year)
- Module 8: Closed and Open Vowels /a/ /i/ /u/ (Second Year)
- Module 9: Voiceless Velar Plosive /k/ (Second Year)
- Module 10: Review, Voiced Approximants (Second Year)
- Module 11: Review, Vowels (Second Year)
- Module 12: Review, Voiceless Plosives (Second Year)
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LA PRONUNCIACIÓN DEL ESPAÑOL

Módulo 1: pronunciación del sonido p

A. INTRODUCCIÓN

En inglés hay 2 formas de pronunciar este sonido:

<table>
<thead>
<tr>
<th>Con aspiración:</th>
<th>Sin aspiración:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[pʰ]</td>
<td>[p]</td>
</tr>
</tbody>
</table>

- Con aspiración: Al principio de una sílaba acentuada
- Sin aspiración: En los demás contextos

<table>
<thead>
<tr>
<th>Con aspiración:</th>
<th>Sin aspiración:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[pʰ]</td>
<td>[p]</td>
</tr>
</tbody>
</table>

- Con aspiración: Al principio de una sílaba acentuada
- Sin aspiración: En todos los contextos

<table>
<thead>
<tr>
<th>English</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td>port</td>
<td>puerto</td>
</tr>
<tr>
<td>compare</td>
<td>comparar</td>
</tr>
<tr>
<td>Paraguay</td>
<td>Españaparaguay</td>
</tr>
<tr>
<td>pool</td>
<td>apple</td>
</tr>
</tbody>
</table>

En cambio, en español solo hay 1 forma:

- [p]

En todos los contextos

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en inglés y la uniformidad en la pronunciación en español.

B. PERCEPCIÓN Y PRODUCCIÓN

i. Escucha los siguientes cognados en inglés - español, identifica la diferencia en ambos idiomas del sonido /p/.

ii. Practica pronunciar estas palabras en ambos idiomas, y compáralo con la grabación.

1. paper - papel
2. problem - problema
3. possible - posible
4. possibility - posibilidad
5. personal - personal
6. president - presidente
7. persistent - persistente
8. impossible - imposible
9. politics - política

C. PRÁCTICA Y DISCUSIÓN

i. Practica la pronunciación de estas palabras con un compañero de clase.

ii. Discute con tu compañero de clase el significado de estas palabras, y cuáles son importantes para los temas tratados en clase.

iii. Completa las actividades de la noticia programada para esta clase. Presta atención a la pronunciación de estas palabras.

1. cuentapropisto
2. empleo
3. competencia
4. capitalismo incipiente
5. cuenta propia
6. popular
7. aprobar
8. empleo
9. desempeñar
10. cambio profundo
11. precio
12. reforma profunda

¡Ojo!: A menudo los anglohablantes confunden el sonido [p] con el sonido de las letras b/v. Intenta diferenciar entre estos dos sonidos: Ve la letra pe

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La pronunciación del español

Módulo 2: pronunciación de la consonante **d**

### A. INTRODUCCIÓN

En **inglés** hay 2 formas de pronunciar este sonido:

- **fuerte**: [d]
- **relajada**: [d̪]

En **español** hay 2 formas diferentes de pronunciarlos:

- **fuerte**: [d]
- **suave**: [ð]

<table>
<thead>
<tr>
<th>En inglés</th>
<th>En español</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>fuerte</strong>: [d]</td>
<td><strong>fuerte</strong>: [d]</td>
</tr>
<tr>
<td><strong>relajada</strong>: [d̪]</td>
<td><strong>relajada</strong>: [ð]</td>
</tr>
</tbody>
</table>

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en español y en inglés.

### B. PERCEPCIÓN Y PRODUCCIÓN


b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

1. **distance** – distancia [d]  
2. **radio** – radio [ð]  
3. **gradual** – gradual [ð]

<table>
<thead>
<tr>
<th>Ingles</th>
<th>Español</th>
</tr>
</thead>
<tbody>
<tr>
<td>distance – distancia [d]</td>
<td>distance – distancia [ð]</td>
</tr>
<tr>
<td>radio – radio [ð]</td>
<td>radio – radio [d]</td>
</tr>
<tr>
<td>gradual – gradual [ð]</td>
<td>gradual – gradual [d]</td>
</tr>
</tbody>
</table>

### C. PRÁCTICA Y DISCUSIÓN

a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención al sonido **d y p**

b. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase. Consulta el significado en caso que no estés seguro.


<table>
<thead>
<tr>
<th>Ingles</th>
<th>Español</th>
</tr>
</thead>
<tbody>
<tr>
<td>vendedor</td>
<td>cumplidos</td>
</tr>
<tr>
<td>debido a</td>
<td>indirectamente</td>
</tr>
<tr>
<td>licenciado</td>
<td>directa y precisa</td>
</tr>
<tr>
<td>mercado</td>
<td>verse obligado</td>
</tr>
</tbody>
</table>

[Dialecto]: El sonido [ð] en español, es similar al sonido "th" en palabras como mother, thin, o through.

* madre: ma[ð]re
* dado: da[ð]o
* miedo: mie[ð]o
La pronunciación del español

Módulo 3: pronunciación de la vocal e

### A. Introducción

<table>
<thead>
<tr>
<th>Inglés</th>
<th>Español</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. &quot;elephant&quot;, &quot;they&quot;, &quot;vein&quot;</td>
<td>1. elefante</td>
</tr>
<tr>
<td>2. &quot;set&quot;, &quot;peck&quot;, &quot;bed&quot;, &quot;dress&quot;</td>
<td>2. peso</td>
</tr>
<tr>
<td>3. &quot;see&quot;, &quot;free&quot;, &quot;meet&quot;, &quot;extreme&quot;</td>
<td>3. queso</td>
</tr>
<tr>
<td>4. &quot;fear&quot;, &quot;peer&quot;, &quot;tier&quot;, &quot;beer&quot;</td>
<td>4. lee</td>
</tr>
<tr>
<td>5. &quot;elephant&quot;, &quot;melted&quot;, &quot;retain&quot;</td>
<td>5. puede</td>
</tr>
<tr>
<td></td>
<td>6. mesa</td>
</tr>
<tr>
<td></td>
<td>7. perro</td>
</tr>
</tbody>
</table>

¿Puedes percibir la diferencia en inglés? Compara las diferencias de la pronunciación en inglés y la uniformidad en la pronunciación en español.

