UNIVERSIDADE FEDERAL DE SANTA CATARINA

PÓS-GRADUAÇÃO EM LETRAS INGLÊS E LITERATURA CORRESPONDENTE

THE INFLUENCE OF TRAINING AND INSTRUCTION ON THE PRODUCTION OF VERBS ENDING IN –ed BY BRAZILIAN EFL LEARNERS

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To Rosana

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ABSTRACT

THE INFLUENCE OF TRANING AND INSTRUCTION ON THE PRODUCTION
OF VERBS ENDING IN –ed BY BRAZILIAN EFL LEARNERS

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The present research investigates the role played by pronunciation training and pronunciation instruction as two different pronunciation teaching methods in the production of English verbs ending in –ed by beginning-level Brazilian learners of English. The participants of this study were Brazilian learners registered in the English Extracurricular Courses (level 1) of the Universidade Federal de Santa Catarina. They were divided into three groups: Training Group (13 students), Instruction Group (15 students) and Control Group (15 students). The training group received a pronunciation manual developed for this study based on exercises focusing on perception and production practice of the verbs ending in –ed without addressing the rules guiding the pronunciation of this morpheme. The instruction group received the same pronunciation manual but including the explanation of each type of pronunciation of the –ed morpheme. The researcher was in charge of teaching both groups. The study consisted of a pretest, followed by a period of training and/or instruction, depending on the group, and a posttest. The pre and posttests were a production test, which consisted of the recording of short sentences containing the target words. The other instruments used in data collection were (a) a questionnaire assessing biographical and English learning experience information and; (b) a pronunciation manual. The results indicate a positive effect of pronunciation instruction, whereas training alone did not offer significant results.
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RESUMO

A INFLUÊNCIA DO TREINAMENTO E DA INSTRUÇÃO NA PRODUÇÃO DE VERBOS TERMINADOS EM –*ed* POR ESTUDANTES BRASILEIROS DE INGLÊS COMO LÍNGUA ESTRANGEIRA

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2009

Professora Orientadora: Dr. Barbara Oughton Baptista

A presente pesquisa investiga o papel desempenhado pelo treinamento e pela instrução como dois diferentes métodos de ensino de pronúncia na produção de verbos em inglês terminados em -*ed* por estudantes brasileiros em nível inicial de aprendizagem do Inglês como língua estrangeira. Os participantes deste estudo foram alunos brasileiros matriculados no Curso Extracurricular de Inglês (nível 1) da Universidade Federal de Santa Catarina. Eles foram divididos em três grupos: Grupo Treinamento (13 alunos), Grupo Instrução (15 alunos) e Grupo Controle (15 alunos). O grupo treinamento recebeu um manual de pronúncia desenvolvido para este estudo baseado em exercícios para a prática de percepção e produção dos verbos terminados em -*ed* sem abordar as regras que orientaram a pronúncia deste morfema. Por outro lado, o grupo instrução recebeu o mesmo manual de pronúncia, no entanto incluindo a explicação de cada tipo de pronúncia do morfema -*ed*. A pesquisadora foi a responsável pelo ensino de ambos os grupos. O estudo consiste em um pré-teste, seguido por um período de treinamento e / ou instrução, dependendo do grupo, e um pós-teste. Os pré e pós-testes consistem em um teste de produção, onde os alunos fazem uma gravação de frases curtas contendo as palavras-alvo. Os outros instrumentos utilizados na coleta de dados foram: (a) um questionário sobre experiência biográfica e aprendizagem em Inglês; (b) um manual de pronúncia. Os resultados indicam um efeito positivo da instrução, no entanto o treinamento não ofereceu resultados significativos.

Número de páginas: 62 (excluindo apêndices) e 80 (incluindo apêndices)
Número de palavras: 16.311

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CHAPTER 1
INTRODUCTION

1.1 Background to the study

Mastering pronunciation in a second/foreign language seems to be one of the most difficult accomplishments in the learning process, thus, it has been getting increased attention over the years (Grant, 1993; Koerich 2002; Silveira, 2004; Baptista, 2006, Nobre-Oliveira, 2007). Achieving a native-like pronunciation might be almost impossible and the pursuit of perfection can become frustrating. Thus, instead of trying to reach perfection, many authors propose that learners should aim at becoming intelligible (Kenworthy, 1987; Celce-Murcia, Brinton and Goodwin, 1996). The concept of Intelligibility has been defined by Munro and Derwing, (1995 cited in Baptista and Watkins, 2006) as "the extent to which an utterance is actually understood" (p.12). The authors also pose that intelligibility differs from accentedness in the sense that a person can be highly intelligible but have a strong foreign accent. In a similar vein, Goodwin (2001) postulates that setting realistic goals is the best way to foster students' pronunciation improvement. To that end, intelligibility, functional communicability, increased self-confidence, and speech monitoring abilities are asserted to be of great importance in pronunciation development. (Celce-Murcia, 2001)

Considering the factors that might influence second language (L2) pronunciation and the teaching of it in the classroom, many studies have pointed out that a learner's native language is a major factor in the acquisition of the second/foreign language phonetic system (Flege, Frieda and Nowaza, 1997; Flege, Mackay and Piske, 2001) According to Celce-Murcia, Brinton and Goodwin (1996), "pronunciation teaching should provide learners with activities to minimize the effects of L1 interference and maximize the transfer of features that are common to the L1 and the L2" (p. 24).

Bearing in mind the benefits of pronunciation teaching, Silveira (2004) and Alves (2004) carried out separate studies investigating the effects of pronunciation instruction on Brazilian learners of English as a foreign language (EFL) at the beginning level. The study by Silveira aimed at minimizing the production of a paragogic vowel in the pronunciation of word final consonants, whereas Alves (2004) investigated the effects of explicit instruction on the production of the –*ed* morpheme in Brazilian EFL learners. Both authors' findings concluded that pronunciation instruction had a positive effect on students' productions of the instructed target sounds.

In addition to instruction, research has also been carried out on pronunciation training, which is usually considered to differ from instruction by the lack of explicitness regarding the rules guiding the pronunciation of the target sound being taught. Nobre-Oliveira (2007) conducted research in order to verify the effect of perceptual training on the perception and production of three English vowel contrasts (/i-ɪ/, /ɛ-æ/, and /ʊ-u/) in Brazilian EFL learners. The results of this study confirmed that a) training has a positive effect on the perception of L2 vowels; b) perceptual training can improve vowel production to a certain degree and; c) training has a long term effect on the perception improvement of L2 vowels.

Another study involving training and Brazilian EFL learners was carried out by Bettoni-Techio (2008). The researcher investigated the effects of perceptual training on the perception and production of /s/-clusters. The author concluded that training was beneficial for the identification, discrimination and the production of /s/-clusters by Brazilian EFL learner and it had a long term effect.

1.2 Statement of the purpose

In line with the studies mentioned above, the present study investigated (a) the effects of pronunciation training on Brazilian EFL learners' production of words ending in –*ed*; (b) the effects of pronunciation instruction on Brazilian EFL learners' production of words ending in –*ed*; and (c) the differences between these two types of pronunciation teaching on Brazilian EFL learners at the beginning level in terms of which one brings more benefits to learners' production of the target sound. The study is innovative because no previous studies in Brazil had compared the effects of pronunciation training and pronunciation instruction until the present moment.

1.3 Significance of the study

The previous studies mentioned above have thrown interesting light on the main variables influencing the Brazilian EFL learners' pronunciation. Among these variables are the importance of intelligibility, the influence of their first language, the effects of instruction and the effects of training as separate methods of pronunciation teaching. Considering the production of the words ending in –*ed* by Brazilian EFL learners, it is possible to say that instruction results in positive effects (Alves, 2004; Silveira, 2004). As regards to training, it has been investigated as advantageous in the perception and production of English vowels by Brazilian EFL learners (Nobre-Oliveira, 2007). However, no studies have investigated its use as influential in the production of the words ending in –*ed* by the same learners. In line with these investigations, the present study aims at exploring the effects of pronunciation training and instruction on the accuracy of the Brazilian EFL learners' productions of words ending in the simple past –*ed*. Past participles and adjectives are not considered in this investigation.

The importance of this study lies in raising language educators' and learners` awareness about the effect of training and instruction on pronunciation. The objectives

of this study are threefold: (a) to assess the effectiveness of training; (b) to assess the effectiveness of instruction; and (c) to verify which procedure has a greater effect on students. The use of pronunciation instruction and pronunciation training independently and comparatively is the special contribution of the present study to the field. It is hoped that the findings of this study will contribute with relevant pedagogical and theoretical implications.

1.4 Organization of the thesis

This thesis is organized into 5 chapters: Chapter 2 reviews the most relevant literature regarding the –*ed* morpheme – its use, how Brazilians produce it and previous empirical studies concerning the use of –*ed* by Brazilians. It also reviews some empirical studies regarding pronunciation training and pronunciation instruction. Chapter 3 describes the research questions and hypotheses elaborated for the study, the method used to collect and analyze the data, and some information about the participants and the material used. Chapter 4 presents the analysis and discussion of the results, and Chapter 5 concludes the study, discussing some pedagogical implications, limitations and offering suggestions for further research.

CHAPTER 2
REVIEW OF THE LITERATURE

2.1 Introduction

This chapter discusses the most influential studies in the area that provided the basis for to this research. It first presents the –*ed* rules for regular simple past tense verbs in section 2.2. Then, section 2.3 describes the way Brazilian EFL learners tend to produce these verbs, the strategies they resort to in this production, and some of the reasons why learners use these strategies. Sections 2.4 and 2.5 present the studies which are directly related to this present one, concerning the –*ed* morpheme and research in the area of pronunciation training and instruction.

2.2 The –*ed* morpheme pronunciation rules

The pronunciation of the –*ed* ending morpheme was chosen to be the focus of this study because it is believed that the pronunciation rules for this morpheme are not considered complicated for students at the beginning levels (Alves, 2004). The rules guiding the pronunciation of this morpheme are explained in the next paragraph.

The –*ed* morpheme occurs in regular simple past tense verbs, in the regular past participle inflections (occurring in the perfect tenses and in the passive voice), and in some adjectives (Celce-Murcia, Brinton & Goodwin, 1996). There are three different realizations depending on the final sound of the base form of the verb: (a) verbs ending in [t] or [d] are pronounced with an extra syllable [ɪd] as in *needed* [nidɪd] or *wanted* [wɑntɪd]; (b) verbs ending in voiced sounds like [l] or [n] are pronounced with a final [d] as in *called* [kɔld] and *opened* [oʊpənd]; and, (c) verbs ending in voiceless sounds

like [k] or [p] are pronounced with a [t] sound as in *looked* [lʊkt] and *jumped* [dʒəmpt]. (Poedjosoedarmo, 2004).

An interesting fact about the pronunciation of the –*ed* is mentioned by Pinker (2000), who states that, in the past, the morpheme –*ed* was pronounced with the vowel in all three contexts. He further explains that the reason for the change was the concentration of the stress on the first syllable of words, which makes speakers reduce the final syllables, eliminating vowels in many words. In addition to that, Nevalainen (2006) claims:

> The past-tense and the past participle forms of the great majority of verbs were formed by means of the regular –*ed* suffix in Early Modern English. The vowel sound in the suffix was usually deleted in colloquial language especially in the second half of the period, but in formal styles –*ed* was pronounced as a separate syllable until the end of the seventeenth century. (p.92)

For the present study, adjectives formed with –*ed* were not included, bearing in mind that some of the adjectives such as *naked* do not follow the rules given above. The following section presents some of the reasons why the pronunciation of this morpheme might be problematic for Brazilian EFL learners at beginning levels.

2.3 The –*ed* as pronounced by Brazilian Portuguese speakers

In Baptista's (2001) review of some of the errors made by Brazilian speakers of English, she pointed out the –*ed* morpheme as one common source of errors. The most common strategy that Brazilian Portuguese (BP) speakers of English resort to for pronouncing words ending in –*ed* is the insertion of an extra vowel before and/or after this morpheme. This strategy, called *epenthesis* when a vowel is inserted before the morpheme and, thus, within the word, and *paragoge* when inserted after and thus at the end of a word, is discussed by Major (1999), Baptista (2001), Koerich (2002), Alves

(2004), Silveira (2004), Delatorre (2006), and Frese (2006). For instance, instead of pronouncing the word *looked* as [lʊkt], BP learners of English tend to pronounce it as [lukɪd] or [lukdi], or even [lukɪdi]. According to Major (1999), epenthesis and paragoge production can be considered the result of BP phonology transfer, since they occur in BP as the result of a quite productive phonological process.

Major points out that Brazilians also resort to developmental substitutions, such as the simplification of consonant clusters like in [res] for *raced*, that is, learners would simply not produce the final *–ed* sound which should result in the cluster [st]. By developmental substitutions, Major (1999) implies errors that cannot be "directly attributed to Portuguese phonology," and this deletion, contrary to vowel insertion, is not a phonological process of BP (p. 133). Deletion not being attributable to the influence of L1 phonology, Young-Scholten and Archibald (2000) consider it to be one of the strategies largely used in the developing phonologies of second language learners, in general, as a syllable simplification process. Regardless of whether the learner uses developmental or L1 processes to simplify the L2 syllable structure, most authors dealing with BP-English interphonology blame both English orthography and the differences in the syllable structure of BP and English for the difficulty BP learners have in pronouncing the *–ed* morpheme (Major, 1999; Baptista, 2001; Koerich, 2002; Alves, 2004; Silveira, 2004; Delatorre, 2006; Frese, 2006; Gomes, 2008; Nobre-Oliveira, 2007).

