

USING SELF-ASSESSMENT IN ESL PRONUNCIATION CLASSES

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SELF-MONITORING

« A moment-by-moment awareness of the likelihood that one maintains the skill/knowledge to act in a particular situation » (Eva & Regehr, 2011)



Sources of Feedback

- Self-observations & (in)correct intuitions
- Unclear or misunderstood teacher standards and criteria
- Incomplete or biased parent/peer feedback

Student Pitfalls without proper guidance

- Overgeneralization
- Erroneous self-beliefs about performance (*Dunning-Kruger* effect)
- Poor investment of study time and energy
- Ego preservation and resistance

Pedagogical Implications

- Unrealistic standards of performance & inaccurate evaluation of own strengths and weaknesses
- Negative attitudes
- Loss of motivation
- Task avoidance
- Failure to learn skills
- Fossilization

SELF-ASSESSMENT

- “A **global judgment** of one’s own ability in a particular domain” (Eva & Regehr, 2011)
- A type of **formative assessment** (Noonan & Duncan, 2005)
- A **positive impact** on learning (Andrade & Valtcheva, 2009; Harris & Brown, 2018; Jamrus & Razali, 2019; Ross, 2006)
- The ability to assess strengths and weaknesses is **a skill that needs to be modeled and taught** (Derwing & Munro, 2015; Harris & Brown, 2018)

L2 PRONUNCIATION

- For adult learners, L2 pronunciation is resistant to change :
 - Fossilization
 - Insufficient focus on pronunciation instruction in L2 courses
 - L2 pronunciation is multidisciplinary and thus difficult to teach
 - L2 teachers lack of confidence in their knowledge of phonetics, phonology and L2 pronunciation pedagogy
- Research and pedagogy aims to innovate to support these challenges

SELF-MONITORING CHALLENGES IN L2 PRONUNCIATION CLASSES

- ➔ **Difficulty evaluating** own pronunciation (Trofimovich *et al.*, 2016)
- ➔ Prior to training, students report **segmental difficulties / less aware of suprasegmental issues** (Derwing & Rossiter, 2002)
- ➔ **Unsure how to correct themselves** to achieve desired performance (Dlaska & Krekeler, 2013)
- ➔ There are many aspects of pronunciation to attend to, and **limited attentional resources** result in learners focusing on one aspect at a **time** (Brannen *et al.*, 2021; Mora & Darcy, 2017)

SELF-MONITORING IN L2 PRONUNCIATION CLASSES

➔ Pronunciation activities that **raise a student's awareness of their L2 speech** and **draw their attention to phonological features** are important to the learning process

(e.g. Celce-Murcia *et al.*, 2018, Derwing, Munro, & Wiebe, 1998; Derwing, 2018; Wouters & Fortier, 2020).

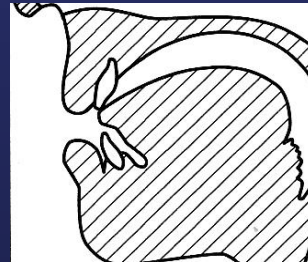
Sound-spelling correspondences

A “moth” is not a “moth” in “mother”
nor “both” in “bother”, “broth” in “brother”

From “English” by T.S. Watt.

Physiological cues

/_/: Did you link the final consonant to the following vowel?



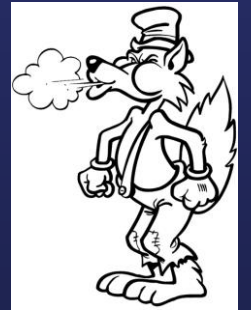
DALE, P. & L. PONS. (2004). *English Pronunciation Made Simple*. White Plains, NY: Longman.

/θ, ð/: Do you feel vibration in your vocal cords?

Was your tongue between the teeth or on the gums?

Acoustic cues

/h/: Can you hear a long puff of air?



<https://signspecialist.com/decals/beevault/pages/Phenomena-and-History-072-0457.htm>

/θ, ð/: Do you hear a sound that seems short or cut off?
Do you hear a long « th » sound?