### B. Percepción y Producción

a. Escucha los siguientes cognados en inglés - español, fíjate lo similar que es en español, y lo diferente que es en inglés.

b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

1. elephant – elefante  
2. federal – federal  
3. extreme – extremo  
4. express – expres  
5. president – presidente  
6. paper – papel  
7. hotel – hotel  
8. essential – esencial  
9. repeat – repetir

### C. Práctica y Discusión

a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención a la pronunciación de las letras "e" y "o".

b. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase, y qué significan.

c. Completa las actividades A, B, C y D (p.224) del libro. Presta atención a la pronunciación de los sonidos surayados.

1. defender  
2. dedicarse  
3. convertir  
4. el conservador  
5. el sacerdote  
6. comprometido  
7. el monje  
8. el ateo  
9. el creyente  
10. los derechos  
11. la fe  
12. negociar

---

¡Ojo! Aunque la pronunciación en español es similar a (1) en inglés, debes evitar incluir un diptongo. Un diptongo es la combinación de dos vocales.

<table>
<thead>
<tr>
<th>Inglés</th>
<th>Español</th>
</tr>
</thead>
<tbody>
<tr>
<td>lay</td>
<td>le, ley</td>
</tr>
<tr>
<td>say</td>
<td>se</td>
</tr>
<tr>
<td>may</td>
<td>me</td>
</tr>
</tbody>
</table>
La pronunciación del español

Módulo 4: pronunciación del sonido  

**A. INTRODUCCIÓN**

En **inglés** hay 3 formas de pronunciar este sonido:

- **Con aspiración:**  
  \[ t^h \]  
  (Al principio de una sílaba acentuada)
- **Sin aspiración:**  
  \[ t \]  
  (generalmente después de consonante o final de sílaba)
- **Relajado:**  
  \[ d \]  
  (Entre vocales o sílaba no acentuada)

En cambio, en **español** solo hay 1 forma:

- **Sin aspiración:**  
  \[ t \]  
  (En todos los contextos)

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en inglés y la uniformidad en la pronunciación en español. Práctica la pronunciación del español no aspirada en todos los contextos.

**B. PERCEPCIÓN Y PRODUCCIÓN**

i. Escucha los siguientes cognados en **inglés - español**, identifica la diferencia en ambos idiomas del sonido /t/.

ii. Practica pronunciar estas palabras en ambos idiomas con un compañero de clase.

1. **tomato** – **tomate**
2. **taco** – **taco**
3. **total** – **total**

4. **lottery** – **lotería**
5. **torture** – **tortura**
6. **tutor** – **tutor**

7. **telephone** – **teléfono**
8. **terrible** – **terrible**
9. **temple** – **templo**

**C. PRÁCTICA Y DISCUSIÓN**

i. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención al sonido /t/ y /d/.

ii. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.

iii. Completa la actividad **Conversación B.C (p.228-229)** del libro. Presta atención a la pronunciación de estas palabras.

1. **tatuarse**
2. **estudiar español**
3. **bautizar**
4. **votar**

5. **competencia**
6. **convertir**
7. **un político**
8. **baloncesto**

9. **una pipa**
10. **cartas a sus padres**
11. **cooperación**
12. **entrar en el ejército**
Módulo 5: pronunciación de la vocal 0

A. INTRODUCCIÓN

En inglés hay 7 formas de pronunciar la letra ο. En cambio, en español solo hay 1 forma de pronunciarla:

| 1 | no, coat, low, know, home |
| 2 | pool, book, cook, good |
| 3 | hop, body, lock |
| 4 | boo, who, boot, loop |
| 5 | flood, someone, comfort |
| 6 | boy, choice, toy, joy |
| 7 | now, count, how |

¡Ojo! Aunque la pronunciación en español es similar a (1) en inglés, debes evitar incluir un diptongo. Un diptongo es una vocal más otra vocal más corta.

B. PERCEPCIÓN Y PRODUCCIÓN

a. Escucha los siguientes cognados en inglés - español, fíjate lo similar que es en español, y lo diferente que es en inglés.

b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

| 1. horror - horror |
| 2. hotel - hotel |
| 3. office - oficina |
| 4. color - color |
| 5. opera - opera |
| 6. hospital - hospital |
| 7. other - otro |
| 8. social - social |
| 9. adoption - adopción |

C. PRÁCTICA Y DISCUSIÓN

a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención al sonido <o> y <e>.

b. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.

c.Completa la actividad Práctica (p.236) del libro. Presta atención a la pronunciación de las siguientes palabras.

| 1. acostarse |
| 2. dormirse |
| 3. calentarse |
| 4. dormirse |
| 5. mojarse |
| 6. sentarse |
| 7. comprometerse |
| 8. divorciarse |
| 9. enojarse |
| 10. openarse |
| 11. enamorarse |
| 12. preocuparse |
Módulo 6: pronunciación del sonido b

A. INTRODUCCIÓN

En inglés hay 2 formas de pronunciar este sonido:

- **b fuerte:**  
  
  - **b**  
  
  (En todos los contextos)

  - **boat**
  - **combine**
  - **bingo**
  - **beer**

- **b suave:**
  
  - **b**  
  
  (principio de frase o después de m, n)

  - **bote**
  - **bueno**
  - **vino**
  - **Colombia**

En cambio, en español solo hay 1 forma:

- **b fuerte:**  
  
  - **b**  
  
  (En algunos contextos)

  - **tubo**
  - **bota**
  - **voto**
  - **hacer**
  - **ver**

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en español y la uniformidad en la pronunciación en inglés.

B. PERCEPCIÓN Y PRODUCCIÓN

a. Escucha los siguientes cognados en inglés - español, compara la diferencia entre /b - v/ (significado) en inglés, con la diferencia /b - β/ (contextual) en español.

- 1. boat – bote [ b - b ]
- 2. favor – favor [ v - β ]
- 3. rebel – rebelde [ b - β ]
- 4. possible – posible [ b - β ]
- 5. bank – banco [ b - b ]
- 6. vote – voto [ v - b ]
- 7. visible – visible [ v - b ]
- 8. balance – balance [ b - b ]
- 9. severe – severo [ v - β ]

b. Practica pronunciar estas palabras en ambos idiomas con un compañero de clase.

