Recherches anglaises et nord-américaines

55 | 2022
Pronunciation Matters

Doing Pronunciation Online: An Embodied and Cognitive Approach Which Puts Prosody First

Dan Frost

Electronic version
URL: https://journals.openedition.org/ranam/379
DOI: 10.4000/ranam.379
ISSN: 3000-4411

Publisher
Presses universitaires de Strasbourg

Printed version
Date of publication: July 20, 2022
Number of pages: 25-38
ISBN: 9791034401161
ISSN: 0557-6989

Electronic reference
Dan Frost, "Doing Pronunciation Online: An Embodied and Cognitive Approach Which Puts Prosody First", *Recherches anglaises et nord-américaines* [Online], 55 | 2022, Online since 01 February 2024, connection on 08 February 2024. URL: http://journals.openedition.org/ranam/379 ; DOI: https://doi.org/10.4000/ranam.379

The text only may be used under licence CC BY-NC-SA 4.0. All other elements (illustrations, imported files) are "All rights reserved", unless otherwise stated.

Doing Pronunciation Online: An Embodied and Cognitive Approach Which Puts Prosody First

Dan Frost♦

The study of a foreign language, usually English, is compulsory for all university students in France, as in many other countries in Europe and throughout the world. In Grenoble-Alpes University therefore, where the project presented in this paper is being carried out, these non-specialists make up the majority of students of English, and teaching conditions and learner motivation vary greatly (Taillefer, 2002). In addition, there are also English classes for undergraduate and graduate specialists of English, members of the university staff and also members of the general public. The French Ministry of Education and Research has specified the levels which it expects learners to achieve in their foreign languages at various stages of their education, and for LSP/LAP[1] learners, this means B2 according to the CEFRL[2] on arrival at university (Goullier, 2005: 38). In fact, most students arrive after eight–ten years of secondary schooling with a level that is closer to A2 (Taillefer, 2007; Macré, 2015), and this includes students who arrive in the first year of an applied foreign language course (*LEA*), at least for oral production and oral interaction (Frost & O'Donnell, 2015). English specialists receive some training in phonetics and phonology, but teaching pronunciation in many contexts in France, as in other European countries, is often neglected, due mainly to a lack of teacher training in what is a very varied set of learning situations (Frost & Henderson, 2013). Although

♦ Dan Frost, *Université Grenoble Alpes, Lidilem (Linguistique et didactique des langues étrangères et maternelles).*

Thanks to Marie Delacroix, who was responsible for obtaining the grant for the HELD project, to Robin Pruchon for recording, editing and subtitling the videos, to Chara Kornilaki for making the learning path what it is, and to all the other teachers and researchers on the HELD and HELD+ teams who have worked so hard to give our students all the tools they need to learn in their own homes and at their own pace.

1 Languages for Specific Purposes / Languages for Academic Purposes.

2 Common European Framework for Reference in Languages (COE, 2001).

pronunciation has often been the poor relation in language teaching, this is less true today, and the last few years, there has been a renewed interest in teaching pronunciation and researching the teaching and acquisition of phonology. Furthermore, the content of pronunciation teaching is increasingly based on solid research (Munro & Derwing, 2015) and attainable goals; the aim for many teachers today is no longer to modify their students' accents to achieve perfect RP or GA, but the more pragmatic goal of accent addition, where the endpoint is "intelligibility" and "comprehensibility" (Derwing, 2010; Munro & Derwing, 2011). In the context of French universities, teachers and researchers are also focusing increasingly on pronunciation in classes, and putting intelligibility at the centre of their teaching (Nocaudie et al., 2019). For learners whose native language is a romance language such as French or Spanish, the prosody of English, with its different levels of stress, reduced syllables, numerous deletions, and complex rhythmic patterns, causes many difficulties (Frost, 2011), both to intelligibility and to comprehension.

Even before the Covid-19 pandemic and the rush towards distance learning which it provoked, French universities had already been turning more and more to online learning platforms as a way of supplementing, and sometimes replacing, classroom learning (Biros & Matthys, 2020). The resources and the study presented in this paper are an attempt to respond to the many problems which learners of English in French universities encounter: more specifically, how to move teaching and learning pronunciation online. In part two of the paper will outline some of the challenges we faced, and in part three, we will describe some of the solutions we are bringing to bear, and how this pilot study is helping us to assess the merits or otherwise of our approach.

