

**12<sup>th</sup> BRAZ-TESOL  
NATIONAL CONVENTION**



*The Art of  
Teaching*

ði r'fɛkts əv sɪ'lɛktɪd ænd  
ɪk'splɪsɪt 'tɪtʃɪŋ əv  
prəˌnʌnsi'eɪʃən tə brə'zɪljən ɪ  
ɛf ɛl 'lɜrnərz

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# RESEARCH

- **Why Teach Pronunciation?**
  - for communication 
- **Research Questions:**
  - What are the effects?
  - What is the durability?

# METHODOLOGY

- **Interventionist Action Research**

CLASS	STUDENTS	TEACHER	INTERVENTION
Control Group	11	Non-native	No
Research Group	17	Non-native	Yes

- **Pre/post-tests**

- Avery e Ehrlich (1992)
- Kelly (2000)
- Yavaş (2006)
- Godoy, Gontown e Marcelino (2006)
- Collins e Mees (2008)

# Difficulties considered to design the pre/post-test

## DIFFICULTIES WITH CONSONANTS

1	[p <sup>h</sup> ] [t <sup>h</sup> ] [k <sup>h</sup> ] → [p] [t] [k]	9	final [ŋ] → [ŋg]
2	[t] [d] → [tʃ] [dʒ]	10	[h]
3	[tʃ] [dʒ] → [ʃ] [ʒ]	11	[z] [s] → [s] [z]
4	[θ] → [t] [s] [f] [ð] → [d] [z] [v]	12	[t] [d] [ɪd] (-ed) → [ɛd]
5	Post-vocalic (dark) [ɤ] → [ʊ]	13	[j] [w] → [ɪ] [ʊ]
6	[ɽ] (retroflex) → [x] [χ]	14	Final plosives → intrusive vowel
7	Consonant clusters → intrusive vowel	15	[g] → [ʒ]
8	[m] [n] [ŋ] → substituted with nasal vowels		

Initial [p] [t] [k]  
in stressed syllables sound  
[p<sup>h</sup>] [t<sup>h</sup>] [k<sup>h</sup>]

‘pay’ [p<sup>h</sup>ej] - [pej] = [bej]

‘tie’ [t<sup>h</sup>aj] - [taj] = [daj]

‘cap’ [k<sup>h</sup>æp] - [kæp] = [gæb]

[θ]	[s]
Thank	Sank
Think	Sink
Thin	Sin
Math	Mass
Path	Pass
Mouth	Mouse

[θ]	[t]
Three	Tree
Thick	Tick
Through	True
Tenth	Tent
Math	Matt
Booth	Boot



[θ]	[f]
Thought	Fought
Threat	Fret
Three	Free
Oath	Oaf
Death	Deaf
Myth	Miff

[ð]	[d]
They	Day
Though	Dough
Those	Doze
Then	Den
There	Dare

/t/	[tʃ]
Two	Chew
Tease	Cheese
Tip	Chip
Tin	Chin
Tear	Cheer
Art	Arch
Beat / Beet	Beach
Cat	Catch
Bent	Bench

[ʃ]	[tʃ]
Share	Chair
Shoe	Chew
Shore	Chore
Shin	Chin
Ship	Chip
Shop	Chop
Wash	Watch
Cash	Catch
Wish	Witch

[m]	[n]
Cam	Can
Them	Then
Pam	Pan
Rum	Run
Seem	Scene
Rom	Ron

[n]	[ŋ]	[ŋk]
Son / Sun	Sung	Sunk
Ban	Bang	Bank
Ran	Rang	Rank
Thin	Thing	Think
Done	Dung	Dunk
Win	Wing	Wink

[ow]	[owɪ]
Sow / Sew / So	Soul
Bow	Bowl
Go	Goal
Mow	Mole
Row	Role
Rode / Road	Rolled
Code	Cold
Coat	Colt

[h]	/r/
Home	Rome
Hose	Rose
Hat	Rat
Hole	Role
Hate	Rate
Hear	Rear
Hair	Rare
Hide	Ride
Hope	Rope



# Regular Simple Past -ed

Last sound of the base form is <b>Voiceless</b>	Last sound of the base form is <b>Voiced</b>	Last sound of the base form is [t] or [d]
[t]	[d]	[ɪd] [əd]
<p>wiped [pt] liked [kt] lughed [ft] messed [st] crashed [ʃt] matched [tʃt]</p>	<p>bribed [bd] jogged [gd] lived [vd] named [md] opened [nd] rolled /ld/ appeared /rd/ raised [zd] breathed [ðd] longed [ŋd] merged [dʒd] cried – vowel + [d]</p>	<p><b>one syllable is added to the verb</b> lasted [tɪd] [təd] accepted [tɪd] [təd] added [dɪd] [dəd] founded [daɪd] [dəd]</p>

