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## FACULTAD DE FILOSOFIA Y HUMANIDADES ESCUELA DE POSTGRADO

# PHONETIC ANALYSIS OF CONSONANTAL GROUPS IN THE BOUNDARIES OF WORDS AND IN WORD FINAL POSITION PRODUCED BY ESL STUDENTS IN THE ENGLISH LANGUAGE AND LITERATURE PROGRAMME AT UNIVERSIDAD DE CHILE. 

Tesis para optar al grado de Magíster en Lingüística con mención en Lengua Inglesa

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#### Abstract

Studies regarding the pronunciation of consonant groups have been carried out by many authors such as Roach (2000); Cruttenden (2008); O’Connor (1980). In Chile, researches done by Pilleux (1972); Montero (1979) and lately Bastías (2012) have summarized categories of difficulties when pronouncing consonant groups in word initial and final position; common errors produced by English learners when pronouncing consonant groups in word medial and final position and the conclusion that the more years of training in English language would not mean a better pronunciation of these English consonant groups in certain individuals, respectively.

This study aims at discovering and analysing the deviations produced by a group of English learners as a second language when pronouncing RP consonantal groups in word final position and in the boundaries of words. The corpus will include 20 sentences recorded by 28 students of the English language and literature undergraduate programme at Universidad de Chile. These 28 students include 14 individuals who belong to $2^{\text {nd }}$ year and 14 individuals who belong to $4^{\text {th }}$ year.

The information in this descriptive study is very useful for those teachers who work in the English Phonology area, since it may help them to know what are the deviances, the type of errors and the strategies they employ when pronouncing a consonant group of sounds in word final position or in the boundaries of words. Teachers might be able to organize and grade their class material and teaching strategies in order to reach the subject learning objectives effectively.


"Hard work doesn't guarantee success, but improves its chances"
BJ. Gupta

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## INTRODUCTION

Studies regarding the pronunciation of RP English consonant sequences have been the concern of many authors such as Roach (2000); Cruttenden (2008); O'Connor (1980) among others. Cruttenden, for example, states many restrictions regarding the production and distribution of consonant sounds that occur in groups, namely in final position. Considering the topic of juncture, he states that "some phonetic features may be retained, which mark word or morpheme boundaries" as he provides a series of examples claiming what are the main features that characterize the boundaries of the words implied.

On the other hand, O'Connor gives a very accurate description on how these consonant groups of sounds - whether they are in word final position or in the boundaries of words- should be carefully articulated. In the same way, he mentions some 'alterations' in sounds placed at the boundaries of words, where phenomena such as substitution and elision of some consonant sounds may occur in certain phonological contexts.

Roach, exemplifies in a very orderly way all of the possible combinations of consonant sounds in sequences placed at the end of words. Regarding the concept of juncture, he mentions that it "refers to the relationship between a sound and the sounds that immediately precede or follow it" Like O'Connor, he also describes the relevance of the realization of some features in certain sounds in the boundaries of words that determine the grammatical categories of the words involved. Roach also points up the importance of context, which makes clear where the boundary comes.

Studies about the English consonant groups produced by learners of English whose L1 is Spanish have been the concern of just a few academics. Professor Mauricio Pilleux in his work called "English Consonants Clusters and the Spanish speaking learner"(1972: 153) examined 15 English consonant groups, 3 initial and 12 final and the difficulties that some Spanish speakers find when producing them. Two categories were established: those English consonant groups whose awkward pronunciation change the meaning or produce a foreign accent and those English consonant groups that do not represent a problem for the student.

Professor Sonia Montero from the Department of Linguistics at Universidad de Chile, also carried out some studies regarding the English consonant sequences but this time, produced by English learners whose L1 is Chilean Spanish. In her "Notas sobre problemas de pronunciación de algunas combinaciones de consonantes en inglés"(1979:83) published in Lenguas Modernas, she examined English consonant sequences in medial and final position that cause problems when Chilean Spanish learners of English pronounce them. Montero summarizes the most common errors produced by these learners as elision, substitution and metathesis in phonemes in codal and other types of sequences, as well as dissolution in the sequence for vowel intersection.

Bastías (2012) in his MA thesis researched on English consonant groups in absolute initial position produced by English learners, students in the English Teaching programme at Universidad Bernardo O’ Higgins who had different levels of English. He concluded that these learners mainly used substitution and elision when pronouncing these types of consonant sounds and that the most used methodological strategies were Negative Transfer and Graphemic Interference. As he compared two groups of students with different levels of English, he expected that those learners who had spent more time in contact with the target language, produced less deviations when pronouncing the consonant sequences, however, he found that the more years of training in English language would not mean a better pronunciation of these English consonant groups.

Vivanco, H. (1982-1987) states that the erroneous pronunciation a Spanishspeaker would produce when pronouncing the phonic sequences of /marsterk/ will be different whether the individual is trying to pronounce "mice take" or "my steak". In both cases it could be possible the realization of $/ \mathrm{s} /$ as $[\mathrm{s}] \mathrm{o}[\mathrm{h}]$, but only in the second case an epenthetic [e] before [s] would be added. It is worth noticing that the main difference between both sequences is the location of the juncture, before or after $/ \mathrm{s} /$. This is the cause of the [e] insertion.

As portrayed in the previous paragraphs there have been just some studies regarding the English consonant groups considering initial, final and medial position, and
what is more, there have been just a couple of researches that present and describe the difficulties faced by English learners whose L1 is Chilean Spanish and the deviations that they produce. In the light of this, it would be interesting and useful to investigate about the characteristics of the phenomenon but this time posing the focus upon those English consonant groups of sounds that occur in final position as well as in the boundaries of words.

The information obtained in this descriptive study may be useful for those teachers and professors who work in the English Phonology area, since it may help them to know what are the deviances, the type of errors and the strategies students employ when pronouncing a consonant group of sounds in word final position or in the boundaries of words. By knowing the nature of the phenomenon, teachers and professors might be able to organize and grade their class material and teaching strategies in order to reach the subject learning objectives effectively.

This work may serve as a basis for later studies that may focus on the same phenomenon but this time in English learners that are native speakers of Chilean Spanish who learn the language in instructional settings such as high schools, elementary schools and higher education, where English is taught as an instrumental language. The nature of the phenomenon can also be studied in English learners who have learned the language in non- instructional settings, namely those ones who have learned it immersed in a natural English speaking environment. Another possibility for later studies could be works that research on the topic but considering another variant of English, such as General American.

## 1. RESEARCH QUESTIONS

- Are there any deviations in the pronunciation of RP English consonant groups ${ }^{1}$ in word final position and in the boundaries of words by learners belonging to the second and fourth year in the English language and literature undergraduate program at Universidad de Chile?
- What are the strategies employed by the English learners when pronouncing RP English consonant groups in word final position and in the boundaries of words?
- Is the achievement capacity of the learners proportional to the time that they have been exposed to the target language in formal academic training?


### 1.2 GENERAL OBJECTIVES

- To determine the occurrence of deviations in the pronunciation of RP English consonant groups in word final position and in the boundaries of words.
- To determine the strategies employed by the English learners when pronouncing RP English consonant groups in word final position and in the boundaries of words.
- To determine which learners' group produces more deviances when pronouncing RP English consonant groups in word final position and in the boundaries of words.

[^0]- To determine if the achievement capacity of the learners is proportional to the time they have been exposed to the target language in formal academic training, in case this is found so.


### 1.3 SPECIFIC OBJECTIVES

- To identify and characterize the deviations when learners belonging to the second and fourth year in the mentioned undergraduate programme pronounce RP English consonant groups in word final position and in the boundaries of words.
- To identify and characterize strategies employed by the English learners when pronouncing RP English consonant groups in word final position and in the boundaries of words.
- To identify the frequency of deviances' occurrence in both learners' groups when pronouncing RP English consonant groups in word final position and in the boundaries of words.
- To identify and characterize evidence supporting the idea that the achievement capacity of the learners is proportional to the time they have been exposed to the target language in formal academic training considering the subject matter of the study, in case this is found so.


## 2. THEORETICAL FRAMEWORK

### 2.1 Phonotactics and consonant groups

In order to know and understand all of the possible consonant sound combinations it is very important to explain the concept of Phonotactics, which refers to the restrictions of occurrence of all the possible sound sequences and syllable structures in a language as Roach (2009) explains:

It has often been observed that languages do not allow phonemes to appear in any order; a native speaker of English can figure out fairly easily that the sequence of phonemes $/$ streŋ $\theta \mathrm{s} /$ makes an English word ('strengths'), that the sequence /bleid3/ would be acceptable as an English word 'blage' although that word does not happen to exist, and that the sequence /lvm/ could not possibly be an English word. Knowledge of such facts is important in phonotactics, the study of sound sequences.(p.64)

Skandera and Burleigh (2011) also deal with the topic of phonotactics. They use the term 'Distribution' "as the range of environments in which a linguistic unit can occur" (p.67) They mention that "every language has restrictions on the distribution of phonemes within a syllable, morpheme or word. In English for example, / $\mathrm{y} /$ occurs only after some short vowels, more specifically $/ \mathrm{I}, \mathfrak{æ}, \Lambda, \mathrm{D} /$ and no words ends with the sequence /æh/" (p. 67)

About consonant clusters, the main topic regarded to in this study, they state:

Especially important, here, are the rules governing the possible sequences of consonants, i.e. consonants produced consecutively without an intervening vowel or pause, such as the initial /st/ in stir. Such consonant sequence is technically termed consonant cluster, or simply, cluster. Languages differ considerably in their tolerance for clusters: Hawaiian, for example, permits no clusters at all, and Japanese allows only a few clusters in word-internally. English, on the other hand, has numerous clusters and many of them are quite complex.

Cruttenden (2008) provides a description about these complex English consonant clusters. He states that "although the general pattern of word- initial and word- final phoneme sequences is plain, there are certain problems" as follows:

- " There are some sequences that are exemplified only by single words which are themselves of rare occurrence as for example /smj-/ smew, /gj-/ gules.
- There are some sequences that are exemplified only by their use in certain proper names, as for example /gw-/ Gwen (and various other names of Welch origin). Such sequences are generally included.
- There are some sequences that are exemplified only in recently imported foreign words, often themselves proper names, such as Schnapps and Schweppes, involving initial clusters beginning with/j/
- Sometimes a word or a group of words have more than one accepted pronunciation, one of which provides a unique sequence of phonemes. Thus width, breadth, hundredth have variants with $/ \mathrm{t} \theta /$ or $/ \mathrm{d} \theta /$; only the more common $/ \mathrm{t} \theta /$ is included in the word-initial and word- final phoneme sequences. Since $/ \mathrm{d} \theta /$ is the less common pronunciation and $/ \mathrm{t} \theta /$ follows a common pattern whereby all final clusters involving plosives, fricatives and affricates are either wholly voiceless or wholly voiced.
Words like French, range can be pronounced with $/ \mathrm{nt} \int$, nd3/ or $/ \mathrm{nf}$, $\mathrm{n}_{3} /$; again, since the former is more common, the possibility of the latter is excluded. On the other hand, though many speakers do not distinguish the final clusters of prince and prints the possibility is sufficiently widespread for both /-ns/ and /-nts/ to be considered as possible final clusters.
- An attempt to include sequences of consonant plus syllabic nasal or lateral would unnecessarily complicate the statement of word-final clusters; such sequences are therefore taken as a variant of $/ \mathrm{\partial} /$ plus nasal or lateral.
- The greater complexity of final consonant clusters is largely accounted for by the fact that final $/ \mathrm{t}, \mathrm{d}, \mathrm{s}, \mathrm{z} /$ frequently represent a suffixed morpheme (e.g possessive <-s>, or past tense <-ed>)

In the next charts, Cruttenden displays all of the possible combinations of consonant groups in final position.

## Final VCC

Final CC clusters pattern as follows


## Final VCCC

(a) Final VCCC clusters patterns as follows:
(i) Final /t/ preceded by one of the following sequences:

```
p+s
t + S
k+ s
d+ s
m+ p
n+s}\quadt
\eta+s, k
l+s, p, k, tf
s+ p,k
```

(ii) Final /d/ preceded by one of the following sequences

```
n+d3 z
l+d3,m,v
```

(iii) Final /s/ preceded by one of the following sequences

(iv) Final/z/ preceded by one of the following sequences

```
n+ d
l+b,d,m,n,v
```

(v) Final $/ \theta /$ preceded by one of the following sequences:

| $\mathrm{k}+$ |  |  |  | s |
| :--- | :--- | :--- | :--- | :--- |
| $\mathrm{n}+$ | t |  |  |  |
| $\mathrm{y}+$ |  | k |  |  |
| $1+$ |  |  | f |  |

According to Roach, these consonant groups consist of "onset", "nucleus" and "coda"

Schema 1


Schema 3

t

These schemas show a simple coda, exemplified in schema 1 and more complex codas in schemas 2 and 3. These last two examples represent one of the focuses of this study.

Regarding final consonant clusters Roach, points that there are two sorts of twoconsonant final clusters, one being final consonant preceded by a pre final consonant and the other final consonant followed by a post final consonant. The pre final consonants form a small set $/ \mathrm{m}, \mathrm{n}, \mathrm{\eta}, \mathrm{l}, \mathrm{s} / \mathrm{We}$ can see this in 'bump' /bımp/, 'bent' /bent/, 'bank' /bæŋk/ 'belt' /belt/, 'ask' /a:sk/ The post final consonants also form a small set /s, z, t, d, $\theta$ / example words are: ‘bets’ /bets/, ‘beds'/bedz/, 'backed’ /bækt/, 'bagged' /bægd/, 'eighth' /ett $\theta /$. These post- final consonants can often be identified as separate morphemes (though not always, e.g. 'axe' /æks/ is a single morpheme and its final $/ \mathrm{s} /$ has no separate meaning) A point of pronunciation can be pointed out here: the
release of the first plosive of a plosive - plus- plosive cluster as the g (of gd) in /bægd/ or the k (of $/ \mathrm{kt} /$ in /bækt/) is usually without plosion and is therefore practicable inaudible.

There are two types of final-consonant cluster; the first is pre final plus post final, as set out in the following table taken from Roach (2009)
PRE - FINAL FINAL POST- FINAL

| 'helped' | he | l | p | t |
| :--- | :---: | :---: | :---: | :---: |
| 'banks' | bæ | y | k | s |
| 'bonds' | bv | n | d | z |
| 'twelfth' | tw | 1 | f | $\theta$ |

The second type shows more than one post final consonant can occur in a final cluster: final plus post final 1 plus post final 2 . Post final 2 is again one of $/ \mathrm{s}, \mathrm{z}, \mathrm{t}, \mathrm{d}, ~ \theta /$

## PRE FINAL FINAL POST FINAL 1 POST FINAL 2

| 'fifths' | fi | - | f | $\theta$ | s |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 'next' | ne | - | $k$ | s | t |
| 'lapsed' | læ | - | p | s | t |

Most four- consonant clusters can be analyzed as consisting of a final consonant preceded by a pre-final and followed by post final 1 and post final 2 , as shown below:

|  |  |  | POST FINAL | POST FINAL |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | PRE - FINAL | FINAL | $\mathbf{1}$ | $\mathbf{2}$ |
| 'twelfths' | twe | 1 | f | $\theta$ | s |
| 'prompts' | pro | m | p | t | s |

A small number of cases seem to require different analysis, as consisting of a final consonant with no pre final three post finals:

| PRE |  | POST | POST | POST |
| :---: | :---: | :---: | :---: | :--- |
| FINAL | FINAL | FINAL 1 | FINAL 2 | FINAL 3 |


| 'sixths' | si | - | k | s | $\theta$ | s |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 'texts' | te | - | $k$ | s | t | s |

### 2.2 Comparison between the English syllabic structure and the Spanish syllabic structure

As mentioned before the post nuclear English syllabic margin is much more complex than the Spanish one, as in English there may occur up to four consonant sounds after the nucleus as it is shown in this schema taken from Roach (2009)


Finch and Ortiz (1982) compare the English syllable structure and the Spanish syllable structure. They describe important differences:
a) " The simplest syllable structure in both English and Spanish is V (i.e. one vowel by itself) but whereas the English syllable may take up to three consonants before the vowel, and up to four after it, Spanish can only take two consonants before, and oneexceptionally two- after. This can be expressed as follows:

English syllable: (CCC) V (CCCC) - e.g. spray, texts

Spanish syllable: (CC) V (CC) - e.g. trans-cri-bir
b) P. Delattre (in Finch and Ortiz 1982) gives the following figures for the four most frequent syllable types, which show that Spanish clearly favours the CV type:

|  | CVC | VC | CV | CCV |
| :--- | :---: | :---: | :---: | :---: |
| English | $31,8 \%$ | $11,9 \%$ | $27,6 \%$ | $4,0 \%$ |
| Spanish | $19,8 \%$ | $3,1 \%$ | $55,6 \%$ | $10,2 \%$ |

c) Whereas in English there is a predominance of closed syllables, the ones ending in C represent $60 \%$, Spanish strongly favours open syllables, those ending in V, representing $72 \%$.

In the light of this, the number of possibilities of consonant clusters in word initial and word final positions in the two languages is:
CCV CCCV VCC VCCC VCCCC

| English | 20 | 3 | 96 | 173 | 62 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Spanish | 12 | 0 | 0 | 0 | 0 |

### 2.3 Juncture

Roach (2009) defines juncture as the relationship between one sound and the sounds that immediately precede or follow it. The point here is how we differentiate between sequences in connected speech as for example the utterance /arskri:m/ may be understood as "I scream" or "ice-cream" or for example the utterance /anerm/ can be understood as "an aim" or "a name" among millions of other examples. In the light of this, Firth (1948) mentions the concept of "junction prosodies" entailing those features and combinations of features whose occurrence sets a boundary between structural units. Prague's school also mentioned this type of features and called them 'Grenzsignale', boundaries signals. Trubetzkoy (1939) also used the concept of Grenzsignale of the negative kind, which according to Sommerstein (1977:59) they are "elements and combinations of elements whose presence states that there is no boundary (of a certain kind) in the environment. According to Mounin (1982:107), "Americans consider juncture as a suprasegmental phenomenon (...) Unlike the terminology used by Martinet, Americans include in the concept of juncture phoneme the boundaries of words"

Regarding to this, Selkirk (1986) explains that "Standard Generative Theory, following American structural linguistics' steps, represents some of these relations between segments as 'juncture elements' or boundaries, stating that these ones are by themselves segments that take place between the truly phonological segments in the strictly lineal disposition of the phonological representation" (p. 5)

Skandera and Burgleigh (2011) describe four ways of noticing juncture such as pauses and hesitation noises; boundaries signalled by restrictions in the distribution of phonemes, suprasegmental features and phonetic processes that occur at the beginning or end of linguistic units:

Firstly the most obvious junctural features, or boundary signals, are of course pauses, including pauses filled with hesitation noises such as 'er' and 'um', but pauses are less common than is widely assumed... Secondly, at the phonological level, linguistic boundaries are marked by restrictions on the possible positions and combinations of phonemes... Thirdly... linguistic boundaries are signalled by the
suprasegmental features of loudness, pitch, and duration which are components of stress and thus shape intonation of connected speech. And fourthly, what maybe the most reliable boundary signals are the rule- governed phonetic processes that take place when phonemes occur at the beginning or end of linguistic units, such as the partial devoicing of some lenis consonants in word- initial positions, and the full devoicing of these consonants in word- final position. In other words, maybe the most reliable clues as to how to distinguish the separate words of an utterance come from allophones in complementary distribution. (p.61)

Regarding this last point, Cruttenden (2008) states:
Phonetic features may be retained which mark a word or morpheme boundaries. Thus the phonemic sequence /pi:sto:ks/ may mean 'peace talks' or 'pea stalk' according to the situation of the word boundaries (i.e. /pi:s $+\mathrm{to}: \mathrm{ks} /$ or /pi: +sto:ks /) In this case if the boundary occurs between /s/ and /t/ the identity of the words 'peace' and 'talks' maybe established by reduced /i:/ (in a syllable closed by a voiceless consonant) and by the aspiration of /t/ on the other hand, if the boundary occurs between /i:/ and $/ \mathrm{s} /$, this maybe signalled by the relatively full length of /i:/ (in an open word final syllable) and by the unaspirated allophone of /t/ (following a $/ \mathrm{s} /$ in the same syllable as well as by the stronger $/ \mathrm{s} /$ )

Roach (2000) also provides more examples of minimal pairs where he describes the phonetic features that mark the boundaries, however he also points that the context in which words occur helps to notice the boundaries and in this case the information about juncture is redundant. Skandera and Burleigh (2011) explain that juncture is also related to the idea of transition between syllables, words or clauses, situation that overlaps with the concept of liaison and some linguists include it as a part of juncture.

On the other hand, it is worth mentioning that not all of the languages have the same 'juncture patterns' and in some of them, the transition between one sound to another can be very clear and sharp and in other instances, that transition can flow without a clear division between the sounds involved.

Some American phonologists gave so much importance to this phenomenon since they claimed the existence of a 'juncture phoneme' which was criticized by Daniel Jones (1952). In Mounin's Diccionario de la Linguistica (1982), he points that "it is generally referred to juncture when in a word there is a boundary of moneme or
morpheme. This phenomenon is similar to the virtual pause, although this one is realized in the boundaries of two words" (p.107)

In the case of the Spanish language, Harris (1983) mentions that "Spanish provides an example in which a morphological generalization depends on the syllabic structure" as he considers that the suffix allomorph of the diminutive depends on the number of syllables of the base word, so for instance, the diminutive of "padre" is "padrecito" and not "padrito" while for "compadre" is "compadrito" and not "compadrecito". In short, some authors consider that on the phonological side, the morphemes might be units that match a syllable or a syllable sequence and that considering the degree of connection that they have with the neighbouring sound there will be different types of juncture.

Skandera and Burleigh (2011) make a distinction and describe each type of juncture as follows:

There have been several attempts to establish a typology of junctures. The most common one is based on the notion of 'open' and 'close'. Junctural features at a word boundary are referred to as open juncture... If that word boundary is not preceded or followed by a pause, i.e. if the words on both sides of the boundary are run together, we speak of internal open juncture. The sequences night rate, for example has internal open juncture between $/ \mathrm{t} /$ and $/ \mathrm{r} /$, and it is the location of the internal open juncture that distinguishes a name from an aim. If the word boundary is preceded or followed by a pause, i.e. if the word boundary occurs at the beginning or at the end of an utterance, we speak of external open juncture. The "normal" transitions between sounds within a word, on the other hand are referred to as close juncture... The word nitrate, then, has a close juncture between /t/ and /r/

Vivanco C. and Vivanco H. (1993) in their arcticle "Algunas consideraciones acerca de la juntura fonética" in Taller de letras, state that the type of juncture influences the pronunciation of segments joined or separated by it. Let us consider the realization of $/ \mathrm{s} /$ that precedes $/ \mathrm{a} / \mathrm{in} / \mathrm{sal} /$. In 'sal' the only possible realization of $/ \mathrm{s} / \mathrm{in}$ standard Spanish is [s]. In 'Dos amigos' and in 'Aquí tienes los dos'. Ambos son buenos', /s/ might be pronounced [s], [h] and still it could be elided, depending on the situational context in which the communicative act is carried out" (p.136)

Regarding the aspect about the realization of certain phonemes in Spanish Vivanco H. (1987) points that "the pronunciation errors produced by a Spanish speaker
in the phonic sequence /masterk/ would be different whether the individual is trying to pronounce 'mice take' or 'my steak'. While in both cases it would be possible the realization of /s/ as [s] or [h] only in the second case he/she would add an epenthetic [e] before $/ \mathrm{s} /$. It is worth to mention that the main difference between both sequences is the juncture's location, before or after $/ \mathrm{s} /$. This simple fact causes the [e] insertion". (p. 83)

### 2.4 Deviations in the pronunciation of consonant groups.

Corder (1981) has set up a taxonomy in which he distinguishes four types of errors: "errors of omission -where some element is omitted which should be presentnamely Elision; errors of addition - where some element is present which should not be there- namely Addition; errors of selection - where wrong item has been chosen in place of the right one, namely Substitution and errors of ordering - where elements presented are correct but wrongly sequenced, namely Metathesis." (p.36)

Likewise, professor Vivanco, C. (1991) elaborated a taxonomy in which she identifies and describes the main problems that English learners as a foreign languagewhose native language is Chilean Spanish- might face when pronouncing different consonant sounds. Regarding this topic specifically, it is worth mentioning that she distinguishes between Consonant Clusters and Consonant sequences. The former are defined as a combination of consonants within the same word, where it is necessary to determine the number of elements, identify the segments and the place of the cluster in the word. On the other hand, the latter refers to one or more consonants present at the boundaries of words.

Vivanco, C. (1991) in Bastías 2012, explains:

### 2.4.1 a) Addition of a vowel sound in front of the consonant group in order to

 facilitate the pronunciation. Example: Spanish /spanif/*[esp]*[ehp]For example <school> contains the consonant group/sk/ which does not occur in Spanish, since the syllabic structure is different from the English one. Consequently a Spanish speaker will tend to perceive $/ \mathrm{s} /$ and $/ \mathrm{k} /$ as belonging to different syllables. That is why Spanish speakers will add a vowel sound in order to make it similar to the pronunciation they are familiar with.

### 2.4.1 b) Addition of an element in the consonant group. Example: isn't/znt/ *[sent]

Like the previous case, the speaker adds a vowel sound in the group /znt/ in order to be similar to the Spanish syllabic structure.
2.4.2 Substitution of one of the elements of the consonant group. Example: isn't/znt/ *[snt]

In this case, the group /znt/ presents a sound that is not included in the phonological Spanish inventory, thus the speaker substitutes the sound for another one of similar characteristics. In the example above the substituted sound differs from the right one in the position of the vocal folds.

### 2.4.3 Elision of one of the elements of the consonant group. Example: isn't/znt/ *[sn]

In this example, it can be noticed how Spanish interferes with the production of the consonant group /znt/ where the speaker elides the last phoneme as the sequence CCC does not occur in Spanish.

### 2.4.4 Reordering of the elements of the group. Example: Beds *[besd]

There are some cases where Spanish speakers change the order of the elements of the consonant group in final position.

Phenomena of addition, substitution, elision and metathesis will be used to classify the possible instances of deviances in the pronunciation of a certain consonant group. In this case the focus will be posed on consonant groups in final position as well as in the boundaries of words.

### 2.5 Interlanguage and Second Language Acquisition

There is a period during the process of second language acquisition, where the L2 is not completely acquired yet and there is evidence stating the influence of L1. In the light of this and as this work aims at researching the possible errors and the strategies that ESL students employ when pronouncing consonant groups, it is relevant to know more about this concept and what it involves.

The concept of interlanguage has taken different names according to different authors, as for example Corder names it as "Transitional Competence"; "Aproximative system" by Nemser (1974), "Interlanguage" by Selinker (1972) and "Interligua" by James (1977) All of these notions of interlanguage point to a common aspect: an intermediate state of language which is different from the mother tongue system and different from the target language also. These systems may vary according to the learner's level of competence.

For the purpose of this research, the five processes also known as strategies described by Selinker (In Richards 1974) will be considered:
2.5.1 Language Transfer: It refers to all of the "fossilizable items, rules and subsystems which occur in the interlanguage performance as a result of the native language influence". For example: The use of / $/ /$ and $/ \mathrm{t} / /$ in Spanish as they are allophones of a same phoneme, but they are significant in English, see 'cheep' and ‘sheep'
2.5.2 Transfer of Training: It refers to the "fossilizable items, rules and subsystems which occur in the interlanguage performance as a result of identifiable items in training procedures".

To exemplify this, the author mentions that Serbo- Croatian speakers at all levels of English proficiency produce 'he' on almost every occasion wherever he or she would be called for according to the norm of English. This is due to the fact that most of the textbooks and teachers presented drills with 'he' and never with 'she'.
2.5.3 Strategies of second language learning: They refer to the "fossilizable items, rules and subsystems which occur in the interlanguage performance as a result of an identifiable approach by the learner to the material to be learned".

An example is the case of Indian speakers of English, who have adopted the strategy that all verbs are either transitive or intransitive, producing language forms such as ' $I$ 'm feeling thirsty' or 'Don't worry, I'm hearing him'. Here the adopted strategy is that the aspect marker always ends in -ing on its surface.
2.5.4 Strategies of Second Language Communication: They refer to those "fossilizable items, rules and subsystems which occur in the interlanguage performance as a result of an identifiable approach by the learner to communication with native speakers of the target language". The author mentions as an example the fact that some language learners may avoid grammatical formatives such as articles, plural forms and past tense forms. This is because language learners feel very anxious when attempting to communicate with native speakers without hesitation and they also consider that certain words are not relevant when transmitting the message.
2.5.5 Overgeneralization of TL linguistic material: It refers to those "fossilizable items, rules and subsystems which occur in the interlanguage performance as a result of clear overgeneralization of rules of the target language and semantic features". For example, the use of the past tense morpheme -ed in regular verbs might be widespread to a context that could be quite reasonable for the student to use it, 'What did he intended to say?'

Selinker also points that "combinations of these processes produce what we might term entirely fossilized Interlanguage performance"

In order to classify the different strategies employed by the individuals in this study, the strategies used in the research ""Analysis of the deviant pronunciations of some brand names in English by Chilean speakers" by Vivanco, H. (2001) will be used. The taxonomy presented in this work refers to the psychological mechanisms employed by individuals when producing deviations:

- Negative Transfer: it refers to the influence that mother tongue has on the second language.
- Graphemic Interference: it refers to the orthography influencing the pronunciation.
- Overgeneralization: it refers to the instances when the speaker applies a special rule in cases where is not needed.
- Overpronunciation: it refers to the speaker who does not pronounce correctly based on the assumption that a specific pronunciation is correct or sounds better.


## 3. METHODOLOGY

This study is descriptive and considers a qualitative and quantitative approach. In terms of design, it is regarded as non experimental.

### 3.1 Participants

The participants- aged between 18 and 24 -were twenty students of $2^{\text {nd }}$ and fifteen students of $4^{\text {th }}$ year in the English language and literature programme at Universidad de Chile. The variable of gender was not considered for the study's purpose.

At first, these participants were chosen at random to read the material prepared for the study, however, learners who are bilingual, namely, those ones who had lived in an English-speaking country or those ones who had studied in high schools where all of the subjects were taught in English, were excluded. Consequently, this study is based on the readings of fourteen students from $2^{\text {nd }}$ year and fourteen students from $4^{\text {th }}$ year.