Background

Context

The context for this study is a public university in France, and the resources developed and which this project is using are intended for four different sets of learners:

1. Applied foreign language students (*Langues étrangères appliquées / LEA*);
2. Language students (*Langues littératures civilisations étrangères et régionales / LLCER*);
3. Lifelong learning students: either teachers or researchers from the university, or who are enrolled on short English for Specific Purposes (ESP / EAP) courses;
4. Non-specialist students: either ESP / EAP or general language courses.

For the purposes of the pilot study presented in this article, the participants are all first-year students in applied foreign languages (LEA), and we will discuss

these students in the second part of this article. Lifelong learning students vary enormously, in terms of both their level, but also their needs. As for the last category, this is the most varied group, and potentially the largest. The LLCER students will also be given access to the learning path, but as they have dedicated pronunciation lectures and classes, we do not expect a high uptake.

Transfer

Language transfer is a well-documented and researched phenomenon (Major 2008), and although transfer may be a positive factor when the target language and learners' language(s) are closely related, it often causes problems for learners when there are important differences. In the case of French and English, although their shared history means that up to two-thirds of the vocabulary have common ancestry in Latin, the phonologies of the two languages are very different, as we shall see below.

Following on from Polivanov and Trubetzkoy's positing of the existence of "phonological deafness" (Trubetzkoy, 1939), may authors have written of the difficulties some learners experience in actually perceiving certain features in a target language. It also seems that prosodic features are particularly prone to transfer (Mennen & De Leeuw, 2014) and indeed some learners of English may even experience "stress Deafness" (Dupoux et al., 2001). These difficulties are understandable given the differences between French and English, especially regarding the prosody of these respective languages (Frost, 2011). The problem of negative phonological transfer for French learners of English is further compounded by their shared orthography: while sharing an alphabet undoubtedly presents many advantages, as Stenton points out: "[u]sing the same Latin alphabet for the radically different sound/symbol associations of two different languages is akin to shooting yourself in the linguistic foot. Paradoxically, the ones who suffer most are those language pairs which are the most similar such as French and English" (2009: 297). These grapheme to phoneme conversion (GMP) rules (Colombo & Tabossi, 1992) have been confirmed in several studies involving French learners (Bürki et al., 2019), and indeed even experienced learners evince orthographic effects on their pronunciation (Bassetti & Atkinson, 2015), although proficiency generally lessens the effects (Bassetti et al., 2020).

What Model(s) Do We Teach and Why

In any language teaching situation, perhaps more so in an online distance learning context, the question of models is unavoidable. In a classroom, teachers may themselves be the only model, in which case we have the accent we have. However, when choosing resources, we must select the model or models we use, especially for work on accent. For over twenty years now, the number of

exchanges in English between non-native speakers (NNS) has outnumbered the number of exchanges between native speakers (NS) (Jenkins, 2000), and for this reason, many of us choose to provide a variety of Englishes from around the world, both NS and NNS models (Murphy, 2014). However, in the French context, only two models are taught to future English teachers in universities and only two models are accepted in the context of the phonology part of the *Agrégation externe*, the competitive exams which are still considered the gold standard for teachers in both the secondary and universities in France, and those varieties are General American (GA) and Standard British English (SBE) (Gillesen, 2021). It is important to note however that despite the many varieties of English which co-exist, there are some features they all share, even English as a Lingua Franca (ELF), which remain unchanged, and those include the weak/strong syllable alternation (Jenkins, 2000: 147). As we have seen, this stress and the other prosodic and segmental features that are linked to stress, are at the heart of our approach.

Our Pedagogical Approach

Firstly, as we have seen above, the context for this study involves several different sets of learners, all with different needs, and all of course with their individual profiles, styles and strategies. Some English specialists who will be completing our learning path will be aiming for a career in English teaching, or international business, interpreting, etc., and it may well be that a near-native accent will be their aim, as credibility judgements often depend on accent (De Meo, 2012; Lev-Ari & Keysar, 2010). However, for many of our non-specialist students, and even for the specialists in their first year, we focus on intelligibility and comprehensibility. So, for what we may term "high stakes learners", their aim is generally *accent modification*, but for most learners, the more realistic goal of *accent addition* is sufficient. In both cases, most authors recommend working on both production and comprehension in tandem (Reed et al., 2010), and this is what we encourage our learners to do. It is worth pointing out, however, that a small amount of research has shown that speech production may be bad for learning speech sounds, especially in the initial stages of language learning (Baese-Berk & Samuel, 2016).

