

## STRATEGIES TO CORRECT ERRORS IN PRONOUNCING FINAL CONSONANT CLUSTERS BY SECOND-YEAR ENGLISH MAJOR STUDENTS AT HONG DUC UNIVERSITY

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**Abstract:** *This article deals with final consonant clusters errors made by the second-year English-majored students in the Faculty of Foreign Languages, Hong Duc University (HDU). Data were generated through a mid-term oral test with the participation of 30 second-year students. The two data collection instruments are used to record students' talk to find out common errors with final clusters that students actually make and then observe their reading out loud the single words to seek out suitable strategies to overcome those errors. The findings of the study indicate that the majority of the second year students tend to omit one or two elements of the final clusters and some of the students make certain minor substitution and insertion errors. Some useful strategies are also suggested for this typical group of second-year students at HDU to deal with their pronunciation errors.*

**Keywords:** *Consonants, final clusters, English major, errors.*

### 1. Introduction

English has become an important demand for educational and job opportunities; however, many Vietnamese speakers do not have intelligible English pronunciation so as to be easily understood in direct communication with foreigners. Learners with serious pronunciation errors will often fail in communication. Therefore, it is very essential to research learners' pronunciation errors, and then to develop suitable strategies to improve articulation.

Among many pronunciation errors that learners of English as a second language are likely to make (i.e. intonation, stress, ending sounds, etc.), errors with final consonant clusters can be considered serious because "learners' inability to produce final consonant clusters can lead to incomprehensibility" [2, p.55]. Along the same line, Celce-Murcia, Brinton & Goodwin [3] supported that inaccurate pronunciation of consonant clusters can make English language learners' speech difficult for native speakers to understand, particularly in cases where the learners use epenthesis to break up clusters or omit a consonant in a cluster [1].

Serious as it might be, problems with final clusters can be considered as one typical pronunciation error of Vietnamese learners. In an article about common challenges faced by Vietnamese learners, Deshayes [5] firmly stated that "English

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consonant clusters give Vietnamese learners problems not only because they do not have these consonant combinations in their own language, but also because they produce a variety of syllable types”.

Being an English teacher at Hong Duc University (HDU), I realize that many of my students encounter difficulties in pronouncing English final clusters though they are able to produce single consonants accurately. For the above reasons, I have conducted this research entitled “*Strategies to correct errors in pronouncing final consonant clusters by second-year English major students at HDU*”.

## **2. Some main theoretical terms**

### **2.1. Consonant sounds**

According to Peter Roach [11], consonants are “sounds in which there is obstruction to the flow of air as it passes from the larynx to the lips”. Specifically, consonant sounds are the sounds in the production of which two articulators come close together so that air stream is obstructed and cannot get out freely.

Consonants can be described in terms of the manner of articulation, the place of articulation and voicing. Kelly [8] and Roach [11] categorized the 24 consonants into 6 groups:

Plosive	Nasal
Fricative	Lateral
Affricative	Approximant

### **2.2. English final consonants and consonant clusters**

Any consonant except h, r, w and j may be a final consonant. When there are two or more consonants at the end of the word (called final cluster), the terms “pre-final” and “post-final” consonants are used. These clusters will be investigated in my study.

Pre- final includes: /m, n, ŋ, l, s/

Post-final includes: /s, z, t, d, θ/

Two consonant clusters:

Pre-final followed by a final consonant

Consonant plus post-final:

E.g.: **think**, **important**, **help**, **health**, **cats**, etc.

Three consonant clusters:

Pre-final plus final plus post-final (e.g. **helped**, **twelfth**, **banks**, etc.)

Final plus post-final plus post-final (e.g. **text**, **fifths**, **lapsed**, etc.)

Four consonant clusters:

Most are pre-final plus final plus post-final plus post-final.

E.g: **prompts**, **twelfths**.

Occasionally, there is one final and three post-final consonants.

E.g: **sixths**, **texts**.

### **2.3. Final consonant clusters errors**

According to previous studies, the errors with consonant sounds can be classified into 6 types:

1. Cluster reduction. This is the “deletion of one or more consonants from a target cluster so that only a single consonant occurs at syllable margins” [5; 217].

2. Cluster simplification. The error occurs when one/some elements of a cluster being is/ are produced in a different manner from the target phoneme [5].

E.g. green - pronounced as [gwin]; bread - pronounced as [bwed]

3. Epenthesis. This is the insertion of some vowel (normally a schwa) between cluster elements [6] [12].

E.g. drive /draiv/ pronounced as [dəraiv]

4. Coalescence. It occurs when the yielded pronunciation contains a new consonant composed of features from the original consonants.