Thus, it is essential for the present study to discuss the differences in syllable patterns between the two languages. The BP syllable structure consists basically of a consonant and a vowel (CV), whereas the basic English syllable pattern is CVC (Giegerich, 2000), and even CCCVCCC words are permitted in English, such as *scrimps* (Major, 1999; Koerich, 2002; Shockley, 2003). Giegerich (2000) claims that the

rhyme of the English syllable normally allows two consonants. However, this rule can be violated when the consonants are followed by certain consonant phonemes which can also infringe on the sonority generalization. In the case of the –ed morpheme, the sonority generalization can be violated, that is, the last sound in each word is more sonorous than its previous one, hence forming an additional sonority peak. (p. 149)

One restriction on the BP syllable is the small number of consonants permitted in coda position as opposed to English, where all the 24 consonants of English inventory are allowed in this position. For instance, no consonant clusters are permitted in BP word-final codas, and the only word-final consonants are /r, s, l/ as in *comer, andar, dormir* (verbs in the infinitive), *casas, meninos* (words in the plural and the word *lápis*, which may be exceptional) and, *mil.* However, even these final consonants have restrictions; for instance, the vocalization of the /l/ to [u], final /r/ is often deleted, as is /s/ in plurals and second person singular of the present tense (Major, 1999; Koerich, 2002). Concerning word-internally consonant clusters, /rs/ and /ns/ are allowed like in the coda of words such as *perspectiva* and *transporte.* Consonants can also occur at the end of the syllable within the word, but they generally provoke epenthesis in BP, such as the Portuguese words *corrupção, advogado* and *obstruir,* which are generally pronounced as /kohupisao/, /adivogado/ and /obistruir/ (Baptista & Silva Filho, 1997; Baptista, 2001; Koerich, 2002; Alves, 2004; Silveira, 2004; Delatorre, 2006; Frese, 2006; Gomes, 2007). Still regarding syllable-final consonants, /m/ and /n/ are largely used in this position, like in the words *campo* and *canto*; nevertheless they are realized just as a trace, e.g., [ka^mpu].

All in all, studies in the area of L2 interlanguage phonology indicate that learners' pronunciation of a foreign language can be greatly influenced by L1 transfer,

in particular of L1 syllable structure, which leads learners to resort to strategies of syllable simplification. This seems to be the case of the words ending in –*ed*, resulting sometimes in an unintelligible pronunciation.

2.4 Review of previous studies on –*ed* pronunciation

Several studies analyzing Brazilian EFL learners' productions of the –*ed* ending have been conducted in the last decade and the ones reviewed in the following paragraphs are particularly important for the present investigation.

Delatorre (2006) investigated the production of vowel epenthesis by 26 upper-intermediate Brazilian EFL learners with 270 hours of instruction. The students read ten paragraphs containing 91 -*ed* ending words (reading task) and described four pictures orally (free speech task). The author observed that participants sometimes produced epenthesis after the –*ed,* as well as epenthesis splitting the coda formed with the addition of -*ed;* that is, they produced an medial epenthetic vowel, which was the focus of her study. The results of the research demonstrated that the main factors influencing epenthesis were (a) the preceding consonantal context; (b) the manner of articulation; (c) the length of the clusters; and, (d) orthography

Taking into account the influence of the preceding context, the author found that consonants induced more epenthesis than vowels. When considering the influence of sonority/consonantal strength, she concluded that the voiceless obstruents induced higher rates of epenthesis than their voiced counterparts. She found that the rates of epenthesis decreased from affricates, which induced the highest rates, to stops, fricatives, nasals, and then to liquids, which had the lowest rates. The influence of cluster length was demonstrated by the comparison of three-member cluster and two-

member clusters, in which the former induced higher rates of epenthesis than the latter. In order to investigate the influence of orthography, Delatorre compared epenthesis production in –*ed* ending words and in *contrastive words*[1], such as *laughed* vs *left*. She found no epenthesis production in the latter and high rates of epenthesis production in the former, concluding that orthography has a strong influence on the production of –*ed*. This conclusion about the influence of orthography on epenthesis production in –*ed* ending words was reinforced by the results of the comparison between the production of –*ed* endings in reading and free speech.

Following Delatorre, Frese (2006) studied the relationship between the perception and production of words ending in –*ed* by 32 Brazilian EFL learners at an advanced level. The main purpose of his research was to investigate the relationship between the participants' performance in perceiving and producing the -*ed* inflectional ending; and to see if there were important differences in the perception and production of each of the -*ed* ending types [t], [d], and [ɪd]. The results of Frese's study showed that (a) the way students perceived the –*ed* sound had an influence on the way they produced it; (b) the participants' success at identifying the –*ed* ending depended on which of the three types of ending they had to identify, the order from best to worst being [ɪd], [t], and [d]; (c) the order of accurate production of the three types of ending was also, from best to worst, [ɪd] than [t] and [d]; and (d) the participants' performance in the perception test was significantly better than their performance in the production test.

Concerned with the effect of explicit instruction on pronunciation, Alves (2004) investigated the learning/acquisition of the English –*ed* morpheme by seven

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[1] According to Delatorre, contrastive words are "words with homophonic endings used to provide contrasts with the pronunciation of words ending in –*ed*."(p. 3)

undergraduate students of the Letras course at the Universidade Federal de Pelotas. At the time of the data collection, students were enrolled in the second semester of the course and had had no contact with phonetics and phonology. Alves selected the *–ed* morpheme as the object of his experiment because he believed that the rules which dictate the sounds of this morpheme are easy to understand. The data were collected at three different times – before the treatment period, four weeks after it, 4 and 8-weeks after it – in order to verify the short and long-term effects of explicit instruction. The author divided the verbs ending in –ed into three different groups: (a) the verbs in which the final coda was complex and the penultimate segment was not permitted in BP, e.g. *lived, jumped*; (b) the verbs in which the final coda was complex but the penultimate segment was permitted in BP codas, e.g. *remembered, caressed* and; (c) the verbs in which the coda was simple and there was the presence of an epenthetic vowel, e.g. *needed, wanted*. The results obtained demonstrate that explicit instruction had a positive and long-term effect on students' productions of the *–ed* morpheme following the hierarchy of the groups described above as follows: more correct productions on verbs from group c, then group b, and finally group a.

Aiming to investigate how BP speakers produce the *–ed* morpheme, Gomes (2008) carried out a study similar to those of Delatorre (2006) and Frese (2006), with the objective of analyzing the influence of the phonological environment in the occurrence of epenthesis, orthography and the three different *–ed* realizations. The author also considered as relevant variables to the study: (a) proficiency in the language; (b) time of formal instruction and; (c) length of time in an English speaking country. The main focus of the analysis was to verify the variation of the production of the *–ed* morpheme related to the variables previously mentioned. The researcher selected 48 participants (31 female and 17 male) from a total of 60 (2 participants were native English speakers and their production was used as a comparative standard for the other

participants). Participants were university students and teachers from different undergraduate and graduate courses. Data was collected using a profile questionnaire, a proficiency test and text reading recordings.

The results on Gomes' study show that (a) Brazilians have a strong tendency to produce epenthesis in words ending in –*ed*; (b) proficiency in the language, length of time in an English speaking country and correct production of the –*ed* morpheme are strongly correlated; (c) time of formal instruction in the classroom is not associated with accuracy in the production of –*ed*; (d) word frequency influences the production of the –ed morpheme; (e) orthography does not affect epenthesis production; (f) type of –ed allomorph related to epenthesis production follows the order [ɪd] than [t] and [d] respectively from more to less occurrences of epenthesis and; (g) preceding phonological environment has a great deal of influence in the production of –*ed*.

2.5 Pronunciation training and pronunciation instruction

The current literature on L2 interphonology experimental research concerning training and instruction is still limited. Up to the present moment, it is difficult to find a concrete definition of what constitutes pronunciation training and what constitutes pronunciation instruction, so that authors use these two terms interchangeably, without a clear explanation of what training is as opposed to instruction. In this study the two modalities are defined and the differences are highlighted to show how they can be used in pronunciation teaching/learning. Section 2.5.1 introduces a definition of training and reviews influential studies that seem to have contributed to the area. Section 2.5.2 gives a definition for instruction together with a review of the most important studies that relate to it.

2.5.1 Pronunciation training

The literature available in the area of pronunciation teaching does not present a unanimous and straightforward definition for the term *training*, and it has been operationalized in different ways in experiments. In this study, training is taken as pronunciation practice, that is, teaching that employs a series of activities aimed at improving learners' speech perception and/or production by means of performance. In training programs, students do not receive explicit instruction on phonetics and phonology; that is, no metalinguistic information on the pronunciation of the target sound being trained is provided; the teaching is carried out by means of exercise routines.

An important study concerning training was conducted by Yeon (2004). The author examined the effectiveness of intensive perceptual training on Korean EFL speakers' perception and production of English word-final alveolopalatals, by comparing a group of Korean learners who underwent training to a Korean EFL control group who did not undergo training and to a group of native speakers. According to the author, Koreans have a tendency to produce word-final alveolopalatals adding an extra [i] at the end, so words such as *fish* and *change* tend to be pronounced /fɪʃi/ and /tʃeɪndʒi/, respectively. The seven hypotheses raised were that (a) native speakers of Korean and native speakers of English would differ significantly in the perception and production of final alveolopalatals in English; (b) after the training period, the experimental group would perform better in the perception of final alveolopalatals in English than the control group; (c) the experimental group would also perform better in generalization tests than the control group after the training; (d) three months after training, the experimental group would still perform better than the control group in the perception of alveolopalatals in English; (e) the experimental group, who would receive

only perception training, would perform better than the control group in the production of final alveolopalatals in English after the training; (f) three months after the training, the experimental group would do better than the control group in the production of alveolopalatals in English; and (g) there would be a significant correlation between perception and production scores in each test.

The participants in this study took three perception and production tests: a pre-test, a post-test, and a delayed post-test. The perception tests were designed to investigate whether native Koreans were able to identify English words or non-words ending in either an obstruent or a vowel. The production tests involved reading words from a wordlist and also naming the same words from this list by looking at flash cards. The training period lasted for 3 weeks; three 30-minute sessions were provided per week, totaling approximately 4.5 hours. The training program consisted of an identification test similar to the pre-test. The participants were exposed to a wide range of recordings in which the three sounds under consideration (/ʃ, tʃ, dʒ/) were produced by 3 native speakers of English. Koreans were asked to identify whether a stimulus ended in consonant or consonant+i. Feedback was given both auditorily and visually. For incorrect answers, the participants heard a beep sound, and the stimulus was automatically repeated. Concomitantly, the correct text stimuli were blinked. The participants listened to stimuli from the same talker during a week, and then continued with a different talker each subsequent week. All participants listened to all words in each session.

Concerning perception, the results of Yeon's study showed that training had a positive if limited effect. Statistical tests showed that hypothesis (a) that the Koreans' perception and production was different from that of native speakers, was confirmed; however, hypotheses (b) and (d) were partially confirmed, and hypothesis (c) was not confirmed. That is, in the post and delayed tests, the experimental group did not perform

better in generalization tests than the control group after the training. In regard to production, hypotheses (e) and (f) were not confirmed. Neither the experimental nor the control group showed significant improvement in the production of words ending with alveolopalatals and alveolopalatals + i; thus, perception training did not lead to production improvement. Considering the correlation between perception and production, it seemed to be strong only for low-proficiency participants; thus, hypothesis (g) was partially confirmed.

Another recent and equally important empirical study regarding training is the one carried out by Bettoni-Techio (2008) on perceptual training and word initial /s/-clusters in Brazilian Portuguese/English interphonology. The main objective was to investigate whether perceptual training would bring benefits to learners' perception and production of word initial /s/-clusters. The author tested (a) whether the production and perception of word-initial /s/-clusters would be influenced by phonological context and/or cluster type; (b) whether there is a relationship between identification and discrimination of word-initial /s/-clusters in BP/English interphonology; (c) whether there would be a relationship between perception and production of word-initial /s/-clusters in BP/English interphonology; (d) what the effects of perceptual training on word-initial /s/- clusters would be and; (e) whether there would be retention of improvement in perception and production after eight months.

The participants in this study were 23 Brazilian EFL learners ranging in age from 16 to 55. There were fifteen participants in the experimental group and eight in the control group. There were also two pre-adolescent girls (ages 9 and 11) who were grouped with the adults due to their similarity in performances with the adults. The data was collected through a pretest, a training phase, a posttest, and a retention test. Participants' production was evaluated using four reading tests and an interview

whereas their perception was assessed using a discrimination test and a forced choice identification test.

During the training period, participants took computer assisted two-alternative-forced-choice identification trials with instant feedback for correct or incorrect answers. They listened to the input recorded by two American native speakers and had to decide between contrastive pairs like "if stop" and "iffy stop". They were permitted to retry before hitting the decision key.

Bettoni-Techio's final conclusions were (a) learners' perception and production were not significantly affected by phonological context; (b) /s/+sonorant clusters were more difficult than /s/+stop clusters in both perception and production; (c) there was improvement in identification, transfer to production, to discrimination and to untrained clusters and; (d) improvement in identification, discrimination, and production was still detected in an eight-month follow-up test.

2.5.2 Pronunciation Instruction

Just as for training, the literature does not provide a definite conceptualization of *instruction* either. In contrast to training, as defined in 2.5.1, in this study instruction is taken to be explicit teaching by the raising of awareness about the phonological and/or phonetic rules which operate in the pronunciation of speech sounds and the phonological environments in which they operate. Besides the explicit teaching of the rules, instruction also comprises activities for practice of the target sound being explored in class. Supporting this idea, Silveira (2004) states that "the goals of pronunciation instruction are more likely to be accomplished if we use a variety of language instruction techniques to provide learners with practice that ranges from more controlled to more communicative" (p.19).