In any teaching situation, especially in a short course (and the learning path discussed here is 24 units, representing 12-24 hours of work), we must choose what to prioritise. We have seen above that the prosody of English and French are very different, but there is also a large body of work which shows that prosody not only has a high impact on perception of accentedness (Anderson-Hsieh et al., 1992; Trofimovich & Baker, 2006), but also on intelligibility (Munro & Derwing, 1997). In our approach, we choose to foreground prosody (Frost & Guy, 2016), in particular stress, and features which result from stress, such as reduced vowels,

and connected speech phenomena, such as deletions, liaisons, assimilations, etc. because they have a high impact on intelligibility. Indeed, Levis and Levis refer to lexical stress as one of the "high value pronunciation features", i.e. those which have a large impact on "other listeners' ability to understand". (Levis & Levis, 2018: 139). There is also an increasing amount of encouraging work on the learnability of prosodic features in many contexts (Akita, 2005; Jung et al., 2017), including with French learners (Schwab & Llisterri, 2013).

Finally, as speech is not only a cognitive process, but also a motor skill, we believe that it is essential to work on the body as well as developing cognitive and metacognitive strategies. For a full review of research on body language, embodiment, and the incorporation of proprioception, physical movement, gestures and touch into second language education, particularly with regard to the pronunciation of English, see Marsha Chan's review of the field (Chan, 2018). As she states (2018: 47), "careful attention to breathing, vocalization, articulatory positions, pulmonic and tactile pressures, pitch and duration, scope and synchrony of body movements, in addition to the systematic use of gestures, enables more effective pronunciation." In our learning path, we therefore encourage learners to become aware of their articulators with a variety of physical activities, to be aware of the physical differences between French and English, and to "warm up" before undertaking pronunciation activities, as we would in a physical classroom.

Using Digital Technology: Moving the Classroom Online

Digital technology, especially using e-learning platforms, opens up some very interesting possibilities for learning pronunciation, as long as careful consideration is given to the solutions chosen (Yoshida, 2018). Many students, especially in France, are reluctant to speak in classroom settings (Crosnier & Décuré, 2018). Working in the privacy of one's own home can be a solution to these and other problems which learners may face in the classroom. Other teachers and researchers in France have used technology to teach pronunciation to French learners of English at university level. Some colleagues have favoured a segmental approach, for example, Kinephones[3], an online interface based on Gattegno's Silent Way, but integrating colour and certain target phonemes (Le Page Pitullo, 2020). On the suprasegmental level, various attempts have been made to help French learners with English prosody, such as Prosodia, which used software to visualise intonation and stress and proposed a series of activities (Herry-Bénit et al., 2003), and SWANS, a karaoke style synchronised subtitling program, which annotated text for lexical stress, reduces syllables, etc. (Stenton, 2009).

3 http://dlm.univ-grenoble-alpes.fr/kinephone/#/en_gb/1/table.

Technical and practical considerations aside, the real challenge is how to recreate a classroom learning experience using online tools: teaching pronunciation inevitably involves some imitation. Our approach, which, as we have seen above, is both cognitive and physical, provides a particular set of challenges when designing online self-study programmes. Starting a pronunciation session with relaxation techniques, breathing, work on raising learner awareness to articulatory settings, etc. is much easier in person than in a self-study distance-learning context. For this reason, we chose to base our approach on the extensive use of videos, which enable us more easily to demonstrate these techniques, as well as provide informational content, encourage the development of strategies, etc. Perhaps more importantly, videos are where many of us, and this is especially true of generations Y and Z, go to find information, rather than read a book (Weiler, 2005). The three main pillars of our online approach are therefore:

1. Short video capsules[4] (mostly 4 or 5 minutes), many of which demand some activity on the part of the learners, including standing up, warming up, repeating words and phrases, etc.
2. Activities to discover and/or reinforce skills (drag and drop, multiple choice, etc.)
3. Listen, repeat and record activities to encourage the development strategies such as critical listening, noticing, monitoring, etc.

Screenshots of the learning path may be found in the appendices.