C. PRÁCTICA Y DISCUSIÓN

a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención a las letras <d>, <b> y <v> y sus sonidos en español [ d, b, y β ]

b. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.

c. Completa la actividad Lectura Cultural (p.244) del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

- 1. variedad
- 2. medicina alternativa
- 3. curandero
- 4. indígena
- 5. curativa
- 6. andinos
- 7. precolombina
- 8. civilizaciones
- 9. beneficio
- 10. símbolo
- 11. selva
- 12. enfermedades
Módulo 7: pronunciación del sonido g

A. INTRODUCCIÓN

En inglés hay 1 forma de pronunciar este sonido:

<table>
<thead>
<tr>
<th>g fuerte:</th>
<th>g suave:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[g]</td>
<td>[ɣ]</td>
</tr>
</tbody>
</table>

En cambio, en español hay 2 formas diferentes de pronunciarlos:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>g fuerte:</td>
<td>g suave:</td>
<td></td>
</tr>
<tr>
<td>great</td>
<td>lago</td>
<td></td>
</tr>
<tr>
<td>guide</td>
<td>algo</td>
<td></td>
</tr>
<tr>
<td>gas</td>
<td>amiga</td>
<td></td>
</tr>
<tr>
<td>globe</td>
<td>higado</td>
<td></td>
</tr>
</tbody>
</table>

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en español y la uniformidad en la pronunciación en inglés.

B. PERCEPCIÓN Y PRODUCCIÓN

a. Escucha los siguientes términos:

1. gradual - gradual [g]
2. navigate - navegar [ɣ]
3. groma - la groma [ɣ]
4. gratis [g] - es gratis [ɣ]
5. agregar [ɣ]
6. gange [g-g]
7. ambiguous - ambiguo [ɣ]
8. gato [g] - el gato [ɣ]
9. amargo [ɣ]

b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

C. PRÁCTICA Y DISCUSIÓN

a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención a las letras <g>, <b> y <v>. Recuerda la diferencia de pronunciación de estos sonidos en español comparados con la uniformidad del inglés.

b. Completa la actividad A, B, C (p.256) del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

1. inmigración 4. ciudadano 7. exiliado
2. adaptarse 5. refugiado 8. bilingüe
3. grupos 6. establecerse 9. anglosajón
Módulo 8: pronunciación de las vocales a, i, u

A. INTRODUCCIÓN

Al igual que con la e y o, en inglés las vocales a i u tienen diferentes pronunciones.

<table>
<thead>
<tr>
<th></th>
<th>inglés</th>
<th>español</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>bar</td>
<td>bar</td>
</tr>
<tr>
<td>2</td>
<td>bat</td>
<td>bat</td>
</tr>
<tr>
<td>3</td>
<td>score</td>
<td>score</td>
</tr>
<tr>
<td>4</td>
<td>formula</td>
<td>formula</td>
</tr>
<tr>
<td>5</td>
<td>locate</td>
<td>illustrate</td>
</tr>
<tr>
<td>6</td>
<td>law</td>
<td>under</td>
</tr>
<tr>
<td>7</td>
<td>aisle</td>
<td></td>
</tr>
</tbody>
</table>

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en inglés y la uniformidad en la pronunciación en español.

B. PERCEPCIÓN Y PRODUCCIÓN

i. Escucha los siguientes cognados en inglés - español, fíjate lo similar que es en español, y lo diferente que es en inglés.

<table>
<thead>
<tr>
<th></th>
<th>inglés</th>
<th>español</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>bar</td>
<td>bar</td>
</tr>
<tr>
<td>2</td>
<td>bat</td>
<td>bat</td>
</tr>
<tr>
<td>3</td>
<td>score</td>
<td>score</td>
</tr>
<tr>
<td>4</td>
<td>formula</td>
<td>formula</td>
</tr>
<tr>
<td>5</td>
<td>locate</td>
<td>illustrate</td>
</tr>
<tr>
<td>6</td>
<td>law</td>
<td>under</td>
</tr>
<tr>
<td>7</td>
<td>aisle</td>
<td></td>
</tr>
</tbody>
</table>

ii. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

1. actor – actor
2. analyze – analizar
3. angel – ángel
4. island – isla
5. important – importante
6. miserable – miserable
7. united – unido
8. urgent – urgente
9. usual – usual

C. PRÁCTICA Y DISCUSIÓN

i. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención a las vocales a, i, y u.

ii. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.

iii. Completa la actividad A-B (p.292) del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

<table>
<thead>
<tr>
<th></th>
<th>inglés</th>
<th>español</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>luchador</td>
<td>astuto</td>
</tr>
<tr>
<td>2</td>
<td>superficial</td>
<td>apasionado</td>
</tr>
<tr>
<td>3</td>
<td>valiente</td>
<td>encantador</td>
</tr>
<tr>
<td>4</td>
<td>curioso</td>
<td>individualista</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>conformista</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>apático</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>imaginativo</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>inteligente</td>
</tr>
</tbody>
</table>
La pronunciación del español

Módulo 9: pronunciación del sonido **k**

### A. INTRODUCCIÓN

En inglés hay 2 formas de pronunciar este sonido:

<table>
<thead>
<tr>
<th>Con aspiración:</th>
<th>Sin aspiración:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[kʰ]</td>
<td>[k]</td>
</tr>
</tbody>
</table>

(Al principio de una sílaba acentuada) (En los demás contextos)

En cambio, en español solo hay **1 forma**:

<table>
<thead>
<tr>
<th>Sin aspiración:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[k]</td>
</tr>
</tbody>
</table>

(En **todos** los contextos)

Cores<br>kiosk<br>care<br>queen

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en inglés y la uniformidad en la pronunciación en español.

### B. PERCEPCIÓN Y PRODUCCIÓN

i. Escucha los siguientes cognados en inglés - español, identifica la diferencia en ambos idiomas del sonido /k/.

ii. Practica pronunciar estas palabras en ambos idiomas con un compañero de clase.