### 3.2 Corpus and Elicitation tool

The Corpus to be analysed is composed of twenty sentences elaborated by the researcher especially for this study. These sentences were created taking into account some references from the book English Pronunciation Practice by Arnold and Gimson and Longman's Pronunciation Dictionary being carefully focused on the consonant groups in the boundaries of words and in word-final position that may cause some pronunciation difficulties for the individuals based on the taxonomy proposed by Professor Vivanco, C (1991) which has been used in several postgraduate and undergraduate Universidad de Chile's theses regarding the topic of consonant sounds in the field of Phonology.

The elicitation tool begins with twenty sentences which contain consonant groups in the boundaries and at the end of words to be read silently first. The second page contains five questions which enquire the subject's name and about the participant's approach to the English language or English language background and, finally, there are the twenty sentences to be read aloud by the student.

### 3.4 Data Collection

One by one the students came to the Phonetics laboratory at Universidad de Chile and they were given the elicitation tool mentioned in the previous section. First, the student read the sentences silently and then the recording began when he/she answered the questions, saying the letter of each of the questions at the beginning to be identified latter on. Next, the individual proceeded to read the twenty sentences aloud, saying their number firstly. The recording was carried out using a Sony Vaio laptop with a microphone and a headset connected to it. Each of the recordings, if necessary, was treated with some filters in order to increase the volume or reduce it, using COOL edit Pro 2.1 sound editor software. This treatment permitted to have an aural material much clearer at the moment of transcribing it.

The recorded readings were listened to in order to detect and transcribe phonetically the deviations in the pronunciation of consonant sounds produced by each individual.

In order to carry out this transcription symbols corresponding to the IPA alphabet were used.

## 4. DATA ANALYSIS

Once the data was gotten and all the instances of deviances were transcribed, it could be possible to report the results.

### 4.1 General results presentation

Of out 5.152 total instances of potential deviances, namely consonant sounds in the boundaries of words and consonant sounds in word- final position, which correspond to the $100 \%$, there were found 1.310 instances where individuals did not pronounce the consonant group ideally. This corresponds to $25 \%$

Graphic 1.
Total percentages of deviations versus correct pronunciations


- Correct pronunciations

■ Deviant pronunciations

The details according each type of deviation can be seen in the table below

Table. 1

| Deviation | Number of instances <br> found | Percentages |
| :---: | :---: | :---: |
| Substitutions | 778 | $59,3 \%$ |
| Elisions | 281 | $21,5 \%$ |
| Additions | 239 | $18,3 \%$ |
| Metathesis | 12 | $0,9 \%$ |
| TOTAL | $\mathbf{1 . 3 1 0}$ | $100 \%$ |

Graphic 2.
Deviations' Global Distribution


As it can be seen in this graphic, the most frequent deviation produced by all of the individuals in the contexts previously stated was the substitution of one the elements of the consonant group.

Regarding the type of strategies used by individuals at a global level; the results are explained as it follows.

Table. 2

| Strategy | Number of instances <br> detected | Percentage |
| :--- | :---: | :---: |
| Negative transfer | 965 | $73,4 \%$ |
| Graphemic interference | 246 | $18,7 \%$ |
| Overpronunciation | 80 | $6,1 \%$ |
| Overgeneralization | 0 | $0 \%$ |
| Unclassified | 23 | $1,8 \%$ |
| Total | $\mathbf{1 . 3 1 4}$ | $100 \%$ |

Graphic 3.

## Strategies' Distribution of Percentages



According to this chart, the strategy most used by these individuals is negative transfer, followed by graphemic interference. There were found 80 instances of overpronunciation and no cases of overgeneralization. Cases of deviances which did not fall into the previous categories were amounted to a category called "Unclassified" with 23 cases.

### 4.2 Results according to the individual's level

It is very important to know the distribution of the deviations according to the individual's level of English since this variable is related to one of the research questions: Is the achievement capacity of the learners proportional to the time that they have been exposed to the target language in formal academic training?

### 4.2.1 Second Year Individuals

The chart below summarizes the deviations results produced by students in the second year of the English Language and Literature programme at Universidad de Chile.

Table. 3

| Deviation | Number of instances <br> detected | Percentage |
| :---: | :---: | :---: |
| Substitution | 424 | $56 \%$ |
| Addition | 165 | $21,4 \%$ |
| Elision | 164 | $21,3 \%$ |
| Metathesis | 11 | $1,3 \%$ |
| Total | $\mathbf{7 6 4}$ | $100 \%$ |

Graphic 4.


According to the graphic, the highest percentage of deviations corresponds to the phenomenon of substitution. Similar percentages in addition and elision are the types of deviations that follow, with $21,4 \%$ and $21,3 \%$ respectively.

The strategies most used by the individuals belonging to the second year are summarized in the table below.

Table 5.

| Strategy | Number of instances <br> detected | Percentage |
| :--- | :---: | :---: |
| Negative transfer | 607 | $74,7 \%$ |
| Graphemic interference | 163 | $20 \%$ |
| Overpronunciation | 26 | $3,2 \%$ |
| Overgeneralization | 0 | $0 \%$ |
| Unclassified | 17 | $2,1 \%$ |
| Total | $\mathbf{8 1 3}$ | $100 \%$ |

Graphic 5.

## Strategies' distribution



According to this data, the methodological strategy most used is negative transfer where the L1 rules of the mother tongue are transferred to the one that is being learnt. For example, the voiced, alveolar, fricative [z] was realized as [s] since the former sound does not belong to the sounds inventory of the Chilean Spanish.

### 4.2.2 Fourth Year Students

The deviation results of the students belonging to the $4^{\text {th }}$ year of the English Language and Literature programme at Universidad de Chile are displayed in the chart below.

Table 6.

| Deviation | Number of instances detected | Percentage |
| :---: | :---: | :---: |
| Substitution | 354 | $64,8 \%$ |
| Elision | 117 | $21,4 \%$ |
| Addition | 74 | $13,6 \%$ |
| Metathesis | 1 | $0,2 \%$ |
| Total | $\mathbf{5 4 6}$ | $100 \%$ |

Graphic 6.
Percentages of Deviations $4^{\text {th }}$ Year


Comparing the data from individuals in the $2^{\text {nd }}$ year (table. 3) and data from individuals in $4^{\text {th }}$ year (table. 6) it is possible to establish that all of the types of deviations diminished in the number of instances. For example, 398 instances of substitution were produced by $2^{\text {nd }}$ year students. $4^{\text {th }}$ year students produced 354 instances. A bit more drastic is the fall in cases of elision, addition and metathesis. The former one fell from 164 cases to 117 ; the second one fell from 165 to 74 and the latter one from 11 to 1 only.
$4^{\text {th }}$ year students' strategies and their percentages are shown in table 7 below.

Table 7.

| Strategy | Number of instances <br> detected | Percentage |
| :--- | :---: | :---: |
| Negative transfer | 358 | $71,5 \%$ |
| Graphemic interference | 83 | $16,6 \%$ |
| Overpronunciation | 54 | $10,7 \%$ |
| Overgeneralization | 0 | $0 \%$ |
| Unclassified | 6 | $1,2 \%$ |
| Total | $\mathbf{5 0 1}$ | $100 \%$ |

Graphic 7.

## Strategies' distribution



Like the results from students in $2^{\text {nd }}$ year, the strategy most used by students in $4^{\text {th }}$ year is also negative transfer with $71,5 \%$. Down below, graphemic interference is the next one with $16,6 \%$.

### 4.3 General view of the results by level

Graphic 8.


Taking into account the first research question proposed, which inquired about the existence of deviations in learners belonging to the second and fourth year in the English Language and Literature programme at Universidad de Chile when pronouncing RP English consonant groups in word- final position and in the boundaries of words, graphic 8 displays that the deviations produced by these individuals are: substitution, addition, elision, and metathesis.

Considering the last research question, which inquires whether the achievement capacity of learners is proportional to the time that they have been exposed to the target language in formal academic training and the data displayed in graphic 8 , it is possible to conclude that the relationship between the exposure to the target language and the achievement capacity is directly proportional.

Let us take into account the phenomenon of substitution. While students from second year produced 424 cases of this deviation, there is a drop in the number of cases in fourth- year students with 354 instances. Looking at the second most frequent case of
deviation, addition, the behaviour was regular as in the previous phenomenon. While second-year students produced 165 instances of this deviation, fourth- year students produced only 74 instances.

The drop in the cases of deviances such as elision and metathesis is as dramatic as the previous cases, where 164 instances were detected in case of second- year students and 117 instances in fourth- year students for the former deviation, and 11 metathesis instances versus 1 instance found in fourth- year pronunciations.

Graphic 9.


The second research question, "what strategies are employed by the English learners when pronouncing RP English consonant groups in word final position and in the boundaries of words", is answered by the data displayed in graphic 9, where negative transfer, graphemic interference and overgeneralization are shown as the methodological strategies employed by second and fourth year students when their pronunciation deviated from the target form.

In two of the most frequent strategies employed by these individuals, can be seen a regular behaviour, while in second- year students' pronunciations, 607 instances of negative transfer were detected, that number diminished in fourth- year students with 358 instances of this strategy. A less dramatic change but still regular behaviour was detected in the case of graphemic interference strategy, where second- year individuals' pronunciations showed 163 instances of graphemic interference and fourth-year individual's pronunciation showed 83 instances.

An irregular behaviour was detected in the case of the overpronuciation strategy, where in fourth- year students' pronunciation 54 instances of this strategy were identified and in second- year students' pronunciation only 26 instances were identified.

No instances of overgeneralization were detected in the pronunciations of these individuals and there is a small amount of cases that could not be analysed using the taxonomies employed in this study. These are 23 instances that account for a $1,8 \%$ of the used strategies.

Some examples of unclassified errors are:

- "bottled wine" /tld/ /w/ whose consonants are realized [tl $\varnothing][\mathrm{w}]$
- "will shred" /l//[r/ whose consonants are realized [1] [ erd ]
- "toilet's tiles" /ts/ /t/ whose consonants are realized [st] [t]
- "the tray"/tr/ whose consonants are realized [str]
- "gardens"/dnz/ whose consonants are realized [rðers]


### 4.4 Analysis according to the type of error

This part of the analysis was conducted considering the type of error, the characterizations and frequency of occurrence in each of the groups of individuals considered to carry out this study.

### 4.5 Second Year Learners Deviations

### 4.5.1 Second Year Learners: Substitution

As it was mentioned in a previous section the type of error with the highest rate of occurrence was substitution in second-year as well a fourth year's pronunciations. Table 8 , below, displays information about the phonemes most substituted in secondyear student's pronunciations.

The most substituted phonemes were fricatives with 323 substitutions, then plosives with 64 instances, affricates with 27 and in last place nasals with only 10 instances of substitution.

Table 8

| Phonemes substituted | Number of instances <br> found | Percentages |
| :---: | :---: | :---: |
| Fricatives | 323 | $76,2 \%$ |
| Plosives | 64 | $15 \%$ |
| Affricates | 27 | $6,4 \%$ |
| Nasals | 10 | $2,4 \%$ |
| TOTAL | $\mathbf{4 2 4}$ | $100 \%$ |

Graphic 10


Next section will give information about the actual fricative sounds substituted.
4.5.1.1 Substituted Sounds: Fricatives

Graphic 11.


As it can be seen in the pie chart above the highest number of substitutions found in the pronunciations of second-year students corresponded to the phoneme $/ \mathrm{z} /$
with $79,2 \%$. The behaviour of this fricative sound substitution was quite uniform, since all of the mispronounced sounds were [ s ] as in "times better" in which the consonant group in the boundaries of words $/ \mathrm{mz} \mathrm{b} /$ was realized as [ms b]. Another example of this case occurred in the boundaries of words consonant groups in "fields as" /ldz/, realized as [lds]. One last example of this phoneme substitution was found in word final position, as in "attractions" $/ \mathrm{k} \int \mathrm{nz} /$ which was pronounced $\left[\mathrm{k} \int \mathrm{ons}\right]$.

Far below in second place, with $11,4 \% / v /$ is found. This target sound was replaced by $[\beta]$ in most of the instances in the pronunciations of these individuals, as in "travel to" /vl t/ which was mispronounced [ $\beta \mathrm{el} \mathrm{t}]$; "shrivelled sadly" /vld $\mathrm{s} /$ pronounced [ $\beta$ eled s] and in "shelves" /lvz/ being mispronounced $[1 \beta s]$.

The third most frequent substituted fricative sound was $/ \theta /$ with $3,6 \%$. This phoneme substitution was found in the utterance "twelfth night" /lf0 $\mathrm{n} /$ realized as [lft n ]. In the consonant group of "months in" $/ \mathrm{n} \theta \mathrm{s} /$ was also realized as [nts] and in consonant groups at the end of a word, it was found in "sixth" /ks0/ pronounced [kst].

It is worth mentioning that these three phonemes are sounds that are not present in the sound inventory of the Chilean variant of Spanish; this is the reason why secondyear learners may have substituted them for a counterpart sound present in Chilean Spanish.

In fourth place is phoneme $/ \mathrm{h} /$ with $3,1 \%$. This phoneme has a regular pattern of substitution being replaced in all of the instances by [x] as the following sound was a back vowel. Examples of this substitution were found in utterances such as "and had" /n h/ being realized as [ $\eta \mathrm{x}$ ] The same case was found in "Charles hasn't" /lz h/ being pronounced [ls x]

In fifth and sixth place there are $/ J /$ and $/ \delta /$ with $1,5 \%$ and $1,2 \%$ of occurrence frequency, respectively. The former phoneme was realized [t $f$ ] in most of the instances, as for example in, "smashed to" / $\mathrm{ft} \mathrm{t} /$ being pronounced [ t ed t ], however there is one instance where the target sound is realized as [tj], as in "reception for" /pfn f/ being pronounced [ptjomf].

Phoneme / $/$ / has three different realizations. In two occasions it was realized as $/ \theta /$ as in "breathed" $/ \delta d /$ being pronounced $[\theta \phi]$. In another instance it was realized as [ $\mathrm{t}^{\mathrm{h}}$ ] in the utterance "thanked them" / $\mathrm{ykt} \delta /$ and it was pronounced $\left[\mathrm{gk} \varnothing \mathrm{t}^{\mathrm{h}}\right.$ ]. The last
realization of this phoneme found was [d] in "breathed"/ $\partial \mathrm{d} /$, being mispronounced [ded].

It is worth mentioning that these three last sounds are present in Chilean Spanish although they occur in a different distribution, that is the case of $/ \mathrm{h} /$ and $/ \delta /$, or it occurs in free variation such as / $\mathrm{J} /$.

### 4.5.1.2 Substituted Sounds: Plosive

Graphic 12.


This pie chart displays that the most substituted plosive sound is / $\mathrm{d} /$, which in most of the cases was replaced by / $\delta /$ as for example in the cluster "bored tourists" /d/ /t/ being realized as [reð t], same case in "needed help" /d/ /h/ that was realized as [Ø h]. In another phonological context, in "breathed" / $\partial \mathrm{d} /$ was realized as [ðеð]

The second most substituted phoneme was /b/, which in all of the cases was substituted by its fricative counterpart. Some examples of this substitution were found in utterances like "double rooms" /bl/ /r/ realized [ $\beta 1 \mathrm{r}$ ] or in "clubs are" /bz/ realized [ $\beta \mathrm{s}]$.

The third most substituted phoneme was /t/ which in almost all of the instances was realized as [d] as in "helped me" /lpt/ /m/ which was mispronounced [lped m], same case happened in "approached to"/[t/ /t/ that was realized like [ $\int \mathrm{ed} \mathrm{t}$ ] or in "smashed to" / $\mathrm{ft} / \mathrm{lt} /$ mispronounced [ Jed t ].

The fourth mispronounced phoneme was $/ \mathrm{k} /$ with only two instances of substitutions. In "uncle" / $\mathfrak{\jmath k l}$ /, this phoneme was realized as [ ggl$]$ and in "blinked" $/ \mathrm{\jmath kt} /$ it was realized like[ŋced].

### 4.5.1.3 Substituted Sounds: Affricates

Graphic 13.


The main affricate sound substituted was /d3/ which had three different realizations: [t]], [g], [ []]. In "strange dream" /nd3/ /dr/ was mispronounced as [nt d dr] and $\left[\mathrm{n} \int \mathrm{d} I\right.$ ]. In word- final position context, "obliged" /d3d/ was mispronounced [ [d],[gerð] and [ [d]. Another example in this same context, "changed" /nd3d/ was pronounced $\left[\mathrm{g} \mathrm{t} \int \mathrm{t}\right]$ or $\left[\mathrm{n} \int \mathrm{t}\right]$.

There was found only one case of substitution for the phoneme /tr/, this was realized as [tl] in "his trip" /z/ /tr/ that was mispronounced as [s tl].

### 4.5.1.4 Substituted Sounds: Nasals

Graphic 14.


The phoneme $/ \mathrm{y} /$ was substituted in 10 instances, being realized [ n ] and [ n ]. Examples of that realization were found in "drinking some" $/ \mathrm{y} / / \mathrm{s} /$ that was realized [ n s ], in "frightening dream" $/ \mathrm{y} / / \mathrm{dr} /$ as [n d.I] or in "song spent" $\mathrm{n} /$ /sp/ being realized as [n esp]. In "saying they", $\mathrm{n} / / \delta /$ was realized as $[\mathrm{n} \mathrm{d}]$.

With only two instances of substitution, /n/ was found, as for example in "and had" $/ \mathrm{n} / \mathrm{h} / \mathrm{h}$ that was realized as [ n x ]

### 4.6 Strategies used by Second Year learners in Substitutions

### 4.6.1 Strategies when substituting Fricative sounds

Graphic 15.


When producing substitution of fricative sounds the most used strategy by second- year individuals was negative transfer. There were 260 instances of this strategy used when /z/ was realized as [s] and 31 instances of negative transfer when substituting the phoneme $/ \mathrm{v} /$ for $[\mathrm{b}]$. Fewer instances of this strategy were found when individuals substituted / $\theta /$.

It is relevant to notice that these three sounds do not belong to the sound inventory of the Chilean Spanish that is why these language learners used negative transfer, substituting all those phonemes by using sounds that are familiar for them.

There were found 5 instances of this strategy when replacing $/ \mathrm{f} /$ and just 1 instance when replacing $/ \delta /$. Unlike the three first phonemes substituted above, these two fricative sounds do belong to the Chilean Spanish sound's inventory. / // is in free variation with its affricate counterpart, that would explain the fact that it was substituted by [ t$]$ ] in all of the instances. The same explanation goes for the occurrence of [d] substituting / $\delta /$, since the latter is an allophone of /d/ in Chilean Spanish.

### 4.6.2 Strategies when substituting Plosive sounds

Graphic 16.


Like in the substitution of fricatives, negative transfer is also the most used strategy, with a total of 33 instances that correspond to a $51,6 \%$. This strategy was used 20 times when replacing /b/ by its fricative counterpart [ $\beta$ ] as for example in "double rooms" /bl/ /r/ where it was pronounced [ $\beta 1 \mathrm{r}$ ] or in "clubs are" /bz/ where it was mispronounced $[\beta \mathrm{s}]$. Another example counts for the substitution of $/ \mathrm{d} /$ which was realized as [ $\delta$ ] and [ t$]$ in seven and in three instances respectively, as in "cricket drinking" /t/ /dr/ mispronounced [t ðr] or in "drowned but" /nd/ /b/ realized [neð b].

In "smashed to" or in "approached to"/ft//t/ being realized [ fed t$]$.
In second place, there is a combination of graphemic interference and at the same time negative transfer, with 16 instances that correspond to a $25 \%$. Here there are instances where /t/ is substituted by [d] and /d/ is mispronounced as [ $\delta$ ]. For example, in "dropped three" /pt/ /日r/ was realized [pd $\theta \mathrm{r}$ ] or in "smashed to" /ft/ /t/ that was mispronounced [ t ed t ]; in "bored tourists" /d/ /t/ was realized [reð t], the same happened in "conditioned double"/[nd/ /d/ was realized [ [ neð d].

In third place cases of overpronunciation were found with 8 instances corresponding to $12,5 \%$. Some examples representing these cases were found in
"change" /ndzd/ being pronounced $[\eta t f t]$, in "thanked them" $/ \mathrm{nkt} / \delta /$ being pronounced [ $\mathrm{\eta ks}$ ð], in "strange dream" /nd $3 / / \mathrm{dr} /$ was realized [ $\mathrm{nt} \int \mathrm{fr}$ ].

In fourth place there are cases of graphemic interference. These are 6 instances which corresponded to $9,4 \%$. Examples portraying this case were found in "bored tourists" /d/ /t/ being pronounced [r t], in "approached to" and "smashed to"/ $\mathrm{ft} / \mathrm{tt}$ both were pronounced [ $[\mathrm{ed} \mathrm{t}$ ]

In the last place just one unclassified case was found, that represented $1,6 \%$ in "spectacles" /klz/ being pronounced [ktl].

### 4.6.3 Strategies when substituting Affricate sounds

Graphic 17.


In first place, 18 instances overpronunciation were found corresponding to $58,1 \%$. An example of this strategy was found in "strange dream"/nd3/ /dr/ was realized [ $\left.\mathrm{nt} \int \mathrm{d} . \mathrm{I}\right]$ and $\left[\mathrm{n} \int \mathrm{d} . \mathrm{I}\right]$.

In second place, solely 9 instances of graphemic interference were found corresponding to $29 \%$. An example of this case was found in "obliged" /d3d/ was realized [ged].

In third place, 3 instances of negative transfer were found representing $9,7 \%$. One of the examples was in "his trip" /z/ /tr/ that was pronounced [s tl] or in "obliged" $/ \mathrm{d} 3 \mathrm{~d} /$ that was pronounced [gerð].

Finally a case of negative transfer and graphemic interference was found, that corresponded to a $3,2 \%$. The example is in "obliged" /d3d/ being pronounced [geid]

### 4.6.4 Strategies when substituting Nasal sounds

Graphic 18.


When analysing nasal sounds, 9 instances of negative transfer were found and just one of graphemic interference. Some examples representing these strategies used when substituting nasal sound were found in "saying they" $/ \mathrm{m} / \mathrm{/} / \mathrm{d}$ that was mispronounced [n d], in "song spent" $/ \mathrm{y} / / \mathrm{sp} /$ that was realized as [ n esp], in "and had" $\mathrm{n} / \mathrm{h} / \mathrm{h} /$ that was pronounced $[\mathrm{n} \mathrm{x}$ ], in "spring_on" $\mathrm{y} /$ being realized $[\mathrm{n}]$ and in "blinked" $/ \mathrm{\eta kt}$ / that was pronounced [ $\mathfrak{y c e d}$ ].

### 4.7 Second Year learners: Addition

The second most produced deviation by second- year students is addition. The table below displays the percentages and numbers of the added type of sounds.

Table 9.

| Added sounds | Number of instances <br> found | Percentages |
| :---: | :---: | :---: |
| Vowel sounds | 141 | $85,5 \%$ |
| Flap | 13 | $7,9 \%$ |
| Diphthongs | 5 | $3 \%$ |
| Lateral | 2 | $1,2 \%$ |
| Fricative | 2 | $1,2 \%$ |
| Functional word | 2 | $1,2 \%$ |
| TOTAL | $\mathbf{1 6 5}$ | $100 \%$ |

Graphic 19.


Next section will give information about each of the sounds added.

### 4.7.1 Added Sounds: Vowels

Graphic 20.


Out of the vowel sounds, the most added was /e/ with 100 instances that correspond to $70,9 \%$. Included in these instances, there were cases of epenthetic $/ \mathrm{e} / \mathrm{in}$ "song spent" $/ \mathrm{\eta} / / \mathrm{sp} /$ that was realized [ $\mathrm{\eta}$ esp], in "steak smelt" /k/ /sm/ that was realized [k esm], in "next story" /kst/ /st/ that was realized [kst est], in "next spring" /kst/ /spr/ being realized [k espr], in "small square" /l/ /skw/ being realized [ 1 eskw ], in "my steak" /st/ mispronounced [est], in "the small"/sm/ that was mispronounced [esm].

Considering other cases where also /e/ was added, examples were found in "travel to" /vl/ /t/ being pronounced [ $\beta \mathrm{el} \mathrm{t}$ ], in "conditioned double" / $\mathrm{nd} / / \mathrm{d} /$ being mispronounced [ [joned d], in "bronzed suns" /nzd/ /s/ realized [nsed s], in "complained about" /nd/ realized [ned] and in "blinked" or "breathed" that was mispronounced [ $\mathrm{\eta ced}$ ] and [ðеð].

The second place is for / $\mathrm{o} /$ additions with 25 instances that correspond to $17,8 \%$. Some examples of these addition were found in utterances like "reception for" /pfn/ /f/ being realized [pJom f], in "attractions" /kjnz/ being realized [kJons] and in "Brighton" /tn/ realized [ton].

The third place is for $/ \mathrm{u} /$ with 8 additions that correspond to $5,7 \%$. This addition was found in "careful" /fl/ realized [ful].

The fourth place is for $/ \mathrm{I} /$ addition with 7 instances that correspond to $4,9 \%$. Some examples of it were found in "available shrimp" /bl/ / $\mathrm{rr} /$ realized [lı $\beta$ ] [ rr ], in "my steak"/st/ realized [ist], in "glimpse" /mps/ being realized [msi] and in "obliged" /dzd/ realized [gid].

The last place is for the only one instance in which / / was added. That corresponds to $0,7 \%$ and it was detected in the utterance "in second" $/ \mathrm{n} / / \mathrm{s} /$ that was realized [n $\begin{aligned} & \text { s }] \text { ]. }\end{aligned}$

### 4.7.2 Added Sounds: Flap

The second most added type of sound found was / $\mathrm{r} / .13$ instances were found in which this sound was added, that correspond to $7,9 \%$ (see graphic 19)

The examples regarding this addition were detected in "there was" /ez/ /w/ being realized [er w], in "their gardens" /ez/ /g/ being realized [er g], in "yours that's" /z/ / $\delta /$ realized [rs $\delta$ ], in "burnt fields" /nt/ /f/ realized [rm f], in "papers on" /z/ realized [rs] and no examples were identified in final position.

### 4.7.3 Added Sounds: Diphthongs

The third most added type of sounds were diphthongs or glides / jo/ and /eI/ with 3 instances and 2 instances that correspond to 3\% (see graphic 19).

Examples regarding these two sounds added were found in "conditioned double" $/ \mathrm{nd} / / \mathrm{d} /$ being realized [ $[$ joned d ] and in "obliged" /d3d/ being realized [geIð].

### 4.7.4 Added Sounds minor percentages: Lateral, Fricative and Functional Word

These three additions were identified to occur in 2 instances each, that correspond to $1,2 \%$ (see graphic 19) and with that percentage they are in last place.

Examples of /l/ addition were identified in "wouldn't forget" /dnt/ /f/ that was realized [ldnt f].

Examples of /s/ addition were detected in "dream like"/m/ /l/ realized [ms l] and in "the tray" /tr/ realized [str].

The functional word whose sounds were added was "will" since students should have pronounced the abbreviation of it in "Tom'll travel" /ml/ /tr/ realized [m wil tr].

### 4.8 Strategies used by Second Year learners in Additions

### 4.8.1 Strategies when adding vowel sounds

Graphic 21.


Considering the addition of vowel sounds, the most used strategy was a combination of negative transfer and graphemic interference with 58 instances that correspond to $41,1 \%$. The addition of /e/ was used in 39 instances, /o/ in 11 instances and $/ \mathrm{u} /$ in 8 instances.

Some examples accounting for these strategies were found in "bored tourists" /d/ /t/ realized [red t], "travel to" /vl/ /t/ realized [ $\beta \mathrm{el} \mathrm{t}]$, in "conditioned double" / $\mathrm{fnd} / / \mathrm{d} /$ realized []joned d], "complained about"/nd/ realized [ned], in "reception for"/pfn/ /f/ realized [pJom f], in "Brighton"/tn/ realized [ton] and in "careful" /fl/ realized [ful].

The examples above were considered as using negative transfer and graphemic interference at the same time since individuals might not be able to pronounce the
consonant groups involved so they needed to add a vowel sound as it is the normal combination in their L1 and at the same time this addition was considered graphemic interference because they pronounced it just like the orthographic representation.

In the second place were found those additions where purely negative transfer was used, with 41 instances that corresponded to $29,1 \%$. Adding /e/ was used in 33 instances, / $\mathrm{o} /$ in 5 instances and $/ \mathrm{I} /$ in 3 instances.

Some examples accounting for this strategy were found in "song spent" $\mathrm{\eta} / / \mathrm{sp} /$ realized [ $\eta$ esp], in "steak smelt" $/ \mathrm{k} / / \mathrm{sm} /$ realized [k esm] , in "next story" /kst/ /st/ realized [kst est] , in "small square" /l/ /skw/ realized [1 eskw]. In all these examples the ephetentic /e/ is used since individuals reproduced what is known for them in Spanish, as adding this sound to separate the cluster, becoming similar to words like "escuadra", "escuela", "estadio".

Examples of addition of other vowels were found in "reception for" / $\mathrm{p} \mathrm{n} / \mathrm{n} / \mathrm{f} /$ realized [Jom f], in "available shrimp" /bl/ / r r/ realized [ $\beta 1 \mathrm{l}$ Jr], in " my steak"/st/ realized [est] and in "obliged" /d3d/ realized [gid] or [ged].

In the third place were found those additions where purely graphemic interference was used with 40 instances that correspond to $28,4 \%$. Addition of /e/ was used in 28 instances, of $/ \mathrm{o} /$ in 9 and of $/ \mathrm{I} /$ in 3 instances.

Some examples accounting for this strategy were found in "thanked them" / $\mathrm{gkt} /$ / $\delta /$ realized [ $\eta$ ket $\varnothing$ ], in "bored tourists" /d/ /t/ realized [reð t], in "gardens" /dnz/ realized [dens], in "obliged" $/ \mathrm{d} 3 \mathrm{~d} /$ realized [gid] or [ged], in "blinked" $/ \mathrm{ykt} /$ realized [ $\mathrm{\eta ced}$ ], in "breathed" / $\delta \mathrm{d} /$ realized [ $\partial \mathrm{e} \varnothing]$, in "attractions" $/ \mathrm{k} \int \mathrm{nz} /$ realized $[\mathrm{kJons}]$ and in "glimpse" $/ \mathrm{mps} /$ realized [møse] or [møsI].

In the last place were found two unclassified cases in "in second" $/ \mathrm{n} / / \mathrm{s} /$ realized $\left[\begin{array}{ll}\mathrm{n} & \mathrm{s}\end{array}\right]$ and in "available shrimp" $/ \mathrm{bl} / / / \mathrm{r} /$ realized $[\mathrm{lr} \beta \mathrm{fr}]$.

### 4.8. 2 Strategies when adding a Flap sound

Graphic 22.