Moreover, Baptista and Watkins (2006) consider that in order to improve EFL learners' pronunciation it is important to raise awareness about the rules governing it. The authors state that:

> L2 users do not automatically hear what is physically there in the speech signal. Unless we have our attention drawn to certain features of the L2 which are different from our L1, and to our own interlanguage productions of these L2 features, we are unlikely to notice them, and therefore will not produce them correctly. Noticing appears to be crucial for correct pronunciation, at all levels, from segments to intonation patterns. (p.11)

2.5.2.1. The role of consciousness in L2 pronunciation instruction

The role of consciousness in L2 learning has been receiving increased attention and provoking fruitful debates. In 1994, Schmidt brings the concept of consciousness to light, defining it in a fourfold concept aiming to standardize somewhat the theoretical concepts that are pertinent to its understanding: (a) consciousness as intentionality; (b) consciousness as attention; (c) consciousness as awareness and; (d) consciousness as control. As regards consciousness as intentionality, the author presents the term *intentional learning* in contrast with *incidental learning*, the latter being the case when a person learns a language with the motivation to communicate, without worrying about mastering grammar. The second concept of consciousness concerns the term attention. In this view, the author claims that learning needs at least "some sort of attention" (p. 6) to take place. When talking about consciousness as awareness, Schmidt contrasts *explicit* an *implicit learning*, stating that learning with awareness can be equivalent to explicit learning, whereas learning without awareness corresponds to implicit learning. Last but not least, is the concept of consciousness as control. By control, the author means the automaticity learners have in developing certain language skills, and also in terms of output processing.

In 2001, the author provided a definition of attention from a psychological view. In this article, he proposes that it is impossible to separate attention "and its correlate subject of 'noticing'"(p.5) from awareness, but he clearly states that neither noticing nor attention can be equated to "metalinguistic awareness" (p.5). According to him, attention accounts for both conscious and unconscious processes, considering that the conscious attention seems to have greater effects on L2 acquisition. The author states that "there is no doubt that attended learning is far superior, and for all practical purposes, attention is necessary for all aspects of L2 learning." (p.3).

Considering that the issue of awareness has provoked great debate in the second language acquisition (SLA) area, this study will be limited to the concepts of attention, noticing, implicit and explicit knowledge concerning only to pronunciation teaching. Taking this implication into account, the next studies presented are remarkably influential to the present piece of research.

From the pronunciation teaching point of view, Alves and Zimmer (2005) and Zimmer and Alves (2006) also discuss the concept of 'noticing'. They define 'noticing' as a key element in L2 pronunciation learning, since it regards the way learners become aware of the differences between the L1 and L2 phonological systems. In other words, noticing is more than just perceiving the acoustic signals from the L2; it is the process of understanding the differences between the phonetic and phonological features of the native language (NL) and the target language (TL).

Considering the role of attention in phonetic learning, Guion and Pederson (2007) conducted a study investigating the effects of attention manipulation in pronunciation learning. The participants of this study were 26 monolingual English speakers ranging in age from 19 to 29. Participants were randomly divided into two groups – the *sound- attending* and *meaning-attending* groups – and were presented Hindi words in minimal pairs recorded by five native Hindi speakers. The *sound-*

attending group was instructed to draw their attention to the beginning sounds of the minimal pairs, whereas the *meaning-attending* group was instructed to pay attention to the meanings of the words (the meanings were translated into English). The study was conducted in two sessions. The first one was composed of a discrimination pretest and a semantics pretest, performed in the same manner by both groups. The second session consisted of perceptual training of the minimal pairs – where the two different groups had two different instructions as explained above – followed by a discrimination posttest and a semantics posttest, both identical to the pretests. There was a 5 minute interval between the training and the posttests.

Results of the pretests showed similarity between the groups. Discrimination posttest results yielded significant improvement for the *sound-attending* group. As expected, in the semantics posttest the *meaning- attending* group performed better than the *sound-attending*. Overall, these results demonstrated that orientation of attention had a positive effect on pronunciation learning. Concluding the study, the authors suggest that more research is needed to verify whether "more direct manipulation of attention simultaneous with the speech input would facilitate learning to a greater degree" (p. 76)

Taking into account the role of awareness in the teaching of pronunciation, it can be highly related to instruction. Considering the definition of instruction given above, the explicitness of the rules guiding the target sound being taught brings the learner to a conscious awareness of how to produce the sound. This is what essentially differentiates instruction from training – the presence of conscious awareness

2.5.2.2 Empirical studies in pronunciation instruction.

Regarding important empirical studies in pronunciation instruction relevant to this present investigation, Silveira (2004) conducted research aiming at investigating the

effects of instruction on Brazilian EFL learners at the beginning level with the objective of minimizing the production of an epenthetic vowel in the pronunciation of word final consonants. An important concern of the study was the effort to develop pronunciation improvement methodologies, techniques and materials such as the pronunciation manual created by the author for data collection. In order to reach the objective stated above, Silveira taught two groups of students (one experimental and one control) enrolled in the first level of the English Extracurricular Course at UFSC. The extracurricular groups consisted of 12 and 10 participants, respectively, with ages raging from 14 to 28. The study consisted of a pretest, followed by a period of instruction (only for the experimental group), and a posttest. The production pre and posttests were sentence-reading tests containing 78 sentences, each including a word with the target final consonant: /p/, /b/, /t/, /d/, /k/, /g/, /f/, /v/, /dʒ/, /m/, /n/, /ŋ/. The perception tests were discrimination tests aiming at verifying if participants could perceive the difference between words ending in a consonant (e.g., *fog*) and words ending in the same consonant followed by /i/ (e.g., *foggy*). The sentences in the perception tests were recorded by a native speaker of American English. The data collection period lasted a whole semester divided into 30 meetings (two meetings per week), each one lasting one hour and 30 minutes, totaling 45 hours. For the experimental group, the pronunciation classes took turns with the general language classes, taking about 40 minutes of one weekly class for a period of 6 weeks, resulting in 4 hours of pronunciation instruction. The researcher developed a pronunciation manual that was used during the instruction period with the experimental group. The instructions of the activities in the pronunciation manual were given in Portuguese so that they would be of an easier understanding. The control group did not receive any instruction on pronunciation. The results of Silveira's study show that in general, pronunciation instruction had a positive effect on participants' production and

perception of word-final consonants. In addition to that, it is important to point out that this effect was greater at the production level than at the perception level.

Silveira and Alves, (2006) also investigated the role of explicit instruction on the perception and production of the *–ed* morpheme by Brazilian EFL learners. The participants were 16 undergraduate students from the Letras course at UFSC with different levels of English proficiency. In the perception test, participants needed to indicate the number of syllables from a list of words containing regular simple past tense verbs, amongst others (15 in the pretest and 9 in the posttest). In the production test participants were asked to read a dialogue containing 21 target verbs both in the pretest and posttest. The explicit instruction procedures consisted of (a) the demonstration of when the target verbs are produced, that is, in the simple past tense; (b) the identification and classification of the three different types of pronunciation; (c) the perception and production of the target verbs, involving lists of words and sentence pairs in which the only difference was the verbal tense; (d) the production of a narrative in the simple present, using a list of regular verbs; (e) listening to colleagues' production, observing the correctness of the *–ed* morpheme; (f) listening to a short story and identifying the different pronunciations of the *–ed* morpheme; and (g) recording the same short story. The results of the study were somewhat similar to those of Frese (2006) reported in Section 2.4 above; that is, (a) [ɪd] endings seem to be less problematic for Brazilians, followed by [d], and [t], respectively; (b) students performed better on the perception tests than in the production tests; and (c) explicit instruction had a great influence on the improvement of both perception and production of the *–ed* ending verbs.

Another important study in the area of instruction was carried out by Nobre-Oliveira (2007). Although the author used the term training, during her data collection participants were exposed to a theoretical phase, including guidelines on how to

pronounce the target sounds appropriately. This study is a perfect example on how the terms training and instruction are used interchangeably in the area of pronunciation teaching. Nobre- Oliveira states that "training started to be applied to more pedagogical settings as a means to improve L2 phonetic abilities in non-native speakers, with the purpose of facilitating communication and diminishing foreign accent" (p. 49) . The author collected and analyzed data from 29 Brazilian EFL learners enrolled at Letras course in order to verify the effect of perceptual training on the perception and production of three English vowel contrasts (/i-ɪ/, /ɛ-æ/, and /ʊ-u/). The hypotheses raised were that (a) training would have a positive effect on the perception of L2 vowels; (b) participants would benefit more with training using synthesized stimuli than training using natural stimuli; (c) improvement in the categorization of the synthesized targets would be transferred to natural listening settings; (d) perceptual training would lead to production improvement even without any specific production training; and (e) perceptual improvement would be maintained one month after perception training was over. To these ends, participants were given a production and a perception test, both administered three times: previous to the treatment (pretest), immediately after the treatment (posttest), and one month after the treatment (retention test). In the production tests, the participants read 116 monosyllabic English words containing the vowels /i, ɪ, ɛ, æ, ʊ, u/ inserted in a voiceless consonantal context. In the perception test, participants had to identify the vowels within 108 CVC words produced by eight native speakers of American English.

The training program of Nobre-Oliveira's study consisted of two different procedures: in-class training and take-home training. In-class training was divided into two phases: theoretical and practical. The theoretical phase took 40 minutes and the learners were presented some basic articulatory properties of the vowel. The practical

phase took 50 minutes and the researcher took the learners to the Language Laboratory at Universidade Federal de Santa Catarina (UFSC), where they performed activities in which they listened to specific stimuli according to the group they were assigned to (natural words with the target vowels or just synthesized vowels) and had to mark one option on their answer sheet. Only front vowels were practiced in the first week of training, followed by practice of back vowels in the second week. The third week was dedicated to practicing all vowels together. Immediate feedback was given to the participants after each session. For the take-home training, participants were given a CD containing software in which four activities were developed for the investigation. These activities were considered homework and the learners were asked to save the results and send them to the teacher by e-mail. The software consisted of 2 identification (or labeling) tasks and 2 discrimination tasks. The design of all activities was the same, differing only in the type of stimuli, according to the learner's group. Just like the in-class training, during the first week only front vowels were trained, followed by back vowels and all vowels together in weeks 2 and 3, respectively.

The results of this study confirmed the third and fifth hypotheses and partially confirmed the first and fourth hypotheses; the second hypothesis was not confirmed; that is, improvement in the categorization of the synthesized targets was transferred to natural listening settings; and the perceptual improvement was maintained one month after perception training was over. However, what was predicted about training having a positive effect on the perception of L2 vowels and that perceptual training would lead to production improvement even without any specific production training was partially confirmed. The study also showed that participants did not benefit more from training using synthesized stimuli than training using natural stimuli.

2.5.3 Training and Instruction as related to implicit and explicit knowledge

In addition to awareness, the concepts of implicit and explicit knowledge are also essential for the present discussion about training and instruction. Ellis (2006) carried out a correlational study in order to investigate the learning difficulty of seventeen L2 grammatical structures in relation to implicit and explicit knowledge, and to explore to what extent L2 proficiency can be understood in terms of a mix of implicit and explicit knowledge. In his article, the author presents important features that distinguish implicit from explicit knowledge. These features are divided into representation dimensions and processing dimensions. The former is composed of (a) awareness – where implicit knowledge is related to unconscious awareness whereas explicit knowledge is related to conscious awareness (Ellis based on Karmiloff-Smith, 1979); (b) types of knowledge – implicit knowledge is equated to procedural knowledge while explicit knowledge is equated to declarative knowledge and; (c) sistematicity and certainty of L2 knowledge - implicit knowledge can be highly systematic and explicit knowledge can be imprecise, inaccurate and inconsistent. The processing dimensions group is constituted by (a) accessibility of knowledge – implicit knowledge being considered as deeply embedded and automatically processed, whereas explicit knowledge is considered as weakly held and more controlled; (b) use of L2 knowledge – implicit knowledge is related to inaccurate speech and used when learners do not have time (Ellis based on Yuan and Ellis, 2003) and; (c) self report – implicit knowledge cannot be verbalized while explicit knowledge can be verbalized. Concerning implicit knowledge, there are five determinants that benefit the understanding of what makes different grammatical features easy or difficult: (a) frequency, (b) saliency, (c) functional value, (d) regularity and, (e) processability. Regarding explicit knowledge, the author brings conceptual clarity and metalanguage as important characteristics in explaining ease or difficulty in different grammatical features.

Relating Ellis's (2006) theoretical background about implicit and explicit knowledge to training and instruction in pronunciation teaching, it can be said that training relates to implicit knowledge just as instruction relates to explicit knowledge. That is to say, the participant who undergoes training relies on his/her implicit knowledge, and needs the target sound/ structure being trained to be frequent, salient and regular – just as in the case of the –*ed* morpheme. However, the participant undergoing instruction needs to rely on the explicit knowledge – having the concepts and rules guiding the pronunciation of the –*ed* well clarified. The participant who undergoes training will not be able to verbalize why this morpheme has three different realizations; whereas the participant who undergoes instruction will be able to clearly explain each type of pronunciation of the –*ed* and why they are pronounced that way.