E.g. Swim-pronounced as [fim]. It was explained that because the [+fricative] feature of /s/ cooccurs with the [+labial] feature of /w/, resulting in a labial fricative, [f] [6] [12].

5. Omitting nasal and liquid sounds. In consonant clusters consisting of pre-final + final consonants with nasals (/n/, /m/) or liquids (/r/, /l/) as the first element, (/m, n, l, r/ + final consonant), nasals and liquids sounds are often omitted [10].

E.g. went → wet belt → bet

6. Phonetically possible spelling. In representing the first consonant of a cluster, spellers tend to spell words in an inaccurate but phonetically plausible ways [14].

E.g. trap → chap. It was explained that because “ch” closely resembles the sound of the initial blend “tr”. Treiman (1985) explains that this “ch” spelling reflects the release of /t/ in the context [4] [10].

## **3. The study**

### **3.1. Subjects of the study**

Participants in the research are 30 second-year students, who were chosen randomly from the 3 second-year classes of the Faculty of Foreign Languages, HDU. All of them had completed the Pronunciation course offered to first-year students at HDU. Hence, they had got not only basic ideas of pronunciation rules but also a certain awareness of their own pronunciation problems which might have been corrected by teachers.

At the time of the research, these English major subjects, aged from 19 to 21 years old, had worked with the textbook “Achievers B2” by Martin Hobs [10] for speaking skills. The total time allotted to speaking skills for the third term at HDU English majors is 63 class hours. The mid-term oral test occurs in week 8 or week 9 in each class with the same speaking topics.

### ***3.2. Data collection procedure***

Data collection was divided into two steps as follows:

*Stage 1 (Recording):* The data collection was administered through an oral test. This is the mid-term oral test that students had to participate in to get the mid-term marks which make up 20% of the total score in the semester. During the test, each of the students was requested to answer the questions on different topics in about eight to ten minutes. Everything they presented was recorded with the aid of an mp3 recorder which was placed on the table in the test room to get the best audio quality, and was later used for analysis to describe and categorize their errors with final clusters.

*Stage 2 (Observation):* All words with mispronounced final clusters collected from the recordings were then used for the participants to read out loud. The aim of the stage is to answer the question whether or not the students have the same problems in the test and in their real speech. From this, it is expected to suggest relevant and suitable strategies to correct the errors. Therefore, the speaker himself/ herself would read out loud the errors that he/ she made, paying attention to the final clusters when pronouncing the words. When they read, the researcher took note of any mispronounced final clusters in a checklist.

### ***3.3. Data analysis procedure***

The data analysis procedure included two phases:

*Phase 1:* All information collected from the subjects during the oral test was used for analysis. All the errors made by students were counted in terms of types, frequency and seriousness. The researcher then classified those types of errors and presented them in form of charts and tables. Tape(s) recorded from the oral test were given to a group of three English lecturers at the Faculty of Foreign Languages, HDU for pronunciation evaluation. The evaluators, informed in advance of the purpose of the evaluation, were also given a checklist so that the results would be more precise and suitable for the purpose of the research. After getting the result, they gave a written feedback to the researcher and participated in a discussion to work out the final results. Then, data were processed by using the descriptive statistics, working out the common kinds of mistakes.

*Phase 2:* The results from recording analysis were used to design a checklist for observation process. The results collected from observation were then compared with the results from recording analysis so as to suggest suitable solutions to students' pronunciation errors with final clusters.

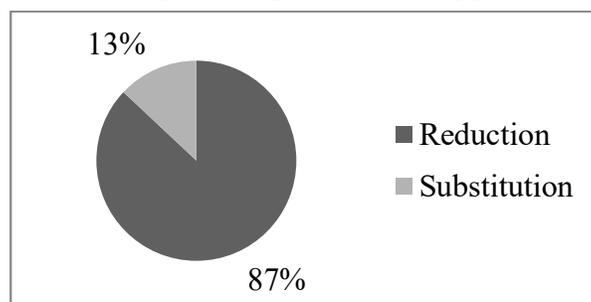
## **4. Findings and discussions**

### ***4.1. Findings from recordings and discussions***

The data from recording analysis helped reveal (1) the final clusters errors that the second year students at faculty of Foreign Languages, HDU often make; and (2) which errors are the most common ones in their pronunciation. It should be noted that the most common one was chosen owing to the number of subjects that made the errors and the number of times they appear when students presented the talk.