USING SELF-ASSESSMENT IN L2 PRONUNCIATION CLASSES

- Self-assessment leads to improved pronunciation
 - of oral and nasal vowels in L2 French (Lappin-Fortin & Rye, 2014)
 - of suprasegmentals in L2 (Trofimovich *et al.*, 2016; Tsunemoto *et al.*, 2021)
- To our knowledge, no studies have specifically investigated English consonants

The goal of this study is to find out whether L2 self-assessment activities contribute to improving the pronunciation of certain problematic English consonants

CONSONANT INVESTIGATIONS

In **production**, L2 learners of English tend to

- **substitute 'th'**

$/\theta, \delta/ \rightarrow /t, d/$ *think that* → *tink dat*

or

$/\theta, \delta/ \rightarrow /s, z/$ *think that* → *sink zat*

- **delete 'h'** (some L1s)

- $/h/ \rightarrow /_/$ *heart* → *_art*

- **insert 'h'** (in some cases)

$/_/ \rightarrow /h/$ *apple* → *happle*

(Brannen, 2011; Brannen *et al.* 2021; John & Cardoso, 2009; Trofimovich *et al.*, 2007; Trofimovich & John, 2011)

In **perception**, learners also have difficulty distinguishing

$/\theta, \delta/$ vs. $/t, d/$ or $/s, z/$

and

$/h/$ vs $/_/$.

($/\theta, \delta/$: Brannen, 2002, 2011; Trofimovich & John, 2011; Wouters & John, 2020)
($/h/$: Mah, Goad, & Steinhauer, 2016; White *et al.*, 2015; Wouters & John, 2020)

PRIOR TO THIS STUDY

Pronunciation error detection in recordings (English L2)

Wouters & John (2020)

- h-errors > th-errors
- h-epenthesis > h-deletion
- Correlations between production accuracy and error detection

→ Learners are **capable of detecting pronunciation errors** involving /θ, ð/ and /h/ in their own and their peers' speech.

Self-assessment

Brannen, Rosales, Wouters & John (2021)

Weekly self-assessment activities targeting various aspects of pronunciation, including “th” and “h”

→ **No significant differences** between **pre- and post-tests**, nor between **test** (*self-assessment*) and **control** (*no self-assessment*) **groups**

→ **Significant differences** between **test items**: more errors on /θ, ð/ substitution versus /h/ insertion

THE CURRENT STUDY

- In Brannen *et al.* (2021): The short phrases targeting students' pronunciation of "th" and "h" did not reveal significant differences in pre- and post-test performance
- In the **present study**: We increased the difficulty level of the the pre- and post-test stimuli by using complete sentences

HYPOTHESIS

Self-assessment activities will lead to improvement in the production of « h » and « th » in **full sentences**

METHOD

CLASS AND PARTICIPANTS

Winter – Summer – Fall 2020 - ANG4152 *Pronunciation III* (CEFR, C1)

22 ESL students (M=5; F=17)

French: N = 12, Chinese: N = 4, Spanish: N=3, Other: N=3 (*Brazilian Portuguese, Japanese, Romanian*)



Test Group

- N=11 (F=7; M=4)
 - French: N = 3
 - Spanish: N = 3
 - Chinese: N = 2
 - Other: N = 3

Control Group

- N=11 (F=10; M=1)
 - French: N = 9
 - Chinese: N = 2

METHOD

TEST DESIGN AND ANALYSIS

→ Instruments:

- Reading aloud sentences

Example pre-/post-test sentences :

3) My bro**th**er _is **th**irty-nine years _old. **H**e works _in a large _office building.

6) Montreal _is my favourite **h**ockey team, but **th**ey **h**aven't been winning recently.