2.6 Conclusion

To conclude, the –*ed* morpheme found in regular simple past verbs and past participles is determined by simple pronunciation rules. However, the production of this morpheme is still problematic for beginning Brazilian EFL learners, due to some strategies they tend to resort to. Several studies have investigated the strategies Brazilians tend to use and they all came to the same conclusion: that epenthesis is the main strategy used by Brazilians when pronouncing the –*ed.* Furthermore, aiming at standardizing theoretical concepts, this chapter provided definitions for training and instruction considering that these two terms were not clearly differentiated and defined in the literature of teaching pronunciation. In this study, training is considered as the practice of the target sound, whereas instruction is the explanation of the rules guiding the target sound, followed by practice. The presence of awareness in instruction was another important construct discussed in this chapter. As postulated by Schmidt (1990,

1994 and 2001), noticing and attention are similar concepts directly related to awareness, which all are essential ingredients in the facilitation of L2 learning. Conscious awareness about the existence of the rules and how they work is what essentially differentiates instruction from training. Finally, regarding the empirical studies reviewed in this chapter, it can be concluded that, in general, both training and instruction seem to be beneficial for improvement of the pronunciation of EFL learners.

CHAPTER 3
METHOD

This chapter describes the research questions and hypotheses guiding the study, the participants involved, the instruments used in the data collection, and the procedures adopted in the experiment, as well as in the treatment of the data. It also provides details about the criteria and method of data analysis and about the statistical treatment employed.

3.1 Research questions and hypotheses

Considering the objectives of the study, and relying on theoretical and empirical research from previous literature in the areas of phonetics & phonology and of second language teaching (SLT), the following research questions and hypotheses were proposed:

RQ1: Does pronunciation training influence learners' production of verbs ending in -*ed*?

Hypothesis 1: The production of verbs ending in -*ed* by the group which undergoes training will improve from the pre-test to posttest.

RQ2: Does the use of pronunciation instruction and training influence learners' production of verbs ending in –ed?

Hypothesis 2: The production of verbs ending in -*ed* by the group subject to instruction and training will improve from the pre-test to the posttest.

RQ3: Is the use of two modalities (instruction and training) of greater benefit to learners than the use of only one modality (training)?

Hypothesis 3: The group which undergoes training and instruction will show greater improvement from the pretest to the posttest than the group which undergoes only training.

3.2 Participants

Forty-three Brazilian EFL learners participated in this study: 27 females and 18 males, ranging in age from 16 to 57 years (M= 23,53 ; SD= 9,13). The participants in this study were enrolled in the Foreign Languages Extracurricular Course (Cursos Extracurriculares de Línguas Estrangeiras) – at Universidade Federal de Santa Catarina (UFSC). There are a total of ten semesters in this course, each corresponding to an increasing level of language proficiency. The participants were regularly attending the first semester of EFL classes – Level 1 – and had completed 23 hours of English classes at the time of data collection.

The participants self-reported the contact that they had had with the English language through songs, movies and the Internet, and in formal instructional settings in high school, although the latter form of contact included mostly grammar and text-reading activities. The majority of the male participants also reported having contact with the English language through the use of video games. All participants have Portuguese as their native language, and only 5 participants reported studying a foreign language other than English – 1 participant has studied German and 4 have studied Spanish.

The participants were divided into three groups for the testing procedures: (a) Treatment Group 1(TG1) – consisting of 15 students who underwent training and instruction; (b) Treatment Group 2 (TG2) – 13 students who underwent only training; and (c) Control Group (CG) – 15 students who were tested but not treated.

Besides the 43 Brazilian students, one American native speaker of English participated in the research as rater for the speech production tests. He was required to listen to learners' productions and indicate whether the pronunciation improved or not from the pre-test to the posttest with the help of an assessment sheet.

3.3 Materials

The data gathering instruments designed for the investigation included a participant's profile questionnaire, a speech production test consisting of 60 sentences that participants read aloud, and a pronunciation manual. In addition, the researcher used the appropriate and relevant lessons from the course material in providing instruction and training to the students. The material adopted in the Extracurricular Course from levels 1 to 6 is the series *Interchange Third Edition* (Richards, Hull, & Proctor, 2004), whereas from levels 7 to 10 the series adopted is *American Inside Out: Upper Intermediate and Advanced* (Philip Kerr, Jon Hird, Vaughan Jones, Sue Kay, 2003). The participants of this study were using the book *Interchange Third Edition 1*.

The data was gathered using a Sony tape recorder (model ER 5013) and resulted in 45 audio tapes. The data was subsequently analyzed using a digitizing, mixing and editing software – Sound Forge 9.0 - and an Acer laptop computer (model ASPIRE 5920).

3.3.1 Questionnaire

The questionnaire used in this study (APPENDIX A) was designed based on the individual differences questionnaire used in Silveira's (2004) dissertation. The main purpose of the participant profile questionnaire was to determine participants' level of experience with the English language in order that a homogeneous group of participants could be selected. Although all students were in the first semester course, not all

students were truly beginners. In order to accurately conduct this research study, it was necessary to ensure that all participants were in fact at the very start of their language instruction. The inclusion of those with pre-existing English language skills could have resulted in inaccurate outcomes regarding the benefits of the modalities of learning – training and instruction.

Furthermore, as has been noted, it was anticipated that some particular differences might interfere with pronunciation acquisition, such as age and exposure to the language through movies and songs. In general, students in the first semester have had contact with English before (mainly in high school) but decided to take the course from the beginning because they were not confident in some of their abilities, such as speaking and listening in English. The reason for this lack of confidence might be that their contact with the language during high school focused heavily on writing and reading rather than speaking and listening skills.

3.3.2 Sentence reading test (pre-test and post-test)

The pre-test (APPENDIX B) was administered immediately after the participants completed the profile questionnaire. The pre-test consisted of a sentence reading exercise in which participants read aloud and recorded 60 sentences, having had no previous pronunciation instruction or practice. This test consisted of 30 sentences, including verbs in the regular past tense (with the –*ed* morpheme) and 30 sentences not containing these verbs, included in the test to conceal the target structure. Of the sentences containing the target sounds, (a) 10 sentences included verbs ending in voiceless sounds /k/, /s/, /p/, /tʃ/; (b) 10 sentences included verbs ending in voiced sounds /l/, /v/, /n/, /r/, /i/, /z/; and (c) 10 sentences included verbs ending in either /t/ or /d/.

The words following the –ed sounds were controlled in order to avoid unreleased sounds. According to Davenport & Hannahs (2005), when the stops [t], [d], [p], [b], [k] and [g] are followed by another consonant sound, they are unreleased; i.e., there is no audible indication of when that occlusion ends (p.21). For instance, if the verb *carried* was followed by the definite article *the,* it would be more difficult for the raters to perceive whether the participant pronounced the –ed sound correctly than if it was followed by the indefinite article *an.* For that reason, words beginning in vowels, nasals and liquids were chosen over words beginning with the consonants [t], [d], [p] and [b].

The sentences used to disguise the focus of the study were retrieved from the resource book regularly used in class, targeting the grammar lessons students were introduced to before the data collection period. In addition, the sentences were arranged in such a way that for every sentence or two containing the –ed structure under examination, there were one or two distractor sentences from the course book.

The post-test (APPENDIX C) differed from the pre-test in that the sentences were displayed in a different order. The purpose of this test was to record data in order to determine whether there was an improvement in participants' pronunciation of English verbs ending in –ed as a result of the use of the two different modalities of pronunciation teaching – instruction and training.

3.3.3 The pronunciation manual

The pronunciation manual was used with both experimental groups together with the regular text book *Interchange Third Edition 1.* There were two types of pronunciation manuals. In the material directed to Treatment Group 1 (TG1) (APPENDIX D) there was a set of tasks for the practice of the target structure and information about the rules guiding the different types of pronunciation of the –ed

endings mixed in with the practice activities. The material directed to Treatment Group 2 (TG2) (APPENDIX E) included the same set of tasks for practice of the manual for TG1; however, it did not include informative material about the pronunciation rules of the target structure.

The activities for practice were retrieved from the books *Pronunciation in Use* (Mark Hancock, 2003), *Well Said: Pronunciation for Clear Communication* (Linda Grant, 2000), and *Pronunciation Tasks* (Martin Hewings, 1993). These activities consisted of listening to a story and filling in the blanks, practicing the story in pairs, listening to a poem in order to perceive the rhyming sounds, reciting the poem, matching rhyming words and practicing the rhymes, and dividing the verbs ending in –*ed* into three different categories: [t], [d] and [ɪd]. Some of the activities were adapted in order to better suit the manual.

The rules provided in the manual for TG1 were also retrieved from the books mentioned in the paragraph above.

3.4 Procedures

Participants were drawn from a total of six Extracurricular groups, each containing twenty students. Due to expected high mortality rates (i.e., many students miss classes or drop the course for a variety of reasons), the researcher opted to form two groups for each type of treatment applied. Thus, Treatment Group 1 consisted of two different level 1 groups from the Extracurricular course; the same was true for Treatment Group 2 and the Control Group. Another reason for the inclusion of two groups for each treatment condition was that the researcher wanted to ensure a reasonable number of participants were still involved in the study by the end of the data collection process, particularly given the fact that students had the option of not participating in this study.

In order for the subjects to gain familiarity with and not feel inhibited by the researcher, two weeks before the treatment period the researcher started attending and participating as a student in the subjects' classes. The researcher started the instruction and training sessions at the end of May, having in mind that the students would not have been introduced to the simple past structures until two months before the end of the course in July. The lesson on the simple past was taught over the course of four class periods by the researcher. The pronunciation manual was used simultaneously with the book the students use regularly.

One week before running the experiment the researcher talked to each group and to the teachers who had agreed to participate in the study, explaining the overall procedure of the research, such as the sentence reading tests and the pronunciation practices; however, details about the purpose of the study were not given.

In the first meeting with each group, the students signed the consent document to approve their participation in the research and completed the profile questionnaire. They were instructed to answer it in Portuguese and the doubts were clarified by the researcher as they appeared.

In the second meeting, conducted during the last 30 minutes of the following class, the participants were taken to the language laboratory of the Universidade Federal de Santa Catarina to take the pre-test. Students were instructed on the use of the apparatus in the laboratory and on how to proceed during the recording of the sentences. It took them a minimum of 4 minutes and a maximum of 10 minutes to record the sentences. The language laboratory was specifically designed for students of foreign languages to perform audio activities. It is equipped with two consoles (Sony model LLC4500MKII) for the teachers, and individual tape recorders (Sony model ER5030), and head-mounted microphones (Sony model HS95) for 34 students.

From the third meeting on, the researcher took responsibility for teaching the 4 level 1 groups involved in the experiment; thus the meetings lasted a whole class period, during which time, besides applying the pronunciation treatment designed for the experiment, the researcher taught the regular lessons from the course book. In this third meeting, each treatment group worked with Part 1 of the material designed for its condition – TG1 worked with material for training and instruction, and TG2 worked with material for training. TG1 students learned about the rules guiding the pronunciation of –*ed* endings and performed the first 6 activities of a total of 13 included in the manual. TG2 participants performed the same activities as TG1; however, as the research condition required, the students had no explicit instruction about the –*ed* pronunciation. The entire meeting lasted 1 hour and 30 minutes, the last 40 minutes being devoted to the instruction and training in TG1, whereas for TG2 the final 30 minutes of the meeting were devoted to training.

In the fourth meeting, the researcher asked the participants of both groups to discuss what they had learned in the previous meeting in order to review the lesson. The regular course book was used and during the last 30 minutes of the class Part 2 from the pronunciation manual was taught. The fifth meeting followed the same steps as the fourth, except that Part 3 was taught, instead of Part 2.

A week after the treatment was over, both groups took the post-test. The procedures followed for the post-test were the same as described for the pretest: the researcher took the students to the language laboratory and explained what they should do. Recording the post-test sentences was faster than the pre-test, due to students' familiarity with the process. The whole data collection process took place at UFSC during the students' regularly scheduled class time for the extracurricular course.

3.5 Data Analysis

Participants' recordings in the sentence reading tests (pre and post-test) were digitized at 44.100 Hz with 32-bit amplitude resolution, using a Sony tape recorder (model BM 21), a digitizing, mixing and editing software Sound Forge 9.0 and a Acer laptop computer (model ASPIRE 5920). The steps for digitizing the tapes were as follows: (a) the sentences were converted into waveforms; (b) the sentences not containing the verbs ending in –ed and sequences broken by coughing, throat clearing and long pauses were excluded; (c) the edited sentences were converted into mp3 format in a new file; and (d) the sentences were recorded on two separate CD-ROMS: one containing the participants' pre-tests and the other containing their posttests.

The CD-ROMS were given to a linguistically naive native speaker (i.e., one who had had no previous training in phonetics and phonology) who agreed to participate in the study as a rater. He was given basic explanations on some concepts used in the area. Epenthesis was simply defined as the insertion of a vowel in different positions within a word and omission was explained as the absence of a sound that should be produced. The rater auditorily analyzed 1,290 tokens produced by the learners using a pronunciation assessment sheet (APPENDIX F). The pronunciation assessment sheet consisted of one grid for each participant containing the numbers of the sentences and the options: (a) correct pronunciation; (b) omission; (c) initial epenthesis[2]; (d) final epenthesis; and (e) initial and final epenthesis. These options helped the rater to assess the participants' productions in a straightforward manner. The researcher also analyzed the participants' productions auditorily using the pronunciation assessment sheet. In case of disagreement in the judgments, a third listening was carried out by the

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[2] Initial epenthesis refers here to epenthesis before the –ed morpheme and not to word-initial epenthesis. Final epenthesis refers to epenthesis after the –ed morpheme, also called paragoge.

researcher and the native speaker rater together in order to take the decision. Hence, all 1,290 occurrences of the target phonemes were analyzed.

