SCAFFOLDING STUDENTS' PHONOLOGICAL COMPETENCE THROUGH THE INTEGRATION OF PRONUNCIATION LEARNING STRATEGIES

BY

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LICENCIATURA EN LENGUA INGLESA
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RESUMEN

Este documento presenta principalmente un proyecto de investigación referente a la experiencia de integrar estrategias de pronunciación como una manera de mejorar y promover procesos metacognitivos en cursos de pronunciación en un programa de enseñanza de idiomas. Autores como Celce-Murcia, Brinton, & Goodwin, (2010) argumentan que exponer a los aprendices a las estrategias apropiadas facilita el desarrollo y el alcance de las metas académicas. Este estudio resalta la urgencia de incorporar ciertas estrategias que permitan a los estudiantes de idiomas o a los maestros en formación monitorear su aprendizaje de la pronunciación de una segunda lengua. Teniendo en cuenta esto, a los maestros en formación se les instruyó en el uso y aplicación de las cuatro estrategias de aprendizaje de la pronunciación (LPS) que en la opinión de Pawlak (2010) se definen como acciones deliberadas y pensamientos que se emplean conscientemente, a menudo en una secuencia lógica, para el aprendizaje y la obtención de un mayor control sobre el uso de diversos aspectos de la pronunciación. Las estrategias mencionadas anteriormente son: la escucha crítica, transcripción, anotaciones y correcciones en voz alta. Los grupos de estudio colaborativo (CSGs) fueron también usados como parte del proyecto considerando que el aprendizaje colaborativo ha sido catalogado como una estrategia efectiva para la construcción del conocimiento.

Este proyecto se llevó a cabo en un programa de enseñanza del inglés y los participantes fueron 40 estudiantes que conformaron 10 grupos de estudio colaborativo (CSGs). Estos estudiantes pertenecían a los grupos de pronunciación II. Los métodos implementados para recolectar información fueron entrevistas, diarios del investigador y registros reflexivos. Los resultados confirman que la inclusión de tareas para el aprendizaje colaborativo dentro del salón de clase alientan a los estudiantes a expresar sus opiniones además de discutir y negociar ideas con sus compañeros (Johnson & Johnson, 1989). Además, los datos confirman la efectividad de los grupos de estudio para que los alumnos menos competentes se beneficien de compañeros con un nivel de conocimiento superior (Vygostky, 1978). También se evidenció que a través de las estrategias de pronunciación se mejoró la conciencia fonológica de los estudiantes y su capacidad para monitorear su pronunciación y la de sus compañeros. De igual manera las habilidades pedagógicas fueron promovidas y fortalecidas a través de la experiencia del curso.
ABSTRACT

This research study is mainly intended to present a research project concerning the experience of participants implementing pronunciation learning strategies as a means to enhance and promote metacognitive processes on pronunciation courses in a Language Teaching program. Authors such Celce-Murcia, Brinton, & Goodwin, (2010) argue that the fact of exposing the learners to the appropriate strategies facilitate the development and achievement of academic goals. Hence, the main purpose of this study was to incorporate certain strategies that allow language learners or teachers-to-be to monitor their L2 pronunciation learning. Considering this, pre-service teachers were instructed on the use and application of four learning pronunciation strategies (LPS) which in Pawlak's (2010) view are defined as deliberate actions and thoughts that are consciously employed, often in logical sequence, for learning and gaining greater control over the use of various aspects of pronunciation. The aforementioned strategies were: Critical listening, transcription, annotations and rehearsing corrections aloud. CSGs were also embedded as part of the course considering that Collaborative learning has been deemed as an effective strategy for the construction of knowledge.

The present research was carried out at a Language Teaching Program and the participants involved were 40 students that were part of 10 CSGs, they belonged to the courses of Pronunciation II. The methods implemented for collecting data were interviews, researchers' journals, and reflective logs. Results confirm that the inclusion of collaborative learning tasks encourage students to express their opinions, discuss and negotiate ideas with others (Johnson & Johnson, 1989). Data also confirmed the effectiveness of CSGs inasmuch as less competent learners benefit from more skillful peers (Vygostky, 1978). Besides, data reveal that phonological awareness was enhanced and monitoring strategies were adopted throughout the application of the LPS. On the other hand, pedagogical abilities were strengthened in the process and, finally, other language skills were promoted through the experience.
Scaffolding students' phonological competence through the integration of pronunciation learning strategies

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I would like to express my gratitude to my mother Maria Clemencia Diáez your always caring, compressive lovely way to be, gave me confidence to start walking this great path and my father Alcibiades Londoño who always encouraged me to continue my education and supported me financially.

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INTRODUCTION

The present project is the result of a study conducted in pronunciation courses in a Language Teaching Program in Pereira. Two research studies report on the results of this project, the intention of this study is basically to inform the reader about the impact of integrating four pronunciation learning strategies on students' phonological competence. Given that pronunciation is a decisive component in the learning of a foreign language, this study aimed at empowering learners with key elements for taking control of the development of their phonological competence. Instructors and investigators were concerned with pronunciation since they had looked for effective strategies and approaches to strengthening this skill; this study describes the experience of participants after they have been exposed to the use of pronunciation learning strategies within a collaborative learning scenario.

Pronunciation is, nowadays, by far one of the fields of interest in, both second language research and English language teaching. The current trends in language teaching suggest and encourage English teachers to promote this skill in the EFL scenarios and, for this purpose a wide range of strategies have been proposed, which Peterson (2000) classifies based on Oxford’s (1990) model of strategy types; memory, cognitive, compensation, metacognitive, affective and social strategies. The importance of the implementation of these strategies lies in the fact that language learners need to become autonomous and conscious users of tools and actions in their learning process that will, eventually, allow them to gain control over the use of various aspects of pronunciation (Pawlak, 2010).

In the first chapter of the study, the reasons why the research was conducted will be explained, specifically the need of valid strategies whose applications allow learners to control and monitor their learning process. Another reason to conduct this study was to promote the collaborative work; despite the fact that in the Colombian second language learning settings, there is a lack of students’ autonomy and commitment for this approach to be applied effectively.

In the second part of the study the topics in which this study was framed are explained which are pronunciation, pronunciation features, pronunciation in the EFL curriculum,
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pronunciation techniques, pronunciation strategies, pronunciation learning strategies (critical listening, transcription, annotation and rehearsing corrections aloud) and study groups (collaborative study group). All these definitions are compared by authors and authorities in the field of study in order to support or contrast ideas about the research project. Finally, current and similar projects are presented to support the idea of this study.

In the next section, the methodology applied in this research project is explained since this study was conducted as a descriptive case study, it required to report and describe in detail the whole experience of participants when implementing pronunciation learning strategies in a collaborative learning setting. This part of the study also explains the context, where the project was developed, the participants, why were they chosen, their characteristics in terms of age and the level of English proficiency they had, the data collection methods which were: reflective logs, interviews, and researcher’s journals. Finally, the data analysis explains the methods the researchers used in order to examine what was found in the study.

Additionally, the findings are explained in the following order, those findings aim to answer the two different research questions presented in the study which are what can be evidenced from the experience of promoting pronunciation skills through the implementation of collaborative study groups? And how does the integration of pronunciation learning strategies impact students' phonological competence? Those findings are also supported through a discussion with authors who support or disagree with the results found in the study.

To finish, the difficulties that emerged in the implementation of the current project are presented so that future research studies on this topic can be informed of those aspects that might influence the execution of a project. These limitations are related to time constraints, the lack of autonomy and commitment by some participants and, additionally the different English proficiency levels of each group.

At the end in the conclusion, it is presented the necessity to promote collaborative study groups to enhance the pronunciation, and also to foster autonomy and commitment in the project.
STATEMENT OF THE PROBLEM

The Communicative Approach states that the ultimate goal of language learning is communication (Celce-Murcia, Brinton and Goodwin, 1996). In view of the need of unifying criteria in foreign language learning and teaching processes, the Council of Europe in 2001 designed the CEFRL (Common European Framework of Reference for Languages) with the purpose of providing a coherent and comprehensive basis for the elaboration of language curricula, material design, and language assessment. This document covers several competences that are necessary in order to use a language for communication. The linguistic competence is a significant skill that a language learner should develop when exposed to foreign language learning (i.e. lexical, grammatical, semantic, phonological, orthographic and orthoepic). What is more, this framework suggests a series of elements to be taken into account when dealing with the phonological competence, for instance, the sound units of the language, phonetic features, phonetic composition of words, sentence phonetics (stress, rhythm, and intonation), and phonetic reduction.