- One-hour zoom interviews

Targets are in orange

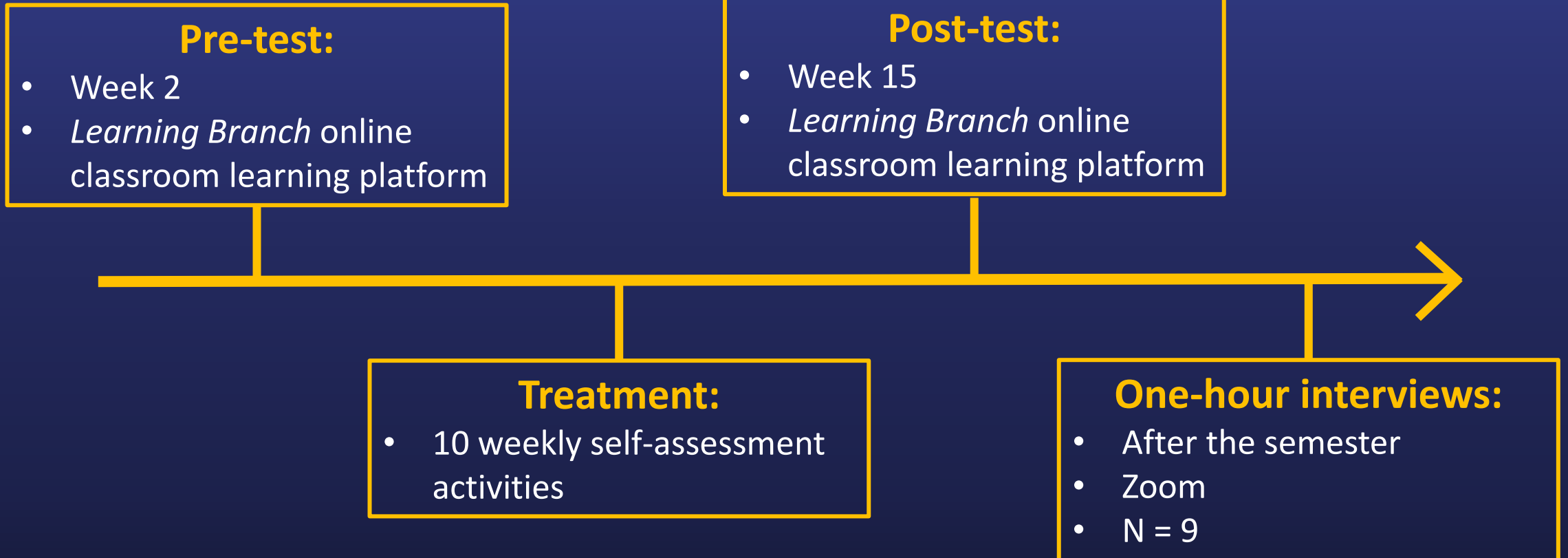
→ Analysis:

- **3** native English speaker **raters** (1 CAN, 2 USA)
 - 2 experienced ESL pronunciation teachers rated all the occurrences
 - 1 experienced non-pronunciation ESL teacher in case of disagreements
- Quantitative data: **Student T-test**
- Qualitative data: **content analysis**

Agreement: **98%** :
/h/-deletion: 97,2%
/h/-epenthesis: 99,8%
/θ/-substitution: 95,2%
/ð/- substitution: 90,6%

METHOD

DATA COLLECTION



One semester = 15 weeks

TREATMENT

Example of a self-assessment text

 Step 1: **Record** the following text, speaking as naturally as possible:

These were high, airy places with big windows and a cool breeze moving through. I imagined one room opening brightly onto another room until I'd built a house, a place with hallways and more staircases. I built many houses, one after another, and those gave rise to a city [...]. I put myself there, and that's where I lived, in the wide-open sky of my mind. I made friends and read books and went running on a footpath in a jewel-green park along the harbour. I ate pancakes drizzled in syrup and took baths and watched sunlight pour through trees.