## Adjectives with *-ed*

wretched

beloved

naked

four-legged

wicked

crooked

[s]

House, mouse, blouse

Base, case, basic

Basis, crisis, analysis

Useful

Fantasy

Famous, marvelous, various

Disorder, disappear, dishonest

Misuse, misinform, misinterpret

[z]

His, hers, theirs

Does, was, is

Resort, business, easy

Whose, praise, because

Dessert, scissors, possessive

[s] (noun / adjective)	[z] (verb)
Abuse	To abuse
Use	To use
Excuse	To excuse
House	To house
Close	To close

[s]	[z]
Ice	Eyes
Spice	Spies
Loss	Laws
Price	Prize
Face	Phase
Loose	Lose
Once	Ones
Race	Raise
Advice	Advise
Niece	Knees

<b>Singular</b> <i>/sɪs/</i>	<b>Plural</b> <i>/si:z/</i>
<b>Crisis</b> <i>/kraɪsɪs/</i>	<b>Crises</b> <i>/kraɪsi:z/</i>
<b>Analysis</b> <i>/əˈnæləsɪs/</i>	<b>Analyses</b> <i>/əˈnæləsi:z/</i>
<b>Parenthesis</b> <i>/pəˈrɛnθəsɪs/</i>	<b>Parentheses</b> <i>/pəˈrɛnθəsi:z/</i>
<b>Basis</b> <i>/'beɪsɪs/</i>	<b>Bases</b> <i>/'beɪsi:z/</i>

# Final -s

Last sound of the base form is <b>Voiceless</b>	Last sound of the base form is <b>Voiced</b>	Last sound of the base form is [s] [z] [ʃ] [ʒ] [tʃ] [dʒ]
[s]	[z]	[ɪz] [əz]
<p>cups /cʌps/</p> <p>takes /teɪks/</p> <p>student's /stu:dənts/</p>	<p>boys /bɔɪz/</p> <p>lives /lɪvz/</p> <p>she's /ʃi:z/</p>	<p>one syllable is added to the verb</p> <p>glasses /'glæsɪz/</p> <p>washes /'wɒʃɪz/</p> <p>judge's /'dʒʌdʒɪz/</p>

## Difficulties considered to design the pre/post-test

DIFFICULTIES WITH VOWELS			
16	[i:] [ɪ] → [ɪ] [i:]	20	Final [ə] → [eɪ] [jɔn] [oʊ]
17	[u:] [ʊ] → [ʊ] [u:]	21	[ʌ] → [ʊ]
18	[æ] [ɛ] → [ɛ] [æ]	22	[ʌ] → [æ]
19	[æ] → [ɑ:]		



[i:]	[ɪ]
Leave	Live
Scene	Sin
Heat	Hit
Seat	Sit
Feet	Fit
Leap	Lip
Beach	Bitch
Sheet	Shit

[u:]	[ʊ]
Fool	Full
Luke	Look
Pool	Pull
Cooed	Could

[ɛ]	[æ]
Bed	Bad
Pet	Pat
Men	Man
Ken	Can
Said	Sad
Ten	Tan
Send	Sand

[i:]	[ɪ]	[ɛ]	[æ]
Beat	Bit	Bet	Bat
Bead	Bid	Bed	Bad
Meet	Mitt	Met	Matt
Deed	Did	Dead	Dad
Keen	Kin	Ken	Can

[ə]	Typical mistake	Correct Pronunciation
<i>ous</i> , as in <b>various</b>	[ows]	[əs]
<i>pro</i> , as in <b>production</b>	[pro] [prow]	[prə]
<i>ion</i> , as in <b>illusion</b>	[on] [jon]	[ən]
[ə] or [ʊ]	[ə] or [ɪ]	
today, you (connected speech)	behind, prefer, delicate, chocolate, wanted	

[ʌ]	[ʊ]
Luck	look
Cud	Could
Buck	book
stud	stood
tuck	took

[ʌ]	[ɑ] [ɔ:]
nut	not / knot
cup	cop
buddy	body
color	collar
duck	dock
fund	fond
bum	bomb
wonder	wander

# The pre/post-test



# DATA ANALYSIS

## Most difficult sounds according to diagnostic (pre) test

MOST DIFFICULT SOUNDS	ERROR OCCURRENCE RATE	CHOSEN TO BE TREATED?
[æ]	100%	YES
[z] [s]	100%	YES
[ŋ]	100%	NO
[ʔ]	95%	NO (but it was)
[u:]	95%	YES
[θ] [ð]	93%	YES
[t] [d] [ɪd]	90%	YES
[i:]	83%	YES
[p <sup>h</sup> ] [t <sup>h</sup> ] [k <sup>h</sup> ]	81%	YES
[ə]	70%	NO
		[h] [r]