The present study

Background: The HELD & HELD+ Projects

This research project follows on from the funded teaching project "*HELD*" (*Hybridation des Enseignements en Langues Débutées*[5]). The original project had a budget of 200,000 euros to pay teachers and technicians to develop online learning paths for students at Grenoble-Alpes University who needed a little extra help as they were starting a new language, such as Russian or Japanese. In addition, as those students were unable to follow English classes, it was decided to develop learning paths in English too, which led to the involvement of English teachers. It was therefore decided that English language specialists could also benefit from a little extra help, as could students enrolled on lifelong learning courses, so English and German learning paths were also developed. The learning platform chosen was Moodle, and a recording studio was made available, along with audio-visual technicians to help record, edit and subtitle the videos, and an engineer to help design the online learning paths. The current article concerns

4 All 30 videos can be watched here: https://www.youtube.com/channel/UCJCHx0de-TsBfit783Db_cw

5 "Blended learning for new language learners."

only the English pronunciation path, which is composed of 24 units, which correspond to two 12-week semesters, but may be realised at any time, each unit taking 30–60 minutes to complete. A list of the units in the learning path may be found in the appendices.

HELD+ is therefore a follow-on *research* project, whereby those members of the initial teaching project who wish to carry out research based on their learners' completion of the learning paths can do so.

The content for learning paths for the initial HELD *teaching* project was developed and finished during the COVID-19 lockdown period, and therefore the roll-out was delayed. For this reason, we chose to pilot the learning paths during the second semester of the academic year 2020–2021. The complete project so far includes the following learning paths:

– English[6] (3 paths, A2-B2: pronunciation, grammar, vocab)
– German (A1-A2)
– Russian (A1-A2)
– Chinese (A1-A2)
– Japanese (A1-A2)

The Japanese learning path is not part of the HELD+ project, and learning paths in Italian and Spanish are currently under development.

Methodology

Participants

There are several groups of learners who will be using the learning paths, although the pilot study presented here concerns only first year applied foreign language students (*Langues étrangères appliquées/LEA*). There are over 600 students in the first year, and they all had access to the HELD+ pronunciation learning path.

Data Collection

The data collection methods vary according to the learning path and/or the language concerned, but the principle is the same, i.e. a pre-test & a post-test, a questionnaire before and after the learning path and semi-structured interviews with selected participants. Participation in the research project is voluntary, but completion of the actual learning paths is either voluntary or compulsory, depending on the context: for the pilot study presented in this paper, participation was voluntary, but for other learning paths in the project, the learning path is a

6 The videos are recorded in RP/SBE, but GA is covered where there are important differences between RP/SBE. The last unit covers these two varieties more fully and the very last activity exposes the learners to other varieties of English.

compulsory part of the degree course on which the students are enrolled. The participants were given access to the pronunciation learning path in January 2021, at the beginning of the second semester. The pre-test, post-test, initial and final questionnaires for the pronunciation path can be found in the appendices.

Preliminary Data: Results and Discussion

Of the 600 first year *LEA* students enrolled in the first year, 206 chose to participate in the study by signing up for the learning path. Of these, 55 participants completed the first questionnaire and 44 took the pre-test. Only two participants completed the post-test, and of these two, only one completed the second questionnaire. As may be seen in Figure 1, the participants accessed the path thousands of times in the first month, but their participation rapidly waned. The majority of the "hits" were watching the first few videos and completing the first few activities. We expected a high attrition rate; indeed, studies have shown that the completion rate for MOOCs is in the order of 3% - 8% (Reich and Ruipérez-Valiente, 2019), but not to the extent that we saw for this pilot study. This extremely high attrition rate is undoubtedly due to the fact that completion of the learning path was voluntary, compounded perhaps by distance learning fatigue after a year of lockdown due to Covid-19, with screens replacing face-to-face learning.

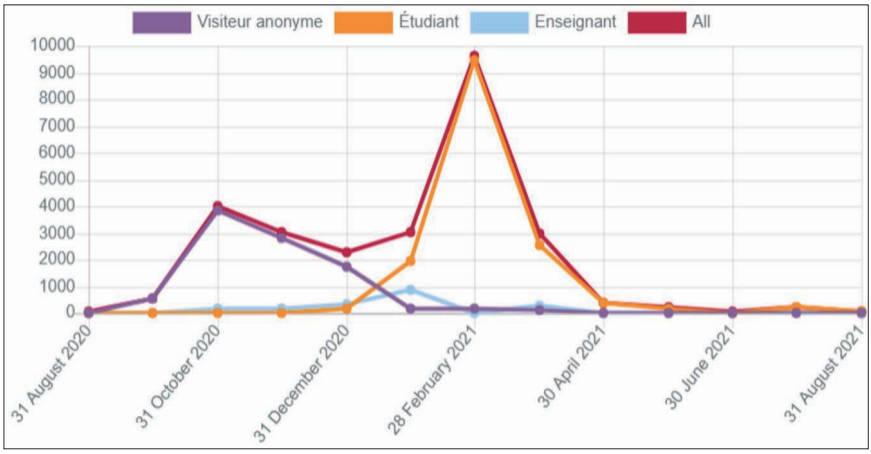


Figure 1: Number of "hits" per month.