This phonological competence is so-called pronunciation and consists, among others, of the way sounds are produced in relation to rhythm, intonation, production of individual sounds, and production of chunks of sounds. As Celce-Murcia, Brinton and Goodwin (1996) suggest, there is a threshold in pronunciation for non-native speakers of English, and when they fall below this threshold, communication breakdowns start to appear no matter how good quality the command of grammar and vocabulary of the learners might be. Pronunciation, then, is related to intelligibility, a term that has gained importance in the last decades; a term that conveys that learners with good oral skills in English are more likely to be understood even if they make errors in other areas (Morley, 1994; Fraser, 2000).

This subcomponent of the linguistic competence is an essential element for communicating successfully with others, as said by Celce-Murcia et al. (1996). However, in practice, English pronunciation can be one of the most complex skills to be developed “..because of the notoriously confusing nature of English spelling, it is particularly important to learn to think of English pronunciation concerning phonemes rather than letters of the alphabet” (Roach,
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This means that pronunciation cannot be based on letters, but on independent sounds. Notwithstanding, pronunciation is not given the importance it deserves, for it has been “swept under the carpet” (Brown, 1991; Pronunciation Second Language Teaching Conference, 2014), which means that pronunciation has been given insufficient attention at a global and a local scale in the English Language Teaching scenarios. Considering this fact, many attempts have been made in order to integrate this competence in the language curriculum. However, this is rarely a matter of interest at a national level, proof of that is the low number of research studies conducted in this area, and the little focus that this skill has in the language classroom. (Gutierrez, 2005)

With reference to the problematic situation in terms of pronunciation, Gutiérrez (2005) considers that the little attention on Pronunciation is caused by different factors such as the number of students per classroom, the insufficient amount of tools for learning, the lack of motivation to learning. In addition, the author states that these factors affect the students' oral performance inasmuch as they are not be able to convey meaning due to the fact that their intelligibility is highly affected by pronunciation errors. Also, Bygate (1987: 1, cited by Gutiérrez, 2005) affirms that “learners often need to be able to speak with confidence in order to carry out many of their most basic transactions. It is the skill by which they are most frequently judged”. This means that appropriate sound production is of highest importance when speakers want to interact with others in the target language, for they are being evaluated, somehow, by their interlocutors, and, also, the fact that pronunciation is one of the first factors detected when someone speaks.

In spite of the different attempts that have been made in view of integrating the pronunciation component into the English classroom, it is still “the cinderella skill” in the language classroom, as already mentioned. Pronunciation is, still, not given priority in language classroom and has a low visibility in the curriculum, fact that is attributed to the lack of teacher training, and the lack of inclusion of instruction on the use of strategies (Foote, Trofimovich, Collins & Urzua, 2013, Sardegna, 2012).

In response to the current situation in this field, studies have indicated and pinpointed a number of strategies to approach and incorporate this skill in the curriculum. New trends in
language teaching suggest and encourage English teachers to promote this skill in the EFL scenarios and, for this purpose a wide range of strategies have been proposed, which Peterson (2000) classifies based on Oxford’s (1990) model of strategy types; memory, cognitive, compensation, metacognitive, affective and social strategies. The importance of the implementation of these strategies lies in the fact that language learners need to become autonomous and conscious users of tools and actions in their learning process that will, eventually, allow them to gain control over the use of various aspects of pronunciation (Pawlak, 2010).

Current results from research on pronunciation learning and teaching have proved the efficiency of instructing learners on the use of learning strategies. Authors such as Ingels, (2011); Sardegna, (2012), Morley, (1991); among others, agree on the fact that the improvement of pronunciation skills centers on the application of certain strategies that allow learners to manage and administer their learning process. Research has also indicated the significant role that autonomy, self-regulation and self-assessment have in the development of phonological competences. However, there is a shortage of studies that identify ways of allowing language learners to take control of their own L2 pronunciation learning which are considered essential for accomplishing goals in contexts where the L2 is required (Celce-Murcia, Brinton, & Goodwin, 2010; W. B. Dickerson, 2000; Morley, 1991; and others).

Considering the number of aspects that influence adult L2 pronunciation acquisition, such as language aptitude, phonemic coding ability, developmental readiness, working memory (Celce-Murcia et al., 2010; Juffs & Rodriguez, 2007), motivation and amount of L2 exposure, instruction, and use (Lightbown & Spada, 2006) specific actions need to be undertaken in order to prompt learners to enhance their phonological abilities.

The current study was designed to address gaps in research regarding the inclusion of specific actions that empower learners with tools for taking control of their own learning, in terms of pronunciation. Therefore, students from Pronunciation Course II were selected and their performance when using pronunciation learning strategies was assessed and analyzed, in view of determining the effectiveness of using learning pronunciation strategies. All this targeted at
reporting on the impact that the integration pronunciation learning strategies had on a group of pronunciation students considering that there are no studies related to this aspect in the context where this research was carried out and with the main intention of covering the gap in research of the topic that was under study.
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RESEARCH QUESTIONS

1. How does the integration of pronunciation learning strategies impact students' phonological competence?
THEORETICAL FRAMEWORK

Along this chapter, the main theories that are related to the range of the study will be determined and examined considering different authors’ perspectives and how these aspects have been accounted in other researches. In an attempt to articulate the different views and concerns stated by some authorities regarding pronunciation, this section is intended to present these concepts that serve as a foundation for the present and future studies.

This study was mainly elaborated within six topics that account for the relevance of this research. Those topics are pronunciation, pronunciation features, pronunciation in the EFL curriculum, pronunciation techniques, pronunciation strategies and pronunciation learning strategies. The theory presented in this chapter mentions and describes pronunciation from the perspective of different authors in order to illustrate the most relevant theory and research around this notion; also, the features of this component will be described (segmental and suprasegmental); these features serve as a basis to teach and assess accurate pronunciation. Considering the importance of the topic, pronunciation in the EFL curriculum is also included to describe how language learners, instructors and EFL programs insert this skill in the language classroom. Equally, some techniques are pointed in this section in order to show the practices that have been recognized as appropriate and effective in terms of pronunciation learning and teaching. This section will also refer to some pronunciation learning strategies (critical listening, transcriptions and annotations, and rehearsing corrections aloud); since these were the strategies that learners apply during the execution of the current study.

Pronunciation

Pronunciation has been defined by Cook (1996) as a set of habits of producing sounds, the habit of producing a sound is acquired by repeating it over and over again and by being corrected when it is pronounced incorrectly. Other authors as (Morley, 1994; Fraser, 2000) consider that this skill is the way we speak that immediately conveys something about ourselves to the people around us. The same authors state that pronunciation is related to intelligibility because learners with good oral skills in English are more likely to be understood even if they make errors in other
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areas, whereas learners whose pronunciation is difficult to understand will not be understood, even if their grammar is perfect, such learners may avoid speaking in English, and thus experience social isolation, employment difficulties and limited opportunities for further study. Similarly, Labov & Wiliam (2003) proposed a more updated definition of pronunciation which the authors describe as the knowledge pertaining the different features of the target language phonological system, and the capacity for using them appropriately within the discourse.

**Pronunciation features**

The pronunciation skill has also been said to be the sum of many features that constitute the speech of language users, as stated by Crystal (2003) who differentiates among two main types of features, the segmental that the author defines as any discrete unit that can be identified, either physically or auditory, in the stream of speech, and the suprasegmental defined as phonemes that cannot be easily analyzed as distinct segments, but rather belong to a syllable or even word. Authors, such as (Ur, 2008; Kelly, 2000; Seferoglu, 2005) agree on that pronunciation comprises the sounds of a language or phonemes, stress, rhythm, and intonation. Even though the categorization of segmental and suprasegmental features is varied enough, the same authors claim that a broad definition of pronunciation includes both suprasegmental and segmental features, which are implanted in the instruction of the phonological competence.