The first place was for additions of flap using graphemic interference, with 10 instances that correspond to $76,9 \%$. Some examples were found in "yours that's" /z/ /ס/ realized [rs ס], in "bored tourists" /d/ /t/ realized [red t], in "burnt fields"/nt/ /f/ realized $[\mathrm{rm} \mathrm{f}]$, in "there was" $/ \mathrm{e}$ / /w/ realized [ər w] and in "papers on" $/ \mathrm{z} /$ realized [rs].

In the second place only with 2 instances were for additions of flap using negative transfer purely, that corresponds to $15,4 \%$. Examples of this were found in "their gardens" /ea/ /g/realized [er g].

In the third place with only 1 instance was an addition of flap using both negative transfer and graphemic interference, that corresponds to $7,7 \%$. The example was found in "guard mulcts" $/ \mathrm{d} / / \mathrm{m} /$ realized [ rm ].

### 4.8.3 Strategies when adding Diphthongs

Graphic 23.


There were 3 instances of the addition of diphthongs where individuals used negative transfer and graphemic interference at the same time, as in "conditioned double" / $\mathrm{fnd} / / \mathrm{d} /$ realized [ $[$ joned d].

There were 2 instances of addition of diphthongs were individuals used only graphemic interference like in "obliged" /d3d/realized [gerð].

### 4.8.4 Strategies when adding Lateral, Fricative and Functional Word.

Graphic 24.


The two additions of /l/ were detected using graphemic interference in "wouldn't forget" /dnt/ /f/ that was realized [ldnt f].

The only two additions of [wil] were detected using negative transfer as apparently the individuals were not able to pronounce the consonant groups in "Tom'll travel" $/ \mathrm{ml} / / \mathrm{tr} /$ being realized [m wil tr].

And two unclassified instances of /s/ addition were detected in "dream like" /m/ $/ 1 /$ realized [ms l] and in "the tray" $/ \mathrm{tr} /$ realized [str].

### 4.9 Second Year learners: Elisions

Table 10.

| Elided phonemes | Number of instances <br> found | Percentages |
| :---: | :---: | :---: |
| Fricatives | 93 | $56,7 \%$ |
| Plosives | 61 | $37,2 \%$ |
| Laterals | 8 | $4,9 \%$ |
| Trill | 1 | $0,6 \%$ |
| Affricate | 1 | $0,6 \%$ |
| TOTAL | $\mathbf{1 6 4}$ | $100 \%$ |

Graphic 25.


Next section will give information about the actual fricative sounds elided.

### 4.9.1 Elided Sounds: Fricatives

Graphic 26.


First place is for /s/ that was elided in 49 instances which correspond to $52,7 \%$ Some examples of this elision were found in utterances such as "tourists complained" /sts/ /k/ realized [st k], "almost stayed"/st/ /st/ being realized [st]. There were found three similar cases in utterances like "rooms saying" /mz/ /s/ realized [m s], "stores security" /s/ /s/ realized [s],"famous song"/s/ /s/ realized [s], in these latter cases the elision occurred in the boundaries of words that end and begin with the alveolar sound, so in all of the cases the first alveolar element in the group was elided.

Some examples of elided /s/ in final position were found in utterances like "lists" /sts/ being realized [st] and in "texts" /ksts/ realized [kst].

Second place is for $/ \theta /$ that was elided in 25 instances which correspond to $26,8 \%$. Some examples of these elisions were found in the boundaries of words like in "twelfth night" /lf日/ /n/ being realized [lf n], in "month trip" /nӨ/ /tr/ realized [n tr], in "months in" /n n s/ being realized [ns]

In final position this sound was elided in "sixth" $/ \mathrm{ks} \theta /$ realized [ks] and in "twelfths" /lffs/ being realized[lfs].

Third place is for $/ \mathrm{z} /$ being elided in 18 instances that correspond to $19,4 \%$. Some examples of this elision were found in utterances like "Britain's the"/nz/ / / / being pronounced [n d], in "friends from"/ndz/ /fr/ realized [nd fr] in "uncles sent" / $\mathfrak{j k l z /} / \mathrm{s} /$ being realized [ $\mathrm{\eta kl} \mathrm{~s}]$.

In final position, /z/ was elided in utterances such as "attractions" /kjnz/ being realized [kJon] and in "tiles" /lz/ realized [1].

In the last place the elision of $/ \delta /$ was detected with only one instance. The utterance where this sound was elided was "breathed" $/ \delta \mathrm{d} /$ mispronounced [d].

### 4.9.2 Elided Sounds: Plosives

Graphic 27.


The first place is for /d/ which in 35 instances was elided, that correspond to $57,4 \%$. Some examples of this elision were found in "bottled wine" /tld//w/ realized [tl w], in "needed help" /d/ /h/ being mispronounced [h], in "guard mulcts" /d/ /m/ was realized [r m], in "complained about" /nd/ was realized [n], in "weekend at" /nd/ was realized [ n ].

In final position the elision of this sound was found in "breathed" / $\partial \mathrm{d} /$ that was realized [ $\delta$ ] and in "cold" /ld/ that was realized [l].

The second place is for $/ \mathrm{p} /$ that was elided in 16 instances that correspond to $26,2 \%$. Some examples of this elision were found in "shrimp on" $/ \mathrm{mp} /$ that was realized [m] and in final position was found in "glimpse" /mps/ being mispronounced [ms].

The third place is for $/ t /$ that was elided in 9 instances that correspond to $14,8 \%$. Some examples of this elision were found in "Bates stayed" /ts/ /st/ being realized [s st], in "burnt fields" /nt/ /f/ being realized [rm f], in "fruits and" /ts/ was realized [s]. In final position was found in "product" /kt/ being pronounced [k] and in "blinked" / $\mathrm{jkt} /$ being pronounced[ $\mathrm{\jmath k}]$.

The last place is for $/ \mathrm{k} /$ that was elided in only one instance in "picnic with" /k/ $/ \mathrm{w} /$ being realized [w].

### 4.9.3 Other Elided Sounds: Lateral, Trill and Affricate

Graphic 28.


In eight instances /l/ was elided, this corresponds to $80 \%$. The elision of this phoneme was found in "Tom'll travel" $/ \mathrm{ml} / / \mathrm{tr} /$ that was realized [m t.r], in "available shrimp" /bl/ / /r/ being realized [b fr].
/r/ and /d3/ were elided in just one instance respectively. The former was elided in "will shred" /l/ / [r/ being pronounced [1 J] and the latter one was elided in "strange dream" /nd3/ /dr/ being mispronounced [ n d. $]$.

### 4.10 Strategies used by Second Year learners in Elisions

### 4.10.1 Strategies when producing elisions

Graphic 29.


In the 164 cases of elisions, second- year individuals used negative transfer in 158 instances which correspond to $96,3 \%$ and only in 6 instances they produced elisions that were identified as unclassified. This happened in the utterance "bottled wine" /tld/ /w/ that was realized [tl w]. This latter realization does not correspond to any realization that may occur in Chilean Spanish as this is not a consonant combination that often happens, so that it was determined as unclassified.

Most of these negative transfer instances were detected as elisions which the individual is used to produce in their native Chilean Spanish as for example the elision
of $/ \mathrm{s} /$ in the boundaries of words, "tourists complained" $/ \mathrm{sts} / \mathrm{k} / \mathrm{realized}[\mathrm{st} \mathrm{k}]$, or in final position like in "lists" [st] or "texts" [kst]

There was also noticed that fricative sounds that do not belong to the sound's inventory of Chilean Spanish were also frequently elided as for example in "belongs to" $/ \mathrm{gz} / / \mathrm{t} /$ that was realized [ $\mathrm{\eta} \mathrm{t}]$, in "tiles" [l] or in "twelfth night" /lf $\theta / / \mathrm{n} /$ that was realized [lf n ] or in "attractions" $/ \mathrm{k}$ [nz/ where it was realized [ $\mathrm{k} \int$ on]

Another example of negative transfer elisions produced by these individuals are the omission of plosives, which is also a very common phenomenon detected in Chilean Spanish speakers as in "guard mulcts" [r m], in "wild cruise" [l kr], in "calmed and" $[\mathrm{lm}]$ or in "breathed" $[\varnothing]$ in final position.

### 4.11 Second Year Learners: Segment Metathesis

Graphic 30.


6 unclassified instances were found. All these instances represent a $54,5 \%$ and they were found in "bronzed suns" /nzd/ /s/ realized [sen s], in "available shrimp" $/ \mathrm{bl} / / \mathrm{r} \mathrm{r} /$ realized $[\mathrm{lr} \beta \mathrm{r} \mathrm{r}]$, in "that's not" /ts/ /n/ realized [st n], in "toilet's tiles" /ts/ /t/ realized [st t] and in "spectacles" $/ \mathrm{klz} /$ realized [ktl].

5 instances were found where the segment metathesis was used because of negative transfer. These instances represent a $45,5 \%$ and they were found in the utterance "will shred" /l/ / r r/ that was realized [1 Serd]. Here, individuals were not possibly familiar with the consonant combination $/ \mathrm{fr} /$ that is why they anticipate the closest vowel sound.

### 4.12 Fourth Year Learners deviations

### 4.12.1 Fourth Year Learners: Substitution

As it was mentioned in a previous section the type of error with the highest rate of occurrence was substitution in second-year as well as fourth year's pronunciations. Table 11, below, displays information about the phonemes most substituted in fourthyear student's pronunciations.

The most substituted phonemes were fricatives with 305 substitutions, then affricates with 27 instances, plosives with 19 instances and nasals with only 3 instances.

Table 11.

| Phonemes substituted | Number of instances <br> found | Percentages |
| :---: | :---: | :---: |
| Fricatives | 305 | $86,2 \%$ |
| Affricates | 27 | $7,6 \%$ |
| Plosives | 19 | $5,4 \%$ |
| Nasals | 3 | $0,8 \%$ |
| TOTAL | $\mathbf{3 5 4}$ | $100 \%$ |

Graphic 31.


Next section will account for all the fricative sounds substituted.

### 4.12.1.1 Substituted sounds: Fricatives

Graphic 32.


As it can be seen in the pie chart above the highest number of substitutions found in the pronunciations of fourth-year students corresponded to the phoneme $/ \mathrm{z} /$ with $86,6 \%$. The behaviour of this fricative sound substitution was quite uniform, since all of the mispronounced sounds were realized [s] as it was found in "times better" /mz/ /b/ realized [ms b], in "rooms saying" /mz/ /s/ realized [ms s], in " belongs to" /nz/ /t/ realized [ gs t ], in "meals from" /lz/ /fr/ realized [ls fr], in "fields as" /ldz/ realized [lds] or in "tiles" /lz/ realized [ls] or "spectacles"/klz/ realized [kls].

The second place is for $/ \theta /$ substitutions with 19 instances that correspond to 6,2\%. This substitution was found in utterances like "month trip" /n $\theta / / \mathrm{tr} /$ realized [nt tr], in "twelfth night" /lf $\theta / / \mathrm{n} /$ realized [lft n], in "dropped three" /pt/ $\theta \mathrm{r} /$ realized [p tr] and in "months in" $/ \mathrm{n} \theta \mathrm{s} /$ realized [nts].

The third place is for /v/ substitutions with 14 instances that correspond to 4,6\%. Some examples of this phoneme's substitution were found in "travel to" /vl/ /t/ realized [ $\beta \mathrm{el} \mathrm{t}]$, in "shrivelled sadly" $/ \mathrm{vld} / / \mathrm{s} /$ realized [ $\beta$ eled s ], in "twelve month" $/ \mathrm{lv} / / \mathrm{m} /$ realized [lf m] and in "shelves" /lvz/ realized [lbs].

The fourth place is for $/ \delta /$ substitutions with 7 instances that correspond to $2,3 \%$. Some examples of this substitution were found in "spend the" $/ \mathrm{nd} / / \delta /$ realized $[\mathrm{nd} \mathrm{d}$, in "and they" $/ n / / \delta /$ realized $[\mathrm{n} \mathrm{d}]$, in "on the" or in "in the" $/ \mathrm{n} / / \delta /$ realized $[\mathrm{nd} \mathrm{d}$.

The fifth place is for /f/ substitution, corresponding to $0,3 \%$ and was found in "twelfths" /lfӨs/ realized [lfts].

### 4.12.1.2 Substituted Sounds: Affricates

Graphic 33.


The second place of deviation's occurrence is the substitution of affricates. 26 instances of $/ \mathrm{d} 3 /$ substitutions were detected, representing $96,3 \%$. Some examples of this phoneme's substitution were identified in "strange dream" /nd3/ /dr/ realized $\left[\mathrm{nt} \int \mathrm{dr}\right]$ or $\left[\mathrm{n} \int \mathrm{d} . \mathrm{I}\right]$, in "obliged" $/ \mathrm{d} 3 \mathrm{~d} /$ realized [gid], $[\mathrm{t} \mathrm{t}]$ and $[\mathrm{gd}]$ and in "changed" $/ \mathrm{nd} 3 \mathrm{~d} /$ realized $[\mathrm{n} f \mathrm{t}]$, $\left[\mathrm{n} \int \mathrm{d}\right]$ and [ nt ft$]$.

Only one / $\mathrm{t} /$ / substitution was found that represents $3,7 \%$. This deviation was found inthe utterance "rich uncle" /t $f /$ realized [ $t$ ].

### 4.12.1.3 Substituted Sounds: Plosives

Graphic. 34


The third place of deviation's occurrence is the substituion of plosives. 17 instances of /d/ substitution were found corresponding to $89,5 \%$. This substitution was found in utterances like "bronzed suns" /nzd/ /s/ realized [nst s], in "bored tourists" /d/ /t/ realized [r t], in "inside the" /d/ / $\delta /$ realized [ð ð]and in "obliged" /d3d/ realized [ $\mathrm{t} f \mathrm{t}$ ] or [d3t].

Only two instances of $/ \mathrm{t} /$ substitution were found corresponding to $10,5 \%$. This substitution was found in utterances like "approached to" / $\mathrm{tt} / \mathrm{t} /$ realized [ $\left.\int \mathrm{ed} \mathrm{t}\right]$ and in "tourists complained" /sts/ /k/ realized [ss k].

### 4.12.1.4 Substituted Sounds: Nasals

The last place of the substituted sounds is for nasal substitutions, with only 3 instances that correspond to $0,8 \%$ (see graphic 31 ).

These substitutions were found in utterances like "allowing him" $\mathrm{y} / \mathrm{h} / \mathrm{h} /$ realized [ n h ] and in "frightening dream" $/ \mathrm{y} / / \mathrm{dr} /$ realized [ n d. $]$.

### 4.13 Strategies used by Fourth Year Learners in Substitutions

### 4.13.1 Strategies when substituting fricatives

Graphic 35.


When producing substitution of fricative sounds the most used strategy by fourth- year individuals was negative transfer. There were 260 instances of this strategy used when /z/ was realized as [s], 9 instances of negative transfer when pronouncing the phoneme $/ \mathrm{v} /$ as $[\mathrm{b}]$ and 7 instances when substituting $/ \delta /$.

It is relevant to notice that these three sounds do not belong to the sounds inventory of Chilean Spanish. That is why these language learners used negative transfer, substituting all those phonemes by using sounds that are familiar for them.

Far below in graphic 35, there are all those substitutions in which graphemic interference was used. There were 20 instances of this strategy that correspond to 6,6\%. 16 instances were found where / $\theta$ / was substituted by [ t$]$ as a product of graphemic interference. Examples of utterances showing this are "month trip", "twelfth night" and "months in". In 4 instances /z/ was substituted by [s] in the utterance "yours that's".

7 instances were found where individuals used overpronunciation as strategy, 5 instances when substituting $/ \mathrm{v} /$ by $[\beta]$ or $[\mathrm{b}]$ and one when substituting /f/ by [ $\beta$ ].

Examples of the former substitution where found in utterances like "twelve-month" and in "twelfths".

Finally there were 2 instances in which negative transfer and graphemic interference were used at the same time. That represents $0,6 \%$. Examples of these strategies were found in "dropped three" where $/ \theta /$ was substituted by [t]

### 4.13.2 Strategies when substituting affricate sounds

Graphic 36.


With 20 instances, overpronunciation was detected as the highest mostly used strategy substituting affricate sounds, representing $74,1 \%$. Examples of this strategy were found in utterances like "strange dream", "changed", "obliged" where /d3/ was substituted by [t $]$ ], [ []], [t]] respectively.

6 instances were detected where graphemic interference was used when substituting /d3/ in "obliged" being realized [g].

Finally one unclassified case was detected in "rich uncles" in which /t $\int /$ was substituted for [t]

### 4.13.3 Strategies when Substituting Plosive Sounds

Graphic 37.


15 instances were found where overpronunciation was used. This corresponds to $75 \%$. This strategy was found when /d/ was substituted in "bored tourists", "changed", "obliged" and in "changed".

Only 4 instances were detected where negative transfer was used. This corresponds to $20 \%$. This strategy was found when /d/ and /t/ where substituted by [ $\varnothing$ ] in "inside the" and [d] in "approached to" respectively.

One unclassified case was detected in "tourists complained" where /t/ was realized as [s]

### 4.13.4 Strategies when Substituting Nasal Sounds

All of the / $\mathrm{g} /$ substitutions were produced using negative transfer. This was found in utterances like "allowing him" and in "frightening dream" where / $\mathrm{y} /$ was substituted by [n].

This substitution due to negative transfer may lie in the fact that $/ \mathrm{\eta} /$ in Chilean Spanish does not occur in that distribution and it is an allophone of $/ \mathrm{n} /$ that occurs when a velar sound follows.

### 4.14 Fourth Year Learners: Elisions

The second most produced deviation by fourth-year students was elision.

Table 12.

| Elided phonemes | Number of instances <br> found | Percentages |
| :---: | :---: | :---: |
| Fricatives | 62 | $53 \%$ |
| Plosives | 46 | $39,3 \%$ |
| Lateral | 5 | $4,3 \%$ |
| Nasal | 2 | $1,7 \%$ |
| Affricate | 1 | $0,9 \%$ |
| Trill | 1 | $0,9 \%$ |
| TOTAL | $\mathbf{1 1 7}$ | $100 \%$ |

Graphic 38.


Next section will give details about each of the elided phonemes

### 4.14.1 Elided Sounds: Fricatives

Graphic 39.


The first place is for $/ \mathrm{s} /$ with 47 elisions that correspond to $76 \%$. Some examples of this elision were found in "famous song" /s/ /s/ realized [s], in "store's security" /s/ /s/ realized [s], in "next story" /kst/ /st/ realized [k st], in "lists" /sts/ realized [st] and in "texts" /ksts/ realized [kst]

The second place is for $/ \mathrm{z} /$ with 9 elisions that correspond to $14 \%$. Examples regarding this elision were found in utterances like "friends from"/ndz/ /fr/ realized [nd fr], in "uncles sent"/ $\mathfrak{y k l z /} / \mathrm{s} /$ realized $[\mathrm{\eta kl} \mathrm{~s}$ ] and in "meals from" /lz/ /fr/ realized [1 fr].

The third place is for $/ \theta /$ with 6 elisions that correspond to $10 \%$. Examples regarding this elision were identified in utterances like "fifth floor" /ft $\theta / / \mathrm{fl} /$ realized [ft fl], in "month trip" /n $/ / \mathrm{tr} /$ realized [ n tr$]$, in "sixth" $/ \mathrm{ks} \theta /$ realized $[\mathrm{ks}]$ and in "twelfths" /lfӨs/ realized [lf s].

### 4.14.2 Elided Sounds: Plosives

Graphic 40.


The first place is for /t/ elisions with 27 instances that correspond to $58 \%$. Examples of this elision were found in utterances like "next spring" /kst/ /spr/ realized [k spr], in "almost stayed" /st//st/ realized [s st], and in "product" /kt/ realized [k].

The second place is for /d/ elisions with 18 instances that correspond to $39 \%$. Some examples were found in utterances like "bottled wine" /tld//w/ realized [tl w] "drowned but" /nd/ /b/ realized [m b], "weekend at" /nd/ realized [n], "complained about" /nd/ realized [ n ] and in "breathed" $/ \partial \mathrm{d} /$ realized $[\delta]$ among other examples.

The third place is for $/ \mathrm{p} /$ elisions with only 1 instance that correspond to $3 \%$. This elision was found in "shrimp on" $/ \mathrm{mp}$ / realized [m]

### 4.14.3 Elided Sounds: Lateral

/l/ Was elided in 5 instances, this elision represents $4,3 \%$. This was found in utterances like "Tom'll travel" $/ \mathrm{ml} / / \mathrm{tr} /$ realized [ $\mathrm{m} \operatorname{tr}]$ and in "uncle" $/ \mathrm{\eta kl} /$ realized $[\mathrm{\eta k}]$.

### 4.14.4 Elided Sounds: Nasal

/n/ was elided in 2 instances, this elision represents $1,7 \%$. This was found in "month trip"/n $\theta / / \mathrm{tr} /$ realized $[\theta \mathrm{tr}]$ and in "Brighton"/tn/ realized [to].

### 4.14.5 Elided Sounds: Affricate and Trill

$/ \mathrm{d} 3 /$ and $/ \mathrm{r} /$ were elided in one instance each, which represents $0,9 \%$. These elisions were found in utterances like "strange dream" /nd3/ /dr/ realized [nd.r] and in "will shred" /l/ / [r/ realized [1 fed].

### 4.15 Strategies used by Fourth Year Learners in Elisions

### 4.15.1 Strategies when eliding Fricative sounds

Graphic. 41


Most of the elisions of fricative sounds were produced due to negative transfer. 53 elisions due to negative transfer were detected, corresponding to $90,3 \%$. Examples of this strategy when eliding fricative sounds were found in utterances like "famous song", "next spring", "store's security", "next story", "Bates stayed", "lists" and in "texts"
where $/ \mathrm{s} /$ was elided ; in "friends from", "belongs to", "uncles sent", "meals from", where /z/ was elided; in "month trip", and in "twelfths" where / $\theta /$ was elided.

The second place is for those fricatives elided due to graphemic interference. 2 instances were detected where $/ \theta$ / was elided that represented $3,3 \%$. This strategy was used when eliding the voiceless, dental, fricative in the utterance "fifth floor" /ft $\theta$ / /fl/ realized [ft fl].

The third place is for the fricative sounds elided due to overpronunciation in two instances and two unclassified cases. Each of them represents $3,2 \%$ as shown in graphic 41. Examples representing overpronunciation were found in the utterance "sixth" in which / $\theta /$ was elided. The two unclassified cases were detected in the utterance "tourists complained" /sts//k/ realized [ss k].

### 4.15.2 Strategies when eliding lateral sounds

5 instances of /l/ elision were found which were due to negative transfer. These were found in the utterance "Tom'll travel" /ml/ /tr/ realized [m tr] and in "uncle" / $\mathrm{yk} \mathrm{k} /$ realized $[\mathrm{\eta k}]$.

The first example clearly represents a case of negative transfer since in Chilean Spanish there is no such consonant combination in that distribution so that the individuals elided the lateral sound. Likewise, in the second case there is a combination of three consonant sounds so the last one is elided, phenomena that often occurs in Chilean Spanish.

### 4.15.3 Strategies when eliding nasal sounds

2 instances of $/ \mathrm{n} /$ elision were found that correspond to negative transfer. These elisions were found in "month trip" and in "Brighton".

These negative transfer cases were considered so since in Chilean Spanish there is no such combination of consonant sounds. In the former utterance, the nasal sound was located in the boundaries of words where there were four consonants, so it was easy
for the individual to elide the nasal. The elision in the latter example was more common since elision of final sounds in Chilean Spanish occurs very often.

### 4.15.4 Strategies when eliding Affricate and trill sounds

The elision of $/ \mathrm{d} 3 /$ was found to be an unclassified case. This elision was detected in the utterance "strange dream"/nd3//dr/ realized [n d.I].

The elision of /r/corresponded to a negative transfer case. This one was found in the utterance "will shred" and it was considered negative transfer since such combination of consonants /l/ / $\mathrm{fr} /$ does not occur in Chilean Spanish.

### 4.16 Fourth Year Learners: Addition

Table 13.

| Added sounds | Number of instances <br> found | Percentages |
| :---: | :---: | :---: |
| Vowel sounds | 47 | $63,5 \%$ |
| Flap | 26 | $35,1 \%$ |
| Fricative | 1 | 1,4 |
| TOTAL | $\mathbf{7 4}$ | $100 \%$ |

Graphic 42.


Next section will give information about each of the sounds added.

### 4.16.1 Added sounds: Vowels

Graphic 43.


Vowels represent the highest percentage of additions produced by fourth- year students. /o/ sound was the most added with 17 instances that correspond to $36,2 \%$. This vowel was found to be added in utterances like "attractions" /kjnz/ realized [kJons] and "Brighton" /tn/ realized [ton].

Vowel sound /e/ was added in 16 instances. This addition was found in utterances like "conditioned double" / $\mathrm{fnd} / \mathrm{d} /$ realized [ [ ned d], "shrivelled sadly" /vld/ /s/ realized [ $\beta$ eled s], "my steak"/st/ realized [est], "to spend" /sp/ realized [esp], "breathed" /ठd/ realized [סed], "changed" /ndzd/ realized [dzed], "gardens"/dnz/ realized [rdens] among other.

Vowel sound $/ \mathrm{u} /$ was added in 7 instances. This addition was found in "careful" /fl/ realized [ful].

In 6 instances /I/ vowel was added. This addition was found in "obliged" /d3d/ realized [gid].

In only 1 instance /a/ was added. This addition was found in "obliged" /d3d/ realized [gad].

### 4.16.2 Added sounds: Flap

26 instances were found in which this sound was added, corresponding to $35,1 \%$ (see graphic 42).

This addition was found in utterances like "bored tourists" /d/ /t/ realized [rd t], in "yours that's" /z/ / $/$ / realized [rs $\partial$ ], in "gardens" /dnz/ realized [rdns].

### 4.16.3 Added sounds: Fricative

Only 1 instance was found in which /s/ was added, this corresponds to $1,4 \%$ (see graphic 42). This addition was found in "Tom'll travel" $/ \mathrm{ml} / / \mathrm{tr} /$ realized [ms tr].

### 4.17 Strategies used by Fourth Year Students in Additions

### 4.17.1 Strategies when adding vowel sounds

Graphic 44.


The most used strategy when adding vowel sounds is graphemic interference. 25 instances were identified that correspond to $55,5 \%$. Some examples of addition of vowels due to graphemic interference solely were found in utterances like "careful" /fl/ realized [ful], "attractions" $/ \mathrm{kJnz} /$ realized [kjons], "Brighton" /tn/ realized [ton],
"breathed" / $\delta \mathrm{d} /$ realized [ Ded$]$ and in "gardens" /dnz/ realized [rdens]. Individuals in these instances may have read the word orthographically forgetting the actual pronunciation.

The second place is for negative transfer strategy when adding vowel sounds. 8 instances of this strategy were identified. Examples of it were detected in utterances like "conditioned double"/(nd/ /d/ realized [ $\int$ ened d], "travel to" $/ \mathrm{vl} / / \mathrm{t} /$ realized $[\beta \mathrm{el} \mathrm{t} \mathrm{t}$, "dropped three" $/ \mathrm{pt} / / \theta \mathrm{r} /$ realized [pted tr] , "shrivelled sadly" $/ \mathrm{vld} / / \mathrm{s} /$ realized [ $\beta$ eled s ], "hasn't had"/znt/ /h/ realized [sent h], "approached to"/ft/ /t/ realized [ [ ed t] among other. These examples show combinations of consonants that do not exist in Chilean Spanish in the given distributions, that is why individuals added a vowel sound which makes a more familiar pronunciation.

The third place is for those cases detected as graphemic interference and overpronunciation at the same time. 6 instances of these cases were found that correspond to $13,3 \%$. Examples of these cases were detected in utterances like "obliged" /d3d/realized [gid] or [gad] and in "breathed"/ $\partial \mathrm{d} /$ realized [ frd ]. These examples were due to graphemic interference since individuals read the words orthographically but there is also a pronunciation of the vowel sound that they might have heard and learnt beforehand and that were similar to these ones.

The fourth place is for cases of overpronunciation with 3 instances and negative transfer - graphemic interference with 3 instances too. This corresponds to $6,7 \%$ each of the cases. Examples in which negative transfer and graphemic interference occurred were identified in utterances like "conditioned double" / $\mathrm{fnd} / / \mathrm{d} /$ realized [ $[\mathrm{ned} \mathrm{d}]$ and in "reception for" /p $\mathrm{n} / \mathrm{f} / \mathrm{f} /$ realized [ $[\mathrm{om} \mathrm{f}]$. In these two examples individuals might have pronounced the word orthographically and or needed to add a vowel sound between such consonant combination which is something that occurs in Chilean Spanish.

Examples in which overpronunciation occurred were detected in utterances like "cruiser" /z/ realized [zier], "changed" /nd3d/ realized [dzed], this last example might be confused with one of the other pronunciations of past -ed.

### 4.17.2 Strategies when adding Flap

Graphic 45.


The most used strategy when adding /r/ is graphemic interference, with 25 instances that correspond to $96,2 \%$. Examples of this strategy when adding a flap were detected in utterances like "bored tourists" /d/ /t/ realized [rd t], "Charles hasn't" $/ \mathrm{lz} / \mathrm{h} / \mathrm{realized}$ [rls h] and in "gardens"/dnz/ realized [rdns]. In all these examples, individuals pronounced $/ \mathrm{r} /$ as they read the word, following the orthographic way.

There was only one instance of overpronunciation when adding $/ \mathrm{r} /$, that corresponds to $3,8 \%$. This was found in the utterance "cruiser" /z/ realized [zier] which is the General American pronunciation.

### 4.17.3 Strategies when adding Fricative sound

The only /s/ addition corresponds to an unclassified case. This addition was detected in the utterance "Tom'll travel" $/ \mathrm{ml} / / \mathrm{tr} /$ realized [ms tr].

This case is unclassified since there is no such combination of consonant sounds in Chilean Spanish in that distribution.

### 4.18 Fourth Year Learners: Segment Metathesis

Only one case of metathesis was found in fourth-year student's pronunciations. This was detected in the utterance "will shred". The sequence $/ 1 / / \int \mathrm{r} /$ was realized [1 Jer] and as this combination of consonants in that distribution does not exist in Chilean Spanish, the individual changed the order of the segments, placing the vowel sound between / $/$ / and /r/ which is a combination [ [Jer] that occurs in Chilean Spanish. This is the reason why this instance is considered as a negative transfer case.