Participants' scores on the pretest were tabulated and compared to participants' scores on the posttests. The data was treated using the SPSS for WINDOWS 16.0 software. Descriptive statistics were obtained and Kruskal-Wallis tests, ANOVAs, Wilcoxon tests and gain scores were run using the following variables: (a) production pretest/posttest scores, and (b) group: instruction/control/ training.

Considering that parts of the data were not normally distributed, that is, mean, median and mode values were not the same, non-parametric tests such as the Kruskal-Wallis and the Wilcoxon tests were used to analyze the samples. The Kruskall-Wallis is a nonparametric test used to compare means for more than 3 groups similar to a one-way analysis of variance with the data replaced by their ranks. The Wilcoxon is a non-parametric test that corresponds to the t-test, in which the results of a single group which took two tests are compared, for example, TG1 pretest versus TG1 posttest results (for the present study, pre and post sentence reading tests).

ANOVA tests were used to compare the means of the three groups in the pretest and in the posttest, for instance TG1 pretest versus TG2 pretest versus CG pretest.

The next chapter presents and discusses the results of the data analysis.

CHAPTER 4
RESULTS AND DISCUSSION

4.1 Introduction

This chapter reports and discusses the results for the production pre and posttests, with a focus on the effects of pronunciation training and instruction on the performance of the two experimental groups in comparison to the Control Group. In Sections 4.2 and 4.3, the data analysis includes the following comparisons respectively: (a) between groups – comparing the means in the pretest in order to check the similarity of the groups before treatment, and comparing the means in the posttests in order to check the effect of the different types of treatment, that is, which treatment had a greater effect; and (b) within groups – comparing pre and posttest differences in the same group in order to check treatment effects in each group.

Aiming at verifying whether the results of this study are statistically significant regarding the effects of training and instruction on the production of words ending in –ed by Brazilian EFL learners, a parametric test and several non-parametric tests were used.

4.2 Between Groups Analysis

4.2.1 Pretest

The three different groups in this study were taken separately to the language laboratory in the moment of the data collection. The importance of comparing the groups' pretest mean results is to verify whether their productions of the –ed morpheme were similar before treatment. After running the descriptive statistics for the three groups it was verified that their mean, median and mode values were different. For that reason, it was decided to run a nonparametric Kruskall-Wallis test aiming at checking

the significance of the mean comparison for the correct production of the –*ed* morpheme of the groups. Table 1 displays the number and percentage of correct responses on the pretest for each participant and the means for each group.

Table 1

Frequencies of Pretest correct productions of TG1 vs TG2 vs CG.

	Instruction Group (TG1)				Training Group (TG2)				Control Group (CG)		
Partic.	Pretest	%	N	Partic.	Pretest	%	N	Partic.	Pretest	%	N
S1	13	43%	30	S16	7	23%	30	S29	12	40%	30
S2	12	40%	30	S17	5	17%	30	S30	8	27%	30
S3	10	33%	30	S18	18	60%	30	S31	13	43%	30
S4	13	43%	30	S19	15	50%	30	S32	10	33%	30
S5	14	47%	30	S20	11	37%	30	S33	9	30%	30
S6	5	17%	30	S21	13	43%	30	S34	7	23%	30
S7	8	27%	30	S22	10	33%	30	S35	14	47%	30
S8	8	27%	30	S23	13	43%	30	S36	11	37%	30
S9	13	43%	30	S24	10	33%	30	S37	12	40%	30
S10	10	33%	30	S25	11	37%	30	S38	6	20%	30
S11	13	43%	30	S26	12	40%	30	S39	10	33%	30
S12	15	50%	30	S27	10	33%	30	S40	12	40%	30
S13	10	33%	30	S28	9	30%	30	S41	9	30%	30
S14	10	33%	30					S42	11	37%	30
S15	8	27%	30					S43	7	23%	30
Total	162	36%	450	Total	144	37%	390	Total	151	34%	450
Mean	10,8			Mean	11,08			Mean	10,07		
SD	2,78			SD	3,32			SD	2,37		

Comparing means, the training group scored the best performance in the pretest (M=11,80), followed by the instruction group (M=10,08) and the control group (M=10,07) respectively. Considering the most frequent scores, a total of 9 students scored 10 points, S18 scored the highest rate (18 correct responses) while S6 and S17 share the lowest score – only 5 correct responses.

Kruskal-Wallis Test Ranks presented below shows the mean rank for each group according to their pretest correct responses.

Table 2

Kruskal-Wallis Test Ranks for pretest results

	3 groups	N	Mean Rank
Pretest Correct production	Instruction	15	23,27
	Training	13	23,46
	Control	15	19,47
	Total	43	

Table 3

Test Statistics[a,b]

	Pretest Correct production
Chi-Square	,956
DF	2
Asymp. Sig.	,620

Note: a. Kruskal Wallis Test

b. Grouping Variable: 3 groups

As it can be seen, Tables 2 and 3 present the mean rank of the groups in the pretest. TG2 presented the highest rank, followed by TG1 and CG respectively. The comparison between the rates of TG1 (36%; M= 10,80; SD= 2,78), TG2 (36,93%; M=11,08; SD=3,32) and CG (33,56%; M= 10,07; SD= 2,37) shows that there is no statistically significant difference among the groups (p=.620). This is a positive result, considering that any possible significant changes between groups in the posttest can be interpreted as reliable.
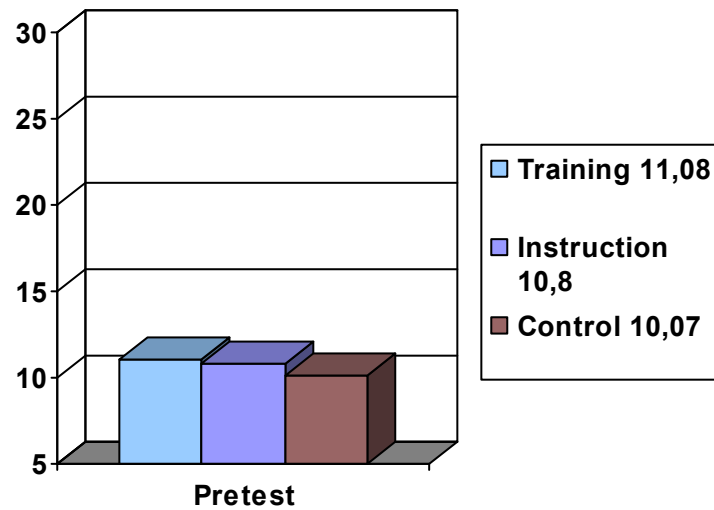
Figure 1: Differences between groups' correct responses on the pretest.

Figure 1 illustrates the insignificant difference between groups in the pretest results. This is a positive point, regarding the importance of having students with the same proficiency level before treatment takes place.

4.2.2 Posttest

The posttest between-groups comparison aims at showing whether the groups differed or not after treatment. Table 4 presents the number and percentage of correct responses on the posttest for each participant and the means for each group. The comparison between the rates of the Instruction Group (50%; M= 15,13; SD= 3,62), the Training Group (37%; M=11,15; SD=4,54) and the Control Group (32%; M= 9,73; SD= 1,66) shows that the groups had significantly different performances on the posttest (p<.001).

Table 4

Frequencies of correct responses in the posttest.

	Instruction Group				Training Group				Control Group		
Partic.	Posttest	%	N	Partic.	Posttest	%	N	Partic.	Posttest	%	N
S1	20	67%	30	S16	3	10%	30	S29	12	40%	30
S2	15	50%	30	S17	6	20%	30	S30	10	33%	30
S3	13	43%	30	S18	18	60%	30	S31	11	37%	30
S4	15	50%	30	S19	13	43%	30	S32	9	30%	30
S5	21	70%	30	S20	10	33%	30	S33	7	23%	30
S6	10	33%	30	S21	8	27%	30	S34	7	23%	30
S7	12	40%	30	S22	20	67%	30	S35	10	33%	30
S8	13	43%	30	S23	14	47%	30	S36	11	37%	30
S9	18	60%	30	S24	9	30%	30	S37	11	37%	30
S10	18	60%	30	S25	10	33%	30	S38	9	30%	30
S11	17	57%	30	S26	12	40%	30	S39	8	27%	30
S12	18	60%	30	S27	11	37%	30	S40	12	40%	30
S13	14	47%	30	S28	11	37%	30	S41	10	33%	30
S14	15	50%	30					S42	11	37%	30
S15	8	27%	30					S43	8	27%	30
Total	227	50%	450		145	37%	390		146	32%	450
Mean	15,13				11,15				9,73		
SD	3,62				4,54				1,66		

As Table 4 shows, nine participants in the instruction group (S1, S2, S4, S5, S9, S10, S11, S12 and S14) obtained 15 or more correct responses in the posttest, as compared to only two participants in the training group (S18 and S22) and no participants in the control group. These results clearly demonstrate that the instruction-training group outperformed the other two groups in the study. This better performance may be related to the pronunciation treatment they received.

It is also important to notice the Standard Deviation in each group. The number is higher for the Training group, demonstrating the big individual differences present in the group; however it is very low for the Control group, suggesting that students have almost no differences among them. For instance, the extraordinary improvement obtained by S22 can be explained by the profile questionnaire answers of this participant. She claimed to be studying English due to the fact that she wanted to get in the English Letras course in the University, so maybe that is the reason why she put an extra effort on the task.

A One-way between subjects ANOVA (Table 5) was conducted to compare the posttest means of the three groups in the production of verbs ending in –ed. The ANOVA yielded a significant difference between the scores of the three groups after treatment [F(2,40)=9,77 , p=.001]; however, a posthoc test (Tamhane) is still needed to detect where this difference is located.

Table 5

One-way ANOVA Posttest Correct production

	Sum of Squares	DF	Mean Square	F	Sig.
Between Groups	235,387	2	117,694	9,775	,000
Within Groups	481,590	40	12,040		
Total	716,977	42			

The Tamhane multiple comparisons tests show, in Table 6, that the difference in results between the Instruction-training Group and the Training Group barely reached the significance level (p=.05), while the difference between Instruction Group and Control Group was highly significant (p=0.01). Moreover, the difference between the Training and Control groups was not significant (p=0.71), meaning that they had similar results in the posttest.

Table 6

Tamhane Posttest Correct production

(I) 3 groups	(J) 3 groups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
Instruction	Training	4,056	1,592	,053	-,05	8,16
	Control	5,400[*]	1,030	,000	2,71	8,09
Training	Instruction	-4,056	1,592	,053	-8,16	,05
	Control	1,344	1,358	,711	-2,31	5,00
Control	Instruction	-5,400[*]	1,030	,000	-8,09	-2,71
	Training	-1,344	1,358	,711	-5,00	2,31

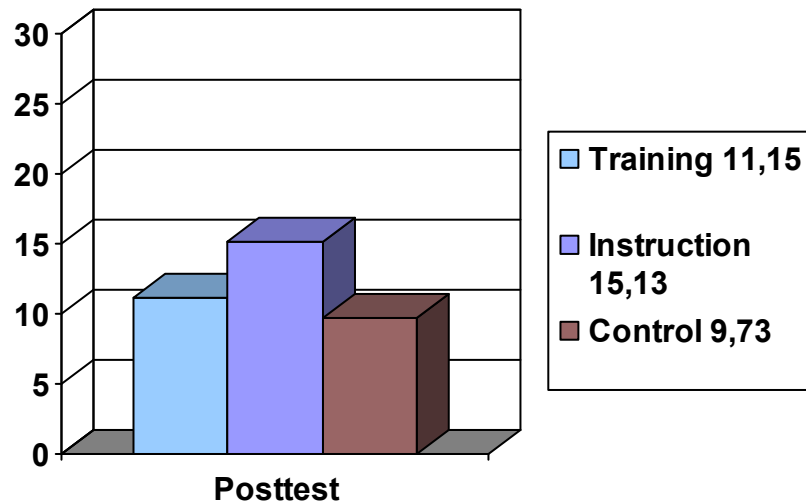Note. *. The mean difference is significant at the 0.05 level.

Figure 2. Differences in the posttest correct production among the three groups.

Figure 2 illustrates that the difference between the Instruction group and the other two groups is clearly noteworthy, whereas the difference between the Training group and the Control group is nearly irrelevant.

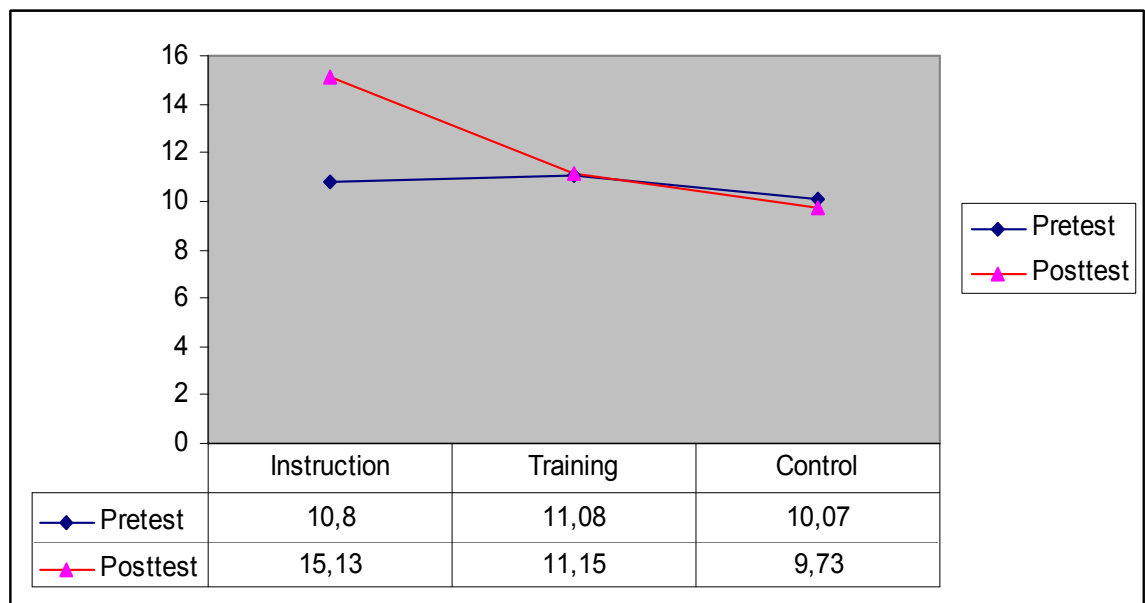|	Instruction	Training	Control
Pretest	10,8	11,08	10,07
Posttest	15,13	11,15	9,73

Figure 3: Differences among groups in both pretest and posttest results.