1. collection – colección<br>4. culture – cultura<br>7. complete – completo
2. combine – combinar<br>5. curious – curioso<br>8. candid – cándido
3. concert – concierto<br>6. company – compañía<br>9. captain – capitán

### C. PRÁCTICA Y DISCUSIÓN

i. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención a los sonidos p, t y k (ya sea escrita con c, k o qu)

ii. Discute con tu compañero de clase qué palabras son daves para los temas tratados en clase.

iii. Completa la actividad B, C, D (p.308-309) del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

1. cerca<br>2. oeste<br>3. qué<br>4. enfrenta

5. calle<br>6. izquierda<br>7. perdón<br>8. esquina

9. cuadra<br>10. compañero<br>11. quedarse<br>12. norte

¡Ojo! En español, el sonido /k/ se puede escribir con C, QU y K:

casa, cosa, cuerpo
queso, quiero
kiosco, kilo

Como en muchas palabras la “c” también suena como s en antes de e o i: “ciudad, cena”
La pronunciación del español

Módulo 10: repaso de d, b, y g

A. INTRODUCCIÓN
Recuerda los dos tipos de pronunciación de estas consonantes de acuerdo al contexto. ¿Cuál de los sonidos suaves existe en inglés? ¿Cuál es el más difícil?

- **d fuerte:** [d] (principio de frase o después de l o n)
- **d suave:** [ð] (en los otros contextos)
- **b fuerte:** [b] (principio de frase o después de m, n)
- **b suave:** [β] (En los demás contextos)
- **g fuerte:** [g] (principio de frase o después de n)
- **g suave:** [ɣ] (En los demás contextos)

Daniel, dado, lindo, decisión
radio, dado, médico, Colombia
bote, bueno, vino, favor
caballo, árbol, lavo, gota
el gato, el lago, algo, el amigo
D. Daniel, ra dio, bote, caballo, el gato, lino, de cisión
D. Daniel, ra dio, bote, caballo, el gato, lino, de cisión

B. PERCEPCIÓN Y PRODUCCIÓN
a. Escucha los siguientes cognados en **inglés - español**, compara la diferencia en todos estos contextos.
   b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.
      2. **radio** – radio [ð]
      5. **bank** – banco [b – b]
      6. **vote** – voto [v – b]
      7. **ambiguous** – ambiguo [y]
      8. **gato** [g] – el gato [y]
      9. **navigate** – navegar [y]

C. PRÁCTICA Y DISCUSIÓN
a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención al la pronunciación fuerte y suave de estos sonidos.
   b. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.
   c. Completa la actividad E-F (p.314) del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

1. ridículo
2. lo ideal
3. lo bueno
4. prudente
5. decirle
6. amigo
7. verdad
8. regalito
9. llevarle
10. buscar
11. sorprendente
12. lo aburrido

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La pronunciación del español

Módulo 11: Repaso de las vocales

A. **INTRODUCCIÓN**: Como has visto, el español es consistente en la pronunciación de las vocales, mientras que en inglés hay varias formas de pronunciar cada letra. También en español debes evitar ciertas características del inglés que los anglohablantes apenas perciben. Escucha la diferencia de pronunciación en inglés y español.

1. **Centralización**
   - e: *formula* - *elevante*
   - o: *phonetics* - *fonética*
   - u: *illustrate* - *ilustrar*

2. **Diptongación**
   - e: *elephant* - *eléfante*
   - i: *irritate* - *irritar*
   - o: *pour* - *por*
   - u: *insult* - *insulto*

3. **Relajación**
   - e: *del* - *sin*
   - i: *me* - *mi, ti*
   - o: *pour* - *por*
   - u: *insult* - *insulto*

4. **Nasalización**
   - e: *bland* - *blando*

En cada uno de los ejemplos, ¿puedes ver que en español en los cuatro ejemplos cada letra suena igual, mientras que en inglés suenan diferentes? Escucha y practica.

B. **PERCEPCIÓN Y PRODUCCIÓN**
   a. Escucha los siguientes cognados en inglés - español, fíjate lo similar que es en español, y lo diferente que es en inglés.
   b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

1. *elephant* – *elefante*
2. *verb* – *verbo*
3. *union* – *unión*
4. *express* – *expreso*
5. *general* – *general*
6. *color* – *color*
7. *hotel* – *hotel*
8. *actor* – *actor*
9. *repeat* – *repetir*

C. **PRÁCTICA Y DISCUSIÓN**
   a. Vuelve a practicar estas palabras, prestando atención a la pronunciación de las vocales.

3. *le, se, me* 7. *por* 11. *blando*
La pronunciación del español

Módulo 12: repaso de p, t, y k

A. INTRODUCCIÓN

Identifica la pronunciación aspirada del inglés y compárala con el español.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Al principio de una sílaba acentuada</td>
<td>En todos los contextos</td>
<td>(Al principio de una sílaba acentuada)</td>
<td>(En todos los contextos)</td>
<td>(Al principio de una sílaba acentuada)</td>
<td>(En todos los contextos)</td>
</tr>
<tr>
<td>port</td>
<td>compare</td>
<td>Paraguay</td>
<td>pool</td>
<td>atomic</td>
<td>tone</td>
</tr>
</tbody>
</table>

B. PERCEPCIÓN Y PRODUCCIÓN

i. Escucha los siguientes cognados en inglés-español, compara la diferencia entre la aspiración en inglés y la no aspiración en español.

ii. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

iii. 

1. paper – papel
2. problem – problema
3. possible – posible
4. lottery – lotería
5. torture – tortura
6. tutor – tutor
7. complete – completo
8. candid – cándido
9. captain – capitán

C. PRÁCTICA Y DISCUSIÓN

i. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención a las consonantes subrayadas. Posteriormente discute qué palabras son claves para los temas tratados en clase.