## 5. CONCLUSIONS

Once the results of the analysis have been presented in order to identify the most used deviations and methodological strategies employed by second-year and fourth year English learners in the production of consonant groups in the boundaries of words and in final position, it is possible to state:

Figures reflect that when producing deviations most students employed the process of substitution. Elision and addition were also detected but figures are considerable lower than the ones detected as substitution. Considering the methodological strategies employed, it is possible to conclude that most deviations were due to negative transfer. Instances of graphemic interference and overpronunciation were also detected but in far lower numbers.

Of out 5.152 potential instances of deviations, 1.310 instances of deviations were found. In the light of these results, it is possible to state that the group that produced more deviations were $2^{\text {nd }}$ year learners with 764 instances of deviations, that represent a $58 \%$, versus 546 instances of deviations produced by $4^{\text {th }}$ year individuals that represent $42 \%$. Both $2^{\text {nd }}$ year pronunciations and $4^{\text {th }}$ year pronunciations were mainly due to negative transfer and graphemic interference. However, it was very surprising for the researcher to find that deviations due to overpronunciation are higher number in pronunciations of $4^{\text {th }}$ year learners than in $2^{\text {nd }}$ year learners, since the former individual's group is supposed to have an advanced interlanguage level.

In view of this conclusion and the research question inquiring whether the achievement capacity of the learners is proportional to the time they have been exposed to the target language in formal academic training, it is possible to say that this is so, since there is a regularity in the deviances figures supporting the idea that $2^{\text {nd }}$ year learners produce more deviances because they have been exposed less time to formal academic language training than learners in $4^{\text {th }}$ year. Yet the fact that this latter group of individuals produced more deviances due to overpronunciation might be because they believe to have more language knowledge so they use some pronunciations they believe are correct in words the pronunciation of which they do not know.

Evidence found throughout this study to support the idea that the achievement capacity of the learners is proportional to the time they have been exposed to the target language in formal academic training is summarized as follows:

Comparing $2^{\text {nd }}$ and $4^{\text {th }}$ year students, there is a drop in the figures of some substituted sounds that do not belong to the Chilean Spanish sound system or those ones which occur in a different phonological context. Such is the case of the voiced, labiodental, fricative and the voiced, velar, nasal. It can be said that during the years of training and or target language exposure they have been able to acquire and articulate these sounds, pronouncing them correctly.

As in the case of substitutions, there is also a drop in the figures regarding elisions produced by $4^{\text {th }}$ year individuals. Taking into account fricative sounds that do not belong to the Chilean Spanish variety, sounds like voiceless, dental, fricative and voiced, alveolar, fricative showed a decrease in their occurrence in $4^{\text {th }}$ year student's pronunciations. A similar situation occurs with plosive sounds, where the voiced, alveolar, stop and the voiceless, bilabial, stop were less elided by $4^{\text {th }}$ year learners. It is worth noticing that stops, excluding /d/ do not occur in final position in Spanish, except in acronyms and loan words, so that this is transferable to the language that is being learnt.

Stronger evidence is found in the case of addition. While $2^{\text {nd }}$ year learners added vowel sounds in 141 instances, $4^{\text {th }}$ year students did it in only 47 instances. For example, in the pronunciation of $2^{\text {nd }}$ year students it was found that /e/ was added in 100 instances and $4^{\text {th }}$ year students' pronunciation only 16 times. In view that most of the cases of this vowel sound addition were cases of ephetentic /e/, this is a phenomena present in early stages of interlanguage by ESL learners whose L1 is Spanish which matches the higher figures of this addition in 2nd year student's pronunciations.

Despite this evidence supporting the idea that the achievement capacity is proportional to the time English learners have been exposed to the target language in formal academic training, some figures were found regarding substitution, elisions and additions that are higher in $4^{\text {th }}$ year learners' pronunciations than in $2^{\text {nd }}$ year learners.

Taking into account substitutions, $4^{\text {th }}$ year individuals' pronunciations had 265 instances of /z/ substitution, ten more instances than $2^{\text {nd }}$ year students' pronunciations.

Likewise substitution of $/ \theta /$ where $4^{\text {th }}$ year pronunciations contained 19 instances of this deviance versus 13 instances found in $2^{\text {nd }}$ year pronunciations. Considering elisions, 27 instances of $/ \mathrm{t} /$ were found in $4^{\text {th }}$ year pronunciations, while $2^{\text {nd }}$ year learners produced only 9 instances of this deviation.

This phenomenon may be due to the fact that according to the curriculum, $4^{\text {th }}$ year students do not have to take specific courses on English phonology where they are instructed and trained in aspects that exercise and improve their pronunciation.

Another possibility may lie on the idea that up to this point in their programme, students feel more confident about their language skills as they have already approved all of the courses regarding English phonology.

## 6. LIMITATIONS

Firstly, the number of subjects may have not been fully representative for the purpose of the study.

Secondly, the elicitation tool. Although the sentences in the elicitation tool were carefully elaborated following patterns of consonant groups shown in phonetics books and dictionaries, they may have not been fully representative to answer the questions proposed.

Thirdly, the methodological strategies employed. It was difficult for the researcher to classify some of the deviances in only one strategy. It can be noticed in the attached charts that some of the deviations were identified with up to three strategies which had an impact on the figures explained.

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## APPENDIX: $2^{\text {nd }}$ YEAR INDIVIDUALS

## Consonant groups in the boundaries of words I



| "tourists complained" | /sts/ /k/ | /turists/ / kəmpleınd/ | [stø] [k] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "conditioned double" | / n d/ /d/ | /kəndifnd / / d^bl/ | [ [joned] [d] | Addition | Negative transfer / graphemic interference |
| "double rooms" | /bl/ /r/ | / d^bl/ /ru:mz/ | $[\beta 1][r]$ | Substitution | Negative transfer |
| "saying they" | / $\mathrm{y} / \mathrm{/} / \mathrm{/}$ |  | [ n$]$ [d] | Substitution | Negative transfer |
| "felt very" | /lt/ /v/ | /felt/ /verı/ | [lt] [ $\beta$ ] | Substitution | Negative transfer |
| "Britain's the" | /nz/ /D/ | /britnz/ /ठə/ | [ n ¢] [d] | Elision and substitution | Negative transfer |
| "there was" | /ea/ /w/ | /ðeə//wnz/ | [er] [w] | Addition | Negative transfer |
| "was just" | /z//d3/ | /wdz/ /d3^st/ | [s] [d3] | Substitution | Negative transfer |
| "John's rich" | /nz/ /r/ | /d3Dnz/ / ritf/ | [ns] [r] | Substitution | Negative transfer |
| "their gardens" | /ea/ /g/ | /欠eə/ /ga:dnz/ | [er] [g] | Addition | Negative transfer |
| "pieces, she" | /z/ / / | /pi:siz/ / ji:/ | [s] []] | Substitution | Negative transfer |
| "will shred" | /1// $\mathrm{r} / \mathrm{l}$ | /wil/ / $\mathrm{rred} /$ | [1] [Jerd] | Metathesis | Negative transfer |
| "bronzed suns" | /nzd/ /s/ | /bronzd/ /sınz/ | [ ns ¢] [ s$]$ | Substitution | Negative transfer |


| "Charles hasn't" | /lz/ /h/ | / a : $1 \mathrm{l} /$ /hæznt/ | [1s] [h] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "thanked them" | /nkt/ /ס/ | / $\theta$ æŋkt/ /ठəm/ | [ $\mathrm{nk} \phi]\left[\mathrm{t}^{\mathrm{h}}\right]$ | Substitution | Graphemic interference |
| "belongs to" | /gz/ /t/ | /bilonz/ /to/ | [ ns ] [ t ] | Substitution | Negative transfer |
| "wouldn't forget" | /dnt/ /f/ | /wudnt/ /faget/ | [ldnt] [f] | Addition | Graphemic interference |
| "was really" | /z/ /r/ | /woz/ /rıli/ | [s] [r] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "finds them" | /ndz/ /ס/ | /faindz/ /ठəm/ | [ $\mathrm{n} \phi \mathrm{s}$ ] [ $¢$ ] | Substitution | Negative transfer |


| INDIVIDUAL 2 <br> LEVEL 2 | Elisions: 7 <br> Substitutions: 12 <br> Addition: 4 <br> Metathesis: 2 <br> N.T: 21 |  | $\boldsymbol{O}: 1 \quad \boldsymbol{U}: 2$ | Total: 24 T | L: 25 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "friends from" | /ndz/ /fr/ | /frendz/ /frəm/ | [ $\mathrm{nd} \phi$ ] [fr] | Elision | Negative transfer |
| "spent three" | /nt/ / $\mathrm{r} / \mathrm{l}$ | /spent/ / r i:/ | [ nt$][\mathrm{tr}]$ | Substitution | Negative transfer |
| "take their" | /k/ / // | /terk/ /ठeә/ | [ks] [ $¢$ ] | Addition | Unclassified |
| "song spent" | /n/ /sp/ | /spy/ /spent/ | [ $\mathrm{\eta}$ ] [esp] | Addition | Negative transfer |
| "Tom'll travel" | /ml/ /rr/ | /tmml/ /trævl/ | [m¢] [t. $]$ | Elision | Negative transfer |
| "bored tourists" | /d/ /t/ | /bo:d/ /turists/ | [r] [t] | Substitution | Negative transfer / graphemic interference |
| "tourists complained" | /sts/ /k/ | /turists/ / <br> kəmplemd/ | [stø] [k] | Elision | Negative transfer |
| "was just" | /z/ /d3/ | /wdz/ /d3^st/ | [s] [d3] | Substitution | Negative transfer |
| "John's rich" | /nz/ /r/ | /d3onz/ / ritj/ | [ns] [r] | Substitution | Negative transfer |
| "pieces, she" | /z/ / $/$ / | /pi:siz/ / Ji:/ | [s] [ [] | Substitution | Negative transfer |


| "was much" | /z/ /m/ | /wnz/ /mstf/ | [s] [m] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "will shred" | /1/ / $\mathrm{r} / \mathrm{l}$ | /wil/ / $\mathrm{rred} /$ | [1] [Jerd] | Metathesis | Negative transfer |
| "strange dream" | /nd3/ /dr/ | /streind3/ /dri:m/ | [ ft [ ] [d.r] | Substitution | Overpronunciation |
| "shrivelled sadly" | /vld/ /s/ | //rrıvld/ /sædli/ | [veled] [s] | Addition | Negative transfer |
| "bronzed suns" | /nzd/ /s/ | /bronzd/ /sınz/ | [sen] [s] | Substitution and metathesis | Unclassified |
| "Charles hasn't" | /lz/ /h/ | / $\mathrm{a}: 1 \mathrm{lz/} / \mathrm{hæznt/}$ | [ls] [w] | Substitution | Negative transfer |
| "hasn't had" | /znt/ /h/ | /hæznt/ /həd/ | [snt] [h] | Substitution | Negative transfer |
| "drowned but" | /nd/ /b/ | /draund/ /bət/ | [ned] [b] | Addition | Negative transfer |
| "twelfth night" | /lf $\theta / / \mathrm{n} /$ | /twelfy/ /natt/ | [lf $¢][\mathrm{n}]$ | Elision | Negative transfer |
| "belongs to" | /nz/ /t/ | /bilogz//to/ | [ $\dagger \varnothing]$ [ t ] | Elision | Negative transfer |
| "was really" | /z/ /r/ | /woz/ /rıali/ | [s] [r] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "mulcts people" | /lkts/ /p/ | /mılkts/ /pi:pl/ | [ $\mathrm{kt} \dagger \phi][\mathrm{p}]$ | Elision | Negative transfer |
| "finds them" | /ndz/ / / / | /famdz/ /ठəm/ | [ $\mathrm{nd} \phi$ ] [ $¢ 0]$ | Elision | Negative transfer |


| INDIVIDUAL 3 <br> LEVEL 2 | Elisions: 3 <br> Substitutions: 16 <br> Addition: 1 <br> Metathesis: 0 <br> N.T: 17 <br> G.I: 1 |  | U: | Total: 19 | L: 20 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "friends from" | /ndz/ /fr/ | /frendz/ /frəm/ | [nds] [fr] | Substitution | Negative transfer |
| "yours, that's" | /z/ / // | /jo:z/ /סæts/ | [rs] [ ¢$]$ | Addition and substitution | Negative transfer/ graphemic interference |
| "Tom'll travel" | /ml/ /rr/ | /tmml/ /trævl/ | $[\mathrm{m} \phi][\mathrm{tr}]$ | Elision | Negative transfer |
| " was just" | /z/ /d3/ | /wdz/ /d3^st/ | [s] [d3] | Substitution | Negative transfer |
| "John's rich" | /nz/ /r/ | /d3pnz/ / ritj/ | [ns] [r] | Substitution | Negative transfer |
| "drinking some" | /n//s/ | /drıjkiŋ/ /ssm/ | [n] [s] | Substitution | Negative transfer |
| "was much" | /z/ /m/ | /wnz/ /matj/ | [s] [m] | Substitution | Negative transfer |
| "strange dream" | /nd3/ /dr/ | /streind3/ /dri:m/ | [ nt f] [d.r] | Substitution | Overpronunciation |
| "shrivelled sadly" | /vld/ /s/ | / $\mathrm{rrıvld} /$ /sædli/ | [ $\beta 1 \mathrm{ld}$ ] [s] | Substitution | Negative transfer |


| "bronzed suns" | /nzd/ /s/ | /bronzd/ /sınz/ | [nsd] [s] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "Charles hasn't" | /lz/ /h/ | / [a:lz/ /hæznt/ | [1s] [x] | Substitution | Negative transfer |
| "hasn't had" | /znt/ /h/ | /hæznt/ /həd/ | [snt] [h] | Substitution | Negative transfer |
| "thanked them" | /nkt/ / / / | / $\theta$ æŋkt//ðəm/ | [ nks ] [ $¢$ ] | Substitution | Overpronunciation |
| "belongs to" | /nz/ /t/ | /bilogz/ /to/ | [ $\dagger \varnothing][\mathrm{t}]$ | Elision | Negative transfer |
| "was really" | /z/ /r/ | /woz/ /riəli/ | [s] [r] | Substitution | Negative transfer |
| "and had" | /n/ /h/ | /ən/ /hæd/ | [ y$]$ [x] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "store's security" | /s/ /s/ | /sto:z/ /sıkjuerəti/ | [ $\phi$ ] [s] | Elision | Negative transfer |
| "finds them" | /ndz/ / / / | /faindz/ /ठəm/ | [nds] [ $¢$ ] | Substitution | Negative transfer |


| INDIVIDUAL <br> 4 <br> LEVEL 2 | Elisions: 2 <br> Substitutions: 9 <br> Addition: 6 <br> Metathesis: 1 <br> N.T: 12 | G.I: 4 | U: $1 \quad$ Total: 14 TOT |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "friends from" | /ndz/ /fr/ | /frendz/ /frəm/ | [ nds ] [fr] | Substitution | Negative transfer |
| "reception for" | /p n / / $/ \mathrm{f} /$ | /risepfn //fo:/ | [ptjom] [f] | Substitution and addition | Negative transfer/ graphemic interference |
| "his twelfths" | /z/ /tw/ | /hiz/ /twelfөs/ | [s] [tw] | Substitution | Negative transfer |
| "times better" | /mz/ /b/ | /taımz / /beta/ | [ms] [b] | Substitution | Negative transfer |
| "yours, that's" | /z/ /ס/ | /jo:z/ /ठæts/ | [ rs$]$ [ $\mathrm{\delta}$ ] | Addition and substitution | Negative transfer/graphemi c interference |
| "meals from" | /lz/ /fr/ | /mi:(ə)lz/ /frəm/ | [1s] [fr] | Substitution | Negative transfer |
| "travel to" | /vl/ /t/ | /trævl/ /tə/ | [ $\beta \mathrm{el}][\mathrm{t}]$ | Substitution and addition | Negative transfer |
| "bored tourists" | /d/ /t/ | /bo:d/ /turists/ | [red] [t] | Addition | Graphemic interference |
| "tourists complained" | /sts/ /k/ | /turists/ / <br> kəmplemd/ | [st $\phi$ ] [k] | Elision | Negative transfer |


| "conditioned double" | //nd/ /d/ | /kəndi [nd / / d^di/ | [ [ned] [d] | Addition | Negative transfer / graphemic interference |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "rooms saying" | /mz/ /s/ | /ru:mz/ /serị/ | [mø] [s] | Elision | Negative transfer |
| "was just" | /z/ / $\mathrm{d}_{3} /$ | /wnz/ /d3nst/ | [s] [d3] | Substitution | Negative transfer |
| "available shrimp" | /bl/ / $\mathrm{r} /$ | /əverləbl/ //rimp/ | $[1 \mathrm{r} \beta$ ] [ r r$]$ | Metathesis and addition | Unclassified |
| "John's rich" | /nz/ /r/ | /d3pnz/ / ritj/ | [ns] [r] | Substitution | Negative transfer |


| INDIVIDUAL <br> 5 <br> LEVEL 2 | Elisions: 3 <br> Substitutions: 19 <br> Addition: 2 <br> Metathesis: <br> N.T: 21 | G.I: $1 \quad O$ : | $\boldsymbol{U}: 1$ Tot | al: 23 TO' |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "friends from" | /ndz/ /fr/ | /frendz/ /frrm/ | [nds] [fr] | Substitution | Negative transfer |
| "his twelfths" | /z//tw/ | /hiz/ /twelfөs/ | [s] [tw] | Substitution | Negative transfer |
| "steak smelt" | /k/ /sm/ | /sterk/ /smelt/ | [k] [esm] | Addition | Negative transfer |
| "yours, that's" | /z/ /ס/ | /jo:z/ /ðæts/ | [s] [ C ] | Substitution | Negative transfer |
| "meals from" | /lz/ /fr/ | /mi:(ə)lz/ /frəm/ | [1s] [fr] | Substitution | Negative transfer |
| "travel to" | /vl/ /t/ | /trævl/ /tz/ | [ $\beta 1$ ] [t2] | Substitution | Negative transfer |
| "tourists complained" | /sts/ /k/ | /turists/ / <br> kampleınd/ | [st $\phi$ ] [k] | Elision | Negative transfer |
| "rooms saying" | /mz/ /s/ | /ru:mz/ /serin/ | [ms] [s] | Substitution | Negative transfer |
| " was just" | /z/ /d3/ | /wdz/ /d3nst/ | [s] [d3] | Substitution | Negative transfer |


| "available shrimp" | /bl/ / $\mathrm{r} /$ | /əveıləbl/ / rrmp / | [ $\beta 1$ ] [ r$]$ | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "approached to" | / $\mathrm{t} / \mathrm{/} / \mathrm{t} /$ | /əprəuft/ /ta/ | [ $]$ ed] [t] | Addition and substitution | Negative transfer / graphemic interference |
| "John's rich" | /nz/ /r/ | /d3ınz/ / ritj/ | [ns] [r] | Substitution | Negative transfer |
| "bottled wine" | /tld/ /w/ | /bbtld/ /wain/ | [tl $¢][\mathrm{w}]$ | Elision | Unclassified |
| "pieces, she" | /z/ / $/$ / | /pi:siz/ / ji:/ | [s] [5] | Substitution | Negative transfer |
| "strange dream" | /nd3/ /dr/ | /streind3/ /dri:m/ | [nt ${ }^{\text {[ }}$ [d.r $]$ | Substitution | Overpronunciation |
| "bronzed suns" | /nzd/ /s/ | /bronzd/ /sınz/ | [nsd] [s] | Substitution | Negative transfer |
| "suns burnt" | /nz/ /b/ | /sınz/ /bs:nt/ | [ns] [b] | Substitution | Negative transfer |
| "Charles hasn't" | /lz/ /h/ | /fa:lz/ /hæznt/ | [ls] [h] | Substitution | Negative transfer |
| "hasn't had" | /znt/ /h/ | /hæznt/ /həd/ | [snt] [h] | Substitution | Negative transfer |
| "almost stayed" | /st/ /st/ | /o:Iməus/ /sterd/ | [ $\phi \varnothing$ ] [st] | Elision | Negative transfer |
| "belongs to" | /nz/ /t/ | /bilonz/ /to/ | [ g s$][\mathrm{t}]$ | Substitution | Negative transfer |


| "was really" | $/ \mathrm{z} / / \mathrm{r} /$ | $/ \mathrm{wnz} / / \mathrm{rroli} /$ | $[\mathrm{s}][\mathrm{r}]$ | Substitution | Negative transfer |
| :--- | :--- | :--- | :--- | :--- | :--- |
| "vegetables <br> when" | $/ \mathrm{blz} / / \mathrm{w} /$ | /ved 3 t bblz/ /wen/ | $[\mathrm{bls}][\mathrm{w}]$ | Substitution | Negative transfer |


| $\begin{gathered} \text { INDIVIDUAL } \\ 6 \end{gathered}$ <br> LEVEL 2 | Elisions: 3 <br> Substitutions: 23 <br> Addition: 10 <br> Metathesis: <br> N.T: 27 | G.I: 10 | O: $1 \quad \mathrm{U}: \quad$ Total: 30 TOT |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "friends from" | /ndz/ /fr/ | /frendz/ /frəm/ | [nds] [fr] | Substitution | Negative transfer |
| "helped me" | /lpt/ /m/ | /helpt/ /mi:/ | [lped] [m] | Addition and substitution | Negative transfer / graphemic interference |
| "reception for" | /pfn/ /f/ | /risepfn //fo:/ | [p]om] [f] | Addition | Negative transfer / graphemic interference |
| "his twelfths" | /z//tw/ | /hiz/ /twelf0s/ | [s] [tw] | Substitution | Negative transfer |
| "yours, that's" | /z/ /ס/ | /jo:z/ /ðæts/ | [rs] [ $¢$ ] | Addition and substitution | Negative transfer/ graphemic interference |
| "times better" | /mz/ /b/ | /taımz / /betə/ | [ms] [b] | Substitution | Negative transfer |
| "meals from" | /lz/ /fr/ | /mi:(ə)lz/ /frəm/ | [ls] [fr] | Substitution | Negative transfer |
| "famous song" | /s/ /s/ | /ferməs/ /spı/ | [ $\phi$ ] [s] | Elision | Negative transfer |
| "Tom'll travel" | /mi/ /tr/ | /tmml/ /trævl/ | [mø] [t. ${ }^{\text {] }}$ | Elision | Negative transfer |


| "travel to" | /vi/ /t/ | /trævl/ /ta/ | [ 3 el$][\mathrm{t}]$ | Substitution and addition | Negative transfer / graphemic interference |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "twelvemonth" | /lv/ /m/ | /twelv/ /mın®/ | [13] [m] | Substitution | Negative transfer |
| "conditioned double" | //nd/ /d/ | /kəndifnd / / d $\lambda$ bl/ | [ [joned] [d] | Addition | Negative transfer/ graphemic interference |
| $\begin{aligned} & \text { "rooms } \\ & \text { saying" } \end{aligned}$ | /mz/ /s/ | /ru:mz/ /seim]/ | [ms] [s] | Substitution | Negative transfer |
| "place to" | /s/ /t/ | /pless/ /tz/ | [ $¢ \mathrm{l}$ [pl] | Elision | Negative transfer |
| " was just" | /z//d3/ | /wnz/ /d3^st/ | [s] [d3] | Substitution | Negative transfer |
| "approached to" | / $\mathrm{t} /$ / /t/ | /əprəuft/ /tə/ | [ $\left.\int \mathrm{ed}\right][\mathrm{t}]$ | Substitution and addition | Negative transfer/ graphemic interference |
| "smashed to" | / $\mathrm{t} /$ / $/ \mathrm{t} /$ | /smæ[t/ /tı/ | [ 5 ed] [t] | Substitution and addition | Negative transfer/ graphemic interference |
| "pieces, she" | /z/ / $/$ / | /pi:sız/ / ji:/ | [s] [5] | Substitution | Negative transfer |
| "was much" | /z/ /m/ | /wbz/ /matj/ | [s] [m] | Substitution | Negative transfer |
| "strange dream" | /nd3/ /dr/ | /streind3/ /dri:m/ | [ nt [ $]$ [d. $]$ | Substitution | Overpronunciation |
| "bronzed suns" | /nzd/ /s/ | /bronzd/ /sınz/ | [nsed] [s] | Substitution and addition | Negative transfer/ graphemic interference |


| "suns burnt" | /nz/ /b/ | /sınz/ /bз:nt/ | [ns] [b] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "Charles hasn't" | /lz/ /h/ | /fa:lz/ /hæznt/ | [ls] [h] | Substitution | Negative transfer |
| "drowned but" | /nd/ /b/ | /draund/ /bət/ | [ned] [b] | Addition | Graphemic interference |
| "thanked them" | / $\mathrm{jkt} / \mathrm{/} / \mathrm{/}$ | /өæŋkt/ / $\partial ə m /$ | [ $\dagger$ ket] [ D ] | Addition | Graphemic interference |
| "his trip" | /z/ /tr/ | /hiz/ /trip/ | [s] [t.] | Substitution | Negative transfer |
| "belongs to" | /nz/ /t/ | /bilpry/ /ta/ | [ ns ] [t] | Substitution | Negative transfer |
| "was really" | /z/ /r/ | /wnz/ /rıəli/ | [s] [r] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "finds them" | /ndz/ / $/$ / | /faindz/ /ðəm/ | [nds] [ $¢$ ] | Substitution | Negative transfer |


| INDIVIDUAL 7 <br> LEVEL 2 | Elisions: 4 <br> Substitutions: 28 <br> Addition: 8 <br> Metathesis: <br> N.T: 32 | $: 28$ $\text { G.I: } 6$ | Total: 37 TO |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "friends from" | /ndz/ /fr/ | /frendz/ /frrm/ | [nds] [fr] | Substitution | Negative transfer |
| "reception for" | /pfn/ /f/ | /risepfn //fo:/ | [pt[om] [f] | Substitution and addition | Negative transfer/ graphemic interference |
| "his twelfths" | /z/ /tw/ | /hiz/ /twelfөs/ | [s] [tw] | Substitution | Negative transfer |
| "steak smelt" | /k/ /sm/ | /sterk/ /smelt/ | [k] [esm] | Addition | Negative transfer |
| "yours, that's" | /z/ / $/$ / | /jo:z/ /ठæts/ | [s] [ d ] | Substitution | Negative transfer |
| "meals from" | /lz/ /fr/ | /mi:(ə) $\mathrm{lz} /$ /frəm/ | [ls] [fr] | Substitution | Negative transfer |
| "famous song" | /s//s/ | /ferməs/ /spy/ | [ $\varnothing$ ] [s] | Elision | Negative transfer |
| "Tom'll travel" | /ml/ /rr/ | /tmml/ /træul/ | [m $\phi$ ] [t. $]$ | Elision | Negative transfer |
| "travel to" | /vl/ /t/ | /trævl/ /tə/ | [ Bel ] [tz] | Substitution and addition | Negative transfer/ graphemic interference |


| ＂twelve－month＂ | ／lv／／m／ | ／twelv／／man日／ | ［13］［m］ | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ＂bored tourists＂ | ／d／／t／ | ／bo：d／／turrists／ | ［r］［t］ | Substitution | Graphemic interference |
| ＂rooms saying＂ | ／mz／／s／ | ／ru：mz／／seırı／ | ［ms］［s］ | Substitution | Negative transfer |
| ＂felt very＂ | ／lt／／v／ | ／felt／／veri／ | ［ 1 t$][\beta]$ | Substitution | Negative transfer |
| ＂was just＂ | ／z／／ $\mathrm{d}_{3} /$ | ／wnz／／d3nst／ | ［s］［d3］ | Substitution | Negative transfer |
| ＂available shrimp＂ | ／bl／／ $\mathrm{r} /$ | ／əverləbl／／ rrmp ／ | ［ $\beta 1$ ］［ r$]$ | Substitution | Negative transfer |
| ＂John＇s rich＂ | ／nz／／r／ | ／d3nnz／／ritj／ | ［ns］［r］ | Substitution | Negative transfer |
| ＂cricket drinking＂ | ／t／／dr／ | ／krıkıt／／drıŋkıı／ | ［t］［ $¢ \mathrm{r}$ ］ | Substitution | Negative transfer |
| ＂dropped three＂ | ／pt／／日r／ | ／dropt／／日ri：／ | ［pd］［ r ］ | Substitution | Overpronunciation |
| ＂smashed to＂ | ／ $\mathrm{t} /$／／t／ | ／smæ䝅／ta／ | ［ d d］［t］ | Substitution | Overpronunciation |
| ＂pieces，she＂ | ／z／／／$/$ | ／pi：ssz／／Ji：／ | ［s］［f］ | Substitution | Negative transfer |
| ＂was much＂ | ／z／／m／ | ／wnz／／mstj／ | ［s］［m］ | Substitution | Negative transfer |
| ＂will shred＂ | ／1／／$/ \mathrm{r} /$ | ／wil／／Jred／ | ［1］［ $[\phi]$ | Elision | Negative transfer |


| "next story" | /kst/ /st/ | /nekst/ /sts:ri/ | [kst] [est] | Addition | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "strange dream" | /nd3/ /dr/ | /streind3/ /dri:m/ | [ t t$]$ [ $\mathrm{\partial r} \mathrm{r}]$ | Substitution | Overpronunciation |
| "shrivelled sadly" | /vld/ /s/ | //Srıvld/ /sædli/ | [ $\beta$ eld] [s] | Substitution and addition | Negative transfer/ graphemic interference |
| "suns burnt" | /nz/ /b/ | /sınz/ /bs:nt/ | [ns] [b] | Substitution | Negative transfer |
| "Charles hasn't" | /lz/ /h/ | / $\mathrm{fa:lz/} / \mathrm{hæznt/}$ | [ls] [x] | Substitution | Negative transfer |
| "hasn't had" | /znt/ /h/ | /hæznt/ /həd/ | [sent] [x] | Substitution and addition | Negative transfer |
| "frightening dream" | /n/ /dr/ | /fraitnıy/ /dri:m/ | [ n$]$ [d.r] | Substitution | Negative transfer |
| "drowned but" | /nd/ /b/ | /draund/ /bat/ | [neð] [b] | Addition | Negative transfer/ graphemic interference |
| "belongs to" | /nz/ /t/ | /bilogz/ /tz/ | [ g ] [ t ] | Substitution | Negative transfer |
| "wouldn't forget" | /dnt/ /f/ | /wudnt/ /fəget/ | [ldnt] [f] | Addition | Graphemic interference |
| "was really" | /z/ /r/ | /wnz/ /rioli/ | [s] [r] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3tablz/ /wen/ | [bls] [w] | Substitution | Negative transfer |


| "picnic with" | /k/ /w/ | /piknik/ /wio/ | [ $\phi$ ] [w] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "store's security" | /s/ /s/ | /sto:z/ /sikjuerəti/ | [ $\varnothing$ ] [s] | Elision | Negative transfer |
| "finds them" | /ndz/ /ס/ | /famdz/ /ðəm/ | [nds] [ס] | Substitution | Negative transfer |