Figure 3 illustrates the gain scores for each group and how they differ amongst each other. It can be clearly noticed that the Instruction group had a much better improvement than the other groups. Yet, while the Training group had almost no improvement, the Control group showed a negative result in the posttest.

The Training group received a pronunciation teaching method based on practice and a routine of exercises regarding the perception and production of verbs ending in –ed. However, the lack of explicit instruction regarding the three different realizations of the –ed apparently did not lead to significant benefits to the production of this morpheme by the participants.

The results in this section were similar to those found by Silveira (2004), who confirmed that pronunciation instruction helped her learners reduce epenthesis rates. Although Silveira dealt with epenthesis following word-final consonants whereas this study dealt with epenthesis provoked by the –ed morpheme, both studies demonstrated the benefits of pronunciation instruction to beginning EFL learners. The present study also showed that training without the explicit instruction was not effective.

4.3 Within-groups Analysis

4.3.1 Gains scores of the training group

The Training Group received a pronunciation treatment based mainly on practice of the -ed (production and perception of words with -ed) with no instruction on the rules guiding the pronunciation of the –ed. The first hypothesis raised in this study says the production of verbs ending in -ed by the group which undergoes training will improve from the pre-test to posttest. This section presents the results for this group before and after treatment along with gain scores showing whether Hypothesis 1 was confirmed or not. Table 7 below shows the performance of the group in the study.

Table 7

Frequencies and gain scores of correct responses for pretest and posttest for the training group.

Partic.	Pretest	%	N	Posttest	%	N	Gain Scores
S16	7	23%	30	3	67%	30	-4
S17	5	17%	30	6	50%	30	1
S18	18	60%	30	18	43%	30	0
S19	15	50%	30	13	50%	30	-2
S20	11	37%	30	10	70%	30	-1
S21	13	43%	30	8	33%	30	-5
S22	10	33%	30	20	40%	30	10
S23	13	43%	30	14	43%	30	1
S24	10	33%	30	9	60%	30	-1
S25	11	37%	30	10	60%	30	-1
S26	12	40%	30	12	57%	30	0
S27	10	33%	30	11	60%	30	1
S28	9	30%	30	11	47%	30	2
Total	144	37%	390	145	50%	390	1
Mean	11,08			11,15			0,08
SD	3,32			4,54			3,59
Maximum	18			20			10
Minimum	5			3			-5

Table 7 shows the frequency of correct responses of the participants in both tests also demonstrating that there was a very small difference of 0,7 score point in the posttest results. It can be noted that participants S17, S22, S23, S27 and S28 showed some improvement from pre test to posttest, whereas participants S18 and S26 had neither improvement nor decay; and S16, S19, S20, S21, S24 and S25 showed negative results.

As a group, the participants did not show any significant difference between pretest and posttest, as demonstrated by the Wicoxon test (p=.94). Contrary to Nobre de Oliveira's (2007) results, pronunciation training by itself in this study seemed to have had almost no positive effect on the participants' performance. Thus, Hypothesis 1 is rejected.

Table 8

Paired Samples Statistics – Within group analysis – Training Group

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest Correct production	11,08	13	3,328	,923
	Posttest Correct production	11,15	13	4,543	1,260

4.3.2 Gain scores of the Instruction Group

The second hypothesis of this study states that the production of verbs ending in -*ed* by the group subject to instruction-training would improve from the pre-test to the posttest. This section shows whether the hypothesis was confirmed or not.

The Instruction Group received pronunciation instruction during treatment based on producing and perceiving verbs ending in –*ed*, as well as studied the rules guiding the pronunciation of this morpheme. This section presents the results for this group across tests.

In order to test whether there was a change in the scores from the pretest to the posttest in the instruction-training group, the gain scores (posttest scores minus pretest scores) for each participant were calculated. The results displayed in Table 9 show that, in general, the group yielded high gain scores; i.e., the participants of the instruction group were able to produce the words ending in –*ed* more effectively in the posttest (M=4.33, SD=2,05) than in the pretest. The results presented in Table 9 below showed an improvement of 4,33 points in the posttest results.

Table 9

Frequencies and gain scores of correct responses for pretest and posttest for the instruction group.

Partic.	Pretest	%	N	Posttest	%	N	Gain Scores
S1	13	43%	30	20	67%	30	7
S2	12	40%	30	15	50%	30	3
S3	10	33%	30	13	43%	30	3
S4	13	43%	30	15	50%	30	2
S5	14	47%	30	21	70%	30	7
S6	5	17%	30	10	33%	30	5
S7	8	27%	30	12	40%	30	4
S8	8	27%	30	13	43%	30	5
S9	13	43%	30	18	60%	30	5
S10	10	33%	30	18	60%	30	8
S11	13	43%	30	17	57%	30	4
S12	15	50%	30	18	60%	30	3
S13	10	33%	30	14	47%	30	4
S14	10	33%	30	15	50%	30	5
S15	8	27%	30	8	27%	30	0
Total	162	36%	450	227	50%	450	65
Mean	10,8			15,13			4,33
SD	2,78			3,62			2,05
Maximum	15			21			8
Minimum	5			8			0

The data displayed in Table 9 show that, in general, the instruction group improved from pretest to posttest. Seven participants (S1, S5, S6, S8, S9, S10 and S14) managed to increase their scores in more than 5 points and showed a significant improvement from pretest to posttest. Six participants (S2, S3, S7, S11, S12 and S13) increased their scores in more than 3 points while just one participant (S4) showed an improvement of only 2 points. If on the one hand participant S15 did not show any improvement from pretest to posttest, on the other hand he/she did not show any decrease either.

As has been noted, the instruction group benefited from the instruction and training period, and a Wilcoxon test (Table 10 below) was run to compare the pre and posttest means, indicating a significant (p=.001) difference, thus confirming Hypothesis 2. The Wilcoxon test was chosen for being the most appropriate way to assess repeated

measurements on a single group, that is, one group undergoing the same procedure twice.

Table 10

Paired Samples Statistics – Within group analysis – Instruction Group

	Instruction Group	Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest Correct production	10,80	15	2,783	,718
	Posttest Correct production	15,13	15	3,623	,935

4.3.3 Gain scores of the control group

The Control group was included in the study in order to place a parameter for the progress which might be found as the result of the instruction/training and training alone by the experimental groups. This group did not receive any type of pronunciation instruction or training during the period of data collection. This section displays the results for this group across tests.

As displayed in Table 11 below, participants S30, S38, S41 and S43 showed some improvement from pretest to posttest, participant S38 obtaining the best gain score (3 points). Participants S29, S34, S36, S40 and S42 maintained the same results, and six participants (S31, S32, S33, S35, S37 and S39) had negative gain scores, meaning their scores were better in the pretest than in the posttest.

Table 11

Frequencies and gain scores of correct responses for pretest and posttest for the control group.

Partic.	Pretest	%	N	Posttest	%	N	Gain Scores
S29	13	40%	30	12	40%	30	0
S30	12	27%	30	10	33%	30	2
S31	10	43%	30	11	37%	30	-2
S32	13	33%	30	9	30%	30	-1
S33	14	30%	30	7	23%	30	-2
S34	5	23%	30	7	23%	30	0
S35	8	47%	30	10	33%	30	-4
S36	8	37%	30	11	37%	30	0
S37	13	40%	30	11	37%	30	-1
S38	10	20%	30	9	30%	30	3
S39	13	33%	30	8	27%	30	-2
S40	15	40%	30	12	40%	30	0
S41	10	30%	30	10	33%	30	-1
S42	10	37%	30	11	37%	30	0
S43	8	23%	30	8	27%	30	1
Total	151	34%	450	146	32%	450	-7
Mean	10,07			9,73			-0,47
SD	2,37			1,66			1,72
Maximum	15			12			3
Minimum	5			7			-4

In an overall analysis, the group did not show significant difference between pretest and posttest, as demonstrated by the Wilcoxon test (p=.47). Theses findings indicate that pronunciation instruction or training are important teaching procedures for the production of verbs in the beginning stages of EFL learning.

Table 12 displays the pretest and posttest means and shows that there was actually a decrease in mean scores (-0.34 score point) from pretest to posttest.

Table 12

Paired Samples Statistics – Within group analysis – Control Group

	Control Group	Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest Correct production	10,07	15	2,374	,613
	Posttest Correct production	9,73	15	1,668	,431

4.4 Summary of results and final comments

The central question guiding the present study was whether training and instruction as two pronunciation teaching methods could facilitate the production of verbs ending in –*ed*. Data from the forty-three participants in this study were used to answer this question.

As explained before in the study, training is considered as pronunciation practice, that is, teaching that employs a series of activities aimed at improving learners' speech perception and/or production by means of performance. In training programs, students do not receive explicit instruction on phonetics and phonology; that is, no metalinguistic information on the pronunciation of the target sound being trained is provided; the teaching is carried out by means of exercise routines. Furthermore, the other pronunciation teaching method employed in this study was defined as instruction. Instruction is taken to be explicit teaching by the raising of awareness about the phonological and/or phonetic rules which operate in the pronunciation of speech sounds and the phonological environments in which they operate. Besides the explicit teaching of the rules, instruction also comprises activities for practice of the target sound being explored in class.

Taking the two pronunciation teaching methods restated above, three hypotheses were investigated. The first hypothesis raised in this study considered that the effects of training in the production of verbs ending in –ed by Brazilian EFL learners would be positive. This hypothesis was rejected considering that the Training Group presented less than 1% of progress in the correct responses from pretest to posttest, unlike Yeon's (2004) and Bettoni-Techio (2008) results concerning training. This indicates that the

participants seemed not to have had benefited from this type of pronunciation teaching method.

Considering that the participants in this study subjects to only training had to rely on their implicit knowledge to infer the differences between the three realizations of this morpheme, the length of exposure to the sound might not have been enough. According to Ellis (2006), implicit knowledge needs frequent and regular exposure to be processed. Perhaps, if students had had the opportunity to devote more time to perceiving and producing the words containing the target sound, they would have had a better result and training would have shown to be more efficient. Another important point to be considered is the fact that there are rules guiding the pronunciation of the –ed morpheme. Hence, the explicitness of such rules and the use of metalanguage are highly significant in this case. Since English was taught as a foreign language and most of the participants had contact with the spoken language mainly in the classroom environment, all that can be verbally open to the group should be done so.

Differently from hypothesis 1, hypotheses 2 and 3 were confirmed. The Instruction group presented significantly high results in the posttest (M=15,13; 50%) as compared to the low number of correct responses in the pretest (M= 10,8; 36%). There was an improvement of 14% in the correct pronunciation of the words ending in –ed. The apparently better rates obtained by this group in the posttest compared to their pretest is related to the type of pronunciation teaching method they received. These results support the findings presented by Silveira (2004) and Alves (2004) concerning the effectiveness of pronunciation instruction in the classroom environment.

In summary, the production pretest results indicated that all groups had some difficulty in pronouncing the verbs ending in –ed, since their performances were below 40% of correct responses. Moreover, one-way ANOVA tests showed that the three groups were significantly similar at the beginning of the study, indicating that possible

differences appearing in the posttest might be considerably significant, that is, instruction had a positive effect on the production of verbs ending in *–ed* whereas training did not.

CHAPTER 5
CONCLUSION

5.1 Theoretical Implications

In the present thesis, data from adult Brazilian learners of English were explored to offer evidence about the effects of two different pronunciation teaching methods. In order to assess these methods, the target sounds chosen to have their production treated are those corresponding to the *–ed* morpheme occurring in regular simple past verbs.

Aiming at standardizing the concepts of *training* and *instruction* to simple and clear definitions that would adequately distinguish one term from the other, the present study introduced training as pronunciation practice, that is, teaching that employs a series of activities aimed at improving learners' speech perception and/or production by means of performance. Instruction, on the other hand, refers here to the explicit teaching of the rules operating in the pronunciation of the *–ed* morpheme, intentionally raising awareness of the differences among the three realizations of the morpheme. Additionally, in ~~the~~ instruction, pronunciation practice and exercises are also included. Both pronunciation teaching methods have been shown to be beneficial for L2 learners in previous empirical interlanguage studies.

The objective of the study was to investigate whether these two pronunciation teaching methods could benefit students in beginning level formal English instruction in the classroom. The research questions addressed in the study aimed at investigating (a) whether training would be effective in the production of the verbs ending in *–ed*; (b) whether instruction would be effective in the production of verbs ending in *–ed* and; (c) which of these two pronunciation teaching methods would be more effective in the production of verbs ending in *–ed*.