Theories conclude that segments are divided into phonemes, which are basic units of a language’s phonology, combining them with other phonemes form meaningful units such as words or morphemes, phonemes also contain speech sounds known as consonants that are articulated with complete or partial closure of the vocal tract which are divided in voiced and unvoiced, vowels; are sounds in spoken language divided in single vowels (short and long) and diphthongs; that refer to two adjacent vowel sounds occurring within the same syllable.

On the other hand, suprasegmental aspects involve intonation; defined as the variation of spoken pitch that is not used to distinguish words, instead it is used for a range of functions such as indicating the attitudes and emotions of the speaker, the stress; that refers to the relative emphasis that may be given to certain syllables in a word, or to certain words in a phrase or
sentence and aspects of connected speech; that is a continuous sequence of sounds establishing utterances or conversation in spoken language. This is one of the classifications for the suprasegmental features; other authors organize them in different ways but they coincide in the fact that these aspects go beyond the segmental features.

**Pronunciation in the EFL curriculum**

Due to the fact that accurate pronunciation deserves knowledge in second language phonology, in the Common European Framework of Reference (2001) (CEFR) section 5.2.1.4 is stipulated that in regard to pronunciation, the phonological competence involves a knowledge and skill in the perception and production of: the sound-units (phonemes) of the language and their realization in particular contexts, the phonetic features which distinguish phonemes (distinctive features, e.g. voicing, rounding, nasality), the phonetic composition of words (syllable structure, the sequence of phonemes, word stress, word tones), sentence phonetics (prosody), sentence stress and rhythm intonation.

Pronunciation has gained importance in the EFL curriculum in the last years; however, it is one of the skills that tend to be neglected in language classrooms. Fraser (2000) states that learners perceive pronunciation as one of the most difficult aspects of English to acquire, that needs constant assistance and monitoring. By the same token, Underhill (2010) points out that in more recent years, there has been a gradual shift towards awareness of the importance of pronunciation prompting to refer to pronunciation as the “cinderella of language teaching”.

Other studies support the fact that pronunciation has been neglected in EFL scenarios. Studies as conducted by Breitkreutz, Derwing, and Rossiter (2001) verify the existing exclusion of pronunciation in pedagogical learning, also the authors remark the lack of adequate instruction pertaining to this language aspect. The same authors surveyed 67 Canadian ESL programs; it was found that only 30% of teacher respondents had received pedagogical training in pronunciation. The authors concluded that quite a few of the teachers identified the need to integrate pronunciation into the communicative classroom to a larger extent, but most lacked the requisite knowledge and training to do so. Given the importance of pronunciation in the EFL curriculum,
Arias (2009) accounted the most common errors that ESL learners commit at the moment of articulating sounds in English. The author shows how EFL learners tend to substitute the correct pronunciation of a phoneme for others that sounds similar. Those common errors are shown as follows:

<table>
<thead>
<tr>
<th>/ʃ/</th>
<th>by</th>
<th>/ʒ/</th>
</tr>
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<tr>
<td>/tʃ/</td>
<td>by</td>
<td>/ʃ/</td>
</tr>
<tr>
<td>/z/</td>
<td>by</td>
<td>/s/</td>
</tr>
<tr>
<td>/θ/</td>
<td>by</td>
<td>/s/</td>
</tr>
<tr>
<td>/ð/</td>
<td>by</td>
<td>/d/</td>
</tr>
<tr>
<td>/v/</td>
<td>by</td>
<td>/b/</td>
</tr>
<tr>
<td>/ɲ/</td>
<td>by</td>
<td>/n/</td>
</tr>
<tr>
<td>/m/</td>
<td>by</td>
<td>/n/</td>
</tr>
<tr>
<td>/ʒ/</td>
<td>by</td>
<td>/ʃ/</td>
</tr>
<tr>
<td>/æ/</td>
<td>by</td>
<td>/æ/</td>
</tr>
<tr>
<td>/ə/</td>
<td>by</td>
<td>any vowel, according to the spelling of the word</td>
</tr>
<tr>
<td>/l/</td>
<td>by</td>
<td>/l/</td>
</tr>
<tr>
<td>/u/</td>
<td>by</td>
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</table>

Because of the rigorousness that EFL learners might face in the process of pronunciation development, the researchers who have been interested in this field, have examined many variables in an attempt to explain the increase of accurate pronunciation. Studies have not been numerous, but have been productive, Vitanova & Miller (2002) have argued that learners can see improvement in both segmental and suprasegmental features of pronunciation. However, once learners have mastered the basic sounds of English and identified some of the suprasegmental differences between their L1 and English, it is time to help them to learn some strategies so that language learners can study more effectively on their own.

In conclusion, it is of high relevance to bring to light what was mentioned in The Fifth Annual Pronunciation Conference in Second Language Learning and Teaching regarding this skill. In the event, the academic community concluded that pronunciation has been ignored or relegated in the EFL classroom, and this was the reason why the Annual Conference on Pronunciation Teaching and Learning emerged. Considering that this skill is not visible in the
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EFL curriculum, studies and reflections presented in the conference induce the academic community to focus and use applied approaches of pronunciation in the classroom, so that better results can be obtained in this phonological competence (e.g., Brodkey, 1972; Fayer & Krasinski, 1987; Smith & Rafiqzad, 1979).

**Pronunciation techniques**

Regarding pronunciation techniques and procedures to work on pronunciation, literature suggests the following strategies targeted at promoting the phonological competence. According to Bradley-Bennett (2007), one of the crucial elements to improve pronunciation is listening (as long as the recordings are understandable for learners and meaningful for their lives). This listening material should include different voices and ranges, for listening just to the teacher limits students from understanding other people. In the same line, Gilbert (2008) proposes dictation of sentences including the specific sounds which are being worked. The author continues to say that linking words could be a proper way to work with final sounds. For example, “the boats Entered the water: boatssssentered” (p.35).

Accordingly, Robertson (2003) estimates that in order to get students oral production sufficiently clear, the speed of speech could be reduced so as to achieve proper English production. In addition, he says that providing students with the script of the modeled pronunciation is suggested, but it should be gradually removed until the focus is completely on students’ word understanding. In the same fashion, Bradley-Bennett (2007) states that modeling syllables in a disjointed way (I… am… a… teach--er) or extending diphthongs (mah-ee neh-eem is...) could help students produce words accurately.

Consequently, Harmer (2011) suggests the use of other techniques for working on pronunciation such as identifying items from a list (listening a series of words and checking the ones which are included in the printed list), comparing minimal pairs (analyzing the difference between “day-they” not only in sound but in meaning), and using the phonetic symbols to clarify specific sounds. He also adds that these techniques might satisfy students who have different needs and attitudes towards pronunciation practice. Scholars like Cotterall, 2000; Hsiao &
Oxford, 2002; Oxford, 1990 suggest that assisting learners to develop a repertoire of learning strategies is essential and recommend the inclusion of self-monitoring tools (self-correction) when learning pronunciation. One of these monitoring tools is suggested by Bradley-Bennett (2007), which is a “phone” made of PVC pipes joint together. The learner speaks to one of the ends of the phone and listens to his partner on the other end. The techniques and procedures presented are samples of what research and literature provide to the world of teaching pronunciation.

**Pronunciation learning strategies (PLSs)**

Considering the importance of pronunciation in the EFL many, approaches have proposed other meaningful learning practices as strategies for addressing pronunciation in the classroom. For instance, the communicative approach (Hinofotis & Bailey, 1980) stipulates that L2 learners are not expected to sound like native speakers of English but rather to enable them to surpass the beginning level; therefore their pronunciation will not affect their ability to communicate. Due to this fact, the same authors named some strategies that aid students working on language communicatively, namely, listening and imitation, phonetic training, minimal pair drills, contextualized minimal pairs, visual aids, tongue twisters and developmental approximation drills.