| INDIVIDUAL <br> 8 <br> LEVEL 2 | Elisions: 10 <br> Substitutions: 16 <br> Addition: 6 <br> Metathesis: <br> N.T: 25 | 16 $\text { G.I: } 6$ | Total: 28 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "Michael's friends" | /ls/ /fr/ | /markls/ /frendz/ | [ $\mathrm{kl} \phi$ ] [fr] | Elision | Negative transfer |
| "friends from" | /ndz/ /fr/ | /frendz/ /frəm/ | [nds] [fr] | Substitution | Negative transfer |
| "times better" | /mz/ /b/ | /taımz / /betə/ | [ms] [b] | Substitution | Negative transfer |
| "yours, that's" | /z/ / / / | /jo:z/ /ðæts/ | [s] [ $¢$ ] | Substitution | Negative transfer |
| "that's not" | /ts/ /n/ | /ðæts/ /nvt/ | [ $\phi \mathrm{s}$ ] [ n$]$ | Elision | Negative transfer |
| "meals from" | /lz/ /fr/ | /mi:(ə) $\mathrm{lz/} / \mathrm{fram} /$ | [l申] [fr] | Elision | Negative transfer |
| "famous song" | /s//s/ | /ferməs/ /spı/ | [ $\phi$ ] [s] | Elision | Negative transfer |
| "tourists complained" | /sts/ /k/ | /tuərists/ / <br> kəmpleınd/ | [st $\varnothing$ ][k] | Elision | Negative transfer |
| "conditioned double" | //nd/ /d/ | /kəndi [nd / / d^di/ | [ $\int$ ned] [d] | Addition | Negative transfer/ graphemic interference |


| "available shrimp' | /bl/ /fr/ | /əverləbl/ //rimp/ | [ $\beta 1$ ] [ r ] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "approached to" | / $\mathrm{t} /$ / $/$ / | /əprəuft/ /tə/ | [ fed ] [t] | Addition and substitution | Graphemic interference |
| "John's rich" | /nz/ /r/ | /d3pnz/ / ritf/ | [ns] [r] | Substitution | Negative transfer |
| "uncles sent" | / $\mathrm{gklz} / \mathrm{s} /$ | /ıŋkklz/ /sent/ | [ gkl ¢ $]$ [s] | Elision | Negative transfer |
| "smashed to" | / $\mathrm{t} /$ / $/$ / | /smæjt/ /tə/ | [ $]$ ed] [t] | Substitution and addition | Graphemic interference |
| "was much" | /z/ /m/ | /wnz/ /mstf/ | [s] [m] | Substitution | Negative transfer |
| "shrivelled sadly" | /vld/ /s/ | //rrvld/ /sædli/ | [ $\beta$ eled] [s] | Substitution and addition | Negative transfer/ graphemic interference |
| "bronzed suns" | /nzd/ /s/ | /bronzd/ /sınz/ | [nsed] [s] | Substitution and addition | Negative transfer/ graphemic interference |
| "suns burnt" | /nz/ /b/ | /sınz/ /bs:nt/ | [ns] [b] | Substitution | Negative transfer |
| "burnt fields" | /nt/ /f/ | /b3:nt/ /fi:əldz/ | [rnø] [f] | Addition | Graphemic interference |
| "Charles hasn't" | /lz/ /h/ | / $\mathrm{a}: 1 \mathrm{lz/} / \mathrm{hæznt/}$ | [1s] [x] | Substitution | Negative transfer |


| "hasn't had" | /znt/ /h/ | /hæznt/ /həd/ | [snt] [h] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "twelfth night" | /lfe/ /n/ | /twelfy/ /nat/ | [ $1 \mathrm{f} \phi$ ] [ n$]$ | Elision | Negative transfer |
| "almost stayed" | /st/ /st/ | /o:Iməus/ /sterid/ | [ $\phi \varnothing$ ] [st] | Elision | Negative transfer |
| "belongs to" | /nz/ /t/ | /bilpŋz/ /tə/ | [ ys ] [t] | Substitution | Negative transfer |
| "Bates stayed" | /ts/ /st/ | /beits/ /sterd/ | [ $¢ \mathrm{~s}$ ] [st] | Elision | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "store's security" | /s/ /s/ | /sto:z/ /sikjuerəti/ | [ф] [s] | Elision | Negative transfer |
| "finds them" | /ndz/ / $/$ / | /faindz/ /ठəm/ | [nds] [ $¢$ ] | Substitution | Negative transfer |


| INDIVIDUAL 9 <br> LEVEL 2 | Elisions: 5 <br> Substitutions: 30 <br> Addition: 16 <br> Metathesis: 1 <br> N.T: 39 <br> G.I: 6 |  | $\boldsymbol{O}: 1 \quad \boldsymbol{U}:$ | Total: 46 TOT | AL: 52 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "Michael's friends" | /kls/ /fr/ | /markls/ /frendz/ | [ $\mathrm{kl} \phi][\mathrm{fr}]$ | Elision | Negative transfer |
| "friends from" | /ndz/ /fr/ | /frendz/ /from/ | [nds] [fr] | Substitution | Negative transfer |
| "steak smelt" | /k/ /sm/ | /sterk/ /smelt/ | [k] [esm] | Addition | Negative transfer |
| "yours, that's" | /z/ / $/$ / | /jo:z/ / ðæts/ | [s] [ $¢$ ] | Substitution | Negative transfer |
| "that's not" | /ts/ /n/ | /ðæts/ /nnt/ | [st] [n] | Metathesis | Unclassified |
| "meals from" | /lz/ /fr/ | /mi:(ə)lz/ /frəm/ | [ls] [fr] | Substitution | Negative transfer |
| "song spent" | / $\mathrm{y} / \mathrm{/sp} /$ | /spı/ /spent/ | [n] [esp] | Substitution and addition | Negative transfer |
| "Tom'll travel" | /ml/ /rr/ | /tmml/ /trævl/ | [m¢] [t. $]$ | Elision | Negative transfer |
| "travel to" | /vi/ /t/ | /trævl/ /tə/ | [ Bel ] [t2] | Substitution and addition | Negative transfer/ graphemic interference |


| " next spring" | /kst/ /spr/ | /nekst/ /sprıj/ | [ $\mathrm{k} \phi$ ¢ $]$ [ espr ] | Addition | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "bored tourists" | /d/ /t/ | /bo:d/ /turists/ | [reð] [t] | Addition and substitution | Negative transfer/ graphemic interference |
| "tourists complained" | /sts/ /k/ | /turists/ / <br> kəmplemd/ | [st $¢$ ] [k] | Elision | Negative transfer |
| "conditioned double" | //nd/ /d/ | /kəndi ${ }^{\text {fnd / / d^bl/ }}$ | [ [nd] [ð] | Substitution | Negative transfer |
| "double rooms" | /bl/ /r/ | / d^bl/ /ru:mz/ | [ $\beta \mathrm{el}$ ] [r] | Substitution and addition | Negative transfer |
| "rooms saying" | /mz/ /s/ | /ru:mz/ /seir!/ | [ms] [s] | Substitution | Negative transfer |
| "was just" | /z/ /d3/ | /wDz/ /d3^st/ | [s] [d3] | Substitution | Negative transfer |
| "available shrimp" | /bl/ /fr/ | /əverləbl///rimp/ | [bø] [ r r$]$ | Elision | Negative transfer |
| "John's rich" | /nz/ /r/ | /d3Dnz/ / ritj/ | [ns] [r] | Substitution | Negative transfer |
| "uncles sent" | /nklz/ /s/ | / $n \mathrm{\eta klz} /$ /sent/ | [ nkles ] [s] | Substitution and addition | Negative transfer |


| "watch cricket" | /tj/ /kr/ | /wnt5/ /krikıt/ | [J] [kr] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "bottled wine" | /tld/ /w/ | /botld/ /wam/ | [tel $\phi][\mathrm{w}]$ | Elision and addition | Negative transfer |
| "smashed to" | / $\mathrm{t} /$ / /t/ | /smæ[t/ /tz/ | [t $\mathrm{f} \phi$ ] [ t$]$ | Substitution | Negative transfer |
| "pieces, she" | /z/ / $/$ / | /pi:sız/ / ji:/ | [s] [5] | Substitution | Negative transfer |
| "needed help" | /d/ /h/ | /ni:dıd/ /help/ | [ $¢$ ] [h] | Substitution | Negative transfer |
| "was much" | /z/ /m/ | /wnz/ /mstf/ | [s] [m] | Substitution | Negative transfer |
| "will shred" | /1// $/ \mathrm{r} /$ | /wil/ / $\int$ red/ | [1] [Jerd] | Metathesis | Unclassified |
| "small square" | /l/ /skw/ | /smo:l/ /skweə/ | [1] [eskw] | Addition | Negative transfer |
| "strange dream" | /nd3//dr/ | /streind3/ /dri:m/ | [ nt f$][\mathrm{\chi r} \mathrm{r}]$ | Substitution | Overpronunciation |
| "shrivelled sadly" | /vld/ /s/ | / $\mathrm{rrıvld} /$ /sædli/ | [ $\beta$ eld] [s] | Substitution and addition | Negative transfer / graphemic interference |
| "bronzed suns" | /nzd/ /s/ | /bronzd/ /sınz/ | [nzed] [s] | Addition | Negative transfer |
| "suns burnt" | /nz/ /b/ | /sınz/ /bз:nt/ | [ns] [b] | Substitution | Negative transfer |


| "Charles hasn't" | /lz/ /h/ | / $\mathrm{a}: 1 \mathrm{lz/} / \mathrm{hæznt/}$ | [les] [x] | Substitution and addition | Graphemic interference |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "hasn't had" | /znt/ /h/ | /hæznt/ /həd/ | [snt] [x] | Substitution | Negative transfer |
| "frightening dream" | /n/ /dr/ | /fraitniy/ /dri:m/ | [ y$][\mathrm{fr}]$ | Substitution | Graphemic interference |
| "drowned but" | /nd/ /b/ | /draund/ /bət/ | [ned] [b] | Addition | Negative transfer/ graphemic interference |
| "his trip" | /z/ /tr/ | /hız/ /trip/ | [s] [tl] | Substitution | Negative transfer |
| "almost stayed" | /st/ /st/ | /o:Iməus/ /steid/ | [st] [est] | Addition | Negative transfer |
| "toilet's tiles" | /ts/ /t/ | /torlets/ /tailz/ | [st] [t] | Metathesis | Unclassified |
| "belongs to" | /nz/ /t/ | /bilonz/ /tə/ | [ ps ] [ t ] | Substitution | Negative transfer |
| $\begin{aligned} & \text { "wouldn't } \\ & \text { forget" } \end{aligned}$ | /dnt/ /f/ | /wudnt/ /fəget/ | [ Cem ¢ $\varnothing$ [ f$]$ | Addition and substitution | Negative transfer |
| "was really" | /z/ /r/ | /woz/ /rıali/ | [s] [r] | Substitution | Negative transfer |
| "and had" | /n/ /h/ | /ən/ /hæd/ | [ n$][\mathrm{x}]$ | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "book store's" | /k/ /st/ | /buk//sto:s/ | [k] [est] | Addition | Negative transfer |


| "store's <br> security", | $/ \mathrm{s} / / \mathrm{s} /$ | /sto:z/ /sıkjverəti/ | $[\varnothing][\mathrm{s}]$ | Elision | Negative transfer |
| :--- | :--- | :--- | :--- | :--- | :--- |
| "finds them" | $/ \mathrm{ndz} / / \delta /$ | $/$ /fanndz/ / $\partial m /$ | $[\mathrm{nds}][\varnothing]$ | Substitution | Negative transfer |



| "uncles sent" | / $\mathrm{gklz} / \mathrm{/s} /$ | /ıŋklz/ /sent/ | [ nkls ] [s] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "bottled wine" | /tld/ /w/ | /botld/ /wain/ | [tlq] [w] | Elision | Negative transfer |
| "pieces, she" | /z/ / / / | /pi:siz/ / Ji:/ | [s] [5] | Substitution | Negative transfer |
| "was much" | /z/ /m/ | /wnz/ /mstf/ | [s] [m] | Substitution | Negative transfer |
| "strange dream" | /nd3/ /dr/ | /streind3/ /dri:m/ | [ tg f$]$ [d. l ] | Substitution | Overpronunciation |
| "shrivelled sadly" | /vld/ /s/ | //rivld/ /sædli/ | [ 3 eled] [s] | Substitution and addition | Negative transfer/ graphemic interference |
| "bronzed suns" | /nzd/ /s/ | /bronzd/ /sınz/ | [nsd] [s] | Substitution | Negative transfer |
| "suns burnt" | /nz/ /b/ | /sınz/ /bs:nt/ | [ns] [b] | Substitution | Negative transfer |
| "Charles hasn't" | /lz/ /h/ | / $\mathrm{a}: 1 \mathrm{lz/} / \mathrm{hæznt/}$ | [les] [x] | Substitution and addition | Negative transfer/ graphemic interference |
| "hasn't had" | /znt/ /h/ | /hæznt/ /həd/ | [sent] [h] | Substitution and addition | Negative transfer |
| "twelfth night" | /lfe/ /n/ | /twelfe/ /nat/ | [lf $¢$ ] [ n ] | Elision | Negative transfer |
| "toilet's tiles" | /ts/ /t/ | /torlets/ /tailz/ | $[t \phi][t]$ | Elision | Negative transfer |


| "belongs to" | /nz/ /t/ | /bilpgz/ /tə/ | [ gs ] [t] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "was really" | /z/ /r/ | /woz/ /riali/ | [s] [r] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "store's security" | /s/ /s/ | /sto:z/ /sıkjuerati/ | [ $\varnothing$ ] [s] | Elision | Negative transfer |
| "guard mulcts" | /d/ /m/ | /ga:d/ /mslkts/ | [ $¢ \varnothing]$ [m] | Addition and elision | Negative transfer/ graphemic interference |
| "finds them" | /ndz/ / // | /faundz/ /סəm/ | [nds] [ $¢$ ] | Substitution | Negative transfer |


| INDIVIDUAL <br> 11 <br> LEVEL 2 | Elisions: 13 <br> Substitutions: 19 <br> Addition: 3 <br> Metathesis: <br> N.T: 32 <br> G.I: 3 |  | $\boldsymbol{O}: 1 \quad \boldsymbol{U}: 1$ | Total: 34 | OTAL:35 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "Michael's friends" | /ls/ /fr/ | /markls/ /frendz/ | [ kl ¢ ] [fr] | Elision | Negative transfer |
| "friends from" | /ndz/ /fr/ | /frendz/ /frrm/ | [ $\mathrm{nd} \phi$ ] [ fr$]$ | Elision | Negative transfer |
| "times better" | /mz/ /b/ | /taımz / /beta/ | [ms] [b] | Substitution | Negative transfer |
| "yours, that's" | /z/ / $/$ | /jo:z / / ðæts/ | [s] [ठ] | Substitution | Negative transfer |
| "that's not" | /ts/ /n/ | /ठæts/ /nt// | [ $¢ \mathrm{~s}$ ] [ n$]$ | Elision | Negative transfer |
| "meals from" | /lz/ /fr/ | /mi:(ə)lz/ /frəm/ | [1s] [fr] | Substitution | Negative transfer |
| "famous song" | /s//s/ | /ferməs/ /spy/ | [ $\phi$ ] [s] | Elision | Negative transfer |
| "Tom'll travel" | /ml/ /rr/ | /tpml/ /trævl/ | [mø] [tr] | Elision | Negative transfer |
| "bored tourists" | /d/ /t/ | /bo:d/ /turists/ | [red] [t] | Addition | Negative transfer/graphemic interference |


| "tourists complained" | /sts/ /k/ | /tuərists/ / kəmpleınd/ | [st $\varnothing$ ] [k] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "conditioned double" | / n nd/ /d/ | /kəndifnd / / dıbl/ | [ $[$ ned] [d] | Addition | Negative transfer/ graphemic interference |
| "rooms saying" | /mz/ /s/ | /ru:mz/ /serin/ | [m $\phi$ ] [s] | Elision | Negative transfer |
| "was just" | /z/ / $\mathrm{d}_{3} /$ | /wnz/ /d3nst/ | [s] [d3] | Substitution | Negative transfer |
| "available shrimp" | /bl/ / $\mathrm{r} / \mathrm{l}$ | /əverıəbl/ //rimp/ | [ $\beta 1$ ] [ r ] | Substitution | Negative transfer |
| "John's rich" | /nz/ /r/ | /d3Dnz/ / ritf/ | [ns] [r] | Substitution | Negative transfer |
| "uncles sent" | / $\mathrm{gklz} / \mathrm{s} /$ | /ıŋklz/ /sent/ | [ $\mathrm{gkl} \varnothing$ ] [s] | Elision | Negative transfer |
| "bottled wine" | /tld/ /w/ | /bbtld/ /wain/ | [tl $¢][\mathrm{w}]$ | Elision | Unclassified |
| "pieces, she" | /z/ / / / | /pi:siz/ / Ji:/ | [s] []] | Substitution | Negative transfer |
| "needed help" | /d/ /h/ | /ni:did/ /help/ | [ $\varnothing$ ] [h] | Elision | Negative transfer |
| "was much" | /z/ /m/ | /wnz/ /matj/ | [s] [m] | Substitution | Negative transfer |
| "strange dream" | /nd3/ /dr/ | /streind3/ /dri:m/ | [ $\left.\mathrm{n} \int\right]$ [d. I ] | Substitution | Overpronunciation |


| "bronzed suns" | /nzd/ /s/ | /bronzd/ /sınz/ | [nsed] [s] | Substitution and addition | Negative transfer/ graphemic interference |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "suns burnt" | /nz/ /b/ | /ssnz/ /bs:nt/ | [ns] [b] | Substitution | Negative transfer |
| "Charles hasn't" | /lz/ /h/ | / $\mathrm{a}: 1 \mathrm{lz/} / \mathrm{hæznt/}$ | [ls] [x] | Substitution | Negative transfer |
| "hasn't had" | /znt/ /h/ | /hæznt/ /həd/ | [snt] [] | Substitution | Negative transfer |
| "frightening dream" | /n/ /dr/ | /fraitnıj/ /dri:m/ | [ n ] [ d ] ] | Substitution | Negative transfer |
| "twelfth night" | /lfy/ /n/ | /twelfe/ /nat/ | [lf $¢$ ] [ n$]$ | Elision | Negative transfer |
| "almost stayed" | /st/ /st/ | /o:lməus/ /sterd/ | [ $\phi$ ¢] [st] | Elision | Negative transfer |
| "belongs to" | /nz/ /t/ | /bilonz/ /to/ | [ g ] [ t ] | Substitution | Negative transfer |
| "Bates stayed" | /st/ /st/ | /beits/ /sterd/ | [t $\dagger$ ] [st] | Elision | Negative transfer |
| "was really" | /z/ /r/ | /woz/ /riali/ | [s] [r] | Substitution | Negative transfer |
| "and had" | /nd/ /h/ | /ənd/ /hæd/ | [ y$][\mathrm{x}]$ | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "finds them" | /ndz/ / / / | /faindz/ /ðəm/ | [ nds ] [ X$]$ | Substitution | Negative transfer |


| INDIVIDUAL <br> 12 <br> LEVEL 2 | Elisions: 10 <br> Substitutions: 20 <br> Addition: 4 <br> Metathesis: 1 <br> N.T: 30 <br> G.I: 5 |  | $\boldsymbol{O}: 1 \quad \boldsymbol{U}:$ | Total: 33 | TAL: 35 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "friends from" | /ndz/ /fr/ | /frendz/ /frrm/ | [nds] [fr] | Substitution | Negative transfer |
| "his twelfths" | /z//tw/ | /hiz/ /twelfөs/ | [s] [tw] | Substitution | Negative transfer |
| "times better" | /mz/ /b/ | /taimz / /beta/ | [ms] [b] | Substitution | Negative transfer |
| "yours, that's" | /z/ /ס/ | /jo:z/ / ðæts/ | [ rs ] [ ¢$]$ | Addition and substitution | Negative transfer/ graphemic interference |
| "meals from" | /lz/ /fr/ | /mi:(ə)lz/ /frəm/ | [1s] [fr] | Substitution | Negative transfer |
| "famous song" | /s/ /s/ | /ferməs/ /spn/ | [ $\varnothing$ ] [s] | Elision | Negative transfer |
| "bored tourists" | /d/ /t/ | /bo:d/ /turists/ | [red] [t] | Addition | Negative transfer/ graphemic interference |
| "tourists complained" | /sts/ /k/ | /turrists/ / <br> kampleind/ | [st $\phi$ ] [ k ] | Elision | Negative transfer |


| "rooms saying" | /mz/ /s/ | /ru:mz/ /seırı/ | [m $\phi$ ] [s] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "was just" | /z/ / $\mathrm{d}_{3} /$ | /wnz/ /d3nst/ | [s] [d3] | Substitution | Negative transfer |
| "John's rich" | /nz/ /r/ | /d3nnz/ / ritj/ | [ns] [r] | Substitution | Negative transfer |
| "uncles sent" | / $\mathrm{gklz} / \mathrm{/s} /$ | / $10 \mathrm{klz} /$ /sent/ | [ $\mathrm{gkl} \mathrm{\phi}$ ] [s] | Elision | Negative transfer |
| "wild cruise" | /ld/ /kr/ | /warld/ /kru:z/ | [ $1 \phi][\mathrm{kr}]$ | Elision | Negative transfer |
| "bottled wine" | /tld/ /w/ | /botld/ /wam/ | $[t l \phi][w]$ | Elision | Unclassified |
| "smashed to" | / $\mathrm{t} /$ / /t/ | /smæft/ /tz/ | [t]ed] [t] | Substitution and addition | Negative transfer/ graphemic interference |
| "pieces, she" | /z/ /5/ | /pi:sız/ / ji:/ | [s] []] | Substitution | Negative transfer |
| "needed help" | /d/ /h/ | /ni:dıd/ /help/ | [d $\phi \phi$ ] [ h$]$ | Elision | Negative transfer |
| "was much" | /z/ /m/ | /wnz/ /mstj/ | [s] [m] | Substitution | Negative transfer |
| "will shred" | /1/ / $\mathrm{r} / \mathrm{l}$ | /wil/ / $\int$ red/ | [1] [Jerd] | Metathesis | Negative transfer |
| "strange dream" | /nd3/ /dr/ | /streind3/ /dri:m/ | [ tg f] [d.r] | Substitution | Overpronunciation |
| "shrivelled sadly" | /vld/ /s/ | / $\int$ rıvld/ /sædli/ | [ $\beta 1 \mathrm{ld}$ ] [s] | Substitution | Negative transfer |


| "bronzed suns" | /nzd/ /s/ | /bronzd/ /sınz/ | [nsed] [s] | Substitution and addition | Negative transfer/ graphemic interference |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "suns burnt" | /nz/ /b/ | /ssnz/ /bs:nt/ | [ns] [b] | Substitution | Negative transfer |
| "Charles hasn't" | /lz/ /h/ | /fa:lz/ /hæznt/ | [1s] [x] | Substitution | Negative transfer |
| "hasn't had" | /znt/ /h/ | /hæznt/ /həd/ | [snt] [h] | Substitution | Negative transfer |
| "thanked them" | /nkt/ / / / | /Өæŋkt//ठəm/ | [ gks ] [t] | Substitution | Unclassified |
| "twelfth night" | /lfe/ /n/ | /twelfe/ /nat/ | [lft] [n] | Substitution | Negative transfer/ graphemic interference |
| "almost stayed" | /st/ /st/ | /o:lməus/ /sterd/ | [ $\phi \varnothing$ ] [st] | Elision | Negative transfer |
| "belongs to" | /gz/ /t/ | /bilonz/ /to/ | [ $\mathrm{\eta} \varnothing$ ] [ t ] | Elision | Negative transfer |
| "was really" | /z/ /r/ | /woz/ /riali/ | [s] [r] | Substitution | Negative transfer |
| "and had" | /n/ /h/ | /ən/ /hæd/ | [ y$][\mathrm{x}]$ | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "finds them" | /ndz/ / / / | /faindz/ /סəm/ | [ $n d \phi][\varnothing]$ | Elision | Negative transfer |


| INDIVIDUAL <br> 13 <br> LEVEL 2 | Elisions: 7 <br> Substitutions: 26 <br> Addition: 9 <br> Metathesis: 1 <br> N.T: 36 <br> G.I: 6 |  | $\boldsymbol{O}: 1 \quad \boldsymbol{U}$ : | Total: 38 | TAL:43 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "friends from" | /ndz/ /fr/ | /frendz/ /frəm/ | [nds] [fr] | Substitution | Negative transfer |
| "from school" | /m/ /sk/ | /frəm/ /sku:1/ | [m] [esk] | Addition | Negative transfer |
| "reception for" | /pJn/ /f/ | /risep n / /fo:/ | [ [om] [f] | Addition | Negative transfer |
| "times better" | /mz/ /b/ | /taimz / /betə/ | [ms] [b] | Substitution | Negative transfer |
| "yours, that's" | /z/ /ס/ | /jo:z/ / ðæts/ | [rs] [ $¢$ ] | Addition and substitution | Negative transfer |
| "meals from" | /lz/ /fr/ | /mi:(ə)lz/ /frəm/ | [1s] [fr] | Substitution | Negative transfer |
| "famous song" | /s/ /s/ | /ferməs/ /smy/ | [ $\phi$ ] [s] | Elision | Negative transfer |
| "song spent" | /n//sp/ | /spy/ /spent/ | [n] [sp] | Substitution | Negative transfer |
| "spent three" | /nt/ / $\mathrm{r} /$ | /spent/ /日ri:/ | [ $\mathrm{n} \phi$ ] [ tr ] | Substitution | Negative transfer |


| "Tom'll travel" | /mi/ /rr/ | /tmml/ /trævl/ | [mø] [tr] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "travel to" | /vl/ /t/ | /trævl/ /tə/ | [ $\beta \mathrm{el}$ ] [tə] | Substitution and addition | Negative transfer/ graphemic interference |
| "month trip" | /n $\mathrm{n} / \mathrm{/tr} /$ | /mın日/ /trip/ | [nt] [t.r] | Substitution | Negative transfer/ graphemic interference |
| "bored tourists" | /d/ /t/ | /bo:d/ /turists/ | [red] [t] | Addition | Negative transfer/ graphemic interference |
| "conditioned double" | //nnd/ /d/ | /kəndi ${ }^{\text {fnd / / d } \lambda \text { bl/ }}$ | [ $\mathrm{n}^{\text {e才] [d] }}$ | Addition and substitution | Negative transfer/ graphemic interference |
| "rooms saying" | /mz/ /s/ | /ru:mz/ /seiry/ | [ms] [s] | Substitution | Negative transfer |
| "was just" | /z/ /d3/ | /wdz/ /d3nst/ | [s] [d3] | Substitution | Negative transfer |
| "available shrimp" | /bl/ /fr/ | /əverləbl/ //rimp/ | [ $\beta 1 \mathrm{I}$ ] [ r r$]$ | Addition and substitution | Negative transfer |
| "John's rich" | /nz/ /r/ | /d3Dnz/ / ritf/ | [ ns ] [r] | Substitution | Negative transfer |
| "uncles sent" | / $\mathrm{yklz} / / \mathrm{s} /$ | / $n \mathrm{j} \mathrm{klz} /$ /sent/ | $[\mathrm{hkl} ¢][\mathrm{s}]$ | Elision | Negative transfer |


| "bottled wine" | /tld/ /w/ | /botld/ /wain/ | [tl\| ] [w] | Elision | Unclassified |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "smashed to" | / $\mathrm{t} /$ / /t/ |  | [ $\left.\int \mathrm{d}\right][\mathrm{t}]$ | Substitution | Overpronunciation |
| "pieces, she" | /z/ / $/$ / | /pi:siz/ / ¢i:/ | [s] [ [] | Substitution | Negative transfer |
| "was much" | /z/ /m/ | /wnz/ /mstf/ | [s] [m] | Substitution | Negative transfer |
| "will shred" | /1/ / $\mathrm{r} /$ | /wil/ //red/ | [1] [Jerd] | Metathesis | Negative transfer |
| "strange dream" | /nd3/ /dr/ | /streind3/ /dri:m/ | [ $\mathrm{n} \phi$ ] [d.r] | Elision | Negative transfer |
| "shrivelled sadly" | /vld/ /s/ | //rivld/ /sædli/ | [ 3 eled] [s] | Substitution and addition | Negative transfer/ graphemic interference |
| "suns burnt" | /nz/ /b/ | /sınz/ /bs:nt/ | [ns] [b] | Substitution | Negative transfer |
| "burnt fields" | /nt/ /f/ | /b3:nt/ /fi:əldz/ | [ $\mathrm{rn} \phi$ ] [f] | Addition and elision | Negative transfer/ graphemic interference |
| "Charles hasn't" | /lz/ /h/ | / $\mathrm{a}: 1 \mathrm{lz/} / \mathrm{h}$ ¢znt/ | [1s] [x] | Substitution | Negative transfer |
| "hasn't had" | /znt/ /h/ | /hæznt/ /həd/ | [snt] [h] | Substitution | Negative transfer |
| "dream like" | /m/ /l/ | /dri:m/ /lark/ | [ms] [1] | Addition | Unclassified |
| "comfortable house" | /bl/ /h/ | /kımpfəbl/ /hauz/ | [bl] [x] | Substitution | Negative transfer |


| "almost stayed" | /st/ /st/ | /o:lməus/ /sterd/ | [ $\phi \varnothing$ ] [st] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "belongs to" | /gz/ /t/ | /bilogz/ /tə/ | [ ng ] [ t ] | Substitution | Negative transfer |
| "was really" | /z/ /r/ | /wnz/ /rioli/ | [s] [r] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "store's security" | /s/ /s/ | /sto:z/ /sıkjuerati/ | [ф] [s] | Elision | Negative transfer |
| "finds them" | /ndz/ /ס/ | /faundz/ /סəm/ | [nds] [ $\mathrm{\delta}$ ] | Substitution | Negative transfer |