1. castigar
2. cometer un crimen
3. poner una multa
4. cadena perpetua
5. el delito
6. la policía
7. el testigo
8. el terrorismo
9. chantajear
10. la víctima
11. la cárcel
12. la pena de muerte

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9. **Instructional Modules (Third Year)**

- Module 1: Voiceless Bilabial Plosive /p/ (Third Year)
- Module 2: Voiced Dental Approximant [ð] (Third Year)
- Module 3: Mid-Front Vowel /e/ (Third Year)
- Module 4: Voiceless Dental Plosive /t/ (Third Year)
- Module 5: Mid-Back Vowel /o/ (Third Year)
- Module 6: Voiced Bilabial Approximant [β] (Third Year)
- Module 7: Voiced Velar Approximant [ɣ] (Third Year)
- Module 8: Closed and Open Vowels /a/ /i/ /u/ (Third Year)
- Module 9: Voiceless Velar Plosive /k/ (Third Year)
- Module 10: Review, Voiced Approximants (Third Year)
- Module 11: Review, Vowels (Third Year)
- Module 12: Review, Voiceless Plosives (Third Year)
## A. INTRODUCCIÓN

En **inglés** hay 2 formas de pronunciar este sonido:

<table>
<thead>
<tr>
<th>Con aspiración:</th>
<th>Sin aspiración:</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Imagen" /></td>
<td><img src="image2.png" alt="Imagen" /></td>
</tr>
</tbody>
</table>

En cambio, en **español** solo hay 1 forma:

<table>
<thead>
<tr>
<th>Sin aspiración:</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3.png" alt="Imagen" /></td>
</tr>
</tbody>
</table>

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en inglés y la uniformidad en la pronunciación en español.

### B. PERCEPCIÓN Y PRODUCCIÓN

1. **i.** Escucha los siguientes cognados en **inglés** - **español**, identifica la diferencia en ambos idiomas del sonido /p/.
2. **ii.** Practica pronunciar estas palabras en ambos idiomas, y compáralo con la grabación.

|------------------|----------------------|----------------------|----------------------------|----------------------|------------------------|--------------------------|----------------------|-------------------------|

### C. PRÁCTICA Y DISCUSIÓN

1. **i.** Practica la pronunciación de estas palabras con un compañero de clase.
2. **ii.** Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.
3. **iii.** Completa la actividad 4-22(p.200) del libro.

|---------|-----------------------|----------------|-----------|---------|-----------|---------------|---------|-----|---------------------|---------|-------------------|
La pronunciación del español

Módulo 2: pronunciación de la consonante d

### A. INTRODUCCIÓN

En inglés hay 2 formas de pronunciar este sonido: ~d fuerte: [d] y ~d suave: [θ]

<table>
<thead>
<tr>
<th>inglés</th>
<th>español</th>
</tr>
</thead>
<tbody>
<tr>
<td>d fuerte:</td>
<td>d fuerte:</td>
</tr>
<tr>
<td>principio de frase o después de n</td>
<td>principio de frase o después de n</td>
</tr>
<tr>
<td>Daniel</td>
<td>Daniel</td>
</tr>
<tr>
<td>radio</td>
<td>radio</td>
</tr>
<tr>
<td>medicinal</td>
<td>medicina</td>
</tr>
<tr>
<td>dough</td>
<td>dado</td>
</tr>
<tr>
<td>distance</td>
<td>radio</td>
</tr>
</tbody>
</table>

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en español y en inglés.

### B. PERCEPCIÓN Y PRODUCCIÓN

- b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.


### C. PRÁCTICA Y DISCUSIÓN

- b. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.
- c. Completa la actividad 5.2 (p.228) del libro. Presta atención a la pronunciación de los sonidos sur哉ados.

1. biodiversidad 5. madera 9. medio ambiente
2. desafío 6. peligro 10. crudo
3. deterioro 7. repartición 11. capa de ozono
4. desechos 8. residuos 12. el daño
La pronunciación del español

Módulo 3: pronunciación de la vocal e

A. INTRODUCCIÓN

<table>
<thead>
<tr>
<th>En inglés</th>
<th>En cambio, en español</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. elephant, they, vein</td>
<td>5. elefante</td>
</tr>
<tr>
<td>2. set, peck, bed, dress</td>
<td>peso</td>
</tr>
<tr>
<td>3. see, free, meet, extreme</td>
<td>queso</td>
</tr>
<tr>
<td>4. fear, peer, tier, beer</td>
<td>lee</td>
</tr>
<tr>
<td>5. elephant, melted, retain</td>
<td>puede</td>
</tr>
</tbody>
</table>

¿Puedes percibir la diferencia en inglés? Compara las diferencia de pronunciación en inglés y la uniformidad en la pronuncización en español.

B. PERCEPCIÓN Y PRODUCCIÓN

a. Escucha los siguientes cognados en inglés - español, fíjate lo similar que es en español, y lo diferente que es en inglés.

b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

1. elephant – elefante  
2. federal – federal  
3. extreme – extremo  
4. express – expreso  
5. president – presidente  
6. paper – papel  
7. hotel – hotel  
8. essential – esencial  
9. repeat – repetir

C. PRÁCTICA Y DISCUSIÓN

a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención a la pronunciación de las letras <e> y <d>.

b. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase, y qué significan.

c. Complementa la actividad 5-4 (p.231) del libro. Presta atención a la pronunciación de las sonidos surrayados.

| 1. indemnizar | 5. ecuatoriana | 9. medio ambiente |
| 2. desafío | 6. remediar | 10. empresa |
| 3. deterioro | 7. repartición | 11. demanda |
| 4. extracción | 8. residuos | 12. el daño |

¡Ojo! Aunque la pronunciación en español es similar a (1) en inglés, debes evitar incluir un diptongo. Un diptongo es la combinación de dos vocales.

<table>
<thead>
<tr>
<th>Inglés</th>
<th>Español</th>
</tr>
</thead>
<tbody>
<tr>
<td>lay</td>
<td>le, ley</td>
</tr>
<tr>
<td>say</td>
<td>se</td>
</tr>
<tr>
<td>may</td>
<td>me</td>
</tr>
</tbody>
</table>
La pronunciación del español
Módulo 4: pronunciación del sonido t

A. INTRODUCCIÓN

En inglés hay 3 formas de pronunciar este sonido:

- **Con aspiración:** [tʰ]
  (Al principio de una sílaba acentuada)
- **Sin aspiración:** [t]
  (generalmente después de consonante o final de sílaba)
- **Relajado:** [ɾ]
  (Entre vocales o sílaba no acentuada)

En cambio, en español solo hay 1 forma:

- **Sin aspiración:** [t]
  (En todos los contextos)

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en inglés y la uniformidad en la pronunciación en español. Práctica la pronunciación del español no aspirada en todos los contextos.

B. PERCEPCIÓN Y PRODUCCIÓN

i. Escucha los siguientes cognados en inglés - español, identifica la diferencia en ambos idiomas del sonido /t/.

ii. Practica pronunciar estas palabras en ambos idiomas con un compañero de clase.