Other authors have focused on the development of pronunciation learning strategies because of the rigorousness for developing accurate pronunciation; the goal of Pawlak (2010) as cited in the study conducted by Ingels (2011), is to develop a valid instrument for identifying PLSs use. The author provides useful definitions regarding the effectiveness of strategy use in the field of pronunciation; he states that pronunciation learning strategies are deliberate actions and thoughts that are consciously employed, often in logical sequence, for learning and gaining greater control over the use of various aspects of pronunciation. He highlights the fact that such strategy usage contributes to the development of declarative (explicit) and procedural (implicit) knowledge. Pawlak proposes some strategies for pronunciation learning, namely, critical listening, transcription, annotations and rehearsing corrections aloud. These strategies will be described, as follows:
Critical listening

One PLS that has been vastly defined and addressed as productive for developing control over one’s pronunciation aspects is critical listening. This strategy is defined by Izumi (2003), as a learner’s deliberate intent for listening to their own production in order to identify non-target features. The same author claims that listening holistically may allow a learner to identify the most noticeable features, such as the use of too many fillers and self-repairs or a lack of fluency. In this strategy, listening is meant to be more detailed and systematic, a critical process that provides an opportunity for learners to focus on their L2 production at the segment, syllable, word, phrase, and discourse levels.

Transcription

Another strategy characteristic of the pronunciation monitoring process is transcription. The author Lynch (2007) claims that this strategy cannot be separated from critical listening, in order for transcription to be effective, an L2 learner must also be able to attend and identify the target pronunciation features in their speech; so that when transcribing speech the learner can write down exactly what was spoken, including non-target-like production of segmental, suprasegmental, pauses, restarts, fillers, and repairs. The goal is to create an accurate written record of a speech without yet moving ahead to the evaluation phase, thus allowing the learner time to analyze and reflect on his or her output.

Annotation

Similarly, Foster and Skehan (1996) state that if the transcription strategy is employed students might consider using the annotation strategy as well. The authors explain that for this strategy, learners go one step further with the transcription described in the previous paragraph; learners review their own transcripts, looking for non-target features, and annotate (mark) corrections directly on the transcript in a contrasting color. During this transcript correction process, learners refer to a checklist to remind them of the pronunciation features they should
Scaffolding students' phonological competence through the integration of pronunciation learning strategies

monitor.

Rehearsing corrections aloud

Another strategy is rehearsing correction aloud which Sardegna (2009) remarks to be a good method for reflecting on the type of practice learners typically do when learning new L2 skills. The same author comments that after performing one of the pronunciation learning strategies with a given speech excerpt (i.e., critical listening, listening + transcription, or listening + transcription + annotating corrections), learners orally produce each speech excerpt, and implement the suggested feedback aiming to make their production as accurate as possible in terms of the target pronunciation features, during and following each rehearsal, learners monitor and evaluate their output, with the goal of identifying modifications that are needed in subsequent rehearsals in order to make their oral production target-like.
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RELATED RESEARCHES

Research studies have been explored in order to see what literature says about pronunciation strategy use and related elements. Studies conducted in other parts of the world illustrate how language learners might have been affected by the employment of pronunciation learning strategies and other instructional practices. In the next paragraphs, some of these studies will be described.

Pronunciation learning strategies can result profitable for increasing accuracy in the production of pronunciation features, as shown in the study conducted by Ingels (2011). The researcher’s goal for this study was to extend our understanding of the role of strategy use in L2 pronunciation learning by investigating the effectiveness of training future international teaching assistants (ITAs) to critically listen to, transcribe, mark corrections (annotate), and orally rehearse English suprasegmental features in their own speech. For this purpose fifteen graduate-level learners of English (14 Mandarin speakers, 1 Korean speaker) from an English as a Second Language (ESL) pronunciation class at a Midwestern university were asked to participate in a repeated-measures design, in which participants had to use in combination strategies of critical listening, transcription, annotation and rehearsal. Speech data resulting from strategy use were gathered at the beginning and end of a 16-week semester in order to determine the extent to which strategy use corresponded to improved suprasegmental accuracy. The author found that all participants accomplished meaningful advances in the suprasegmental aspects of the language, specially stress and connected speech. Thus, concluding that to train learners to use PLS such as critical listening, transcription and rehearsing correction aloud proved to be effective to increase pronunciation accuracy. Besides, this study provided the first empirical evidence for the practicality of the annotation phase as a strategy for further boosting pronunciation accuracy.

On the other hand, other researchers have addressed pronunciation in their studies and whether it can be positively impacted by different learning scenarios and approaches. As an example Goswami and Chen (2008) examined whether collaborative learning structures make a significant impact on ELL subjects’ overall pronunciation of target English sounds. The study enrolled 44 English language learners from a high school in Mexico, who ranged in age from
Scaffolding students' phonological competence through the integration of pronunciation learning strategies

fifteen to nineteen years old; all students’ native language was Spanish, as spoken in Mexico, and they all performed at similar levels of English fluency, as determined by the school’s criteria. Participants were divided into two groups, one of 25 students that received instruction in a conventional classroom setting, and other consisting of 19 students, received instruction on CSG whose instruction included collaborative learning elements such as positive interdependence, individual accountability, face-to-face interaction and group processing. Instructions regarding features of the International Phonetic Alphabet (IPA) such as places of articulation and manners of articulation were also presented to this group in a collaborative learning structure. To collect the data, researchers administered a pre-test of the pronunciation of the target sounds to all the participants in both the collaborative and conventional study groups. After all the phonetic features of the target sounds were presented in the phonetic and phonological instruction, a post-test was given to both groups in the identical format as in the pre-test. Subjects’ phonetic realizations of the target consonants were audio taped and video recorded during both tests for assessment purposes. The researchers concluded that phonetic and phonological instruction did significantly improve subjects’ pronunciation of target English sounds in both the collaborative and the conventional study groups, and both groups obtained statistically significant improvement over the period of the study. However, the difference in progress between these two groups was not statistically significant. Thus, investigators concluded that for collaborative learning structures to be successfully implemented in ESL classrooms, the essential elements of CSG need to be present for a successful outcome. Positive interdependence, individual accountability, face-to-face interaction, social skills and group processing need to be built in the instructional format and materials creatively and effectively. Next, adequate time for instruction and “fermentation” of collaborative learning elements is definitely needed for the implementation of collaborative learning structures.
METHODODOLOGY

This section of the research study contains different components which were relevant to the design of the study. Initially, this study was conducted as a case study under the parameters of two types of study which were qualitative and descriptive research. The following information here appearing illustrates the type of study, the context, the setting, the participants, the researcher’s role, the data analysis and data collection instruments, and the ethical considerations.

Type of study

With regard to the research design, this study can be classified within the qualitative approaches for the most part as this study is structured as an interpretive-descriptive research (IDR) case study, which has become a mainstream in fields of education which methods rely on linguistic rather than numerical data (Elliot, 1999). Applied disciplines have adopted interpretive description methods since their purpose is to supply a coherent conceptual description of particular patterns and cohesions that characterizes certain phenomena.

When describing the type of study developed, it is necessary to mention first that it was conducted as a case study due to the fact that it referred to an intensive description and analysis of a single phenomenon experienced with a very specific set of students as claimed by Merriam (1988). She stated that case studies, especially qualitative ones, are commonly implemented in the field of education as they provide real-life encounters with the phenomenon under study. As mentioned above, other characteristic of the design of this study is its qualitative nature. This project was developed as a qualitative study since the results acquired during the process were highly aligned to it. The core of a qualitative study is the interpretation of phenomena evidenced; it is also emphasized on subjectivity as it mostly starts by identifying, following and describing an event that has been not addressed before, or it has, but from a different approach therefore the researcher needed to narrate from a subjective perspective how the research was conducted and what results were obtained.

Also, according to Cassell and Simon (1998) qualitative studies are concerned with
phenomena taking place in real settings regarding behavior resulting in experience, and inevitably their orientation is towards a process rather than an outcome.

The research study developed was as well as descriptive study. Throughout this study the information was collected without altering the environment, which means that no data were compromised or influenced. The fact that this study was descriptive indicates that it provided information about behavior, attitudes and other characteristics of a particular group. Descriptive research involves collecting data which describe events and then “organizes, tabulates, depicts, and describes the data collection”. Descriptive studies have an important role in educational research, for they describe natural educational phenomena that can interest policy makers and educators (Nelson & McLellan, 2001). In this instance, the descriptive study involved high interaction with the participants, which in turn demanded also interviews to collect necessary information.