4.1.1. Overview of the errors with final clusters of 2<sup>nd</sup> year English-majored students at HDU

From analyzing the data collected from recordings, 230 pronunciation errors related to final clusters were found, including 200 reduction errors and 30 substitution errors. Below is the chart that shows the percentage of the two types of errors:



**Chart 1.** Types of errors

As can be seen from the chart, reduction (occurred 200 times) is more common than substitution (occurred 30 times). In other words, reduction is the major problem that the second-year students at HDU face.

Basing on the number of students who commit the errors, we can conclude that reduction is the most common error. Of all the subjects, 100% made errors with consonant reduction (30 students) and 60% (18 students) made substitution errors.

Interestingly, no insertion error was found in the data although this error still appeared in some previous research [8] [10].

4.1.2. Details of the errors with final clusters of second-year English major students at HDU

4.1.2.1. Reduction

As mentioned in the previous part, reduction is the most common error that the 2<sup>nd</sup> year students at HDU make. Below is the table which demonstrates the details of reduction errors found in the data from the recordings.

**Table 1.** Reduction errors found in the data from recordings

Consonant clusters		Sound(s) omitted	Number of subjects with errors	Occurrence times	
<b>Pre-final + Final + (Post-final)</b>	Pre-final /l/	/ld/	/l/, /d/ or /ld/	7	8
		/ls/	/s/	1	1
		/lp/, /lps/	/l/	6	7
		/lz/	/z/	1	1
		/lf/	/f/	1	1
		/lθ/	/θ/	5	5
		/lt/	/t/	4	4
		/lvz/	/v/	1	1
		/lvd/	/vd/	1	1
		/lm/	/l/	1	1

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	Pre-final /n/	/nt/ or /nts/	/t/ or /ts/	23	39
		/nd/ or /ndz/	/d/ or /dz/	22	43
		/ns/	/s/	1	1
		/nz/	/z/	2	2
		/ndʒ/, /ndʒd/	/dʒ/ or /dʒd/	2	2
		/nθs/	/θ/	1	1
	Pre-final /m/	/mz/	/z/	1	1
		/mp/	/p/	1	1
	Pre-final /ŋ/	/ŋk/	/k/	3	3
	Pre-final /s/	/st/	/t/	22	48
<b>Final + Post-final(s)</b>		/ts/	/s/	1	1
		/pts/	/t/	1	1
		/kt/ or /kts/	/t/ or /ts/	9	11
		/ks/ or /kst/	/s/ or /st/	5	6
		/vd/ or /vz/	/d/ or /z/	4	4
		/bz/	/z/	1	1
		/gd/	/d/	1	1
		/tʃt/	/t/	1	1
		/fts/	/s/	1	1
		/dz/	/z/ or /zd/	2	2

From the Table 1, it can be seen that the errors with final clusters /nt(s), nd(z), st/ are very common among the subjects. The frequency these final clusters appeared in the subjects' talk is also relatively high (/nt(s)/ - 39 times; /nd(z)/ - 43 times; /st/- 48 times). Therefore, it should be noted for correcting. In addition, some of the sounds such as /θ, dʒ/ at the end of words are really hard for Vietnamese learners to pronounce, so subjects tend to delete them. Details of the two types of final clusters are as followed.

Considering the first case (Pre-final + Final + (Post-final)), there were two tendencies to which the final clusters are mispronounced basing on the pre-final consonants: deleting the pre-final and deleting the final or post-final sounds.

Firstly, when the liquid sound /l/ stands as the pre-final, it tends to be omitted. This type of error was made by 33% of the subjects (10 students).

E.g. child /tʃaɪld/ → /tʃaɪd/  
 help /help/ → /hep/  
 film /fɪlm/ → /fɪm/

The consonant following /l/ is often deleted (accounting for 53%).

E.g. difficult /dɪfɪkəlt/ → /dɪfɪkəl/  
 health /helθ/ → /hel/  
 else /els/ → /el/

Secondly, when /n/, /m/, /ŋ/ - nasal sounds – stand as pre-final, the students tend to delete all or keep the first and the last sound in a cluster while deleting the middle ones. The phenomenon was found with 100% of the subjects.

E.g.      went            /went/ → /wen/  
           environment /invaɪrənmənt/ → /invaɪrənəmən/  
           friends /frendz/ → /fren/

Thirdly, when the pre-final sound is a fricative /s/, the students tend to delete the final sounds. 26 students made this error (87%).