# Immediate post-test (sounds)

SOUNDS WITH GREATEST ERROR OCCURRENCE REDUCTION	RESEARCH GROUP
[θ] [ð]	98% → 55% ( <b>43</b> )
[æ]	100 → 71% ( <b>29</b> )
[t̚]	100% → 73% ( <b>27</b> )
[u:]	94% → 68% ( <b>26</b> )
[t] [d] [ɪd]	90% → 65% ( <b>25</b> )
[i:]	81% → 63% ( <b>18</b> )
[h]	18% → 6% ( <b>12</b> )

SOUNDS WITH GREATEST ERROR OCCURRENCE REDUCTION	CONTROL GROUP
[t]	45% → 36% ( <b>9</b> )
[i:]	86% → 77% ( <b>9</b> )
[h]	24% → 15% ( <b>9</b> )
[r]	39% → 30% ( <b>9</b> )
[ɪ]	18% → 9% ( <b>9</b> )
[æ]	100% → 95% ( <b>5</b> )
[ə]	68% → 63% ( <b>5</b> )

# Immediate post-test (students)

PARTICIPANTS WITH GREATEST ERROR OCCURRENCE REDUCTION	RESEARCH GROUP
Lorena	59% → 35% ( <b>24</b> )
Fabíola	50% → 29% ( <b>21</b> )
Patrícia	52% → 32% ( <b>20</b> )
Fábia	42% → 25% ( <b>17</b> )
Thales	50% → 35% ( <b>15</b> )
Sabrina	54% → 43% ( <b>11</b> )
Nívea	53% → 42% ( <b>11</b> )
Maurício	53% → 43% ( <b>10</b> )

PARTICIPANTS WITH GREATEST ERROR OCCURRENCE REDUCTION	CONTROL GROUP
Mário	62% → 54% ( <b>8</b> )
Gabriela	65% → 58% ( <b>7</b> )
Iolanda	67% → 63% ( <b>4</b> )
William	64% → 60% ( <b>4</b> )
Yasmin	56% → 53% ( <b>3</b> )
Leandro	54% → 52% ( <b>2</b> )
Alessandra	44% → 42% ( <b>2</b> )
Beatriz	58% → 57% ( <b>1</b> )

## Immediate post-test

- Fábia (*heat, beat, sit, hit*)
- Patrícia (*heat, beat, sit, hit / cap, bat, bed, leg*)
- Lorena (*moved, robbed, walked, stopped, studied, wanted*)
- Patrícia (*moved, robbed, walked, stopped, studied, wanted*)

## Delayed post-test (sounds)

SOUNDS WITH GREATEST ERROR OCCURRENCE REDUCTION	RESEARCH GROUP
[ʌ]	38% → 12% ( <b>26</b> )
[t]	44 → 21% ( <b>23</b> )
[ɫ]	73% → 59% ( <b>14</b> )
[ə]	64% → 54% ( <b>10</b> )

SOUNDS WITH GREATEST ERROR OCCURRENCE REDUCTION	CONTROL GROUP
[ɫ]	87% → 78% ( <b>9</b> )
[θ] [ð]	81% → 72% ( <b>9</b> )
<i>Consonant clusters</i>	12% → 6% ( <b>6</b> )
[ɪ]	9% → 5% ( <b>4</b> )

## Delayed post-test (students)

PARTICIPANTS WITH GREATEST ERROR OCCURRENCE REDUCTION	RESEARCH GROUP
Geovana	42% → 26% ( <b>16</b> )
Murilo	62% → 47% ( <b>15</b> )
Rita	64% → 53% ( <b>11</b> )
Thales	35% → 24% ( <b>11</b> )

PARTICIPANTS WITH GREATEST ERROR OCCURRENCE REDUCTION	CONTROL GROUP
Mário	54% → 47% ( <b>7</b> )
Yasmin	53% → 46% ( <b>7</b> )
Iolanda	63% → 58% ( <b>5</b> )
Beatriz	57% → 52% ( <b>5</b> )

## Delayed post-test

- [Geovana](#) – learning & retention  
*(heat, beat, sit, hit)*
- [Murilo](#) – learned only in the third one  
*(moved, robbed, walked, stopped, studied,  
wanted)*

## Participants with lowest error occurrence

TEST	RESEARCH GROUP	RATE	CONTROL GROUP	RATE
Diagnostic	Fábia	42%	Alessandra	44%
Immediate post-test	Fábia	25%	Alessandra	42%
Delayed post-test	Thales	24%	Alessandra	41%

## Participants with greatest error reduction

	RESEARCH GROUP (THALES)	CONTROL GROUP (MÁRIO)
DIAGNOSTIC TEST	50%	62%
IMMEDIATE POST-TEST	35%	54%
DELAYED POST-TEST	24%	47%
<b>TOTAL</b>	<b>26 points</b>	<b>15 points</b>



# RESEARCH CONCLUSIONS

- **Research questions**
  - What are the effects?
  - What is the durability?