| INDIVIDUAL <br> 14 <br> LEVEL 2 | Elisions: 6 <br> Substitutions: 22 <br> Addition: 7 <br> Metathesis: 1 <br> N.T: 32 <br> G.I: 4 |  | $\boldsymbol{O}: 2 \quad \boldsymbol{U}: 1$ | Total: 35 | TAL:36 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "Michael's friends" | /kls/ /fr/ | /markls/ /frendz/ | [kls] [fr] | Substitution | Negative transfer |
| "friends from" | /ndz/ /fr/ | /frendz/ /from/ | [nds] [fr] | Substitution | Negative transfer |
| "reception for" | /pfn/ /f/ | /risepfn / /fo:/ | [pfom] [f] | Addition | Negative transfer/ graphemic interference |
| "his twelfths" | /z//tw/ | /hiz/ /twelfөs/ | [s] [tw] | Substitution | Negative transfer |
| "times better" | /mz/ /b/ | /taimz / /betə/ | [ms] [b] | Substitution | Negative transfer |
| "meals from" | /lz/ /fr/ | /mi:(ə)lz/ /frəm/ | [ls] [fr] | Substitution | Negative transfer |
| "song spent" | /n//sp/ | /spy/ /spent/ | [ n$]$ [esp] | Addition | Negative transfer |
| "Tom'll travel" | /ml/ /rr/ | /tmml/ /trævl/ | $[\mathrm{m} \phi][\mathrm{tr}]$ | Elision | Negative transfer |
| "month trip" | /nv/ /rr/ | /man日/ /trip/ | [ $\mathrm{n} \phi$ ] [t.r] | Elision | Negative transfer |


| "bored tourists" | /d/ /t/ | /bo:d/ /turists/ | [ rd$][\mathrm{t}]$ | Addition | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "tourists complained" | /sts/ /k/ | /tuarists/ / <br> kəmplemd/ | [st $\varnothing$ ] [k] | Elision | Negative transfer |
| "conditioned double" | //nd/ /d/ | /kəndi [nd / / dstbl/ | [ [joned] [d] | Addition | Negative transfer/ graphemic interference |
| "rooms saying" | /mz/ /s/ | /ru:mz/ /seiri/ | [ms] [s] | Substitution | Negative transfer |
| "felt very" | /lt/ /v/ | /felt/ /veri/ | $[1 \phi][\beta]$ | Substitution | Negative transfer |
| "was just" | /z/ / $\mathrm{d}_{3} /$ | /wnz/ /d3^st/ | [s] [d3] | Substitution | Negative transfer |
| "available <br> shrimp" | /bl/ / $\mathrm{r} / \mathrm{l}$ | /əverıəbl/ //rimp/ | [ $\beta \mathrm{el}$ ] [ $[\mathrm{r}]$ | Substitution and addition | Negative transfer/ graphemic interference |
| "approached to" | / $\mathrm{st/} / \mathrm{t} /$ | /əprəu ${ }^{\text {d/ / } / \text { t/ }}$ | [ $\left.\int \mathrm{d}\right][\mathrm{t}]$ | Substitution | Overpronunciation |
| "John's rich" | /nz/ /r/ | /d3Dnz/ / ritj/ | [ns] [r] | Substitution | Negative transfer |
| "uncles sent" | / $\mathrm{jklz} / / \mathrm{s} /$ | /anklz/ /sent/ | [ pkls ] [s] | Substitution | Negative transfer |
| "bottled wine" | /tld/ /w/ | /botld/ /wam/ | [tel $\phi$ ] [w] | Addition and elision | Negative transfer /graphemic interference |
| "pieces, she" | /z/ / / | /pi:sız/ / Ji:/ | [s] []] | Substitution | Negative transfer |


| "strange dream" | /nd3/ /dr/ | /stremd3/ /dri:m/ | [ $\left.\mathrm{n} \int\right]$ [d.r] | Substitution | Overpronunciation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "bronzed suns" | /nzd/ /s/ | /bronzd/ /sınz/ | [nsd] [s] | Substitution | Negative transfer |
| "suns burnt" | /nz/ /b/ | /sınz/ /bs:nt/ | [ns] [b] | Substitution | Negative transfer |
| "Charles hasn't" | /lz/ /h/ | / $\mathrm{a}: 1 \mathrm{lz/} / \mathrm{hæ}$ znt/ | [1s] [h] | Substitution | Negative transfer |
| "twelfth night" | /lf $\theta / / \mathrm{n} /$ | /twelfe/ /nait/ | [lf $¢][\mathrm{n}]$ | Elision | Negative transfer |
| $\begin{array}{\|l} \hline \text { "comfortable } \\ \text { house" } \end{array}$ | /bl/ /h/ | /kımpfəbl/ /havz/ | [ l 1 ] [h] | Substitution | Negative transfer |
| "toilet's tiles" | /ts/ /t/ | /torlets/ /tariz/ | [st] [t] | Metathesis | Unclassified |
| "belongs to" | /nz/ /t/ | /bilojz/ /tə/ | [ ys ] [ t ] | Substitution | Negative transfer |
| $\begin{array}{\|l} \hline \text { "wouldn't } \\ \text { forget" } \end{array}$ | /dnt/ /f/ | /wudnt/ /fəget/ | [ldmø] [f] | Addition | Negative transfer |
| "Bates stayed" | /ts/ /st/ | /beits/ /sterd/ | [фs] [st] | Elision | Negative transfer |
| "stayed with" | /d/ /w/ | /steId/ /wio/ | [ O$]$ [w] | Substitution | Negative transfer |
| "was really" | /z/ /r/ | /woz/ /rieli/ | [s] [r] | Substitution | Negative transfer |
| "store's security" | /s/ /s/ | /sto:z/ /sikjuerəti/ | [ $\phi$ ] [s] | Elision | Negative transfer |
| "finds them" | /ndz/ / / / | /faindz/ /ठəm/ | [nds] [ $¢$ ] | Substitution | Negative transfer |

## Consonant groups in the boundaries of words II

| INDIVIDUAL <br> 1 <br> LEVEL 2 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "My steak" | /st/ | /mai/ /sterk/ | [est] | Addition | Negative transfer |
| "months in" | /n s / | /mın $\theta$ s/ /m/ | [ $n ¢ s$ ] | Elision | Negative transfer |
| "clubs are" | /bz/ | /klıbz/ /a:/ | [ $\beta \mathrm{s}$ ] | Substitution | Negative transfer |
| "There was | /eə/ /w/ | /ðeə/ /wəz/ | [ər] [w] | Addition | Graphemic interference |
| "shrimp on" | /mp/ | / rrmp / /ən/ | [mø] | Elision | Negative transfer |


| INDIVIDUAL $2$ <br> LEVEL 2 | Elisions: 1 <br> Substitutions: 2 <br> Addition: <br> Metathesis: <br> N.T: 3 | G.I: $\quad$ O: $\quad$ U: Total: 3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "months in" | /n s / | /mın $\theta$ s/ /m/ | [ $n \phi s$ ] | Elision | Negative transfer |
| "clubs are" | /bz/ | /klıbz/ /a:/ | $[\beta \mathrm{s}]$ | Substitution | Negative transfer |
| "fields as | /ldz/ | /fi: $2 \mathrm{ldz/} / \mathrm{l}$ z/ | [lds] | Substitution | Negative transfer |


| INDIVIDUAL 3 <br> LEVEL 2 | Elisions: 1 <br> Substitutions: 3 <br> Addition: <br> Metathesis: <br> N.T: 4 | G.I: $\quad$ O: $\quad$ U: $\quad$ Total: 4 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "months in" | /n s / | /man $\mathrm{s}^{\text {/ } / \mathrm{m}}$ / | [ $\mathrm{n} \theta \varnothing$ ] | Elision | Negative transfer |
| "spring on" | / $\mathrm{l} /$ | /spriy/ /on/ | [n] | Substitution | Negative transfer |
| "clubs are" | /bz/ | /klıbz/ /a:/ | [ $\beta \mathrm{s}$ ] | Substitution | Negative transfer |
| "fields as | /ldz/ | /fi:aldz/ /əz/ | [lds] | Substitution | Negative transfer |


| $\begin{gathered} \text { INDIVIDUAL } \\ \hline \end{gathered}$ | Elisions: <br> Substitutions: 2 <br> Addition: 1 <br> Metathesis: <br> N.T: 2 | G.I: $\quad$ O: $\quad$ U: $1 \quad$ Total: 3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LEVEL 2 |  |  |  |  |  |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "clubs are" | /bz/ | /klıbz/ /a:/ | [ $\beta \mathrm{s}$ ] | Substitution | Negative transfer |
| "the tray" | /tr/ | / $\partial$ / /treI/ | [str] | Addition | Unclassified |
| "whish I" | / $/$ | /wij/ /ai/ | [t 5 ] | Substitution | Negative transfer |




| INDIVIDUAL 7 <br> LEVEL 2 | Elisions: 5 <br> Substitutions: 2 <br> Addition: <br> Metathesis: <br> N.T: $7 \quad$ G.I: $\quad O: \quad U: \quad$ Total: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "months in" | /nөs/ | /mın $\mathrm{s}^{\text {/ / } / \mathrm{m} / \mathrm{L}}$ | [ n ¢ $]$ | Elision | Negative transfer |
| "complained about" | /nd/ | /kəmpleind/ /əbaut/ | [ $n \varnothing$ ] | Elision | Negative transfer |
| "clubs are" | /bz/ | /klıbz/ /a:/ | [bs] | Substitution | Negative transfer |
| "shrimp on" | /mp/ | / rrmp / /ən/ | [m $\phi$ ] | Elision | Negative transfer |
| "fields as | /ldz/ | /fi:əldz/ /əz/ | [lds] | Substitution | Negative transfer |
| "weekend at" | /nd/ | /wi:kend/ /ot/ | [ $n \phi$ ] | Elision | Negative transfer |
| "fruits and" | /ts/ | /fru:ts/ /ən/ | [ $\dagger \mathrm{s}$ ] | Elision | Negative transfer |


| INDIVIDUAL <br> 8 <br> LEVEL 2 | Elisions: 1 <br> Substitutions: 3 <br> Addition: 5 <br> Metathesis: <br> N.T: 7 G.I: $1 \quad O: \quad U: \quad$ Total: 8 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "My steak" | /st/ | /mai/ /sterk/ | [Ist] | Addition | Negative transfer |
| "months in" | /nөs/ | /mın $\mathrm{s}^{\text {/ / } / \mathrm{m} /}$ | [nts] | Substitution | Graphemic interference |
| "complained about" | /nd/ | /kəmpleind/ /əbaut/ | [ned] | Addition | Negative transfer |
| "shrimp on" | /mp/ | / rrmp / /ən/ | [m $\phi$ ] | Elision | Negative transfer |
| "the small" | /sm/ | /ठə/ /smo:1/ | [esm] | Addition | Negative transfer |
| "fields as | /ldz/ | /fi: 2 ldz/ /əz/ | [lds] | Substitution | Negative transfer |
| "to spend" | /sp/ | /tə/ /spend/ | [esp] | Addition | Negative transfer |
| "calmed and" | /lmd/ | /ka:lmd/ /ən/ | [lmeð] | Addition and substitution | Negative transfer/ graphemic interference |


| INDIVIDUAL $9$ <br> LEVEL 2 | Elisions: 4 <br> Substitutions: 3 <br> Addition: <br> Metathesis: <br> N.T: 6 <br> G.I: 1 <br> $O$ : |  | U: Total: 7 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "months in" | /n s / | /man $\mathrm{s}^{\text {/ / /n/ }}$ | [nts] | Substitution | Graphemic interference |
| "complained about" | /nd/ | /kəmplemnd/ /əbaut/ | [ $n$ ¢] | Elision | Negative transfer |
| "clubs are" | /bz/ | /klıbz/ /a:/ | [bs] | Substitution | Negative transfer |
| "shrimp on" | /mp/ | / rrmp / /ən/ | [m $¢$ ] | Elision | Negative transfer |
| "fields as | /ldz/ | /fi:əldz/ /əz/ | [1ds] | Substitution | Negative transfer |
| "weekend at" | /nd/ | /wi:kend/ /ot/ | [ n ¢] | Elision | Negative transfer |
| "calmed and" | /lmd/ | /ka:lmd/ /on/ | [ $1 \mathrm{~m} \phi$ ] | Elision | Negative transfer |


| $\begin{gathered} \hline \text { INDIVIDUAL } \\ 10 \end{gathered}$ | Elisions: 4 <br> Substitutions: 3 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LEVEL 2 | Addition: 1 <br> Metathesis: <br> N.T: $7 \quad$ G.I: $1 \quad O: \quad U: \quad$ Total: 8 |  |  |  |  |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "months in" | /n $\theta$ s/ | /mın $\mathrm{s}^{\text {/ / } / \mathrm{m} / \mathrm{L}}$ | [nts] | Substitution | Graphemic interference |
| "complained about" | /nd/ | /kəmplemd/ /əbaut/ | [nø] | Elision | Negative transfer |
| "clubs are" | /bz/ | /klıbz/ /a:/ | [ $\beta \mathrm{s}$ ] | Substitution | Negative transfer |
| "shrimp on" | /mp/ | / rrmp / /ən/ | [ $\varnothing \mathrm{p}$ ] | Elision | Negative transfer |
| "the small" | /sm/ | / $\partial$ / / smっ:1/ | [esm] | Addition | Negative transfer |
| "fields as | /ldz/ | /fi:əldz/ /əz/ | [lds] | Substitution | Negative transfer |
| "weekend at" | /nd/ | /wi:kend/ /ot/ | [ $n \varnothing$ ] | Elision | Negative transfer |
| "calmed and" | /lmd/ | /ka:1md/ /ən/ | [ $1 \mathrm{~m} \phi$ ] | Elision | Negative transfer |


| INDIVIDUAL <br> 11 <br> LEVEL 2 | Elisions: 4 <br> Substitutions: 3 <br> Addition: 1 <br> Metathesis: <br> N.T: 7 | G.I: $1 \quad 0$ O: | $\boldsymbol{U}$ : Total: 8 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "months in" | /n s / | /mın $\mathrm{s}^{\text {/ / } / \mathrm{m} / \mathrm{L}}$ | [nts] | Substitution | Graphemic interference |
| "complained about" | /nd/ | /kəmplemd/ /əbaut/ | [ $n$ ¢] | Elision | Negative transfer |
| "clubs are" | /bz/ | /klıbz/ /a:/ | [ $\beta \mathrm{s}$ ] | Substitution | Negative transfer |
| "shrimp on" | /mp/ | / rrmp / /ən/ | [фр] | Elision | Negative transfer |
| "the small" | /sm/ | / $\partial$ / /smo:1/ | [esm] | Addition | Negative transfer |
| "fields as | /ldz/ | /fi: 2 ldz/ /əz/ | [lds] | Substitution | Negative transfer |
| "weekend at" | /nd/ | /wi:kend/ /ot/ | [ $n \phi$ ] | Elision | Negative transfer |
| "calmed and" | /lmd/ | /ka:lmd/ /on/ | [ $1 \mathrm{~m} \phi$ ] | Elision | Negative transfer |


| INDIVIDUAL <br> 12 <br> LEVEL 2 | Elisions: 1 <br> Substitutions: 1 <br> Addition: 2 <br> Metathesis: <br> N.T: 4 | G.I: $1 \quad \boldsymbol{O}: \quad \mathrm{U}: \quad$ Total: 4 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "My steak" | /st/ | /mai/ /sterk/ | [est] | Addition | Negative transfer |
| "complained about" | /nd/ | /kəmpleind/ /əbaut/ | [ned] | Addition | Negative transfer / graphemic interference |
| "shrimp on" | /mp/ | / /rimp/ /ən/ | [m $¢$ ] | Elision | Negative transfer |
| "fields as | /ldz/ | /fi:əldz/ /əz/ | [lds] | Substitution | Negative transfer |



| INDIVIDUAL <br> 14 <br> LEVEL 2 | Elisions: 3 <br> Substitutions: 4 <br> Addition: 3 <br> Metathesis: <br> N.T: 8 | G.I: 2 O: | $U: \quad$ To |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "My steak" | /st/ | /mai/ /sterk/ | [est] | Addition | Negative transfer |
| "months in" | /n s / | /mın $\mathrm{s}_{\text {/ } / \mathrm{m} / \mathrm{m}}$ | [nts] | Substitution | Graphemic interference |
| "complained about" | /nd/ | /kəmplemd/ /əbaut/ | [ $n \phi$ ] | Elision | Negative transfer |
| "clubs are" | /bz/ | /klıbz/ /a:/ | $[\beta \mathrm{s}]$ | Substitution | Negative transfer |
| "papers on" | /z/ | /perpəz/ / ən/ | [rs] | Addition and substitution | Negative transfer / graphemic interference |
| "fields as | /ldz/ | /fi:əldz/ /əz/ | [lds] | Substitution | Negative transfer |
| "to spend" | /sp/ | /to/ /spend/ | [esp] | Addition | Negative transfer |
| "weekend at" | /nd/ | /wi:kend/ / t / | [ $n$ ¢] | Elision | Negative transfer |
| "calmed and" | /lmd/ | /ka:lmd/ /ən/ | [1фф] | Elision | Negative transfer |

## Consonant groups in word final position

| LEVEL 2 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Individual | Word | Consonant groups | Target pronunciations | Individual's pronunciatio n of the CG | Type of deviation | Methodological strategy |
| 1 | "shelves" | /lvz/ | /Selvz/ | [1 $\beta \mathrm{s}$ ] | Substitution | Negative transfer |
| 1 | "sixth" | /ks $\theta$ / | /suks $\theta$ / | [ks $\phi$ ] | Elision | Negative transfer |
| 1 | "attractions | /kJnz/ | /2træk $\mathrm{Snz}^{\text {/ }}$ | [kJons] | Addition and substitution | Negative transfer/ graphemic interference |
| 1 | "glimpse" | /mps/ | /glımps/ | [møsI] | Elision and addition | Negative transfer/ graphemic interference |
| 1 | "gardens" | /dnz/ | /ga:dnz/ | [dens] | Addition and substitution | Negative transfer/ graphemic interference |
| 1 | "obliged" | /d3d/ | /2blard3d/ | [ $[\mathrm{d}]$ | Substitution | Overpronunciation |


| 1 | "Brighton" | /tn/ | /bratn/ | [ton] | Addition | Negative transfer/ graphemic interference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | "breathed" | / $\mathrm{d} /$ | /bri:ðd/ | [ $\varnothing \varnothing$ ] | Elision | Negative transfer |
| 1 | "spectacles" | /klz/ | /spektəklz/ | [kls] | Substitution | Negative transfer |
| 1 | "careful" | /fl/ | /keafl/ | [ful] | Addition | Negative transfer/ graphemic interference |
| Elisions: 3 <br> Substitutions: 5 <br> Addition: 5 <br> Metathesis: |  |  |  |  |  |  |
| 2 | "shelves" | /lvz/ | /Selvz/ | [ $1 \beta \mathrm{~s}$ ] | Substitution | Negative transfer |
| 2 | "lists" | /sts/ | /lısts/ | [st $\phi$ ] | Elision | Negative transfer |
| 2 | "sixth" | /ks $\theta$ / | /sıks $\theta$ / | [ ks ¢ $]$ | Elision | Negative transfer |
| 2 | "attractions" | /kJnz/ | /ətræk $5 \mathrm{nz} /$ | [kJon¢] | Addition and elision | Negative transfer/ graphemic interference |
| 2 | "gardens" | /dnz/ | /ga:dnz/ | [dens] | Addition and substitution | Negative transfer/ graphemic interference |


| 2 | "obliged" | /d3d/ | /2blard3d/ | [geıð] | Addition and substitution | Graphemic interference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | "Brighton" | /tn/ | /braitn/ | [ton] | Addition | Negative transfer/ graphemic interference |
| 2 | "blinked" | / $\mathrm{yk} \mathrm{t} /$ | /blıjkt/ | [ nc ]d] | Addition and substitution | Graphemic interference |
| 2 | "breathed" | / d / | /bri:ðd/ | [ $\varnothing \mathrm{d}$ ] | Elision | Negative transfer |
| 2 | "tiles" | /lz/ | /tailz/ | [1ф] | Elision | Negative transfer |
| 2 | "spectacles" | /klz/ | /spektəklz/ | [kls] | Substitution | Negative transfer |
| 2 | "changed" | /nd3d/ | /tjeind3d/ | [ t [ft] | Substitution | Overpronunciation |

## Elisions: 5

## Substitutions: 6

## Addition: 5

## Metathesis:

|  | G.I: $1 \quad \boldsymbol{O}$. |  | Total: 12 |  | TOTAL: 16 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | "twelfths" | /lfes/ | /twelfs/ | [1fфs] | Elision | Negative transfer |
| 3 | "shelves" | /lvz/ | /Selvz/ | [1/3s] | Substitution | Negative transfer |


|  | "attractions" | /kJnz/ | /2træk ${ }^{\text {nz/ }}$ | [kJons] | Addition and substitution | Negative transfer/ graphemic interference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | "gardens" | /dnz/ | /ga:dnz/ | [dens] | Addition and substitution | Negative transfer/ graphemic interference |
|  | "obliged" | /d3d/ | /2blard3d/ | [ $[\mathrm{d}]$ | Substitution | Overpronunciation |
|  | "tiles" | /lz/ | /tarlz/ | [1s] | Substitution | Negative transfer |
| 3 | "changed" | /nd3d/ | /tjeind3d/ | [ nt 5 t ] | Substitution | Overpronunciation |
| Elisions: 1 <br> Substitutions: 6 <br> Addition: 2 <br> Metathesis: <br> $\begin{array}{lllllll}\text { N.T: } 5 & \text { G.I: } 1 & \text { O: } 2 & U \text { : } & \text { Total: 7 } & \text { TOTAL: } 9\end{array}$ |  |  |  |  |  |  |
|  | "shelves" | /lvz/ | /Selvz/ | [lvs] | Substitution | Negative transfer |
|  | "attractions" | /kJnz/ | /2træk ${ }^{\text {nz/ }}$ | [kJjons] | Addition and substitution | Negative transfer/ graphemic interference |
|  | "glimpse" | /mps/ | /glimps/ | [møs] | Elision | Negative transfer |
|  | "gardens" | /dnz/ | /ga:dnz/ | [dens] | Addition and substitution | Negative transfer/ graphemic interference |


| Elisions: 1 <br> Substitutio <br> Addition: <br> Metathesis <br> N.T: 4 | G.I: 2 | $\boldsymbol{O}$ | Total | TO |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | "twelfths" | /lfes/ | /twelfөs/ | [lføs] | Elision | Negative transfer |
| 5 | "shelves" | /lvz/ | /Selvz/ | [lvs] | Substitution | Negative transfer |
| 5 | "sixth" | /ks $\theta$ / | /sirks $\theta$ / | [ ks ¢ $]$ | Elision | Negative transfer |
| 5 | "gardens" | /dnz/ | /ga:dnz/ | [dns] | Substitution | Negative transfer |
| 5 | "obliged" | /d3d/ | /2blard3d/ | [gid] | Substitution and addition | Graphemic interference |
| 5 | "Brighton" | /tn/ | /brattn/ | [ton] | Addition | Negative transfer/ graphemic interference |
| 5 | "breathed" | / $\partial \mathrm{d} /$ | /bri:ðd/ | [ $\partial \varnothing$ ] | Elision | Negative transfer |
| 5 | "tiles" | /lz/ | /tailz/ | [1s] | Substitution | Negative transfer |
| 5 | "spectacles" | /klz/ | /spektəklz/ | [kls] | Substitution | Negative transfer |
| 5 | "careful" | /fl/ | /keafl/ | [ful] | Addition | Negative transfer/ graphemic interference |



| 6 | "breathed" | / $\partial \mathrm{d} /$ | /bri:ðd/ | [ðеð] | Substitution and addition | Negative transfer/ graphemic interference |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | "tiles" | /lz/ | /tailz/ | [1s] | Substitution | Negative transfer |
| 6 | "spectacles" | /klz/ | /spektəklz/ | [kls] | Substitution | Negative transfer |
| 6 | "careful" | /fl/ | /keafl/ | [ful] | Addition | Negative transfer/ graphemic interference |
| Elisions: <br> Substitutions: 8 <br> Addition: 6 <br> Metathesis: <br> N.T: 6 <br> G.I: 5 <br> O: $1 \quad U:$ <br> Total: 10 <br> TOTAL: 14 |  |  |  |  |  |  |
| 7 | "twelfths" | /lfes/ | /twelfs/ | [1føs] | Elision | Negative transfer |
| 7 | "shelves" | /lvz/ | /Selvz/ | [lvs] | Substitution | Negative transfer |
| 7 | "sixth" | /ks ${ }^{\text {/ }}$ | /sıiks $\theta$ / | [ks $\phi$ ] | Elision | Negative transfer |
| 7 | "attractions" | /kjnz/ | /2træk ${ }^{\text {nnz/ }}$ | [kJons] | Addition and substitution | Negative transfer/ graphemic interference |
| 7 | "glimpse" | /mps/ | /glımps/ | [møs] | Elision | Negative transfer |


| 7 | "gardens" | /dnz/ | /ga:dnz/ | [dens] | Addition and <br> substitution | Negative transfer/ <br> graphemic <br> interference |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 7 | "obliged" | /d3d/ | /ablaid3d/ | [ged] | Substitution and <br> addition | Graphemic <br> interference |
| 7 | "Brighton" | /tn/ | /brartn/ | [ton] | Addition | Negative transfer/ <br> graphemic <br> interference |
| 7 | "tiles" | /lz/ | /tarlz/ | $[\mathrm{ls}]$ | Substitution | Negative transfer |
| 7 | "spectacles" | /klz/ | /spekt2klz/ | [kls] | Substitution | Negative transfer |
| 7 | "careful" | /fl/ | /keafl/ | [ful] | Addition | Negative transfer/ <br> graphemic <br> interference |

## Elisions: 3

## Substitutions: 6

## Addition: 5

Metathesis:


| 8 | "attractions" | /kjnz/ | /2trækSnz/ | [ k [ns] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | "glimpse" | /mps/ | /glimps/ | [møs] | Elision | Negative transfer |
| 8 | "gardens" | /dnz/ | /ga:dnz/ | [rdens] | Addition and substitution | Negative transfer/ graphemic interference |
| 8 | "obliged" | /d3d/ | /2blaid3d/ | [gd] | Substitution | Graphemic interference |
| 8 | "Brighton" | /tn/ | /bratn/ | [ton] | Addition | Negative transfer/ graphemic interference |
| 8 | "tiles" | /lz/ | /tarlz/ | [1s] | Substitution | Negative transfer |
| 8 | "spectacles" | /klz/ | /spektəklz/ | [ktl] | Substitution and metathesis | Unclassified |
| 8 | "changed" | /nd3d/ | /tjernd3d/ | [ $\dagger \mathrm{d} 3 \varnothing$ ] | Elision | Negative transfer |
| Elisions: 3 <br> Substitutions: 6 <br> Addition: 2 <br> Metathesis: 1 <br> N.T: 7 | 6 $\text { G.I: } 3$ | $\boldsymbol{O}$ | Tot |  |  |  |
| 9 | "twelfths" | /lfөs/ | /twelfs/ | [lf $\phi \varnothing$ ] | Elision | Negative transfer |


| 9 | "product" | /kt/ | /prod^kt/ | [ $\mathrm{k} \phi$ ] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | "shelves" | /lvz/ | /Selvz/ | [18s] | Substitution | Negative transfer |
| 9 | "lists" | /sts/ | /lists/ | [st $\phi$ ] | Elision | Negative transfer |
| 9 | "sixth" | /ks $\theta$ / | /sıks $\theta$ / | [ks $\varphi$ ] | Elision | Negative transfer |
| 9 | "attractions" | /kjnz/ | /2træk $5 n z /$ | [kJonø] | Addition and elision | Negative transfer/ graphemic interference |
| 9 | "glimpse" | /mps/ | /glımps/ | [møse] | Elision and addition | Negative transfer/ graphemic interference |
| 9 | "uncle" | / $\mathrm{j} \mathrm{kl} /$ | /^ŋkl/ | [ngl] | Substitution | Negative transfer |
| 9 | "obliged" | /d3d/ | /2blard3d/ | [ged] | Substitution and addition | Graphemic interference |
| 9 | "Brighton" | /tn/ | /braitn/ | [nton] | Addition and substitution | Negative transfer/ graphemic interference |
| 9 | "blinked" | /nkt/ | /blınkt/ | [nced] | Addition and substitution | Graphemic interference |


| 9 | "breathed" | /סd/ | /bri:ðd/ | [ted] | Substitution and <br> addition | Negative transfer/ <br> graphemic <br> interference |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 9 | "tiles" | /lz/ | /tarlz/ | $[\mathrm{ls}]$ | Substitution | Negative transfer |
| 9 | "spectacles" | /klz/ | /spekt2klz/ | $[\mathrm{kls}]$ | Substitution | Negative transfer |
| 9 | "careful" | /fl/ | /keəfl/ | $[$ ful] | Addition | Negative transfer/ <br> graphemic <br> interference |
| 9 | "texts" | /ksts/ | /teksts/ | $[\mathrm{kst} \phi]$ | Elision | Negative transfer |

## Elisions: 7

Substitutions: 7
Addition: 7

| Metathesis: <br> N.T: 12 | G.I: 5 | $\boldsymbol{O}$ |  | TOTAL: 21 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | "twelfths" | /lfes/ | /twelf0s/ | [1føs] | Elision | Negative transfer |
| 10 | "shelves" | /lvz/ | /Selvz/ | [13s] | Substitution | Negative transfer |
| 10 | "lists" | /sts/ | /lısts/ | [st $\varnothing$ ] | Elision | Negative transfer |
| 10 | "sixth" | /ks $\theta$ / | /sıiks $\theta$ / | [kø $¢$ | Elision | Negative transfer |


| 10 | "attractions" | /kjnz/ | /2træk ${ }^{\text {nnz/ }}$ | [k]ns] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | "glimpse" | /mps/ | /glimps/ | [møs] | Elision | Negative transfer |
| 10 | "gardens" | /dnz/ | /ga:dnz/ | [rðers] | Addition and substitution | Negative transfer/ graphemic interference / unclassified |
| 10 | "obliged" | /d3d/ | /2blaid3d/ | [ged] | Substitution and addition | Graphemic interference |
| 10 | "breathed" | / $\partial \mathrm{d} /$ | /bri:才d/ | [ðеð] | Substitution and addition | Negative transfer/ graphemic interference |
| 10 | "spectacles" | /klz/ | /spektəklz/ | [kles] | Substitution and addition | Graphemic interference |
| 10 | "changed" | /nd3d/ | /tjeind3d/ | [ n 5 t ] | Substitution | Overpronunciation |
| 10 | "texts" | /ksts/ | /teksts/ | [kst $\phi$ ] | Elision | Negative transfer |