To conclude, the study focused its attention on data gathered from the participants throughout the process. This case study was highly descriptive and its path relied on different data sources that were triangulated in order to verify that the data analysis was coherent.

Context

This study took place at a public university located in La Julita, Pereira (Risaralda). The university is an official entity which was created in accordance with Law 41 of 15 December 1958. The founder and the first principal of the university was Jorge Roa. The university opened its doors for the first time on March 4th 1961 having only one undergraduate degree of Electrical Engineering. As the years went by, the institution started to offer new programs, being one of them the English language degree provided by the Fine Arts faculty.

The Bachelor’s degree in English language is an academic program that responds to the
need to professionalize teachers capable of enhancing education in the region in learning English as a foreign language covering as one of its main aims to train professional students in the field of English language from an overall perspective to perform teaching, research and social outreach activities.

**Setting**

The English language degree program began to function on the first term of 2004 with a current average of around 680 students as of the end of 2012. The English language degree program is divided in 10 semesters or terms of 6 months each. During the first 2 terms learners from the program take the subjects of pronunciation 1 and 2. The course that was chosen for the development of the study was pronunciation 2 which offers 3 hours of in-class work per week and allows students 3 credits towards this degree.

The teacher in charge of the course is a professor who has a Bachelor’s degree in English language teaching and a Master’s degree in English didactics from Universidad de Caldas. Each pronunciation course has an average of 25 to 30 students.

**Participants**

As mentioned above, the participants who were part of the study were native Spanish speakers, also students from the English language degree program. Their average English language level ranged from A1 to A2 according to the Common European Framework of Reference for Languages (CEFR), which is a guideline designed to describe the achievement of language learners. Language learners classified in levels A1 and A2 are known as basic users. The actual amount of students that participated in the group was approximately forty students divided in ten groups of four students each.
The teacher in charge of the class guided the students giving them all the needed information and instruction on how learning strategies had to be implemented and used by the learners autonomously. As a token of appreciation and motivation for being part of the study, the teacher made clear ahead of time that a 20 percent of the final grade was to be graded at the completion of the actual assignment.

Project procedure

In order to implement pronunciation learning strategies, participants met on a weekly basis. A reading was previously assigned to each group with the purpose of giving the learners the opportunity to read it before gathering in the group session. Each group assigned four different roles to the members: Word collector, Sound dealer, Critical listener and Analytical reader.

To commence, the word collector was in charge of creating a task that would foster the learning of the vocabulary found in the reading assigned. Additionally, the sound dealer led the group in the practice of pronunciation through tasks such as phonetic transcriptions, minimal pairs, repetition drills, filling the gaps, among others, while the critical listener managed to plan listening activities that were connected to the text in question (give examples of activities). To finish, the Analytical reader was expected to prepare tasks that would explore the reading content through comprehension activities. The rubric which the group had available for every meeting was the one below:
Once the learners got together in, each member shared the task they had brought to the encounter and this session was known as. It is important to mention that most of the sessions were recorded in view to analyze after the interventions during the following session also known as the Error Analysis Session. The purpose of the latter was to analyze the mistakes seen during the first session by using the rehearsal correction aloud strategy. The error analysis rubric was the instrument used in order to study such mistakes:

Designed based on model by Arias (2011).
The rubric above was designed taking into account the in-service course teacher’s insights based on years of experience and also some of the most common pronunciation mistakes made by language learners exposed by Arias (2011). Since all the participants shared the same mother tongue which was Spanish, and also they have an average language level of A1 and A2, the rubric is very accurate when it examines the most common substitution mistakes.

**Pronunciation learning strategies**

The present study implemented four main pronunciation learning strategies which were: critical listening, transcription, annotation (correcting a transcript), and rehearsing corrections aloud. Through critical listening, learners are encouraged to listen to their productions to recognize undesired features (W. B. Dickerson, 1987, 1994; Morley, 1991). Also, transcription as a learning strategy was implemented when learners had to write their discourse exactly as it was spoken. By applying annotation, the subjects went beyond transcribing by reviewing their scripts looking for noticeable features and marking or annotating corrections directly on the transcription. Lastly, the rehearsal phase illustrates the kind of practice learners did in their groups when strengthening their L2 language skills.

**Researchers’ role**

The researchers that were part of the study assumed the role of observers as participants. Such role granted that the researchers/observers activities were known to the group in which the study took place. By the means of this, method researchers had access to the group selected and a great deal of data relevant to them and the study. The researchers maintained a role in a very natural setting under observation by immersing themselves in such setting under study to understand key factors and experience events as suggested by Macionis, Plummer (2008).

At the first phases of the process, the researchers limited their role to only observation with little intervention with the intention of later on become participants too at the last phase, which consisted of rehearsing corrections aloud. Then, by the end of the study when researchers analyzed the outcome of the participants after following the process indicated, they compared it to the very first products achieved by them.
Data analysis and data collection instruments

The instruments used by the researchers to gather the data were: researchers’ journals, observations, reflective logs, error analysis rubric, and interviews. Throughout participants’ implementation of pronunciation learning strategies, the researchers used journals to collect data and by the end of the process some participants were interviewed, which provided a great deal of information.

Researchers’ journal

Due to the role played by the researchers during the implementation of the CSG, it became necessary for them to keep journals while on the field. Researchers’ journals are also known as analytic memos or reflective writing. During this project, the researchers attended most of the sessions when the participants met to carry out the activities assigned to observe closely each event that took place. Through these journals, they documented and followed the participants’ performance and participation during the CSG sessions. Borg (2001) specified in his paper that researcher’s journals are a form of reflective writing, which researchers engage in during a project and through which they document their personal experience of the research process. (See appendix 1).

Interviews

After being exposed to metacognitive learning strategies, the participants had different insights about pronunciation than the ones they had at the earliest stages of this project. The researchers decided to interview some of the participants in order to widen the information obtained during the implementation of the CSG. As indicated by Dick, (2002) interviews are considered a systematic method of collecting data from individuals through conversations where the subjects are the primary source of information for the study. By means of an interview, the participants are provided with the opportunity of getting involved in the process and talk about their insights, which can be enriching in regards to their perceptions and interpretations of the
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given situation. Some of the reasons why it was decided to choose the interview as a data collection instrument in this study were first because they allowed conquering personalized data and second because by asking open questions in a semi structured interview there was room for examination, and consequently valued information was obtained. (See appendix 2).

**Reflective logs**

According to Fish and Twinn, (1997) reflective logs are “systematic, critical and creative thinking about action with the intention of understanding its roots and processes” (p.172). These instruments are useful in this research study since they provide a careful consideration, thought and opinion, which lead to a desired result. Also, the researchers implemented these artifacts in order to know the participants strengths and the weaknesses in the learning process. At the same time, this is a way to reflect about which strategies the researchers can implement to improve pronunciation skills. (See appendix 3).

**Data analysis**

Once data was collected, the process of analyzing began. This process was conducted taking into consideration the grounded theory mentioned by Glaser and Strauss (1967). This systematic methodology, which allows researchers to discover theory through the analysis of data, shows four stages of analysis. The first step is data collection, through a variety of methods. In the case of this study, interviews and researcher’s journals were implemented as data collection instruments as well as reflective logs. From the data collected, relevant information for concept creation was marked with codes. The codes then were grouped into similar concepts in order to ease their analysis. These concepts were used to form categories, which became the foundation to create theory. Once theory emerged it was contrasted and compared with related literature.