E.g.      fast                /fa:st/ → /fa:s/  
           first              /fɜ:st/ → /fɜ:s/  
           ask                 /a:sk/ → /a:s/

Considering the second case {Final + post-final(s)}, it is noted that the final consonant is hardly deleted while the second element of two-element clusters and third of three-element clusters are often omitted. Many students just pronounced the first consonants of the long clusters and deleted all the consonants that go after them.

E.g.      next                /nekst/ → /nek/ (/s/ & /t/ were deleted)  
           mixed              /mɪkst/ → /mik/

There were a few cases of deleting a second element of three-element clusters. For example, accepts /əksept/ was pronounced as /əksep/ (/t/ was deleted).

In short, the analysis above shows that the students made the sound omission error. It is easy to understand why final clusters were omitted so frequently. As known, Vietnamese is monosyllabic language, so the students never have to pronounce clusters of consonants. What's more, the habit of "swallowing" the ending sound in the mother tongue is in fact a negative transfer that inhibits the pronunciation of ending sounds in general and final clusters in particular in the target language.

#### 4.1.2.2. Substitution

Of the two common final cluster errors that the subjects committed, the substitution errors come second. The following table incorporates the data on students' substitution errors found from recordings.

**Table 2.** Substitution errors found in the data from recordings

Consonant clusters	Sound(s) substituted	No. of subjects with errors	Repetition times
/θ/	θ=t or 'th' in Vietnamese	2	2
/ft, st/	f=s	2	2
/pt/	t = d	1	1
/nz, mz, dz, vz, lz, ŋz/	z = s	14	21
/ndʒ/	dʒ = z	2	2
/nt/	t = s	1	1
/nd/	d = t	1	1

As has been shown in Table 2, the subjects tend to replace the English sound by the Vietnamese one or confuse similar sounds. The English sound replaced by a Vietnamese one is /θ/, for example, health /helθ/ → θ pronounced as 'th' in Vietnamese. It can be explained that this sound is strange to Vietnamese speakers. Because of the influence of their mother tongue, the students simply substitute them with a similar Vietnamese sound.

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Regarding sound confusion, the most frequent errors are /s/ and /z/ (repeated 21 times). For instance, loves /lʌvz/ → /lʌvs/; kids /kɪdz/ → /kɪds/. The mispronunciation of /z/ to /s/ sounds may be due to the fact that the students often push the air through the mouth too hard.

Also in reference to the confusion of sounds, the mispronunciation of /dʒ/ to /z/ may be due to the carelessness and laziness of the students. The students who made this kind of mistakes usually do not try to find out how the tongue acts in each case, instead they produce all these sounds similarly which results in their mispronunciation as found in this study. The mispronunciation of /θ/ to /t/ may be because of the difficulty the students have when articulating the sound /θ/ at the end of the word.

**4.2. Findings from observation and discussions**

The data collected from taking notes of each student’s reading out loud the problematic words found from recordings are shown in the following table:

Types of errors	Times
Reduction	34
Substitution	7
Insertion	6

*Table 3. Errors from reading out loud the 230 problematic words from recordings*

The data from observation show that the subjects still made mistakes when they read single words. The most common error that the subjects made is reduction error, and it should be noted that there appear insertion errors.

Details of errors from observation are as follows:

*Table 4. Details of errors from observation data*

Types of errors	Consonant clusters	Notes
<b>Reduction</b>	Two-consonant clusters: /θ, lm, lp, lz/ /lt/ /dz/ /ndʒ/ /nd/	/l/ /lt/ or /t/ → deleted /d/ /dʒ/ /n/
	Three-consonant clusters: /nts, pts, kst, ndz, kts, nθs, lvz, lvd, fts/. /lps/	The middle sound of a three-consonant cluster is deleted. /l/ is omitted.
<b>Insertion</b>	/ld, pt/	/ə/ is inserted into the middle of a cluster.
<b>Substitution</b>	/θ, ʃt, ndʒ, dz/	θ = t, ʃ = s, dʒ = z, z = s

As can be seen from Table 4, the subjects mainly made errors with long clusters and clusters with difficult sounds. The reason is perhaps that students had little time to practise them in the Pronunciation course mentioned above. Also, the teacher might not have raised their students' awareness enough about these clusters in particular and clusters in general.

#### ***4.4. Strategies to correct common errors in pronouncing final clusters***

It is stated in the previous discussion that the difficulty with final clusters may result from teachers' neglect, students' carelessness or laziness, and the negative influence of mother tongue. Within the limited scope of this article, I would like to suggest some activities as well as techniques for correcting the final clusters errors that the thirty second-year students actually made.