1. tomato – tomate
2. taco – tacho
3. total – total
4. lottery – lotería
5. torture – tortura
6. tutor – tutor
7. telephone – teléfono
8. terrible – terrible
9. temple - templo

C. PRÁCTICA Y DISCUSIÓN

i. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención al sonido <t> y <p>.

ii. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.

iii. Completa la actividad 5-8 (p.237) del libro. Presta atención a la pronunciación de estas palabras.

1. arquitectura
2. latinoamericano
3. medio ambiente
4. desarrollo sostenible

5. sustentable
6. superpoblación
7. participación
8. urbanista

9. proyecto
10. pobreza
11. contexto
12. estanque

¡Ojo!: en inglés, algunas veces el sonido t se pronuncia como “ch” en “chop”. También debes evitarlo en español con respecto a la t. Compara: statute - estatua

future - futuro

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La pronunciación del español

Módulo 5: pronunciación de la vocal o

A. INTRODUCCIÓN

En inglés hay 7 formas de pronunciar la letra o. En cambio, en español solo hay 1 forma de pronunciarla:

<table>
<thead>
<tr>
<th>Ingles</th>
<th>Español</th>
</tr>
</thead>
<tbody>
<tr>
<td>oo</td>
<td>o</td>
</tr>
<tr>
<td>u</td>
<td>o</td>
</tr>
<tr>
<td>ui</td>
<td>o</td>
</tr>
<tr>
<td>oo</td>
<td>o</td>
</tr>
<tr>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>oo</td>
<td>o</td>
</tr>
<tr>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en inglés y la uniformidad en la pronunciación en español.

*Dependiendo del dialecto puede haber menos o más formas.

B. PERCEPCIÓN Y PRODUCCIÓN

a. Escucha los siguientes cognados en inglés- español, fíjate lo similar que es en español, y lo diferente que es en inglés.

b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

1. horror – horror
2. hotel – hotel
3. office – oficina
4. color – color
5. opera – opera
6. hospital – hospital
7. other – otro
8. social – social
9. adoption – adopción

C. PRÁCTICA Y DISCUSIÓN

a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención al sonido <o> y <e>.

b. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.

c. Completa la actividad 5-10 (p.40) del libro. Presta atención a la pronunciación de las siguientes palabras.

1. logro
2. inversión
3. intercambio
4. derechos humanos
5. bienestar
6. desarrollo
7. comercio
8. poder adquisitivo
9. empresa
10. presupuesto
11. remesas
12. producto interior bruto

¡Ojo! Aunque la pronunciación en español es similar a (1) en inglés, debes evitar incluir un díptongo. Un díptongo es una vocal más otra vocal más corta.

Correcto Incorrecto
| no              | no*          |
| perro           | perro*       |
| torero          | torem*       |
La pronunciación del español

Módulo 6: pronunciación del sonido b

A. INTRODUCCIÓN

En inglés hay 2 formas de pronunciar este sonido:

<table>
<thead>
<tr>
<th>fuerte:</th>
<th>suave:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[b]</td>
<td>[β]</td>
</tr>
</tbody>
</table>

(En todos los contextos)

boat combine beer

En cambio, en español solo hay 1 forma:

<table>
<thead>
<tr>
<th>fuerte:</th>
<th>suave:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[b]</td>
<td>[β]</td>
</tr>
</tbody>
</table>

(En principio de frase o después de m, n)

bote bueno vino Colombia

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en español y la uniformidad en la pronunciación en inglés.

B. PERCEPCIÓN Y PRODUCCIÓN

a. Escucha los siguientes cognados en inglés - español, compara la diferencia entre /b - v/ (significado) en inglés, con la diferencia /b - β/ (contextual) en español.

b. Practica pronunciar estas palabras en ambos idiomas con un compañero de clase.

1. boat - bote [b - b]
2. favor - favor [v - β]
3. rebel - rebelde [b - β]
4. possible - posible [b - β]
5. bank - banco [b - b]
6. vote - voto [v - b]
7. visible - visible [v - b]
8. balance - balance [b - b]
9. severe - severo [v - β]

¡Ojo! En español no hay diferencia entre b/v - las siguientes palabras son homófonas en español y se pronuncian con b o β (dependiendo de la posición):

tubo - tuyo
tota - voto
haber - a ver

C. PRÁCTICA Y DISCUSIÓN

a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención a las letras <b>, <v> y sus sonidos en español [β, 0 y β ]

b. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.

c. Completa la actividad 5-14 (p. 247) del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

1. publicas 5. vanguardia 9. gobierno
2. computadora 6. pedido 10. estudiantes
3. ambicioso 7. Buenos Aires 11. ciudad
4. ordenador 8. entregados 12. diciembre
La pronunciación del español

Módulo 7: pronunciación del sonido g

A. INTRODUCCIÓN

En inglés hay 1 forma de pronunciar este sonido:

- fórmula de pronunciación:
  - [g]
  - en todos los contextos
  - great
  - guide
  - gas
  - globe

En cambio, en español hay 2 formas diferentes de pronunciando:

- [g] fuerte:
  - principio de frase o después de n
  - gato
  - tengo
  - gas
  - gota

- [γ] suave:
  - En los demás contextos
  - lago
  - algo
  - amiga
  - hígado

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en español y la uniformidad en la pronunciación en inglés.