Previous perceptual training studies have obtained positive results regarding training as an effective measure to improve learners' perception and production of vowels, initial /s/-clusters and word-final alveolopalatals (Nobre-Oliveira, 2007; Bettoni-Techio, 2008; Yeon, 2004).

Likewise, empirical pronunciation studies have also shown optimistic results related to instruction. Silveira (2004) developed a pronunciation manual aiming to improve students' English word final consonants in beginning level formal instruction in the classroom. The author included activities that helped students foster their perception and production through means of phonological awareness of the sound sequences being learned. Alves (2004) was another influential study for the present research. The author found that instruction can be highly beneficial in improving the production of words ending in –ed by Brazilian EFL learners and that it has long term positive effects.

In regards to the present study, it has provided evidence that pronunciation instruction can facilitate the acquisition of the pronunciation of regular verbs in the simple past, since TG1 succeeded at raising significantly the rates of correct responses in their production posttests. Conversely, training alone was less successful in bringing about appropriate –ed production.

5.2 Pedagogical Implications

Learning a foreign language in a context where the classroom is one of the only places where the students have contact with the language can become a very demanding task. When it comes to pronunciation, it is even more challenging, considering that students have to rely basically on course books and the teacher. A number of researchers and educators have made a strong case for the importance of pronunciation

teaching as means of helping learners to develop communicative ability. Generally, in the classroom, pronunciation is taught as an isolated component, focusing frequently on controlled activities. The pronunciation element dealt with in the present study was the acquisition of English verbs ending in –*ed*, which are complex to acquire because (a) they present three different types of pronunciation depending on the final sound of the verb in the basic form and; (b) they can form consonant clusters in the coda position, which are not permitted in Brazilian Portuguese. Hence, the –*ed* morpheme should be given a good deal of importance in pronunciation teaching.

Learners need to be aware of the three different types of –*ed* pronunciation, and for this purpose exercises with contrastive words (Delatorre, 2006) such as "missed"/"list" and "scored"/"board" can be useful. Furthermore, these types of activities should involve both perception and production practice. The existence of the three different realizations of the –*ed* morpheme should be elucidated both in training and instruction. What distinguishes instruction from training in this case is the precise and explicit explanation of what distinguishes these three realizations.

Based on the findings of the present study, the suggestion of this study is that instruction and practice with verbs ending in –*ed* should start considering the complex hierarchy shown in Alves (2004) and Frese (2006), that is, first with the verbs whose pronunciation students tend to learn more easily – those which take the allomorph [ɪd] such as *started*, *needed* and *wanted*, followed by those whose past tense forms complex codas but penultimate segment permitted in BP codas such as *missed* and *traveled*, and finally the more complex ones, that is, the verbs whose past tense forms complex codas and penultimate segments not allowed in BP codas, like *watched* and *looked*. In addition, another implication of this study regards the importance to practice these verbs not only in isolation, but also in context, starting with the easiest environment (apparently, when the verb is followed by a vowel, e.g., *I watched all the DVDs*) and

proceeding to the most difficult one (when the verb is followed by a consonant, e.g., *we called the cops*).

The present study showed that pronunciation teaching holds an essential position in the classroom conveying different techniques that can greatly influence a better performance in communication. As regards the pronunciation teaching methods defined here as training and instruction, the research yielded superior results concerning the latter. Instruction seemed to bring greater benefits to learners in the acquisition of verbs ending in –*ed*. Furthermore, it is also important to note that instruction is always followed by practice, but that practice alone did not affect learners' production.

5.3 Limitations of the study and further research

As the data investigated by the present study were limited, the results reported here should be treated with some caution. First, the participants were beginning learners. This restricted the study from collecting more naturalistic speech samples, due to the participants' limitations in performing more difficult tasks by the time the pretest was given, thus they were assessed only in a sentence-reading test. Future studies should focus on investigating the influence of training and instruction with more advanced students and explore their abilities to perform different types of tests using more naturalistic speech samples. However, it is essential to keep in mind that positive results might be more difficult to obtain because of possible fossilization.

The present study collected data involving pre and posttest comparisons assessing the effects of pronunciation teaching, which implies that the posttest results were influenced by the teaching variable. Results from the present study show that instruction provided better results in the production of verbs ending in –*ed*. However, long-term data needs to be collected in order to investigate whether the effects of

pronunciation instruction last longer than a week, which was the only time when the posttest was administered in the present study.

The present study yielded results that do not corroborate findings of previous studies concerning the role of training. Several explanations might account for this divergence. First, the present study dealt with a morpheme, which has rules guiding its pronunciation, in contrast to Nobre-Oliveira (2007), Yeon (2004) and Bettoni- Techio (2008), who focused on vowels, alveolopalatals and /s/-clusters. Second, training here included both perception and production practice with the purpose of influencing production only, whereas the other studies analyzed the influence of perceptual training on both perception and production. These two differences may be among the possible reasons why training did not offer satisfactory results. Further research should be carried out in order to clarify the conflicting results obtained by these studies.

Another limitation of the study was the amount of time devoted to the practice exercises during treatment. Both experimental groups received only 30 to 40 minutes maximum in each of the three sessions and performed the activities present in the manual only once. More extensive practice would probably lead to a better outcome.

Similar to many other classroom studies, the present one had to deal with a significant shortcoming – the small sample. Since the researcher was in charge of teaching all the groups, in order to avoid the influence of an additional variable – different instructors – this restricted the possibility of including more groups. Further research should be carried out with a larger sample size, so that results can better confirm the effects of pronunciation instruction and training on the production of verbs ending in –ed. Moreover, it would be important to explore possible factors affecting the different degrees of improvement, such as the case of a participant in the training group who outperformed the rest of the whole group. Tests on affective factors, such as

motivation and anxiety (and aptitude), might reveal possible reasons to account for the varying degrees of success.

In spite of its limitations, this study contributes with relevant findings to the area of pronunciation teaching. In addition, it brings together theory, research and classroom practice as a way to develop pronunciation teaching methods that have been used in formal instruction settings of foreign language learning. More studies are necessary to assess the benefits of this integration, and to formulate new ways of improving learners' English pronunciation.

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APPENDIX A

Universidade Federal de Santa Catarina
Centro de Comunicação e Expressão
Curso de Pós-Graduação em Inglês e Literaturas Correspondentes
Mestranda: Mariana Honorato Mariano
Orientadora: Profª Drª Rosana Denise Koerich

QUESTIONÁRIO SOBRE PARTICIPANTES DE PESQUISA DE CAMPO

Por favor, responda às perguntas abaixo. Este questionário visa somente obter informações que serão utilizadas para direcionar a análise dos dados da pesquisa conduzida pela aluna acima citada. Em nenhuma hipótese os nomes dos participantes serão divulgados. Solicito informar nome, e-mail e telefone somente para, no caso de necessitar alguma informação adicional, poder entrar em contato com você posteriormente.

1. NOME:

2. IDADE: 3 SEXO: FEM / MASC   4. TEL.

5. E-MAIL:

6. NÍVEL E TURMA DE INGLÊS EM QUE ESTÁ MATRICULADO:

Responda às perguntas abaixo procurando ser o mais específico possível sobre o seu contato com a língua inglesa.

7. Fez inglês no colégio? SIM / NÃO 8. Caso 'SIM', em que séries?

9. Com qual idade começou a estudar inglês?

10. As aulas de inglês exploravam comunicação escrita e oral?

11. Fez curso de inglês além do Extracurricular desta universidade? SIM / NÃO

12. Caso 'SIM', por quanto tempo?

13. Você interrompeu seu estudo de inglês durante algum tempo? SIM / NÃO

14. Por quanto tempo ficou sem fazer curso de inglês até iniciar no Extracurricular?

15. Tem vivência em país de língua inglesa? (mais de 1 mês) SIM / NÃO

16. Caso 'SIM', por quanto tempo?   17. Qual sua idade na época?

18. Freqüentou escola naquele país? SIM / NÃO

19. Que tipo de escola/curso?
20. Conversa com freqüência em inglês com outros brasileiros? SIM / NÃO

21. Conversa com freqüência em inglês com falantes nativos? SIM / NÃO

22. Assiste filmes sem dublagem com freqüência?   SIM / NÃO

23. Ouve música em inglês com freqüência?   SIM / NÃO   24. Canta? SIM / NÃO

25. Joga ou jogava vídeo games com freqüência?   SIM / NÃO

26. Transcreve (tira) letras de músicas?   SIM / NÃO

27. Estuda, estudou, ou tem contato com outra língua estrangeira?   SIM / NÃO

28. Em que contexto? (escola, na família...) _____

29. Qual língua? _____

30. Marque o quanto você gosta de atividades que exploram as habilidades na lista

	Muito	Não muito	Não gosto
Gramática	❑	❑	❑
Leitura	❑	❑	❑
Escrita	❑	❑	❑
Audição (listening)	❑	❑	❑
Fala	❑	❑	❑
Pronúncia	❑	❑	❑

31. Marque seu grau de dificuldade em atividades que exploram as habilidades na lista

	Muito difícil	Não tão difícil	Fácil
Gramática	❑	❑	❑
Leitura	❑	❑	❑
Escrita	❑	❑	❑
Audição (listening)	❑	❑	❑
Fala	❑	❑	❑
Pronúncia	❑	❑	❑

32. Quantas horas por semana, além do curso, você dedica ao estudo da língua inglesa e à atividades para aperfeiçoar seu inglês?

_____

_____

33. Acrescente qualquer informação que julgar interessante e que não tenha sido contemplada neste questionário

_____

_____

Florianópolis,____ de_____ de 2008

Obrigada por aceitar participar da pesquisa.
Mariana Honorato Mariano

APPENDIX B – Pretest

UFSC/CCE/Programa de Pós-Graduação em Inglês.
Professora Mariana Honorato Mariano   Orientadora Profa. Dr. Rosana Denise Koerich
Turma: _____
Aluno (a): _____

Read and record the sentences below.

1. They walked away after the fight.
2. Carla likes to visit her parents frequently.
3. Daniel pretended he knew about it all the time.
4. He used my car this month.
5. Jason loves swimming in the sea.
6. Peter counted all the money he had.
7. Mike can scuba dive.
8. Rita waited for a long time in the line.
9. Damien is not feeling so well today.
10. She danced all night long.
11. He knows my telephone number.
12. Steve rested after a long day.
13. They dance samba very well.
14. I cleaned everything this morning.
15. Robert is singing his favorite song.
16. Jason looked at his mom and left.
17. Junior is listening to loud music.
18. They wanted a big pizza for lunch.
19. Sarah studies everyday in the library.
20. The students listened carefully to the teacher.
21. Anna is a flight attendant for Delta Airlines
22. The Cold War ended in 1991.
23. Sharon dances tango with her husband.
24. He asked if he could go.
25. Cathy travels abroad every year.
26. I enjoyed everything about the play.
27. We went to the math class last week
28. I stopped loading the truck for a moment.
29. Liz works for the hospital
30. I wasted my time going there.
31. Alice is enjoying her time here
32. Kathy phoned her parents to say hello.
33. There is nothing good on TV tonight.
34. Liz started many courses this year.
35. I want to learn French next month.
36. Paula needed help with her bags.
37. Damien is going to Thailand.
38. Last week John talked about his trip.
39. Julianne has a strange boyfriend.
40. My mom cried after the movie.
41. I'm buying a new car.
42. Sandra watched many games last month.
43. Andrew runs the marathon every year.
44. The man carried her bags to the hotel.
45. Camila lives in Paris.
46. Carol posted a letter for her father.
47. My mother helps my father in the office.
48. Sarah worked very hard to buy her car.
49. Leo likes Chilean girls.
50. She liked everything about the party.
51. I don't like watching fights on TV.
52. She stayed a long time in the hospital.
53. George is a waiter in the hotel.
54. They smiled at me after the show.
55. Tom broke his arm playing basketball.
56. We cooked all the food last night.
57. My brothers are dentists.
58. William decided everything about the trip.
59. Alicia likes to eat ice cream for dessert.
60. Alex is a good football player.

APPENDIX C – Posttest

UFSC/CCE/Programa de Pós-Graduação em Inglês.
Professora Mariana Honorato Mariano   Orientadora Profa. Dr. Rosana Denise Koerich
Turma: _____
Aluno (a): _____

Read and record the sentences below.

1. Daniel pretended he knew about it all the time.
2. Alex is a good football player.
3. He asked if he could go.
4. Alice is enjoying her time here.
5. He used my car this month.
6. We went to the math class last week.
7. I cleaned everything this morning.
8. Tom broke his arm playing basketball.
9. I enjoyed everything about the play.
10. Simon works for a TV company.
11. I stopped loading the truck for a moment.
12. Amanda and George are colleagues at the hotel.
13. I wasted my time going there.
14. Leo likes Chilean girls.
15. Jason looked at his mom and left.
16. Camila studies and lives in Paris.
17. Kathy phoned her parents to say hello.
18. Julianne has a strange boyfriend.
19. Last week John talked about his trip.
20. I'm buying a new car.
21. Liz started many courses this year.
22. Arthur lives in Brasilia with his family.
23. My mom cried after the movie.
24. Jane is going to travel to India next month.
25. Paula needed help with her bags.
26. Andrew is a very funny person.
27. Peter counted all the money he had.
28. Caroline prepares drinks at the bar.
29. Rita waited for a long time in the line.
30. Hans is moving back to Germany.
31. Sandra watched many games last month.
32. John likes playing with his friends.
33. Sarah worked very hard to buy her car.
34. Liz works for the hospital.
35. She danced all night long.
36. Carla likes to visit her parents frequently.
37. She liked everything about the party.
38. Cathy travels abroad every year.
39. She stayed a long time in the hospital.
40. Robert is singing his favorite song.
41. Steve rested after a long day.
42. Junior is listening to loud music right now.
43. The boys played soccer all afternoon.
44. His favorite sport is tennis.
45. The Cold War ended in 1991.
46. Martin plays the guitar every night.
47. The man carried her bags to the hotel.
48. Anna is a flight attendant for Delta Airlines.
49. The students listened carefully to the teacher.
50. Doug and Kye are playing cards now.
51. They smiled at me after the show.
52. They are staying at my house.
53. They walked away after the fight.
54. Paul is dating an older woman.
55. They wanted a big pizza for lunch.
56. Matt goes to the club every week.
57. We cooked all the food last night.
58. Antonette is a waitress in the dining room.
59. William decided all the important parts of the trip.
60. Ben was born 10 years before me.