Elisions: 5
Substitutions: 7
Addition: 4
Metathesis:
N.T: 9
G.I: 4

O: 1
U: 1
Total: 12
TOTAL: 16

| 11 | "twelfths" | /lfes/ | /twelfs/ | [lføs] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | "shelves" | /lvz/ | /Selvz/ | [1/s] | Substitution | Negative transfer |
| 11 | "lists" | /sts/ | /lists/ | [st $\phi$ ] | Elision | Negative transfer |
| 11 | "sixth" | /ks $\theta$ / | /sırss $\theta$ / | [kst] | Substitution | Negative transfer/ graphemic interference |
| 11 | "attractions" | /kjnz/ | /2træk ${ }^{\text {nz/ }}$ | [kjons] | Addition and substitution | Negative transfer/ graphemic interference |
| 11 | "gardens" | /dnz/ | /ga:dnz/ | [rðens] | Addition and substitution | Negative transfer/ graphemic interference |
| 11 | "obliged" | /d3d/ | /2blard3d/ | [gid] | Substitution and addition | Graphemic interference |
| 11 | "Brighton" | /tn/ | /braitn/ | [ton] | Addition | Negative transfer/ graphemic interference |
| 11 | "breathed" | / $\partial \mathrm{d} /$ | /bri:ðd/ | [ $\theta \varnothing$ ] | Elision and substitution | Negative transfer/ overpronunciation |



| 12 | "breathed" | /סd/ | /bri:ðd/ | [ded] | Substitution and <br> addition | Negative transfer/ <br> graphemic <br> interference |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 12 | "spectacles" | /klz/ | /spekt2klz/ | $[\mathrm{kls}]$ | Substitution | Negative transfer |
| 12 | "careful" | /fl/ | /keəfl/ | [ful] | Addition | Negative transfer/ <br> graphemic <br> interference |
| 12 | "changed" | /nd3d/ | /tfend3d/ | [ntft] | Substitution | Overpronunciation |

## Elisions: 2

## Substitutions: 7

## Addition: 4

Metathesis:

| M.T: 7 | G.I: 5 | O: 1 | U: | Total: 11 | TOTAL: 13 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |



| 13 | "glimpse" | /mps/ | /glimps/ | [m巾s] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | "gardens" | /dnz/ | /ga:dnz/ | [dens] | Addition and substitution | Negative transfer/ graphemic interference |
| 13 | "obliged" | /d3d/ | /2blard3d/ | [ged] | Substitution and addition | Graphemic interference |
| 13 | "Brighton" | /tn/ | /braitn/ | [ton] | Addition | Negative transfer/ graphemic interference |
| 13 | "breathed" | / $\partial \mathrm{d} /$ | /bri:ðd/ | [ $\varnothing$ ¢] | Elision | Negative transfer |
| 13 | "spectacles" | /klz/ | /spektəklz/ | [kls] | Substitution | Negative transfer |
| 13 | "careful" | /fl/ | /keəfl/ | [ful] | Addition | Negative transfer/ graphemic interference |
| 13 | "changed" | /nd3d/ |  | [ $\mathrm{nt} 5 \phi]$ | Substitution and elision | Negative transfer/ overpronunciation |
| 13 | "texts" | /ksts/ | /teksts/ | [kst¢] | Elision | Negative transfer |

## Elisions: 4

## Substitutions: 8

## Addition: 5

Metathesis:
N.T: 9
G.I: 6
O: 1
$U$ :
Total: 14
TOTAL: 17

| 14 | "twelfths" | /lfes/ | /twelf0s/ | [lføs] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14 | "product" | /kt/ | /prod^kt/ | [kø] | Elision | Negative transfer |
| 14 | "shelves" | /lvz/ | /Selvz/ | [1/s] | Substitution | Negative transfer |
| 14 | "cold" | /ld/ | /kəuld/ | [1ф] | Elision | Negative transfer |
| 14 | "attractions" | /kJnz/ | /2træk ${ }^{\text {diz/ }}$ | [kJns] | Substitution | Negative transfer |
| 14 | "glimpse" | /mps/ | /glimps/ | [møs] | Elision | Negative transfer |
| 14 | "gardens" | /dnz/ | /ga:dnz/ | [rdens] | Addition and substitution | Negative transfer/ graphemic interference |
| 14 | "obliged" | /d3d/ | /2blard3d/ | [red] | Substitution and addition | Graphemic interference |
| 14 | "Brighton" | /tn/ | /bratn/ | [ton] | Addition | Negative transfer/ graphemic interference |
| 14 | "blinked" | /nkt/ | /blınkt/ | [ $\mathrm{k} \mathrm{k} \phi$ ] | Elision | Negative transfer |
| 14 | "breathed" | / $\partial \mathrm{d} /$ | /bri:ðd/ | [ $\theta \varnothing$ ] | Substitution and elision | Negative transfer |


| 14 | "tiles" | /lz/ | /tarlz/ | $[\mathrm{ls}]$ | Substitution | Negative transfer |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 14 | "spectacles" | /klz/ | /spektəklz/ | $[\mathrm{kls}]$ | Substitution | Negative transfer |
| 14 | "careful" | /fl/ | /keafl/ | $[\mathrm{ful}]$ | Addition | Negative transfer/ <br> graphemic <br> interference |
| 14 | "texts" | /ksts/ | /teksts/ | $[\mathrm{kst} \phi]$ | Elision | Negative transfer |

Elisions: 7
Substitutions: 7
Addition: 4
Metathesis:
N.T: 12
G.I: 4
$O$ :
$U:$
Total: 15
TOTAL: 18

## APPENDIX: $4^{\text {TH }}$ YEAR STUDENTS

Consonant groups in the boundaries of word I

| $\begin{array}{\|c} \hline \text { INDIVIDUAL } \\ 1 \end{array}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Elisions: 1 |  |  |  |  |
| LEVEL 4 | Substitutions: 11      <br> N.T: 9 G.I: 3 O: 1 U: 0 Total: 12 TOTAL: 12 |  |  |  |  |
| Words | $\begin{gathered} \text { Consonant } \\ \text { groups } \\ \hline \end{gathered}$ | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "times better" | /mz/ /b/ | /taimz / /beto/ | [ms] [b] | Substitution | Negative transfer |
| "month trip" | /n n / /tr/ | /mane/ /trip/ | [ nt ] [tr] | Substitution | Graphemic interference |
| "rooms saying" | /mz/ /s/ | /ru:mz/ /seiri/ | [ms] [s] | Substitution | Negative transfer |
| "John's rich" | /nz/ /r/ | /d3nnz/ / ritf/ | [ns] [r] | Substitution | Negative transfer |
| "uncles sent" | / $\mathrm{gklz} / \mathrm{s} /$ | / $n \emptyset \mathrm{klz} /$ / sent/ | [ nkls [ [s] | Substitution | Negative transfer |
| "fifth floor" | /fte/ /fl/ | /fifte/ /flo:/ | [ft $\dagger$ ] [fl] | Elision | Graphemic interference |


| "bronzed suns" | /nzd/ /s/ | /bronzd/ /sınz/ | [nst] [s] | Substitution | Negative transfer/ overpronunciation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "suns burnt" | /nz/ /b/ | /sınz/ /b3:nt/ | [ns] [b] | Substitution | Negative transfer |
| "twelfth night" | /lfe/ /n/ | /twelfy/ /nat/ | [lft] [n] | Substitution | Graphemic interference |
| "belongs to" | /nz/ /t/ | /bilonz/ /to/ | [ ns ] [ t ] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3trblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "finds them" | /ndz/ /ס/ | /faindz/ /ठəm/ | [nds] [ $\mathrm{\delta}$ ] | Substitution | Negative transfer |


| INDIVIDUAL <br> 2 <br> LEVEL 4 | Elisions: 6 <br> Substitutions: 10 <br> Additions: 1 <br> N.T: $16 \quad$ G.I: $1 \quad$ O: $1 \quad U: \quad$ Total: $17 \quad$ TOTAL: 17 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "friends from" | /ndz/ /fr/ | /frendz/ /frrm/ | [ $\mathrm{nd} \varnothing$ ] [fr] | Elision | Negative transfer |
| "times better" | /mz/ /b/ | /taimz / /beta/ | [ms] [b] | Substitution | Negative transfer |
| "meals from" | /lz/ /fr/ | /mi:əlz/ /frəm/ | [1s] [fr] | Substitution | Negative transfer |
| "famous song" | /s//s/ | /ferməs/ /spn/ | [ $\phi$ ] [s] | Elision | Negative transfer |
| " next spring" | /kst/ /spr/ | /nekst/ /sprim/ | [køø] [spr] | Elision | Negative transfer |
| "conditioned double" | //nd/ /d/ | /kəndifnd / / d^bl/ | [ $\int$ ened] [d] | Addition | Negative transfer |
| "rooms saying" | /mz/ /s/ | /ru:mz/ /seiri/ | [ms] [s] | Substitution | Negative transfer |
| "was just" | /z/ /d3/ | /wnz/ /d3ast/ | [s] [d3] | Substitution | Negative transfer |
| "dropped three" | /t/ / $\theta \mathrm{r} /$ | /dropt/ /日ri:/ | [ $\mathrm{p} \phi$ ] [tr] | Substitution | Negative transfer/ graphemic interference |


| "needed help" | /d/ /h/ | /ni:dıd//help/ | [d $\phi \varnothing$ ] [h] | Elision | Overpronunciation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "was $\underline{\text { much" }}$ | /z/ /m/ | /wnz/ /matj/ | [s] [m] | Substitution | Negative transfer |
| "suns burnt" | /nz/ /b/ | /ssnz/ /bs:nt/ | [ns] [b] | Substitution | Negative transfer |
| "spend the" | /nd/ / / | /spend/ / $\partial$ / | [ $n \phi$ ] [d] | Substitution | Negative transfer |
| "belongs to" | /gz/ /t/ | /bilogz/ /to/ | $[\eta \varnothing][t]$ | Elision | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "store's security" | /s/ /s/ | /sto:z/ /sıkjuerati/ | [ф] [s] | Elision | Negative transfer |
| "finds them" | /ndz/ /ס/ | /famdz/ /סəm/ | [nds] [ $¢$ ] | Substitution | Negative transfer |



| "tourists complained" | /sts/ /k/ | /turists/ / <br> kəmpleind/ | [ss $¢$ ] [k] | Elision and substitution | Unclassified |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "conditioned double" | //nd/ /d/ | /kəndifnd / / d^bl/ | [ ${ }_{\text {ned }}$ [d] | Addition | Negative transfer/ graphemic interference |
| "rooms saying" | /mz/ /s/ | /ru:mz/ /seiri/ | [ms] [s] | Substitution | Negative transfer |
| "was just" | /z/ / $\mathrm{d}_{3} /$ | /wnz/ /d3^st/ | [s] [d3] | Substitution | Negative transfer |
| "available shrimp" | /bl/ /fr/ | /əverıbbl/ //rimp/ | [ $\beta 1$ ] [ r ] | Substitution | Negative transfer |
| "John's rich" | /nz/ /r/ | /d3Dnz/ / ritj/ | [ns] [r] | Substitution | Negative transfer |
| "uncles sent" | / $\mathrm{gklz} / \mathrm{/s} /$ | / $n \mathfrak{k k l z /} /$ sent/ | [ nkls [ [s] | Substitution | Negative transfer |
| "bottled wine" | /tld/ /w/ | /botld/ /wain/ | $[t \mid \phi][w]$ | Elision | Unclassified |
| "dropped three" | /pt/ / r / | /dropt/ /日ri:/ | [pted] [tr] | Addition | Negative transfer |
| "and they" | /n/ / / / | /ən/ /ðei/ | [n] [d] | Substitution | Negative transfer |
| "pieces, she" | /z/ / / | /pi:sız/ / Ji:/ | [s] [5] | Substitution | Negative transfer |
| "was much" | /z/ /m/ | /wnz/ /matj/ | [s] [m] | Substitution | Negative transfer |


| "will shred" | /1/ / $\mathrm{r} / \mathrm{l}$ | /wil/ / /red/ | [1] [Jed] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "next story" | /kst/ /st/ | /nekst//sto:ri/ | [ $\mathrm{k} \phi \phi$ ] [st] | Elision | Negative transfer |
| "strange dream" | /nd3/ /dr/ | /streind3/ /dri:m/ | [ nt [ ] [d.r] | Substitution | Overpronunciation |
| "shrivelled sadly" | /vld/ /s/ | //rıvld/ /sædli/ | [ $\beta$ eled] [s] | Substitution and addition | Negative transfer |
| "bronzed suns" | /nzd/ /s/ | /bronzd/ /ssnz/ | [nsd] [s] | Substitution | Negative transfer |
| "suns burnt" | /nz/ /b/ | /ssnz/ /bs:nt/ | [ns] [b] | Substitution | Negative transfer |
| "Charles hasn't" | /lz/ /h/ | / $\int a: 1 z / / h æ z n t / ~$ | [1s] [h] | Substitution | Negative transfer |
| "spend the" | /nd/ / $/$ / | /spend/ / $\partial$ / $/$ | [ $\mathrm{n} \phi$ ] [d] | Substitution | Negative transfer |
| "almost stayed" | /st/ /st/ | /১:Iməust/ /sterd/ | [s¢] [st] | Elision | Negative transfer |
| "belongs to" | /gz/ /t/ | /bilpgz/ /ta/ | [ lg ] [ t ] | Substitution | Negative transfer |
| "Bates stayed" | /st/ /st/ | /berts/ /sterd/ | [t¢] [st] | Elision | Negative transfer |


| "was really" | /z/ /r/ | /woz/ /rıali/ | [s] [r] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "finds them" | /ndz/ / / / | /faundz/ /סəm/ | [nds] [ $\chi$ ] | Substitution | Negative transfer |



| "next story" | /kst/ /st/ | /nekst/ /stori/ | [ $\mathrm{k} \phi \phi$ ] [st] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "suns burnt" | /nz/ /b/ | /sınz/ /bs:nt/ | [ns] [b] | Substitution | Negative transfer |
| "Charles hasn't" | /lz/ /h/ | / $\mathrm{a} a: 1 \mathrm{l} /$ /hæznt/ | [1s] [h] | Substitution | Negative transfer |
| "belongs to" | /nz/ /t/ | /bilonz/ /to/ | [ ng ] [ t ] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "finds them" | /ndz/ / // | /faindz/ /סəm/ | [nds] [ $¢$ ] | Substitution | Negative transfer |



| "on the" | /n/ / $/$ / | /ən/ / $\partial$ / | [n] [d] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| " next spring" | /kst/ /spr/ | /nekst/ /spriy/ | $[k \phi \varnothing][\mathrm{spr}]$ | Elision | Negative transfer |
| "bored tourists" | /d/ /t/ | /bo:d/ /turists/ | [ r$][\mathrm{t}]$ | Substitution | Overpronunciation |
| "rooms saying" | /mz/ /s/ | /ru:mz/ /seiry/ | [ms] [s] | Substitution | Negative transfer |
| "was just" | /z/ / $\mathrm{d}_{3} /$ | /wnz/ /d3^st/ | [s] [d3] | Substitution | Negative transfer |
| "John's rich" | /nz/ /r/ | /d3nnz/ / ritf/ | [ns] [r] | Substitution | Negative transfer |
| "uncles sent" | /nklz/ /s/ | / $n j k k \mathrm{l} /$ /sent/ | [ nkls [ s ] | Substitution | Negative transfer |
| "bottled wine" | /tld/ /w/ | /botld/ /wam/ | [tl\| $]$ [w] | Elision | Negative transfer |
| "was much" | /z//m/ | /wnz/ /mstj/ | [s] [m] | Substitution | Negative transfer |
| "next story" | /kst/ /st/ | /nekst/ /sto:ri/ | [ $\mathrm{k} \phi \phi$ ] [st] | Elision | Negative transfer |
| "strange dream" | /nd3/ /dr/ | /streind3/ /dri:m/ | [ nt f$]$ [d.r] | Substitution | Overpronunciation |
| "suns burnt" | /nz/ /b/ | /sınz/ /b3:nt/ | [ns] [b] | Substitution | Negative transfer |
| "Charles hasn't" | /lz/ /h/ | / $\mathrm{a}: 1 \mathrm{lz/} / \mathrm{hæznt/}$ | [1s] [h] | Substitution | Negative transfer |


| "almost stayed" | /st/ /st/ | /o:Iməust//sterd/ | [ $\phi$ ¢¢ [st] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "belongs to" | /gz/ /t/ | /bilogz/ /ta/ | [ y S] [t] | Substitution | Negative transfer |
| "was really" | /z/ /r/ | /wnz/ /rıeli/ | [s] [r] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "finds them" | /ndz/ / / / | /faundz/ /ठəm/ | [nds] [ð] | Substitution | Negative transfer |


| INDIVIDUAL <br> 6 <br> LEVEL 4 | Elisions: 6 <br> Substitutions: 17 <br> Additions: 3 <br> N.T: 23 | G.I: 2 O: | U: Total: 25 TOT |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "friends from" | /ndz/ /fr/ | /frendz/ /from/ | [nds] [fr] | Elision | Negative transfer |
| "times better" | /mz/ /b/ | /taimz / /betə/ | [ms] [b] | Substitution | Negative transfer |
| "yours, that's" | /z/ / / / | /jo:z/ /ðæts/ | [rz] [ $¢$ ] | Addition | Graphemic interference |
| "meals from" | /lz/ /fr/ | /mi:(ə)lz/ /frəm/ | [1s] [fr] | Substitution | Negative transfer |
| "inside the" | /d/ / / / | /insaid/ /ठə/ | [ $¢$ ] [ $\varnothing$ ] | Substitution | Negative transfer |
| "famous song" | /s/ /s/ | /ferməs/ /smy/ | [ $\phi$ ] [s] | Elision | Negative transfer |
| "month trip" | /ne/ /rr/ | /man日/ /trip/ | [ $\phi \theta$ ] [t.r] | Elision | Negative transfer |
| " next spring" | /kst/ /spr/ | /nekst/ /spriy/ | [ $\mathrm{ks} \phi][\mathrm{spr}]$ | Elision | Negative transfer |
| "conditioned double" | / n d/ /d/ | /kəndiJnd / / dabl/ | [ [ ned] [d] | Addition | Negative transfer/ graphemic interference |


| "rooms saying" | /mz/ /s/ | /ru:mz/ /serị/ | [ms] [s] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "was just" | /z/ /d3/ | /wdz/ /d3ast/ | [s] [d3] | Substitution | Negative transfer |
| "John's rich" | /nz/ /r/ | /d3pnz/ / ritj/ | [ns] [r] | Substitution | Negative transfer |
| "uncles sent" | /nklz/ /s/ | / $n \mathrm{jklz} /$ /sent/ | [ gkls ] [s] | Substitution | Negative transfer |
| "pieces, she" | /z/ / $/$ / | /pi:siz/ / ji:/ | [s] [ [] | Substitution | Negative transfer |
| "was much" | /z//m/ | /wnz/ /mstj/ | [s] [m] | Substitution | Negative transfer |
| "next story" | /kst/ /st/ | /nekst/ /sto:ri/ | [køø] [st] | Elision | Negative transfer |
| "strange dream" | /nd3/ /dr/ | /streind3/ /dri:m/ | [ ft f] [ $\mathrm{d} . \mathrm{I}$ ] | Substitution | Overpronunciation |
| "suns burnt" | /nz/ /b/ | /ssnz/ /bз:nt/ | [ns] [b] | Substitution | Negative transfer |
| "Charles hasn't" | /lz/ /h/ | /fa:lz/ /hæznt/ | [1s] [h] | Substitution | Negative transfer |
| "hasn't had" | /znt/ /h/ | /hæznt/ /həd/ | [sent] [h] | Substitution and addition | Negative transfer |
| "his trip" | /z/ /rr/ | /hiz/ /trip/ | [s] [t.r] | Substitution | Negative transfer |


| "almost stayed" | /st/ /st/ | /0:Iməust/ /steId/ | [ $\phi$ ¢] [st] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "belongs to" | /nz/ /t/ | /bilonz/ /ta/ | [ ys ] [t] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "finds them" | /ndz/ /ס/ | /faindz/ /ठəm/ | [nds] [ ${ }^{\text {] }]}$ | Substitution | Negative transfer |


| INDIVIDUAL <br> 7 <br> LEVEL 4 | Elisions: 5 <br> Substitutions: 12 <br> Additions: <br> N. T: $16 \quad$ G.I: $\quad$ O: 1 |  | U: Total: 17 T | TAL: 17 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "times better" | /mz/ /b/ | /tarmz / /betə/ | [ms] [b] | Substitution | Negative transfer |
| "meals from" | /lz/ /fr/ | /mi:(ə)lz/ /from/ | [1s] [fr] | Substitution | Negative transfer |
| "inside the" | /d/ / / / | /insaid/ /ठə/ | [ $\phi$ ] [d] | Substitution | Negative transfer |
| "famous song" | /s/ /s/ | /ferməs/ /spy/ | [ $\phi$ ] [s] | Elision | Negative transfer |
| "Tom'll travel" | /ml/ /rr/ | /tmml/ /trævl/ | [mø] [tr] | Elision | Negative transfer |
| "twelvemonth" | /lv/ /m/ | /twelv/ /mın日/ | [lf] [m] | Substitution | Overpronunciation |
| "John's rich" | /nz/ /r/ | /d3Dnz/ / ritj/ | [ns] [r] | Substitution | Negative transfer |
| "was much" | /z/ /m/ | /wnz/ /matj/ | [s] [m] | Substitution | Negative transfer |


| "next story" | /kst/ /st/ | /nekst/ /sto:ri/ | [ $\mathrm{k} \phi \phi$ ] [st] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "suns burnt" | /nz/ /b/ | /sınz/ /b3:nt/ | [ns] [b] | Substitution | Negative transfer |
| "Charles hasn't" | /lz/ /h/ | / $\mathrm{a}: 1 \mathrm{lz/} / \mathrm{hæzzt/}$ | [1s] [h] | Substitution | Negative transfer |
| "his trip" | /z/ /tr/ | /hiz/ /trip/ | [s] [t. $]$ | Substitution | Negative transfer |
| "belongs to" | /nz/ /t/ | /bilonz/ /ta/ | [ n s$][\mathrm{t}]$ | Substitution | Negative transfer |
| "Bates stayed" | /st/ /st/ | /beits/ /sterd/ | [t $\dagger$ ] [st] | Elision | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "store's security" | /s/ /s/ | /sto:z/ /sıkjuerəti/ | [ $\varnothing$ ] [s] | Elision | Negative transfer |
| "finds them" | /ndz/ / // | /faundz/ / $\partial$ ¢m/ | [nds] [ð] | Substitution | Negative transfer |


| INDIVIDUAL <br> 8 <br> LEVEL 4 | Elisions: 6 <br> Substitutions: 14 <br> Additions: 1 <br> N. T: 18 <br> G.I: 1 <br> $O: 2 \quad U:$ <br> Total: 21 <br> TOTAL: 21 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "times better" | /mz/ /b/ | /taimz / /betə/ | [ms] [b] | Substitution | Negative transfer |
| "meals from" | /lz/ /fr/ | /mi:(ə)lz/ /frəm/ | [ls] [fr] | Substitution | Negative transfer |
| "famous song" | /s/ /s/ | /ferməs/ /spy/ | [ $\phi$ ] [s] | Elision | Negative transfer |
| "Tom'll travel" | /ml/ /rr/ | /toml/ /trævl/ | [møs] [tr] | Addition | Negative transfer |
| " next spring" | /kst/ /spr/ | /nekst/ /sprıj/ | [ $\mathrm{k} \phi$ ¢ $]$ [spr] | Elision | Negative transfer |
| "bored tourists" | /d/ /t/ | /bo:d/ /turrists/ | [ r$][\mathrm{t}]$ | Substitution | Overpronunciation |
| "rooms saying" | /mz/ /s/ | /ru:mz/ /seiry/ | [ms] [s] | Substitution | Negative transfer |


| "was just" | /z/ / $\mathrm{d}_{3} /$ | /wdz/ /d3^st/ | [s] [d3] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "John's rich" | /nz/ /r/ | /d3Dnz/ / ritf/ | [ ns ] [r] | Substitution | Negative transfer |
| "uncles sent" | / $\mathrm{l} \mathrm{klz} / / \mathrm{s} /$ | / $\mathrm{njklz} /$ /sent/ | [ $\mathrm{l} \mathrm{kl} \mathrm{\phi}$ ] [s] | Elision | Negative transfer |
| "was much" | /z/ /m/ | /wnz/ /matj/ | [s] [m] | Substitution | Negative transfer |
| "next story" | /kst/ /st/ | /nekst/ /stori/ | [ $\mathrm{k} \phi \phi$ ] [st] | Elision | Negative transfer |
| "strange dream" | /nd3/ /dr/ | /stremd3/ /dri:m/ | [ I.$]$ ] [d.I] | Substitution | Overpronunciation |
| "suns burnt" | /nz/ /b/ | /sınz/ /bs:nt/ | [ns] [b] | Substitution | Negative transfer |
| "Charles hasn't" | /lz/ /h/ | / $\mathrm{a}: 1 \mathrm{lz/} / \mathrm{hæznt/}$ | [rls] [h] | Substitution | Graphemic interference |
| "his trip" | /z/ /tr/ | /hiz/ /trip/ | [s] [t.r] | Substitution | Negative transfer |
| "almost stayed" | /st/ /st/ | /o:lməust/ /sterd/ | [ $\phi$ ¢] [st] | Elision | Negative transfer |
| "belongs to" | /nz/ /t/ | /bilonz/ /ta/ | [ ng ] [t] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "store's security" | /s/ /s/ | /sto:z/ /sikjuerəti/ | [ $\phi$ ] [s] | Elision | Negative transfer |
| "finds them" | /ndz/ / // | /faindz/ /ठəm/ | [nds] [ $¢$ ] | Substitution | Negative transfer |


| INDIVIDUAL <br> 9 <br> LEVEL 4 | Elisions: 4 <br> Substitutions: 13 <br> Additions: 0 <br> N.T: 14 <br> G. I: 1 <br> O: 2 <br> UC: 0 <br> Total: 17 <br> TOTAL: 17 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "friends from" | /ndz/ /fr/ | /frendz/ /frəm/ | [ $\mathrm{nd} \phi$ ] [fr] | Elision | Negative transfer |
| "times better" | /mz/ /b/ | /taımz / /beta/ | [ms] [b] | Substitution | Negative transfer |
| "meals from" | /lz/ /fr/ | /mi:(ə) $\mathrm{lz/} / \mathrm{fram} /$ | [1s] [fr] | Substitution | Negative transfer |
| "twelvemonth" | /lv/ /m/ | /twelv/ /mın日/ | [lf] [m] | Substitution | Overpronunciation |
| " next spring" | /kst/ /spr/ | /nekst/ /sprin/ | [køø] [spr] | Elision | Negative transfer |
| "rooms saying" | /mz/ /s/ | /ru:mz/ /serin/ | [ms] [s] | Substitution | Negative transfer |
| "John's rich" | /nz/ /r/ | /d3nnz/ / ritj/ | [ ns ] [r] | Substitution | Negative transfer |
| "uncles sent" | / $\mathrm{jklz} /$ /s/ | / $\ \mathrm{\eta} \mathrm{klz} /$ / sent/ | [ $\dagger \mathrm{kls}$ ] [ $¢$ ] | Elision | Negative transfer |
| "was much" | /z/ /m/ | /wnz/ /mstj/ | [s] [m] | Substitution | Negative transfer |


| "next story" | /kst/ /st/ | /nekst//sto:ri/ | [køø] [st] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "strange dream" | /nd3/ /dr/ | /stremd3/ /dri:m/ | [ $\mathrm{n} \int \mathrm{J}$ ] [d.I] | Substitution | Overpronunciation |
| "suns burnt" | /nz/ /b/ | /ssnz/ /b3:nt/ | [ns] [b] | Substitution | Negative transfer |
| "Charles hasn't" | /lz/ /h/ | /fa:lz/ /hæznt/ | [ls] [h] | Substitution | Negative transfer |
| "twelfth night" | /lfe/ /n/ | /twelfe/ /natt/ | [lft] [n] | Substitution | Graphemic interference |
| "belongs to" | /gz/ /t/ | /bilpnz/ /ta/ | [ ns ] [ t ] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "finds them" | /ndz/ / $/$ | /faindz/ /ठəm/ | [nds] [ $\varnothing$ ] | Substitution | Negative transfer |


| INDIVIDUAL <br> 10 <br> LEVEL 4 | Elisions: 3 <br> Substitutions: 12 <br> Additions: 1 <br> N.T:13 G. I: $1 \quad$ O: $1 \quad$ U: $1 \quad$ Total: 16 TOTAL: 16 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "his twelfths" | /z//tw/ | /hiz/ /twelfөs/ | [s] [tw] | Substitution | Negative transfer |
| "yours, that's" | /z/ / $/$ / | /jo:z/ /ðæts/ | [rz] [ð] | Addition | Graphemic interference |
| "famous song" | /s//s/ | /ferməs/ /spy/ | [ $\phi$ ] [s] | Elision | Negative transfer |
| "twelvemonth" | /lv/ /m/ | /twelv/ /mınө/ | [lf] [m] | Substitution | Overpronunciation |
| " next spring" | /kst/ /spr/ | /nekst/ /sprim/ | [ $\mathrm{k} \phi$ ¢ ] [spr] | Elision | Negative transfer |
| "was just" | /z/ /d3/ | /wdz/ /d3ast/ | [s] [d3] | Substitution | Negative transfer |
| "uncles sent" | / $\mathrm{j} \mathrm{klz} / \mathrm{/s} /$ | / $\mathrm{n} \mathrm{j} \mathrm{klz} /$ /sent/ | [ $\dagger \mathrm{kls}$ ] [s] | Substitution | Negative transfer |
| "bottled wine" | /tld/ /w/ | /bntld/ /wam/ | $[t \mid \phi][w]$ | Elision | Unclassified |
| "pieces, she" | /z/ / // | /pi:ssz/ / ji:/ | [s] [5] | Substitution | Negative transfer |


| "was much" | /z/ /m/ | /wnz/ /mstf/ | [s] [m] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "suns burnt" | /nz/ /b/ | /sınz/ /bs:nt/ | [ns] [b] | Substitution | Negative transfer |
| "Charles hasn't" | /lz/ /h/ | /fa:lz/ /hæznt/ | [1s] [h] | Substitution | Negative transfer |
| "hasn't had" | /znt/ /h/ | /hæznt/ /həd/ | [snt] [h] | Substitution | Negative transfer |
| "belongs to" | /nz/ /t/ | /bilonz/ /ta/ | [ nc ] [ t ] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "finds them" | /ndz/ / / / | /faindz/ /ठəm/ | [nds] [ O ] | Substitution | Negative transfer |