B. PERCEPCIÓN Y PRODUCCIÓN

a. Escucha las siguientes palabras y compara la diferencia entre [g – γ] en español.

b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

1. gradual - gradual [g]  
   4. gratis [g] - es gratis [γ]  
   7. ambiguous - ambiguo [γ]

2. navigate - navegar [γ]  
   5. agregar [γ]  
   8. gato [g] - el gato [γ]

3. gota [g] - la gota [γ]  
   6. gamba [g - g]  
   9. amargo [γ]

C. PRÁCTICA Y DISCUSIÓN

a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención a las letras <g>, <gh> <v> y <c>. Recuerda la diferencia de pronunciación de estos sonidos en español comparados con la uniformidad del inglés.

b. Completa la actividad 5-19 (p.253) del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

1. descargar  
   5. fuga de cerebros  
   9. ordenador

2. avanzar  
   6. innovar  
   10. recargable

3. búsqueda  
   7. investigar  
   11. subir

4. descargar  
   8. navegador  
   12. teclado
La pronunciación del español

Módulo 8: pronunciación de las vocales a, i, u

A. INTRODUCCIÓN

Al igual que con la e y o, en inglés las vocales a i u tienen diferentes pronunciciones. En cambio, en español solo hay 1 forma de pronunciar cada una de estas vocales:

<table>
<thead>
<tr>
<th>inglés</th>
<th>español</th>
</tr>
</thead>
<tbody>
<tr>
<td>bar</td>
<td>bate</td>
</tr>
<tr>
<td>bit</td>
<td>irritar</td>
</tr>
<tr>
<td>push</td>
<td>empujar</td>
</tr>
<tr>
<td>mine</td>
<td>mío</td>
</tr>
<tr>
<td>parties</td>
<td>fiesta</td>
</tr>
<tr>
<td>fruit</td>
<td>insult</td>
</tr>
<tr>
<td>locate</td>
<td>localizar</td>
</tr>
<tr>
<td>jaw</td>
<td>jarrar</td>
</tr>
<tr>
<td>aisle</td>
<td>pasillo</td>
</tr>
<tr>
<td></td>
<td>comió</td>
</tr>
<tr>
<td></td>
<td>usar</td>
</tr>
</tbody>
</table>

¿Puedes percibir la diferencia en inglés? Compara las diferencia de pronunciación en inglés y la uniformidad en la pronunciación en español.

B. PERCEPCIÓN Y PRODUCCIÓN

i. Escucha los siguientes cognados en inglés - español, fíjate lo similar que es en español, y lo diferente que es en inglés.
ii. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

1. actor – actor 4. island – isla 7. united – unido
2. analyze – analizar 5. important – urgente
3. angel – ángel 6. miserable – miserable

C. PRÁCTICA Y DISCUSIÓN

i. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención a las vocales a, i, u.
ii. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.
iii. Completa la actividad 5-25 del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

1. internacional 5. guionista 9. temática
2. nominación 6. producción 10. crítica
3. director 7. fotografía 11. productora
4. película 8. fantasía 12. innovación
Módulo 9: pronunciación del sonido k

A. INTRODUCCIÓN

En inglés hay 2 formas de pronunciar este sonido:

<table>
<thead>
<tr>
<th>Con aspiración:</th>
<th>Sin aspiración:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[kʰ] (Al principio de una sílaba acentuada)</td>
<td>[k] (En los demás contextos)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>core</th>
<th>kiosk</th>
<th>care</th>
<th>queen</th>
</tr>
</thead>
<tbody>
<tr>
<td>score</td>
<td>skate</td>
<td>scout</td>
<td>sky</td>
</tr>
</tbody>
</table>

En cambio, en español solo hay 1 forma:

<table>
<thead>
<tr>
<th>Sin aspiración:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[k] (En todos los contextos)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>kiosco</th>
<th>campamento</th>
<th>queso</th>
<th>camino</th>
</tr>
</thead>
</table>

¿Puedes percibir la diferencia en inglés? Compara las diferencias de pronunciación en inglés y la uniformidad en la pronunciación en español.

B. PERCEPCIÓN Y PRODUCCIÓN

i. Escucha los siguientes cognados en inglés - español, identifica la diferencia en ambos idiomas del sonido /k/.
ii. Practica pronunciar estas palabras en ambos idiomas con un compañero de clase.

1. collection - colección
2. combine - combinar
3. concert - concierto
4. culture - cultura
5. curious - curioso
6. company - compañía
7. complete - completo
8. candid - cándido

¡Ojo!: En español, el sonido /k/ se puede escribir con C, QU y K:
cosa, cosa, cuerpo
queso, quiero
kiosco, kilo

Como en muchas palabras la “c” también suena como s en antes de e o i: “ciudad, cena”

C. PRÁCTICA Y DISCUSIÓN

i. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención a los sonidos p, t y k (ya sea escrita con c, k o qu)
ii. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.
iii. Completa la actividad B, C, D (p.308-309) del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

1. cerca
2. oeste
3. qué
4. enfrente
5. calle
6. izquierda
7. perdón
8. esquina
9. cuadra
10. compañero
11. quedar
12. norte
Módulo 10: repaso de d, b, y g

A. INTRODUCCIÓN Recuerda los dos tipos de pronunciación de estas consonantes de acuerdo al contexto. ¿Cuál de los sonidos suaves existe en inglés? ¿Cuál es el más difícil?

<table>
<thead>
<tr>
<th>d fuerte: [d]</th>
<th>d suave: [ð]</th>
<th>b fuerte: [b]</th>
<th>b suave: [β]</th>
<th>g fuerte: [g]</th>
<th>g suave: [ɣ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>principio de frase o después de l o n</td>
<td>en los otros contextos</td>
<td>(principio de frase o después de m, n)</td>
<td>(En los demás contextos)</td>
<td>principio de frase o después de n</td>
<td>En los demás contextos</td>
</tr>
<tr>
<td>Daniel</td>
<td>radio</td>
<td>bote</td>
<td>caballo</td>
<td>gato</td>
<td>lago</td>
</tr>
<tr>
<td>dado</td>
<td>dado</td>
<td>bueno</td>
<td>árbol</td>
<td>tengo</td>
<td>algo</td>
</tr>
<tr>
<td>lindo</td>
<td>medicina</td>
<td>vino</td>
<td>lavo</td>
<td>gas</td>
<td>amiga</td>
</tr>
<tr>
<td>decisión</td>
<td>miedo</td>
<td>Colombia</td>
<td>favor</td>
<td>gota</td>
<td>higado</td>
</tr>
</tbody>
</table>

B. PERCEPCIÓN Y PRODUCCIÓN

a. Escucha los siguientes cognados en inglés - español, compara la diferencia en todos estos contextos.

b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.


C. PRÁCTICA Y DISCUSIÓN

a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención al la pronunciación fuerte y suave de estos sonidos.

b. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.

c. Completa la actividad E-F (p.314) del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

| 1. ridículo | 5. decirle | 9. llevarle |
| 2. lo ideal | 6. amigo | 10. buscar |
| 3. lo bueno | 7. verdad | 11. sorprendente |
| 4. prudente | 8. regalito | 12. lo aburrido |
Módulo 11: Repaso de las vocales

A. INTRODUCCIÓN: Como has visto, el español es consistente en la pronunciación de las vocales, mientras que en inglés hay varias formas de pronunciar cada letra. También en español debes evitar ciertas características del inglés que los anglohablantes apenas perciben. Escucha la diferencia de pronunciación en inglés y español.