UFSC/CCE/Programa de Pós-Graduação em Inglês
Mariana Honorato Mariano   Orientadora Profa. Dra. Rosana Denise Koerich

Pronunciation Manual – The –*ed* endings – Part 1

1. CONVERSATION   I didn't study!
(Reference: Interchange Third Edition – Intro)

Listen and practice

Michael: Hi, Jennifer. Did you have a good weekend?

Jennifer: Well, I had a busy weekend, and I feel a little tired today.

Michael: Really? Why?

Jennifer: Well, on Saturday, I exercised in the morning. Then my roommate and I
        cleaned, did laundry, and shopped. And then I visited my parents.

Michael: So what did you do on Sunday?

Jennifer: I studied for the test all day.

Michael: Oh, no! Do we have a test today? I didn't study! I just watched television all
        weekend!

2. Listen. Sometimes the letter *e* in words ending in –*ed* is pronounced. But usually it is not.

Present + *-ed* = Past

rent	rented
☐	☐
need	needed
☐	☐
talk	talked
☐	☐
wash	washed
☐	☐
listen	listened
☐	☐
plan	planned
☐	☐

3. Listen. Clap once if you hear one syllable. Clap twice if you hear two syllables.

Final –t + *-ed*	Final –d +*ed*	Other letters
Painted	Added	Opened
Rented	Loaded	Walked
Counted	Landed	Cleaned
Planted	Needed	Closed

4. Read these rules.

The Past Tense Syllable Rules

1. When a verb ends with –t or –d, *-ed* will be an extra syllable.
2. When a verb ends in any other letter, *-ed* will NOT be an extra syllable.

Add	added	close	closed
☐	☐ ☐	☐	☐

---

5. Write *–ed* after these verbs. Then say each word two times.

Extra syllable
1. want……
2. end……..
3. add……..
4. repeat…..
5. visit…….
6. wait…….
7. lift………

No extra syllable
8. rain…….
9. talk…….
10. wash……
11. push……
12. look……
13. play……
14. call…….

6. Pair work: yesterday or every day?

1 Student A, says sentence **a** or **b**.
2 Student B, says "Every day" for present or "yesterday" for past.
3 Take turns saying sentences.

Student A: We plant flowers.
Student B: Everyday

Student B: We wanted a ride.
Student A: Yesterday.

1. a. We plant flowers.
   b. We planted flowers.

2. a. We wanted a ride.
   b. We want a ride.

3. a. I need more money.
   b. I needed more money.

4. a. We painted our kitchen.
   b. We paint our kitchen.

5. a. The planes landed at the airport.
   b. The planes land at the airport.

6. a. We wait for the train.
   b. We waited for the train.

7. a. We planned meals.
   b. We plan meals.

8. a. We washed our car.
   b. We wash our car.

9. a. They looked at the pictures.
   b. They look at the pictures.

10. a. The children play at school.
    b. The children played at school.

Pronunciation Manual – part 2

1. The verb *play* has one syllable and the past tense *played* also has only one syllable. Usually the *–ed* ending is just a consonant sound (C), not another syllable; the letter E is silent.

So, for example, *smiled* rhymes with *child*, even though *child* does not have a letter E before the D.

Listen to the rhymes. Notice that the *–ed* rhymes with either /t/ or /d/.

He looked round first,
And then reversed.
The car that passed
Was going fast.
It hit the side.
The driver cried.
He never guessed,
He'd passed the test.

2. Match the beginnings and ends of these rhymes.

1 The people queued	**a** was never found.
2 The thing you missed	**b** are on the board.
3 The man controlled	**c** and then she smiled.
4 She saw the child	**d** to build on sand.
5 The boat that crossed	**e** was on the list.
6 The man who drowned	**f** until she coughed.
7 The snow we rolled	**g** the nation's gold.
8 Her voice was soft	**h** to buy the food.
9 The points we scored	**i** was nearly lost.
10 We never planned	**j** was hard and cold.

3. Last week Jane Bradbury saw an accident from her office window. Later she told a friend about what she had seen. As you listen, decide which of these headlines appeared in the local newspaper the following day. (Pronunciation Tasks, Martin Hewings)

Man knocked down by speeding motorbike.

Man injured by ambulance.

Man and woman killed crossing road.

Man injured by car on crossing.

4. Listen below to the story again, and then try to retell the story. Some of the sentences below and the words in the box may help you. The missing words are all past tense *–ed* words.

Jane Bradbury was working in her office.
She ……………… to see what the weather was like.
She ……………… to the window and ……………… outside.
A car ……………… at the crossing.
A man and a woman ……………… to cross the road.
Another car drove over the crossing.
The woman ……………… out of the way.
The car ……………… her.
It ……………… down the man.
Jane ……………… for an ambulance and the police.
They ……………… quickly.
The ambulance men ……………… the woman to stand up.
They ……………… the man into the ambulance.
Jane ……………… what she had seen.
Later, the police ……………… the driver.

walked	stopped
knocked	phoned
jumped	arrived
wanted	started
looked	helped
explained	carried
arrested	missed

Pronunciation manual - Part 3

1. Work in pairs. Choose words from the box to complete these conversations. All the words end in *–ed*.

laughed	walked	rained	arrived	finished	mended
dropped	washed	passed	polluted	posted	

1. A: How was the weather?
   B: It ………….. all the time.

2. A: How did your glass break?
   B: I …………… it.

3. A: Why didn't you swim?
   B: the sea was ……………..

4. A: Your letter hasn't …………. yet.
   B: But I ……………. it on Tuesday.

5. A: When can I see the painting?
   B: Not until I've …………… it.

6. A: How did the driving test go?
   B: I …………..!

7 A: Was the film funny?
   B: Yes, I ……………. all the time.

8. A: Is it still broken?
   B: No, I've ………….. it.

9 A: This floor is dirty.
   B: But I …………………. yesterday.

10. A: You look tired.
   B: I've …………..all the way.

2. We pronounce the *–ed* ending on regular verbs in three different ways.
(Reference: Well Said)
Listen and write down what the *–ed* sounds like in the sentences below.

1. I project the profits.
   I proje*ted* the profits.   = _____

2. The labs close at eight.
   The labs clos*ed* at eight. = _____

3. They work at home.
4. They work*ed* at home.   = _____

Compare your answers above with the following rules.

☑   1. In verbs that end in /t/ or /d/, like proje**ct**, the *–ed* is spoken as an extra syllable /ɪ**d**/.

☑   2. In verbs that end in voiced sounds, like clo**s**e as a verb, the *–ed* sounds like the voiced /d/ as in dime.

☑   3. In verbs that end in voiceless sounds, like wor**k**, the *–ed* sounds like the voiceless /t/ in time.

3. PRONUNCIATION   Simple past *–ed* endings
A - Listen and practice. Notice the pronunciation of *–ed.*

/t/	/d/	/ ɪd/
worked	cleaned	invited
watched	stayed	visited
…………..	……………	……………
……………	……………	……………

B – Listen and write these verbs under the correct sounds.

cooked   exercised   listened   needed   shopped   waited

APPENDIX E – Pronunciation Manual for Training Group

UFSC/CCE/Programa de Pós-Graduação em Inglês
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Pronunciation Manual   - Part 1

1. CONVERSATION   I didn't study!
(Reference: Interchange Third Edition – Intro)

Listen and practice

Michael: Hi, Jennifer. Did you have a good weekend?

Jennifer: Well, I had a busy weekend, and I feel a little tired today.

Michael: Really? Why?

Jennifer: Well, on Saturday, I exercised in the morning. Then my roommate and I
        cleaned, did laundry, and shopped. And then I visited my parents.

Michael: So what did you do on Sunday?

Jennifer: I studied for the test all day.

Michael: Oh, no! Do we have a test today? I didn't study! I just watched television all
        weekend!

2. Listen. Sometimes the letter *e* in words ending in *–ed* is pronounced. But usually it is not. (Reference: Well Said – adapted)

Present + *-ed* = Past

rent	rented
☐	☐
need	needed
☐	☐
talk	talked
☐	☐
wash	washed
☐	☐
listen	listened
☐	☐
plan	planned
☐	☐

3. Listen. Clap once if you hear one syllable. Clap twice if you hear two syllables.

Painted	Added	Opened
Rented	Loaded	Walked
Counted	Landed	Cleaned
Planted	Needed	Closed

4. Write *–ed* after these verbs. Then say each word two times.

Extra syllable
    15. want……
    16. end……..
    17. add……..
    18. repeat…..
    19. visit…….
    20. wait…….
    21. lift………

No extra syllable
    22. rain…….
    23. talk…….
    24. wash……
    25. push……
    26. look……
    27. play……
    28. call…….

Pronunciation Manual – Part 2

1. Listen to the rhymes.

He looked round first,
And then reversed.
The car that passed
Was going fast.
It hit the side.
The driver cried.
He never guessed,
He'd passed the test.

2. Match the beginnings and ends of these rhymes.

1 The people queued	**a** was never found.
2 The thing you missed	**b** are on the board.
3 The man controlled	**c** and then she smiled.
4 She saw the child	**d** to build on sand.
5 The boat that crossed	**e** was on the list.
6 The man who drowned	**f** until she coughed.
7 The snow we rolled	**g** the nation's gold**.**
8 Her voice was soft	**h** to buy the food.
9 The points we scored	**i** was nearly lost.
10 We never planned	**j** was hard and cold.

3. Pair work: yesterday or every day?

1 Student A, says sentence **a** or **b**.
2 Student B, says "Every day" for present or "yesterday" for past.
3 Take turns saying sentences.

Examples

Student A: We plant flowers.
Student B: Everyday

Student B: We wanted a ride.
Student A: Yesterday.

1. a. We plant flowers.
   b. We planted flowers.

2. a. We wanted a ride.
   b. We want a ride.

3. a. I need more money.
   b. I needed more money.

4. a. We painted our kitchen.
   b. We paint our kitchen.

5. a. The planes landed at the airport.
   b. The planes land at the airport.

6. a. We wait for the train.
   b. We waited for the train.

7. a. We planned meals.
   b. We plan meals.

8. a. We washed our car.
   b. We wash our car.

9. a. They looked at the pictures.
   b. They look at the pictures.

10. a. The children play at school.
    b. The children played at school.

Pronunciation Manual – Part 3

1. Last week Jane Bradbury saw an accident from her office window. Later she told a friend about what she had seen. As you listen, decide which of these headlines appeared in the local newspaper the following day. (Pronunciation Tasks, Martin Hewings)

Man knocked down by speeding motorbike.

Man injured by ambulance.

Man and woman killed crossing road.

Man injured by car on crossing.

2. Listen below to the story again, and then try to retell the story. Some of the sentences below and the words in the box may help you. The missing words are all past tense –*ed* words.

Jane Bradbury was working in her office.
She ……………… to see what the weather was like.
She ……………… to the window and ……………… outside.
A car ……………… at the crossing.
A man and a woman ……………… to cross the road.
Another car drove over the crossing.
The woman ……………… out of the way.
The car ……………… her.
It ……………… down the man.
Jane ……………… for an ambulance and the police.
They ……………… quickly.
The ambulance men ……………… the woman to stand up.
They ……………… the man into the ambulance.
Jane ……………… what she had seen.
Later, the police ……………… the driver.

walked	stopped
knocked	phoned
jumped	arrived
wanted	started
looked	helped
explained	carried
arrested	missed

3. Work in pairs. Choose words from the box to complete these conversations. All the words end in –*ed.*

laughed	walked	rained	arrived	finished	mended
dropped	washed	passed	polluted	posted	

1. A: How was the weather?
   B: It ………….. all the time.

2. A: How did your glass break?
   B: I …………… it.

3. A: Why didn't you swim?
   B: the sea was ……………..

4. A: Your letter hasn't …………. yet.
   B: But I ……………. it on Tuesday.

5. A: When can I see the painting?
   B: Not until I've …………… it.
6. A: How did the driving test go?
   B: I …………..!

7 A: Was the film funny?
   B: Yes, I ……………. all the time.

8. A: Is it still broken?
   B: No, I've ………….. it.

9 A: This floor is dirty.
   B: But I …………………. yesterday.

10. A: You look tired.
   B: I've …………..all the way.

APPENDIX F
Assessment sheet for raters

Test: pretest (   ) posttest (   ) **Participant** _____

1	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
2	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
3	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
4	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
5	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
6	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
7	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
8	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
9	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
10	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
11	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
12	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
13	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
14	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
15	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission

16	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
17	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
18	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
19	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
20	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
21	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
22	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
23	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
24	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
25	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
26	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
27	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
28	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
29	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission
30	☐ Correct	☐ /I/ ed	☐ ed /I/	☐ /I/ ed /I/	☐ Omission