| INDIVIDUAL <br> 11 <br> LEVEL 4 | Elisions: 13 <br> Substitutions: 20 <br> Additions: 2 <br> N.T: 29 <br> G. I: 1 <br> O: 1 <br> U: 2 <br> Total: 32 <br> TOTAL: 35 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "friends from" | /ndz/ /fr/ | /frendz/ /frəm/ | [nds] [fr] | Substitution | Negative transfer |
| "times better" | /mz/ /b/ | /taimz / /betə/ | [ms] [b] | Substitution | Negative transfer |
| "yours, that's" | /z/ /ס/ | /jo:z/ /סæts/ | [ rs ] [ X$]$ | Addition and substitution | Negative transfer/ Graphemic interference |
| "meals from" | /lz/ /fr/ | /mi:(ə)lz/ /frəm/ | [l申] [fr] | Elision | Negative transfer |
| "famous song" | /s/ /s/ | /ferməs/ /spy/ | [ $\varnothing$ ] [s] | Elision | Negative transfer |
| "twelvemonth" | /lv/ /m/ | /twelv/ /mın日/ | [lf] [m] | Substitution | Overpronunciation |
| " next spring" | /kst/ /spr/ | /nekst/ /spriy/ | [kфф] [spr] | Elision | Negative transfer |
| "tourists complained" | /sts/ /k/ | /turrists/ / <br> kəmpleind/ | [st $\varnothing$ ] [k] | Elision | Negative transfer |
| "rooms saying" | /mz/ /s/ | /ru:mz/ /seıị/ | [ms] [s] | Substitution | Negative transfer |


| "was just" | /z/ / $\mathrm{d}_{3} /$ | /wnz/ /d3^st/ | [s] [d3] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "approached to" | $/ \mathrm{st} / / \mathrm{t} /$ | /əprəuft/ /tə/ | [ $\int$ ed] [t] | Addition and substitution | Negative transfer |
| "John's rich" | /nz/ /r/ | /d3pnz/ / ritf/ | [ns] [r] | Substitution | Negative transfer |
| "uncles sent" | / $\mathrm{yklz} / / \mathrm{s} /$ | / $\wedge \eta k \mathrm{klz} /$ /sent/ | [ nkls [ s ] | Substitution | Negative transfer |
| "bottled wine" | /tld/ /w/ | /bptld/ /wain/ | [tl $\phi$ ] [w] | Elision | Unclassified |
| "dropped three" | /pt/ / $\theta \mathrm{r} /$ | /dropt/ /日ri:/ | [ $\mathrm{p} \varnothing$ ] [tr] | Substitution | Negative transfer |
| "pieces, she" | /z/ / / | /pi:siz/ / ji:/ | [s] [5] | Substitution | Negative transfer |
| "was much" | /z/ /m/ | /wnz/ /mstf/ | [s] [m] | Substitution | Negative transfer |
| "next story" | /kst/ /st/ | /nekst/ /sto:ri/ | [ $k \phi \phi$ ] [st] | Elision | Negative transfer |
| "strange dream" | /nd3/ /dr/ | /streind3/ /dri:m/ | [ $n \emptyset$ ] [d.I] | Substitution and elision | Unclassified |
| "plants shrivelled" | /nts/ / r / | /pla:nts/ //rivld/ | [ $\mathrm{nt} \phi][\mathrm{rr}]$ | Elision | Negative transfer |
| "suns burnt" | /nz/ /b/ | /sınz/ /bз:nt/ | [ns] [b] | Substitution | Negative transfer |


| "Charles hasn't" | /lz/ /h/ | / $\mathrm{a}: 1 \mathrm{lz/} / \mathrm{hæznt/}$ | [ls] [h] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "drowned but" | /nd/ /b/ | /draund/ /bat/ | [n¢] [b] | Elision | Negative transfer |
| "allowing him" | / $\mathrm{h} / \mathrm{h} / \mathrm{h}$ | /alaum/ /him/ | [ n$]$ [h] | Substitution | Negative transfer |
| "his trip" | /z/ /tr/ | /hız/ /trip/ | [s] [tr] | Substitution | Negative transfer |
| "almost stayed" | /st/ /st/ | /০:Iməust/ /sterd/ | [ $\mathrm{s} \phi$ ] [st] | Elision | Negative transfer |
| "belongs to" | /nz/ /t/ | /bilogz/ /ta/ | [ g ] [ t ] | Substitution | Negative transfer |
| "Bates stayed" | /st/ /st/ | /beits/ /sterd/ | [ $\dagger \phi]$ [st] | Elision | Negative transfer |
| "was really" | /z/ /r/ | /woz/ /rıali/ | [s] [r] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "store's security" | /s/ /s/ | /sto:z/ /sıkjuerəti/ | [ $\phi$ ] [s] | Elision | Negative transfer |
| "finds them" | /ndz/ /ס/ | /faundz/ /ठəm/ | [ $\mathrm{nd} \phi$ ] [ $\delta$ ] | Elision | Negative transfer |


| INDIVIDUAL <br> 12 <br> LEVEL 4 | Elisions: 7 <br> Substitutions: 18 <br> Additions: 2 <br> N.T: 24 <br> G. I: 4 <br> $O: 1$ <br> $U:$ <br> Total: 26 <br> TOTAL:27 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "friends from" | /ndz/ /fr/ | /frendz/ /frəm/ | [nds] [fr] | Substitution | Negative transfer |
| "his twelfths" | /z/ /tw/ | /hiz/ /twelfөs/ | [s] [tw] | Substitution | Negative transfer |
| "times better" | /mz/ /b/ | /taimz / /betə/ | [ms] [b] | Substitution | Negative transfer |
| "yours, that's" | /z/ / / / | /jo:z/ /ठæts/ | [rz] [ð] | Addition | Graphemic interference |
| "meals from" | /lz/ /fr/ | /mi:(ə)lz/ /frəm/ | [ls] [fr] | Substitution | Negative transfer |
| "famous song" | /s/ /s/ | /ferməs/ /spy/ | [ $¢$ ] [s] | Elision | Negative transfer |
| "Tom'll travel" | /ml/ /rr/ | /toml/ /træul/ | [m $\phi$ ] [rr] | Elision | Negative transfer |
| "month trip" | /n $\theta$ / /tr/ | /msn日/ /trip/ | [nt] [tr] | Substitution | Negative transfer/ Graphemic interference |


| " next spring" | /kst/ /spr/ | /nekst/ /spriy/ | [køø] [spr] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "tourists complained" | /sts/ /k/ | /turrists/ / <br> kəmplemd/ | [st $\phi$ ] [k] | Elision | Negative transfer |
| "was just" | /z/ / $\mathrm{d}_{3} /$ | /wnz/ /d3^st/ | [s] [d3] | Substitution | Negative transfer |
| "John's rich" | /nz/ /r/ | /d3əunz/ / ritf/ | [ns] [r] | Substitution | Negative transfer |
| "uncles sent" | /nklz/ /s/ | / $\wedge \eta k \mathrm{klz} /$ /sent/ | [ nkls [ [s] | Substitution | Negative transfer |
| "pieces, she" | /z/ / $/$ / | /pi:siz/ / Ji:/ | [s] [5] | Substitution | Negative transfer |
| "was much" | /z/ /m/ | /wnz/ /mstj/ | [s] [m] | Substitution | Negative transfer |
| "fifth floor" | /fte/ /fl/ | /fifte/ /flo:/ | [ $\phi \mathrm{t} \theta$ ] [ f$]$ | Elision | Negative transfer |
| "next story" | /kst/ /st/ | /nekst/ /stori/ | [ $\mathrm{k} \phi \phi$ ] [st] | Elision | Negative transfer |
| "strange dream" | /nd3/ /dr/ | /streind3/ /dri:m/ | [ $\mathrm{n} \int \mathrm{f}$ [ [d. I ] | Substitution | Overpronunciation |
| "Charles hasn't" | /lz/ /h/ | /fa:lz/ /hæznt/ | [ rls ] [h] | Addition and substitution | Negative transfer/ Graphemic interference |
| "hasn't had" | /znt/ /h/ | /hæznt/ /həd/ | [snt] [h] | Substitution | Negative transfer |


| "frightening dream" | / $\mathrm{y} / \mathrm{/dr} /$ | /fraitnıy/ /dri:m/ | [ n$][\mathrm{d} . \mathrm{I}]$ | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "allowing him" | /n/ /h/ | /olauin/ /him/ | [ n$][\mathrm{h}]$ | Substitution | Negative transfer |
| "twelfth night" | /lfe/ /n/ | /twelfe/ /natt/ | [ 1 ft ] [ n$]$ | Substitution | Graphemic interference |
| "was really" | /z/ /r/ | /wnz/ /rıali/ | [s] [r] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3trblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "store's security" | /s/ /s/ | /sto:z/ /sikjuerəti/ | [ $¢$ ] [s] | Elision | Negative transfer |



| "was much" | /z/ /m/ | /wnz/ /mstj/ | [s] [m] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "will shred" | /1/ / $\mathrm{r} /$ | /wil/ / $\int$ red/ | [1] [Jer] | Metathesis | Negative transfer |
| "next story" | /kst/ /st/ | /nekst/ /sto:ri/ | [kфø] [st] | Elision | Negative transfer |
| "strange dream" | /nd3/ /dr/ | /stremd3/ /dri:m/ | [ $\mathrm{y} .[$ ] [d.I.] | Substitution | Overpronunciation |
| "suns burnt" | /nz/ /b/ | /sınz/ /bз:nt/ | [ns] [b] | Substitution | Negative transfer |
| "Charles hasn't" | /lz/ /h/ | /fa:lz/ /hæznt/ | [rls] [h] | Addition and substitution | Negative transfer/ Graphemic interference |
| "hasn't had" | /znt/ /h/ | /hæznt/ /həd/ | [snt] [h] | Substitution | Negative transfer |
| "spend the" | /nd/ /ס/ | /spend/ /ठə/ | [ $n$ ¢] [d] | Elision and substitution | Negative transfer |
| "almost stayed" | /st/ /st/ | /o:Iməust/ /sterd/ | [ $s$ ¢] [st] | Elision | Negative transfer |
| "belongs to" | /gz/ /t/ | /bilonz/ /ta/ | [ ys ] [t] | Substitution | Negative transfer |
| "was really" | /z/ /r/ | /wnz/ /riəli/ | [s] [r] | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |


| "store's <br> security" | /s//s/ | /sto:z/ /sıkjverəti/ | $[\varnothing][\mathrm{s}]$ | Elision | Negative transfer |
| :--- | :--- | :--- | :--- | :--- | :--- |
| "finds them" | $/ \mathrm{ndz} / / \delta /$ | $/$ /fandz// $\partial ə \mathrm{~m} /$ | $[\mathrm{nds}][\varnothing]$ | Substitution | Negative transfer |


| INDIVIDUAL <br> 14 <br> LEVEL 4 | Elisions: 3 <br> Substitutions: 20 <br> Additions: 2 <br> N.T: 21 <br> G. I: 3 <br> $\boldsymbol{O}: 1 \quad \boldsymbol{U}:$ <br> Total: 23 <br> TOTAL: 25 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "friends from" | /ndz/ /fr/ | /frendz/ /frəm/ | [nds] [fr] | Substitution | Negative transfer |
| "times better" | /mz/ /b/ | /taimz / /betə/ | [ms] [b] | Substitution | Negative transfer |
| "yours, that's" | /z/ / / / | /jo:z/ /ðæts/ | [ rs$]$ [ $\mathrm{\delta}]$ | Addition and substitution | Negative transfer/ Graphemic interference |
| "meals from" | /lz/ /fr/ | /mi:(ə)lz/ /frəm/ | [ls] [fr] | Substitution | Negative transfer |
| "Tom'll travel" | /ml/ /tr/ | /tmml/ /trævl/ | [mø] [tr] | Elision | Negative transfer |
| "twelvemonth" | /lv/ /m/ | /twelv/ /mın日/ | [lf] [m] | Substitution | Overpronunciation |
| "month trip" | /ng/ /tr/ | /mın ${ }^{\text {/ / /rip/ }}$ | [ $\mathrm{n} \phi$ ][t.r] | Elision | Negative transfer |
| "rooms saying" | /mz/ /s/ | /ru:mz/ /seim]/ | [ms] [s] | Substitution | Negative transfer |
| "was just" | /z/ /d3/ | /woz/ /d3nst/ | [s] [d3] | Substitution | Negative transfer |
| "John's rich" | /nz/ /r/ | /d3əunz/ / ritf/ | [ ns ] [r] | Substitution | Negative transfer |


| "uncles sent" | / $\mathrm{gklz} / \mathrm{/s} /$ | / $n \mathrm{j} k \mathrm{klz} /$ /sent/ | [ kkls ] [s] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: |
| "pieces, she" | /z/ / $/$ / | /pi:siz/ / ji:/ | [s] []] | Substitution | Negative transfer |
| "was much" | /z/ /m/ | /wnz/ /matj/ | [s] [m] | Substitution | Negative transfer |
| "next story" | /kst/ /st/ | /nekst/ /stori/ | [ $\mathrm{k} \phi \phi$ ] [st] | Elision | Negative transfer |
| "suns burnt" | /nz/ /b/ | /sınz/ /bs:nt/ | [ns] [b] | Substitution | Negative transfer |
| "Charles hasn't" | /lz/ /h/ | / $\int a: 1 z / / h æ z n t / ~$ | [rls] [h] | Addition and substitution | Negative transfer/ Graphemic interference |
| "hasn't had" | /znt/ /h/ | /hæznt/ /həd/ | [snt] [h] | Substitution | Negative transfer |
| "twelfth night" | /lfe/ /n/ | /twelfy/ /nat/ | [lft] [n] | Substitution | Graphemic interference |
| "his trip" | /z/ /tr/ | /hiz/ /trip/ | [s] [t.] | Substitution | Negative transfer |
| "belongs to" | /nz/ /t/ | /bilonz/ /ta/ | [ ys ] [t] | Substitution | Negative transfer |
| "was really" | /z/ /r/ | /woz/ /rıli/ | [ s$][\mathrm{r}]$ | Substitution | Negative transfer |
| "vegetables when" | /blz/ /w/ | /ved3təblz/ /wen/ | [bls] [w] | Substitution | Negative transfer |
| "finds them" | /ndz/ /ठ/ | /faundz/ /亢əm/ | [nds] [ $¢$ ] | Substitution | Negative transfer |

## Consonant groups in boundaries of words II



| $\begin{gathered} \text { INDIVIDUAL } \\ 2 \end{gathered}$ | Substitutions: 3 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LEVEL 4 | G.I: $1 \quad$ N.T: $3 \quad$ Total: 4 |  |  |  |  |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "months in" | /ntөs/ | /mın $\mathrm{s}^{\text {/ / } / \mathrm{m} /}$ | [nts] | Substitution | Graphemic interference |
| "clubs are" | /bz/ | /klıbz/ /a:/ | [bs] | Substitution | Negative transfer |
| "fields as | /ldz/ | /fi:əldz/ /əz/ | [lds] | Substitution | Negative transfer |
| "weekend at" | /nd/ | /wi:kend/ /ot/ | [ $n \phi$ ] | Elision | Negative transfer |


| $\begin{array}{\|c} \hline \text { INDIVIDUAL } \\ 3 \end{array}$ <br> LEVEL 4 | Substitutions: 3 <br> Elisions: 2 <br> G.I: $1 \quad$ N.T: $4 \quad$ Total: 5 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "months in" | /ntөs/ | /mın $\mathrm{s}^{\text {/ / } / \mathrm{m} /}$ | [nts] | Substitution | Graphemic interference |
| "complained about" | /nd/ | /kəmpleınd/ /əbaut/ | [ $n \phi$ ] | Elision | Negative transfer |
| "clubs are" | /bz/ | /klıbz/ /a:/ | [bs] | Substitution | Negative transfer |
| "fields as | /dz/ | /fi: $2 \mathrm{ldz/} / \mathrm{l}$ / | [lds] | Substitution | Negative transfer |
| "weekend at" | /nd/ | /wi:kend/ /ot/ | [ $n \varnothing$ ] | Elision | Negative transfer |


| $\begin{gathered} \text { INDIVIDUAL } \\ 4 \\ \hline \end{gathered}$ | Substitutions: 2$N . T: 1$ | $U: 1 \quad$ To |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LEVEL 4 |  |  |  |  |  |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "clubs are" | /bz/ | /klıbz/ /a:/ | [bs] | Substitution | Negative transfer |
| "rich uncles | /t $\mathrm{f} /$ | /ritf/ / $\quad$ 门klz/ | [t] | Substitution | Unclassified |


| INDIVIDUAL 5 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| LEVEL 4 | Elisions: 1 <br> Additions: 2 $\text { N.T: } 5$ | G.I: $1 \quad$ Total: 6 |  |  |  |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "My steak" | /st/ | /mai/ /sterk/ | [est] | Addition | Negative transfer |
| "months in" | /nt $\mathrm{s}^{\text {/ }}$ | /mın $\mathrm{s}^{\text {/ / } / \mathrm{m} / \mathrm{L}}$ | [nts] | Substitution | Graphemic interference |
| "clubs are" | /bz/ | /klıbz/ /a:/ | [bs] | Substitution | Negative transfer |
| "fields as | /dz/ | /fi: $2 \mathrm{ldz/} / \mathrm{l}$ z/ | [lds] | Substitution | Negative transfer |
| "to spend" | /sp/ | /tı/ /spend/ | [esp] | Addition | Negative transfer |
| "calmed and" | /lmd/ | /ka:lmd/ /ən/ | [1m] | Elision | Negative transfer |


| INDIVIDUAL 6 LEVEL 4 | Substitutions: 3 <br> Elisions: 1 <br> N.T: 3 <br> G.I: 1 <br> Total: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "months in" | /n $\theta$ s/ | /mın $\mathrm{s}^{\text {/ } / \mathrm{m} /}$ | [nts] | Substitution | Graphemic interference |
| "clubs are" | /bz/ | /klıbz/ /a:/ | [bs] | Substitution | Negative transfer |
| "fields as | /dz/ | /fi:əldz/ /əz/ | [lds] | Substitution | Negative transfer |
| "weekend at" | /nd/ | /wi:kend/ /ot/ | [ $\mathrm{n} \phi$ ] | Elision | Negative transfer |


| INDIVIDUAL 7 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| LEVEL 4 | Substitutions: 1 <br> N.T: 2 Total: |  |  |  |  |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "complained about" | /nd/ | /kəmpleınd/ /əbaut/ | [n¢] | Elision | Negative transfer |
| "fields as | /dz/ | /fi: $2 \mathrm{ldz/} / \mathrm{l}$ / | [lds] | Substitution | Negative transfer |





| $\begin{gathered} \text { INDIVIDUAL } \\ 11 \\ \hline \end{gathered}$ | Substitutions: <br> N. T: 2 | G.I: 1 | Total: 3 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LEVEL 4 |  |  |  |  |  |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "months in" | /nt $\theta$ s/ | /mın $\mathrm{s}^{\text {/ / } / \mathrm{m} / \mathrm{l}}$ | [nts] | Substitution | Graphemic interference |
| "clubs are" | /bz/ | /klıbz/ /a:/ | [bs] | Substitution | Negative transfer |
| "fields as | /dz/ | /fi:əldz/ /əz/ | [1ds] | Substitution | Negative transfer |


| INDIVIDUAL <br> 12 | Substitutions: 1 <br> Elisions: 1 <br> N.T: 2 | Total: 2 |
| :---: | :--- | :--- | :--- | :--- | :--- |


| INDIVIDUAL <br> 13 | Substitutions: 3 <br> N.T: 2 |  |  |  |  |  | Total: 3 |
| :---: | :--- | :--- | :--- | :--- | :--- | :---: | :---: |


| $\begin{gathered} \text { INDIVIDUAL } \\ 14 \\ \hline \end{gathered}$ | Substitutions: <br> Elisions: 1 <br> G.I: 1 | N.T: $3 \quad$ Total: 4 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LEVEL 4 |  |  |  |  |  |
| Words | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| "months in" | /nt $\mathrm{s}^{\text {/ }}$ | /mın $\mathrm{s}^{\text {/ / /n/ }}$ | [nts] | Substitution | Graphemic interference |
| "clubs are" | /bz/ | /klıbz/ /a:/ | [bs] | Substitution | Negative transfer |
| "fields as | /dz/ | /fi:əldz/ /əz/ | [lds] | Substitution | Negative transfer |
| "weekend at" | /nd/ | /wi:kend/ /at/ | [ $\mathrm{n} \phi$ ] | Elision | Negative transfer |

## Consonant groups in word final position

| LEVEL 2 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Individual | Word | Consonant groups | Target pronunciations | Individual's pronunciation of the CG | Type of deviation | Methodological strategy |
| 1 | "shelves" | /lvz/ | /Selvz/ | [lvs] | Substitution | Negative transfer |
| 1 | "lists" | /sts/ | /lists/ | [st $\phi$ ] | Elision | Negative transfer |
| 1 | "gardens" | /dnz/ | /ga:dnz/ | [rdns] | Addition and substitution | Negative transfer / Graphemic interference |
| 1 | "obliged" | /d3d/ | /2blard3d/ | [gid] | Substitution and addition | Graphemic interference/ Overpronunciation |
| 1 | "tiles" | /lz/ | /tariz/ | [1s] | Substitution | Negative transfer |
| 1 | "spectacles" | /klz/ | /spektəklz/ | [kls] | Substitution | Negative transfer |
| 1 | "careful" | /fi/ | /keafl/ | [ful] | Addition | Negative transfer/ graphemic interference |
| 1 | "changed" | /nd3d/ | /t emad 3 d/ | [ nt ft] | Substitution | Overpronunciation |



| 3 | "product" | /kt/ | /prod^kt/ | [kø] | Elision | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | "shelves" | /lvz/ | / Selvz/ | [18s] | Substitution | Negative transfer |
| 3 | "attractions" | /kjnz/ | /2træk $5 n z /$ | [kJons] | Addition and substitution | Negative transfer/ graphemic interference |
| 3 | "uncle" | / $\mathrm{jkl} /$ | / $n \mathfrak{\mathrm { kk }}$ // | [ $\mathrm{k} \mathrm{k} \phi$ ] | Elision | Negative transfer |
| 3 | "gardens" | /dnz/ | /ga:dnz/ | [rdns] | Addition and substitution | Negative transfer/ graphemic interference |
| 3 | "obliged" | /d3d/ | /2blard3d/ | [tft] | Substitution | Overpronunciation |
| 3 | "tiles" | /lz/ | /tariz/ | [1s] | Substitution | Negative transfer |
| 3 | "spectacles" | /klz/ | /spekt2klz/ | [kls] | Substitution | Negative transfer |
| Substitutions: 6 <br> Elisions : 2 <br> Additions: 2 |  | N.T: 7 | G.I: 2 | O: 1 | Total:8 TOTAL:10 |  |
| 4 | "shelves" | /lvz/ | /Selvz/ | [lvs] | Substitution | Negative transfer |
| 4 | "attractions" | /k[nz/ | /atræk $5 n z /$ | [kJons] | Addition and substitution | Negative transfer/graphemic interference |


| 4 | "gardens" | /dnz/ | /ga:dnz/ | [rdns] | Addition and <br> substitution | Negative <br> transfer/graphemic <br> interference |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 4 | "obliged" | /d3d/ | /əblaid3d/ | [gd] | Substitution | Overpronunciation |


| 5 | "spectacles" | /klz/ | /spektəklz/ | [kls] | Substitution | Negative transfer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | "careful" | /fl/ | /keafl/ | [ful] | Addition | Negative transfer/ graphemic interference |
| 5 | "changed" | /nd3d/ | /tjeind3d/ | [ f f t ] | Substitution | Overpronunciation |
| Substitutions: 7 <br> Elisions: <br> Additions: 4 <br> N.T: 6 |  |  | G.I: $5 \quad$ O: 2 |  | Total: 9 | OTAL: 11 |
| 6 | "twelfths" | /lf9s/ | /twelf9s/ | [18s] | Substitution and elision | Overpronunciation |
| 6 | "sixth" | /ks 0 / | /sııks $\theta$ / | [ks $¢$ ] | Elision | Overpronunciation |
| 6 | "attractions" | /kjnz/ | /2træk $5 n z /$ | [kJons] | Addition and substitution | Negative transfer/ graphemic interference |
| 6 | "gardens" | /dnz/ | /ga:dnz/ | [rdns] | Addition and substitution | Negative transfer/ graphemic interference |
| 6 | "obliged" | /d3d/ | /2blaid3d/ | [d3t] | Substitution | Overpronunciation |
|  | "Brighton" | /tn/ | /bratn/ | [ton] | Addition | Graphemic interference |


| 6 | "breathed" | /ठd/ | /bri:ðd/ | [ $\partial \phi$ ] | Elision | Overpronunciation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | "tiles" | /lz/ | /tailz/ | [1s] | Substitution | Negative transfer |
| 6 | "spectacles" | /klz/ | /spektəklz/ | [kls] | Substitution | Negative transfer |
| 6 | "changed" | /nd3d/ | /t fernd3d/ | [ n f t ] | Substitution | Overpronunciation |
| Substitutions: 7 <br> Elisions: 3 <br> Additions: 3 <br> N.T: 4 |  |  | G.I: 3 O: 5 |  | U: Total: 10 | TOTAL:13 |
| 7 | "shelves" | /lvz/ | /Selvz/ | [lvs] | Substitution | Negative transfer |
| 7 | "attractions" | /kjnz/ | /2træk $\int n z /$ | [k]ns] | Substitution | Negative transfer |
| 7 | "gardens" | /dnz/ | /ga:dnz/ | [rdns] | Addition and substitution | Negative transfer/ graphemic interference |
| 7 | "obliged" | /d3d/ | /2blard3d/ | [gid] | Substitution and addition | Graphemic interference/ Overpronunciation |
| 7 | "tiles" | /lz/ | /tailz/ | [1s] | Substitution | Negative transfer |
| 7 | "spectacles" | /klz/ | /spektəklz/ | [kls] | Substitution | Negative transfer |
| 7 | "changed" | /nd3d/ | /t Sernd3d/ | [nft] | Substitution | Overpronunciation |


|  | N.T: 5 |  | G.I: 2 | O: 2 | Total: 7 T | TAL: 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | "twelfths" | /lfes/ | /twelf0s/ | [lfts] | Substitution | Graphemic interference |
| 8 | "attractions" | /kjnz/ | /atræk $5 n z /$ | [kJons] | Addition and substitution | Negative transfer / graphemic interference |
| 8 | "gardens" | /dnz/ | /ga:dnz/ | [rdnz] | Addition | Negative transfer/ graphemic interference |
| 8 | "obliged" | /d3d/ | /2blard3d/ | [gad] | Substitution and addition | Graphemic interference/ Overpronunciation |
| 8 | "Brighton" | /tn/ | /braitn/ | [ton] | Addition | Graphemic interference |
| 8 | "tiles" | /lz/ | /tarlz/ | [1s] | Substitution | Negative transfer |
| 8 | "spectacles" | /klz/ | /spektəklz/ | [kls] | Substitution | Negative transfer |
| 8 | "changed" | /nd3d/ | /t emd3d/ | [ n ¢ t ] | Substitution | Overpronunciation |



| 10 | "Brighton" | /tn/ | /braitn/ | [ton] | Addition | Graphemic <br> interference |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 10 | "spectacles" | /klz/ | /spektəklz/ | $[\mathrm{kls}]$ | Substitution | Negative transfer |
| 10 | "changed" | /nd3d/ | /tJend3d/ | $[\mathrm{n} 5 \mathrm{t}]$ | Substitution | Overpronunciation |

## Substitutions: 4

Elisions:

|  | N.T: 3 |  | $\boldsymbol{:} 2 \quad 0: 1$ |  | Total: 5 | TOTAL:6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | "shelves" | /lvz/ | /Selvz/ | [18s] | Substitution | Negative transfer |
| 11 | "lists" | /sts/ | /lısts/ | [st $\phi$ ] | Elision | Negative transfer |
| 11 | "attractions" | /kJnz/ | /ətræk ${ }^{\text {dnz/ }}$ | [kJons] | Addition and substitution | Negative transfer/ graphemic interference |
| 11 | "gardens" | /dnz/ | /ga:dnz/ | [rdns] | Addition and substitution | Negative transfer/ graphemic interference |
| 11 | "breathed" | / $\partial \mathrm{d} /$ | /bri:ðd/ | [ðed] | Addition | Negative transfer/ graphemic interference |
| 11 | "tiles" | /lz/ | /tarlz/ | [1s] | Substitution | Negative transfer |
| 11 | "spectacles" | /klz/ | /spektəklz/ | [kls] | Substitution | Negative transfer |




| 13 | "obliged" | /d3d/ | /ablard3d/ | [gid] | Substitution and addition | Graphemic interference/ Overpronunciation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 13 | "breathed" | / $\partial \mathrm{d} /$ | /bri:ðd/ | [ðed] | Addition | Overpronunciation / graphemic interference |
| 13 | "tiles" | /lz/ | /tariz/ | [1s] | Substitution | Negative transfer |
| 13 | "spectacles" | /klz/ | /spektəklz/ | [kls] | Substitution | Negative transfer |
| 13 | "careful" | /fl/ | /keəfl/ | [ful] | Addition | Graphemic interference |
| 13 | "changed" | /nd3d/ | /tjeind3d/ | [ n [d] | Substitution | Overpronunciation |
| Substitutions: 7 Elisions : Additions: 5 |  |  | G.I: $5 \quad$ O: 3 |  | U: Total: 9 | TOTAL:12 |
| 14 | "shelves" | /lvz/ | /Selvz/ | [18s] | Substitution | Negative transfer |
| 14 | "attractions" | /kjnz/ | /ətræk $5 n z /$ | [kJons] | Addition and substitution | Negative transfer/ graphemic interference |
| 14 | "gardens" | /dnz/ | /ga:dnz/ | [rdens] | Addition and substitution | Negative transfer/ graphemic interference |


| 14 | "tiles" | /lz/ | /tarlz/ | $[\mathrm{ls}]$ | Substitution | Negative transfer |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 14 | "spectacles" | /klz/ | /spektəklz/ | $[\mathrm{kls}]$ | Substitution | Negative transfer |
| 14 | "careful" | /fl/ | /keafl/ | $[\mathrm{ful}]$ | Addition | Graphemic <br> interference |
| Substitutions: 5 <br> Elisions : <br> Additions: 3 <br> N.T: 5 | G.I: 3 | $\boldsymbol{O}:$ | $\boldsymbol{U}:$ | Total: 6 | TOTAL: 8 |  |


[^0]:    ${ }^{1}$ Some authors distinguish between consonant clusters and consonant sequences, the former are defined as a combination of consonants within the same word and the latter refers to one or more consonants present at the boundaries of words. Throughout this study the researcher will refer to both as consonant group in the boundaries of words and in final position.