Information was triangulated per method, and through a process of disassembling and reassembling data (Denzin, 1978) relationships were detected and put together for further interpretation.
The codes used were as follows: I: interview, JE: journal entry, Q: question, RL: reflective log, W: week, R: reflection, G: group, #: amount or order of questions, A: artifact, and S: student. Some examples of the coding system are presented as follows:

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<th></th>
<th>This code indicates that the piece of data was taken from an interview, the number 8 indicates the number of the interview, and Q2 makes reference to question number 2.</th>
<th>I8Q2</th>
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<tr>
<td>2</td>
<td>This code was taken from a reflective log applied in group 2 during the second week and it was the reflection number 3.</td>
<td>RLG2W2R3</td>
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<tr>
<td>3</td>
<td>Here it can be seen a journal entry number 3.</td>
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<td>4</td>
<td>This code entails that the data was taken from the group number 5, during week number 1, reflection number 3.</td>
<td>G5W1R</td>
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<td>5</td>
<td>This code stands for an artifact from student number 2.</td>
<td>ASN2</td>
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ETHICAL CONSIDERATIONS

The current research was adjusted in order to complete the research in a precise way. Some parts were noted from the beginning to clarify the credibility of the study. The first aspect was to notify the participants that they would be part of a project, and asked them if they wanted to participate in the study. The second aspect was to inform them about the nature of the project and their role in the research; additionally, in order to protect the integrity of the participants involved in the study, pseudonyms and codes were used with the purpose to reserve the real identity during the stage of the collection of data and information analysis. The third aspect was related to the procedure in which the researchers not only had the role as observers, but also they had the role as supporting the learning in view of the fact that they provided assistance in the execution phase by clarifying the emerging doubts of the participants. Finally, once the researchers had the results, the participants were informed as part of the project, to make them aware of the performance in the research in which they were involved.
FINDINGS AND DISCUSSION

Throughout this section, the analysis, interpretation, and discussion of findings will be presented and illustrated as objectively as possible, by showing evidence from the different instruments and perspectives included in this study. After the process of data analysis, the study revealed relevant issues concerning the implementation of CSGs for developing pronunciation skills. These issues will be described, discussed and exemplified in detail in this section.

The impact of the pronunciation learning strategies (PLSs) on the students’ phonological competence

The present finding will inform about the different stages that were implemented in the project, which were critical listening and transcription, annotation, and rehearsing corrections aloud, also known as pronunciation learning strategies (PLS). Each stage will be described in detail and interpretation will be primarily centered on the reflection of those features that might have benefitted participants' pronunciation performance in terms of phonological awareness, and use of strategies. Equally, a deep analysis will report on the effectiveness of the use of the above-mentioned strategies, by indicating the pros and the cons of their implementation along the CSGs.

It is of extreme importance to remember that the inclusion of the strategies were guided by a rubric, designed by the facilitator of the course, with the intention of controlling the performance of each stage in the project. Its main purpose was to help students identify the non-target features of the language; therefore the analysis of errors can be facilitated.

(See Appendix 4)
Scaffolding students' phonological competence through the integration of pronunciation learning strategies

(See Appendix 5)

<table>
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<tr>
<th>Common mistakes</th>
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1. /a/ by any vowel, according to the spelling of the word.
2. /f/ by /v/.
3. /r/ by /l, r, r/.
4. Inserting /r/ in words beginning with /s/.
5. Not pronouncing correctly the past tense of regular verbs.
6. Pronouncing words as they are spelled.
7. /f/ /v/ and vice versa.
8. /r/ by /l, r, r/.
9. Words are stressed on the right syllable.
10. Rising and falling intonation is considered in speech.
Critical listening and transcription: proved as effective for promoting monitoring and self-monitoring of pronunciation features

The first two PLSs were critical listening and transcription, which were put together as suggested by the reviewed literature. Hence, the learners were expected to listen the speech from their partners, and at the same time they were expected to transcribe it. This segment of the project took place after each session, the students were delivered an error analysis rubric that they had to analyze in terms of the mistakes they had, all of which in order to figure out the common problems and assess the fossilization or corrections of those mistakes.
This excerpt taken from an interview shows participants’ results after have use the PLSs of critical listening and transcription. The pronunciation teacher was asked to express her perception about the participants’ progress in the implementation of the project.

I8Q2:
Teacher: “The students were more conscious about their own mistakes because they had the opportunity to listen to their peers making the same mistakes, so they usually said that by correcting their peers they realized they were mispronouncing some words”

The fact that the participants were exposed to the collaborative groups helped them to reflect on their own mistakes given the fact that other members of the groups in some cases had more accurate pronunciation. As a second instance, this was a useful opportunity for the participants to acquire phonological awareness on the grounds that metacognitive processes were stimulated by the error analysis rubric, so they might consider whether their pronunciation was intelligible and detect those characteristics of their oral production that were not target-like.

The following excerpt was taken from a reflective log, which was developed at the end of each session during the whole project, this data collection instrument exposed that there were three groups that followed the process; each group was asked to fill out this format in order to get the correct pronunciation, they need to transcribe the words that were difficult to pronounce.
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Group 1

Critical listening: The words that were difficult to pronounce in this session were...

Group 2

Critical listening: The words that were difficult to pronounce in this session were...

Group 3

Critical listening: The words that were difficult to pronounce in this session were...

It was registered that each group, which were in charge of a different book, had to read aloud the text to the other members of the group; this to recognize the possible mistakes that the learner made during the activity. It was an opportunity to realize pronunciation characteristics that do not belong to the target language; in that way, the fact that they could notice the other’s mistakes allow them to provide a more accurate and reliable feedback. In addition, these evidences conducted us to consider that the difficulties to pronounce some words came from new terms such as striking that participants pronounced as /strəkɪŋ/ instead of /strəkɪŋ/, the word strike was mispronounced as /strɪk/ instead of /strək/, and stood that was mispronounced as /ˈstod/ instead of /ˈstʊd/, the articulation of sounds that do not belong to their mother tongue such as the sound /ə/ the participants mispronounced words such as touch /ˈtʌʃ/ as /ˈtaʊʃ/, and fossilized words like surprised /səˈpraɪzd/ that was constantly mispronounced as /səˈprɑɪzd/ and dressed /ˈdrest/ that was constantly mispronounced as /ˈdres/. Furthermore, it can be inferred that the use of phonological transcriptions to those mispronounced words brought benefits to the learners in terms of developing their critical and analytical listening aptitudes to self-correct, and finally to face the future readings. For this reason, it seems the rubric enriches the learners to get focused on the common errors which were pronounced, given advantages such
as self-monitoring and co-monitoring to overcome the frequent mistakes.

In accordance to this finding, Ingels (2011) employed the same pronunciation strategy, in which she highlights the importance of applying critical listening since the learners record themselves to self-monitor them, to guide their output and self-correct their non-target pronunciation. This comment is associated to what we found in our study since the researchers could notice that this process of critical listening delivered the learners with some strategies for self-correction and peer correction. Besides, Bradley-Bennett (2007) mentions that one of the crucial elements to improve pronunciation is listening as long as the recordings are understandable for learners and meaningful; for that reason, this strategy is considered a crucial mechanism for learning in which the learners can analyze and self-monitor their speech as well as their partners’ speech; in this case, as the project was collaborative, they were aware of their problems as well as others’ problems.

**Annotation**: a strategy that promoted the participants’ phonological awareness

During the cycle of the project, annotation was the second PLS to which the participants were exposed to. It is important to take into consideration that an effective annotation helps the learner identify the non-target pronunciation features in their speech and annotate (mark) corrections directly on the transcript in a contrasting color. During this transcript correction process, learners refer to a checklist to remind them of the pronunciation features they should monitor. It is important to mention that annotation worked as a complement of this phase, in which it processed critical commentaries and calculated the wrong utterances that needed to be improved.

Through the use of the common errors rubric (see appendix #) the participants guided themselves to check the transcription they did in the previous stage. By this means, they had in mind some specific phonemes to focus on possible mistakes. Once the data was analyzed, the present rubric allowed us to count the common mistakes to design two error graphics in terms of
Scaffolding students' phonological competence through the integration of pronunciation learning strategies

global (G1) and suprasegmental (G2) level.