-- Excerpt from *A House in the Sky*

 Step 2: Model Recording - Now **listen** to the model

 Step 3: **Self-Assessment**

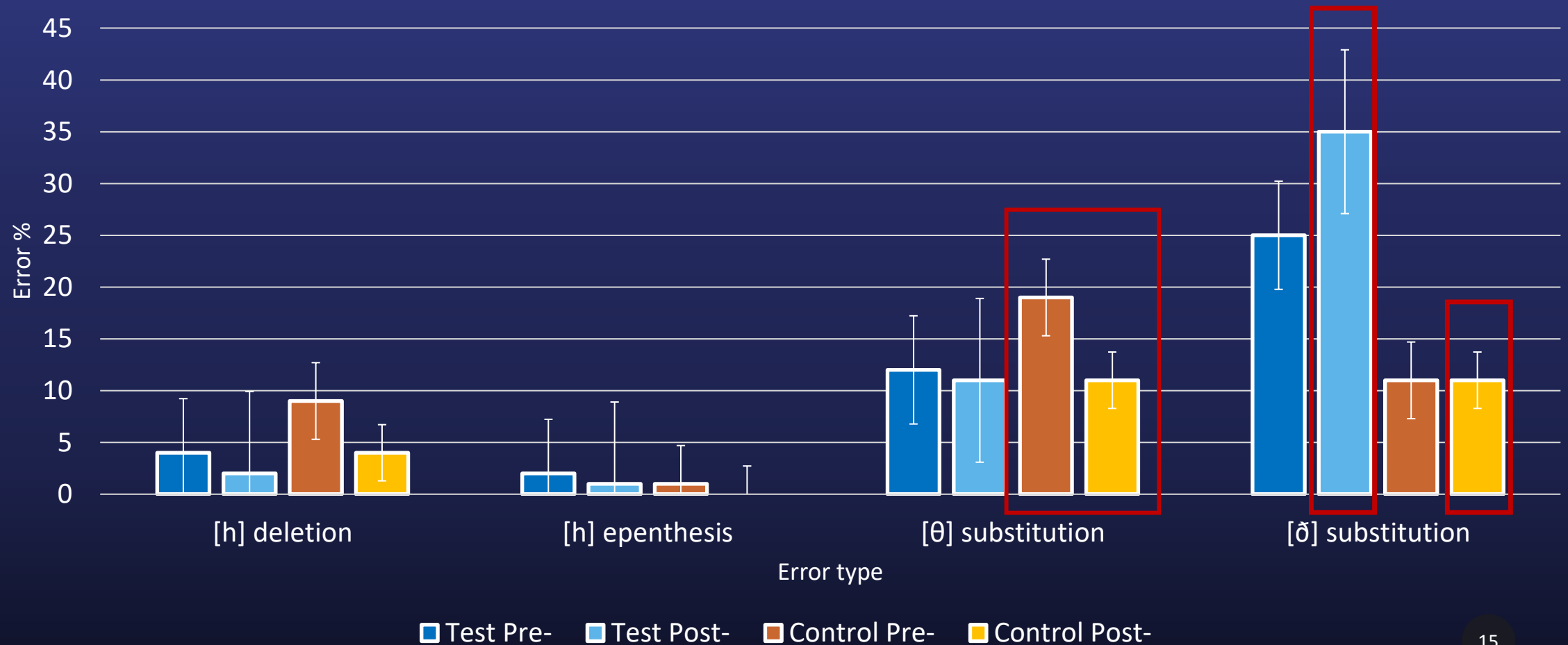
After comparing your recording with the model, evaluate your pronunciation.

- *How was your pronunciation of the vowels and consonants? "th" and "h"? How was your pronunciation of weak forms and rhythm? Word stress and intonation?*
- *Give specific examples of what you did correctly and where you made errors.*

RESULTS

PRONUNCIATION III (ADVANCED)

Test vs. Control Groups Pre- vs. Post-test



RESULTS SUMMARY

Quantitative data

Between groups :

- No significant differences at pre- and post-test
- Except for [ð] -> [d] errors
test group : + errors on /ð/ (post-test)

Between time:

- Test & control groups improved on /h/ and /θ/
Sig. difference for the control group on /θ/

Error type:

- Sig. difference between /θ, ð/ and /h/ errors
/θ, ð/ > /h/

➔ These results resemble the results in Brannen *et al.* (2021)

Qualitative data

- Useful, especially with teacher feedback
- Difficult at first; however, with practice, they were able to develop their self-assessment skills
- Raised self-awareness; feel able to extend this type of self-monitoring to their use of English in their daily lives
- Participants felt that their English pronunciation had improved thanks to self-assessment

DISCUSSION

QUANTITATIVE RESULTS

→ More errors on /θ, ð/ than on /h/

- substitution errors more difficult to eradicate than insertion/deletion of an entire segment?
- fossilization on /θ, ð/?