1. Centralización

<table>
<thead>
<tr>
<th>Español</th>
<th>Inglés</th>
</tr>
</thead>
<tbody>
<tr>
<td>e elephant</td>
<td>e elephant</td>
</tr>
<tr>
<td>i irritate</td>
<td>i irritate</td>
</tr>
<tr>
<td>o phonetics</td>
<td>o fonética</td>
</tr>
<tr>
<td>u illustrate</td>
<td>u ilustrar</td>
</tr>
</tbody>
</table>

2. Diptongación

<table>
<thead>
<tr>
<th>Español</th>
<th>Inglés</th>
</tr>
</thead>
<tbody>
<tr>
<td>e lay, say, may</td>
<td>le, se, me</td>
</tr>
<tr>
<td>i me, see, tea</td>
<td>mi, sí, ti</td>
</tr>
<tr>
<td>o know, low</td>
<td>no, lo</td>
</tr>
<tr>
<td>u two, Sue</td>
<td>tú, su</td>
</tr>
</tbody>
</table>

3. Relajación

<table>
<thead>
<tr>
<th>Español</th>
<th>Inglés</th>
</tr>
</thead>
<tbody>
<tr>
<td>e dell</td>
<td>del</td>
</tr>
<tr>
<td>i sin</td>
<td>sin</td>
</tr>
<tr>
<td>o pour</td>
<td>por</td>
</tr>
<tr>
<td>u insult</td>
<td>insulto</td>
</tr>
</tbody>
</table>

4. Nasalización

<table>
<thead>
<tr>
<th>Español</th>
<th>Inglés</th>
</tr>
</thead>
<tbody>
<tr>
<td>a band</td>
<td>banda</td>
</tr>
<tr>
<td>e ten</td>
<td>ten</td>
</tr>
<tr>
<td>i seen</td>
<td>sin</td>
</tr>
<tr>
<td>o blond</td>
<td>blando</td>
</tr>
</tbody>
</table>

En cada uno de los ejemplos, ¿puedes ver que en español en los cuatro ejemplos cada letra suena igual, mientras que en inglés suenan diferentes? Escucha y practica.

B. PERCEPCIÓN Y PRODUCCIÓN

a. Escucha los siguientes cognados en inglés - español, fija lo similar que es en español, y lo diferente que es en inglés.

1. elephant – elefante
2. verb – verbo
3. union – unión
4. express – expres
5. general – general
6. color – color
7. hotel – hotel
8. actor – actor
9. repeat – repetir

b. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.

C. PRÁCTICA Y DISCUSIÓN

a. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención a las vocales.

b. Discute con tu compañero de clase qué palabras son claves para los temas tratados en clase.

c. Completa la actividad 6-1 (p.285) del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

1. calificar
2. cruzar
3. frontera
4. promulgar
5. valla
6. cobertura
7. disminuir
8. entrada
9. indocumentado
10. integrarse
11. concienciar
12. regularizar
Módulo 12: repaso de **p, t, y k**

### A. INTRÓDUCCIÓN

Para estas consonantes, la diferencia es que en español suenan sin aspiración.

Identifica la pronunciación aspirada del inglés y compárala con el español.

<table>
<thead>
<tr>
<th>Con aspiración:</th>
<th>Sin aspiración:</th>
<th>Con aspiración:</th>
<th>Sin aspiración:</th>
<th>Con aspiración:</th>
<th>Sin aspiración:</th>
</tr>
</thead>
<tbody>
<tr>
<td>[pʰ]</td>
<td>[p]</td>
<td>[tʰ]</td>
<td>[t]</td>
<td>[kʰ]</td>
<td>[k]</td>
</tr>
<tr>
<td>Al principio de una sílaba acentuada</td>
<td>En todos los contextos</td>
<td>(Al principio de una sílaba acentuada)</td>
<td>(Al principio de una sílaba acentuada)</td>
<td>(En todos los contextos)</td>
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<tr>
<td><strong>port</strong></td>
<td><strong>puerto</strong></td>
<td><strong>atomic</strong></td>
<td><strong>átomo</strong></td>
<td><strong>core</strong></td>
<td><strong>kiosco</strong></td>
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<td><strong>compare</strong></td>
<td><strong>comparar</strong></td>
<td><strong>tone</strong></td>
<td><strong>tomate</strong></td>
<td><strong>kiosk</strong></td>
<td><strong>campamento</strong></td>
</tr>
<tr>
<td>Paraguay</td>
<td>España</td>
<td><strong>tell</strong></td>
<td><strong>fotografía</strong></td>
<td><strong>care</strong></td>
<td><strong>queso</strong></td>
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<tr>
<td><strong>pool</strong></td>
<td>Paraguay</td>
<td><strong>time</strong></td>
<td><strong>estado</strong></td>
<td><strong>queen</strong></td>
<td><strong>camino</strong></td>
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</table>

### B. PERCEPCIÓN Y PRODUCCIÓN

1. Escucha los siguientes cognados en **inglés - español**, compara la diferencia entre la aspiración en inglés y la no aspiración en español.
2. Practica pronunciar estas palabras en ambos idiomas solo o con un compañero de clase.
3. Practica la pronunciación de estas palabras con un compañero de clase. Presta atención al las **consonantes**. Posteriormente discute qué palabras son claves para los temas tratados en clase.

#### i.

1. paper – papel
2. problem – problema
3. possible – posible

#### ii.

4. lottery – lotería
5. torture – tortura
6. tutor – tutor
7. complete – completo
8. candid – cándido
9. captain – capitán

### C. PRÁCTICA Y DISCUSIÓN

1. Completa la actividad **6-16-617 (p.306)** del libro. Presta atención a la pronunciación de las palabras que aparecen en esta lista.

#### i.

1. frontera
2. exportaciones
3. mexicanas
4. codependencia
5. indocumentado
6. latino
7. inmigrante
8. peligro

#### ii.

9. tasa
10. título
11. quedarse
12. concienciar
REFERENCES


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