G1 Segmental graphic

The above diagram represents common pronunciation mistakes found in the study and their evolution in the course of the project; there are columns that exemplify common mistakes in terms of phonemes (segmental features), all of which are identified by a different color. For instance, the substitution of /θ/ by /ð/ corresponds to the pink column. Additionally, under each column, there is information that corresponds to the ongoing week and its equivalent percentages that evidence that were noticeable changes as the weeks advanced. Regarding the above information, we can observe that the column related to “inserting /e/ in words beginning with /s/” obtained significant modifications; it is clear that specific errors were corrected as the weeks progressed. The students might have become more aware of the production of sounds, due to the use of the rubric and the feedback received from their peers at the annotation stage in which they were told about the mistakes they made in their first reading. One of the participants said “I thought my pronunciation was pretty good, but after receiving feedback I noticed that I had some problems when pronouncing some vowels.”
It can be concluded from the analysis how the pronunciation of the students had changes in terms of phonemic sounds as the weeks went by on account of the fact that the chart indicates that there is a decrease of mistakes in the last weeks; it means that the students gain phonological awareness with the implementation of the project. This evidence was taken from an interview where the participants were asked to reflect about the use of phonemes in the process.

I9Q2:

“Yo creía que no tenía problemas en la pronunciación y me di cuenta que yo no sabía pronunciar el sonido “ə.”

The above evidence reflects on how the participants gain phonological awareness in the pronunciation of certain sounds, even though some of them regarded themselves as accurate users of the language in phonological terms, the CSG provided them with strategies to become conscious of those aspects of pronunciation that they needed to improve.

G2 Suprasegmental graphic

The afore graph illustrates the participants' performance in the suprasegmental features; the diagrams can be read in the same way as the graphic G1. In this scheme, the results were
more notorious in view of the fact that the four items to be taken into account had changes. To illustrate this, in the item pronunciation of words as they are spelled there is an initial evidence with a range of 50% in words such as “outside, resulting, and wild”. By the end of the process, the results dropped to 10%.

The results suggest that the suprasegmental features were more impacted in the process; however, it is relevant to mention that just the more advanced students inclined the analysis of their mistakes towards these features. It seems to be that the analysis of the suprasegmentals was more friendly for the ones that feel more confident with the segmentals. In other words, the analysis of errors was connected to the students' proficiency level given that those students that were more proficient were more likely to focus their analysis on the suprasegmental aspects rather than on the segmental. This might be one of the reasons why the suprasegmental analysis was not as notorious as the segmental, considering that in the Pronunciation course II, there are few advanced students, most of them are placed in a pre-intermediate English level.

With regard to this finding, Yavas (1998) mentions that learners first developed implicit phonological knowledge and then they become aware of phonological structure of words that enable them to self-correct speech errors. Also, Cheung (2007) states that phonological awareness cares about listeners who differentiate diverse representations of phonological aspects which are affiliated with speech sounds and the oral language input; regarding this, the project allowed them to expand their awareness on the phonological aspects, which contributed to be more critical and conscious when producing the oral speech.

The following artifact shows that through the annotation stage, the participants were able to notice those mistakes in pronunciation by gaining control over the correcting skills and the use of the IPA (International phonetic alphabet), which was proposed as an effective strategy by the Audiolingual method.

AS1
In the previous excerpt, the student marks with another color the mispronounced words and writes in IPA his peers' actual pronunciation on top of the words. This strategy addressed the learner to a disciplined and careful analysis of the non-target features of the language and contributed to refine his correcting skills and the use of the phonemic symbols.

An author as Aufderhaar, (2004) debates that learners often are more comfortable with receiving feedback from their instructors or those whom they perceive as more competent L2 speakers. Learners often reported that they were unsure of what to listen for, and also were less confident in knowing how to consistently and accurately identify errors and produce the target features accurately; hence, corrections were not always appropriate. Consequently, there were some cases in which participants were supported by more competent students who were able to provide an adequate feedback, but also, there were cases in which this feedback was hindered by those participants that were not very proficient in their phonological competence.

Rehearsing corrections aloud: the significance of corrections under question
After the implementation of the annotation stage, the rehearsing correction aloud strategy was employed; the participants read again aloud the passages that had some mistakes, the production was intended to make their production as accurate as possible in terms of the target pronunciation features during and following each rehearsal, learners monitored and evaluated their output with the goal of identifying modifications that are needed in subsequent rehearsals in order to make their oral production more target-like. However, after one rehearsal was performed, data reveal that learners have fossilized pronunciation regardless the feedback they received prior to the second correction.

It is important to highlight that data proved the effectiveness of strategies such critical listening, transcription, annotation, and rehearsing corrections aloud. With regard to the impact that rehearsing corrections aloud had on students’ pronunciation data reveal that, after receiving feedback, the students significantly reduced the number of mistakes in a second recording. However, data do not show to what extent the last strategy was significant for participants’ pronunciation learning since students were not monitored afterwards to verify that they really overcame their mistakes.

This is a sample of the participants’ application of rehearsing corrections aloud through the project. Learners read aloud a paragraph in which all their pronunciation errors were addressed for further assessment then, in the second rehearsal it was noticed that students kept mispronouncing the word “feathers”.

It is clear that the second rehearsal shows that the student has implemented the suggested corrections. However, the current study does not reveal to what extent these corrections are meaningful, and whether these mistakes will emerge again in further readings. In this stage, the process encouraged the students to self-monitor when reading aloud the same paragraph. Unfortunately, there is no evidence that informs us about the significance of these corrections what was easy to evidence was that there were some fossilized mispronunciations that were persistent in different stages, which implies that this strategy should be reconsidered in further studies.

Another piece of data, taken from a reflective log, evidenced the weaknesses and strengths that the corrections of mistakes had. The participants were asked to complete a reflective chart in which they had to reflect about what went well in each lesson accounting the
words that were yet mispronounced regardless of the feedback participants received through the rehearsal corrections aloud strategy.

**RLG2**

| Rehearsing corrections aloud: Read the text again including the received feedback, then mention the problems that are still present in terms of pronunciation | After reading the text again, the problems didn't appear again. This proves that practice makes perfect. |

**RLG4**

| Rehearsing corrections aloud: Read the text again including the received feedback, then mention the problems that are still present in terms of pronunciation | The pronunciation of the word "hold" continued to be wrong. |

**RLG3**

| Rehearsing corrections aloud: Read the text again including the received feedback, then mention the problems that are still present in terms of pronunciation | The pronunciation of the word "lighted" continued to be wrong. |

The students seemed to have been able to reduce the number of errors they committed after one rehearsal was performed but maintaining rare mispronunciations presenting word fossilization. The information also reveals that not all the mistakes were covered, and the feedback provided by other students sometimes was not accurate, diminishing the reliability of the project. The process of data analysis evidenced a connection between the number of
rehearsals performed by the students and the number of mispronunciations they committed, suggesting that for the PLS to be more effective, more than one rehearsal might be applied in the rehearsing correction aloud stage.

The previous statement is affiliated with Ingel’s study (2011), who researched the effects of PLS use on the pronunciation of ESL learners. In the author’s study, four major strategies were covered (critical listening, transcription, annotation and rehearsing correction aloud). In the rehearsing correction aloud stage the author comments that participants applied three rehearsals for pragmatic reasons explaining that going beyond three might result in fatigue or too great a cognitive load and based on her own observations of students’ attempts at self-monitoring, students tend to make increasingly more corrections following at least two or three rehearsals. In the current study, time was just the exact for participants to perform their activities delaying the use of more than two rehearsals. For that reason, they could not test themselves to check out if they really overcame the mistakes they had, which made that most of the time this type of learning was considered as a rote-learning experience and not a meaningful learning as it was expected.
PEDAGOGICAL AND RESEARCH IMPLICATIONS

This research project has presented a number of findings that may contribute to develop pronunciation and teamwork skills to the field of second language teaching and learning.

Firstly, after having conducted this study, it was evidenced the effectiveness of the use of pronunciation learning strategies for the strengthening of language learners’ pronunciation. English teachers should contemplate within their planning some instances that are given to focus on pronunciation learning strategies; also, language learners should consider employing PLS for the reason that they provide enough opportunities to practice the pronunciation features and increase their phonological awareness through contextualized activities such as mini lectures and subsequent transcription and correction.

In addition to the pronunciation practice granted throughout the project, the participants gained a considerable amount of teaching experience due to the various roles assigned to each and every one of them. A handy recommendation to carry out those practices should include a wide variety of activities from other sources of language skills such as reading, listening and writing. Students need to continue this process in a more exhaustive way to improve their own learning experience in order to reach a proficient linguistic competence.