→ Test group had more errors on /ð/ in post-test

- The teacher told students not to focus on /ð/ in the function word “the”
 - may lead to stressing “the” and thus disrupting rhythm
- Self-assessments directed students’ attention to /ð/

conflicting
information

→ More errors on /ð/ than on /θ/

- /θ/ more perceptually salient than /ð/
 - /θ/ is longer than /ð/ (Jongman *et al.*, 2000)
 - weak saliency of /ð/ also reflected in lower inter-rater agreement on /ð/

DISCUSSION

QUANTITATIVE RESULTS

- ➔ Pre-/post-test: **No advantage for the self-assessment group**
 - Are traditional pronunciation teaching methods sufficient?

How to reconcile these results with previous research?

- ➔ Benefits of self-assessment in the pronunciation of **vowels** and **suprasegmentals**
 - Are consonants different?
- ➔ Qualitative data: **more attention to suprasegmentals** than segmentals
 - **Limited attentional resources**: Can't attend to both simultaneously?
 - Initially, learners are **more aware of their segmental errors** than suprasegmental errors (Derwing & Rossiter, 2002)
 - **introduction to suprasegmentals** in pronunciation courses may **attract their attention**

EFFECTIVE SELF-ASSESSMENT

Criteria and Feedback

- Well-structured, frequent self-assessment
- Clear guidance
- Timely feedback

Critical understanding

- Ability to identify and improve on specific aspects
- Ability to detect nuances

Improved outcomes

- Cycle of self-regulated learning (Zimmerman, 2008)
- Better and more varied adaptive learning strategies in more challenging tasks
- Learner autonomy and empowerment

(Harris and Brown, 2018)

FUTURE RESEARCH

Other possible benefits of self-assessment

Improvement in other aspects of pronunciation?

Overall **comprehensibility** and **intelligibility**?

Stress and **intonation**? **Rhythm**?

Motivation

Reduced pronunciation **anxiety**?

Improved **perception**?

Future research

More participants for a **larger sample size**

Continue **collecting sentence data** at the intermediate level

Refine pre- and post-tests, self-assessment **tasks**

Impose **time limits**

Include **delayed post-tests**

Use **spontaneous, elicited speech**

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COMMENTS FROM INTERVIEWS

P1

When listening, I could perceive the difference between the sounds.

Then I realized, when you listen again or listen to your recording, I was like, « My God, I didn't get it at all! It wasn't words that I didn't know, it's just a word that I really didn't pronounce well. »

[Before the course] For me, knowing that I didn't pronounce the words the right way or that I had trouble was like a handicap, in fact, that bothered me. I didn't necessarily want to have conversations with native English speakers.

I found that this was an exercise that was nonetheless very complete, to be able to read, record oneself, listen to ourselves, then compare. For sure when you don't have another person to do it, I think that exercises like these, being able to read aloud and record oneself... It's like having a conversation. I think that it's a good exercise.

I actually saw an improvement. I was even surprised to see that it actually went faster than I thought.

By having to read the sentence, then seeing the types of words, then adding the intonation, that allowed...even when reading or when I pronounced the exercises out loud... that allowed me to better understand where I had to pause, or if it was allowed there, even if there was no punctuation.

COMMENTS FROM INTERVIEWS

P2

I always learned something new and I paid attention to something new each time. That's something that won't be lost now that I am aware of it.

Now I know that I make mistakes, so I can work on them.

When someone spoke in English, talked fast, or sort of mused their words, before, I felt like I was deaf. Now, I hear what is said, I understand that not all the letters in a word are pronounced, that the intonation is placed more on one word than the other [...]. It really made me realize that everyone talks that way!