Firstly, the results show that students tend to make more final clusters errors in spontaneous speeches than when reading single words. Therefore, it is important to help them form a habit for pronouncing these final clusters. It is impossible to form a habit without practice. The following activities have been compiled and adapted from Celce-Murcia, Brinton & Goodwin [3], Pham Thi Cam Chi [4], and Deshayes [5] in order to help students practise final clusters.

*Brainstorming:* Ask students to think of words that contain the target sound of the lesson. When students provide enough words, give them communicative activities so that they can practice the sound using those words.

The following example is a brainstorming task to practise the final cluster /nt(s)/:

Ask students to find at least five words containing the final cluster /nt(s)/.

E.g.: went, plant, excellent, want, important, parents, restaurants, spent

*Follow-up activity:* Work in pairs. Tell your partner what you did in your last summer holiday using at least five words that you have just listed above.

E.g: Last summer, I went to Hue with my parents. We were there for three days. We spent most of the time sightseeing there. We visited a lot of places such as Thien Mu pagoda, Khai Dinh mausoleum, and many other mausoleums. Also, we went along Huong River by boat. Huong River in the evening was very romantic. The local food, especially "Bun bo Hue", "Che Hue" were excellent there. I had a good time there, and I really want to go back to Hue soon.

*Dialogues:* With a word list containing the target sound of the lesson, teachers can ask students to work in pairs and create their own dialogues using those words. Next, students practise the dialogues they have created.

E.g.: A brief dialogue might be:

Ted: I couldn't finish the *sixth* problem.

Joe: That's because you forgot to reduce 6/6/ (*six/sixths*) to 1.

*Short oral presentation:* Teachers ask students to find at least five English words with final clusters on a certain topic. Then each learner presents a personal list to the class

and makes a short oral presentation that includes at least five of the words. Classmates should evaluate the speaker's production of consonant clusters as to how accurate, natural, and easily intelligible they sound.

Secondly, the results indicate that the subjects in this research had difficulties pronouncing long clusters (three-element clusters), clusters containing the complex sound such as /ft, ndʒ/, and clusters with the consonant "l" and its following consonants. To help correct these final clusters errors, I adopted some teaching suggestions from other researchers [2] [3] [5] [8] [9]. Hopefully, these suggestions can partly lessen the students' problems.

*Practicing using two words:* For example, to practice the final cluster /ld/ as in "field", use the phrase "feel down". The students can gradually eliminate more and more of the second word. E.g: Feel down → feel dow → feel d → field.

*Breaking down consonant clusters:* Add and change sounds gradually to practice long clusters, for instance, 'six', 'sixth', sixths'. Practice slowly at first and then speed up as confidence increases.

Some important deletions made by native speakers of English should be noted for students as follows: (1) the loss of a fricative when two or more fricatives occur together; for example, /θ/ is lost in *asthma*, /ð/ is lost in *clothes brush*; (2) the deletion of /t/ and /d/ in informal speech when they occur between two other consonants (e.g. friends, best man, child's); (3) the loss of /k/ in similar contexts, e.g. asked.

A sample dialogue can be used for students' practising cluster simplification strategies as follows:

Vet: What seems to be the problem with Peppy?

Pet owner: Well, he just isn't very peppy, Doc. He acts so tired all the time. He just lifts his head up and sighs.

Vet: And this started two months ago? Can you give me some more facts?

Pet owner: Sure. One of Peppy's big strengths as a guard dog is his bursts of energy. I asked him to fetch the newspaper yesterday and he left three-fourths of it on the doorstep. What does your medical textbook say about that?

Vet: Well, let me look it up under "listless dogs." It says here that "four/fifths of all listlessness in dogs is due to poor diet." Why don't I give you some pep pills? Feed him one every day and we'll see how he acts next week.

## **5. Conclusion**

There are three major types of errors that the second year students at HDU often make with final clusters: reduction, substitution and insertion. The first type of error, reduction, is committed by most of the second-year students. For the second type of error, substitution, students tend to replace an English sound by a Vietnamese one or confuse similar sounds. The results show that students often confuse /z/ with /s/, /ʃ/ with /s/, or /dʒ/

with /z/. The last type - Insertion - which does not appear in students' real speech but in their reading out loud single words- is also one error with final clusters that students make.

Some strategies are suggested for students, including brainstorming, dialogues, short oral presentation, information gap activity, Practicing using two words and Breaking down consonant clusters. Those strategies focus on developing students' habit of pronouncing final clusters in the speaking process as well as helping them overcome the difficult final clusters.

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