In this section, the study will provide what might be done by the future researches in similar research taking into account different points of views to continue the enhancement of the pronunciation learning strategies.

First, the future researchers should consider a figure of authority in the selection and in the implementation of the CSGs, which is considered relevant on the grounds that the presence of a leader motivates the learner to be aware about the learning process. On the other hand, the researcher should set up groups in which the participants have different English levels; this will be done with the purpose of ensuring that feedback given comes from a competent student.

Second, language instructors might take into account pronunciation learning strategies
within the classroom activities as a support for students to familiarize with the new language phonological system and acquire tools that may result useful for their further learning process, all of these need to be contemplated out of the class considering that the whole project is involved in a context where the students are working autonomously. Regarding the above-mentioned, the future researchers should schematize PLS, go along with them, and this can be accomplished if the students feel supported by a leader who is going to be in charge of delegating tasks as well as guiding the whole process.

Finally, it is relevant to debate that this type of project should be implemented in different subjects from the English language program inasmuch as it provides tools and techniques to raise their own learning and teaching process. In teaching programs, undergraduate students should be given the opportunity to expose themselves to pedagogical scenarios where they can develop skills in designing tasks, monitoring peers, and correcting one another.
LIMITATIONS OF THE STUDY

Even though this study observed results reporting the fact that collaborative study groups can help learners to join cooperative work and implement social skills that allow them to develop pronunciation skills, there are some phases that limited us as researchers when trying to proceed with all the stages we had initially planned for this research.

In the first place, time limitation was an important element that affected the development of the inquiry because the members of the group had different academic schedules, which made the meetings to work on the project very difficult to carry out. Additionally, the lack of autonomy by some participants was reflected during the project; considering that this kind of research involves collaborative work, the autonomy and the commitment of one participant affects the overall results due to the fact that every member has their own responsibilities within the group.

Another limitation of this study was that many of the participants that were part of the study groups did not have the adequate level to provide corrections. Owed to the fact that the project activities involved students to engage in active peer correction, the learners’ inability to offer meaningful or correct feedback represented a major barrier in the making of such activities; also the feedback presented by most of the learners sometimes was not accurate, lessening the reliability of the project.

Some participants had some issues when attending the sessions without proper homework of their role previously accomplished. This became an obstacle that was represented when attempting to carry out the session without all the activities accurately developed and completed as well as the material needed to be used at the moment of the meeting as it was more difficult to successfully finish the group session hardly getting out the best of it.
CONCLUSIONS

After concluding this study, we can determine that CSGs contributed to the development of autonomous attitudes and led the student to be more responsible and take control of their own learning process. Besides, CSGs allowed learners in constantly reflections for the construction of knowledge in terms of phonological control with the help of feedback, and self-monitoring.

Even though the project required participants who have special characteristics such as autonomy, commitment and responsibility, the results indicate the lack of those features in some participants. However, some members demonstrated better commitment with the progress of the activities, which makes those students exhibit modifications in the production of a second language.

Furthermore, pronunciation learning strategies proved to be important in terms of assisting language learners to take control over their learning process by extending their knowledge about the second language phonology system and the errors they commit. Besides, through the pronunciation learning strategies students obtain awareness in how the strategies can be used for other tasks such as monitoring other language users’ pronunciation and oral skills.

On another note, pronunciation strategy research indicates that language learners can use self-monitoring strategies for improving pronunciation accuracy, but most studies have focused on holistic/global pronunciation improvement, rather than on identifying how the target strategies affect accuracy on specific pronunciation features. This study helps to fill some of the gaps in our understanding of the utility of strategy-based instruction and the extent to which specific pronunciation strategies are valid tools for correcting an even wider range of segmental and suprasegmental features than previously studied.

It was due to the extensive variety of activities suggested to inspire the practice of pronunciation that it was possible to merge listening and reading tasks into the project qualifying it to become an inclusive learning experience; besides, collaborative work was useful for participants to consolidate knowledge of the target language.
REFERENCES


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Cheung, H. (2007). The role of phonological awareness in mediating between reading and listening


Ellis, A. (2001) student-centered collaborative learning via face to face and asynchronous online communication: What’s the difference? In proceedings of the 18th annual conference of the Australian society for computer in learning in tertiary education (pp.169-177), Melbourne Australia.


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Scaffolding students' phonological competence through the integration of pronunciation learning strategies


Merriam, S. B. (1998). Qualitative research and case study applications in Education. Case studies as qualitative research, 2, 27.


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Scaffolding students' phonological competence through the integration of pronunciation learning strategies


Appendix 1
Researcher’s journal format

General description: Green
Extra information: 20

JOURNAL

- The activities attempt to involve the whole IPA.
  Activities in which there are phonological transcriptions have let them to realize about how certain words are pronounced. Moreover, knowing about phonemes allow them to identify the pronunciation of those unknown words.

- Some of the learners have improved in the differentiation between sounds like /f/ /v/ /w/ and /g/.

- Students present challenging activities in which they need to make a great effort to develop them. Moreover, they all help each other because some students have a deeper knowledge than the other.

- Team work: Participants (John and Carolina) have been learning from their partners (Luca and Dayana).

- The activity sessions have allowed them to learn many unknown words.

- Through the use of roles, the Ss have discovered a variety of learning strategies, most of which have been started to implement in their learning process.

  - Learning words through the use of synonyms and antonyms.
  - Cooperative learning: before starting to read, they talk about those possible difficult words to say. Besides, some participants share certain knowledge about punctuation, how stress, intonation and fluency can affect the speech.

- As the Ss move through pronunciation course, the activities start to become more challenging. Moreover, they start to involve the content of the class, as a way to evidenced that, the participants practice activities in which they need to identify content words and function words as well some suprasegmental features such as intonation and fluency.

- Some recommendations such as, read carefully and several time before recording, identify the punctuation symbols, be aware of the regular verbs at the moment of reading, take into account those that start with “s”, and asking for help if there is any doubt about the pronunciation of certain words, have been useful for them to improve their pronunciation as well as the reading skill.

- The participants have evidenced the improvement of vocabulary, they argued that their range of words have increased a lot.

- The project has allowed to the participant developing reading strategies such as skimming and scanning.

- The activities that Luca designed were changing for the Ss. Nevertheless, in my consideration those activities were very useful for them because it allowed to go beyond of their level.

- Even though they are able to read a text in phonological transcription, they are not able to write with phonemes.

- A problem that is still presenting is the addition of “s” in words that begin with “g”.

- The understanding of the phonetic symbols have been increasing significantly.

- The use of some web pages such as http://www.southern.edu/his411/phonetics/home.html and http://www.phonemudit.com/Online/Text2Phonetics.aspx have been used as sources of input for pronunciation.
Appendix 2

Interview questions performed to the participants

1. ¿Cómo describes la experiencia de haber participado en un grupo de estudio de pronunciación?
2. ¿Qué aspectos resaltas de esta experiencia?
3. ¿Podrían describir el proyecto en términos de fortalezas y recomendaciones para una próxima oportunidad?
4. ¿Cómo se evidenciaron durante el proceso a nivel personal y académico?

Appendix 3
Reflective logs formats

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Appendix 4
Error analysis rubric

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</tbody>
</table>
Scaffolding students' phonological competence through the integration of pronunciation learning strategies

Appendix 5
Pronunciation strategies format

<table>
<thead>
<tr>
<th>Critical listening: The words that were difficult to pronounce in this session were...</th>
<th>Near, usually, found, whose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transcription and annotation: Write in phonetic symbols the words that were mispronounced and highlight the mistakes</td>
<td>/near/, /usually/, /found/, /jous/</td>
</tr>
<tr>
<td>Rehearsing corrections aloud: Read the text again including the received feedback, then mention the problems that are still present in terms of pronunciation</td>
<td>The pronunciation of the word &quot;whose&quot; continued to be wrong.</td>
</tr>
</tbody>
</table>

Please, honestly and objectively, take your time to complete the following chart in relation to the pronunciation project, your points of view are important for this process.

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>We have been learning so much in this project, and correct each mistake that we made. P2SH5</td>
<td>The group ought to developed more the knowledge about pronunciation. P2SH5</td>
</tr>
</tbody>
</table>