The initial questionnaire revealed several interesting pieces of data about the 1st year *LEA* students (see fig. 2), for example Q5, where they self-reported their CEFR level. Perhaps the most surprising fact is that over a third of them did not know their CEFR level in English! Of those that did, half reported having B1/B2 level. This is a full level above the results found in previous studies (Frost & O'Donnell, 2015; Macré 2015; Taillefer, 2007). The results to Q9 show that over

half the students believe their French accent in English to be strong or very strong, which, given the responses to Q11 indicating that 95% of them have had little or no training in phonetics or pronunciation, is hardly surprising. However, as we can see in the answers to Q10, they are very positive about their comprehension of authentic spoken English – which we may speculate has more to do with Netflix than the teaching they receive in secondary schools – with 63% of the participants admitting to watching films or series every day or almost every day.

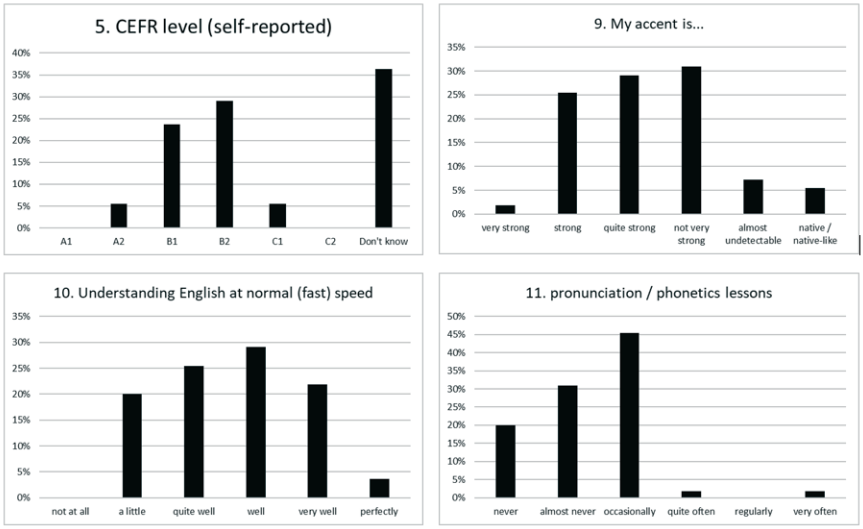


Figure 2: Questionnaire 1: selected results (Q5, Q9, Q10, Q11).

The results to the pre-test (n=55, see Figure 3) show above all that the participants have three areas in particular where they are weak, namely nuclear stress placement (Q3), knowledge of schwa (Q4), and knowledge of linking vowel-final and vowel-initial words with /r/, /w/, and /j/ (Q5.) – see appendices for all 10 questions in the pre-test and post-test. These results correspond to data we collected when calibrating a prosody assessment tool (Frost & O'Donnell, 2018), where we discovered that French learners at A2 level had little difficulty knowing *where* to place lexical stress correctly (Q6 – Q10), although often it was not always correctly realised using all of the acoustic cues. Particularly lacking is the ability to correctly reduce unstressed syllables, typically with schwa (Q4), but we will need many more completed post-tests and recordings to explore this more. On the other hand, during the calibration process in the previous study (*op cit*), it became evident that mastery of focus / nuclear stress (Q3) and linking typically occurs between B2 and C1 for most French learners of English, and this seems also to be borne out by the current study. As only two subjects completed the post-test, we are reluctant to draw and conclusions at this stage, although it is unsurprising to see that even on completion of the learning path, one of the

participants still answered the questions regarding nuclear stress (Q3) and linking (Q5) incorrectly. We hope to be able to further confirm and develop on these results following this pilot study when we have more data, both pre-test / post-test results, and recordings of the participants' actual oral performance.

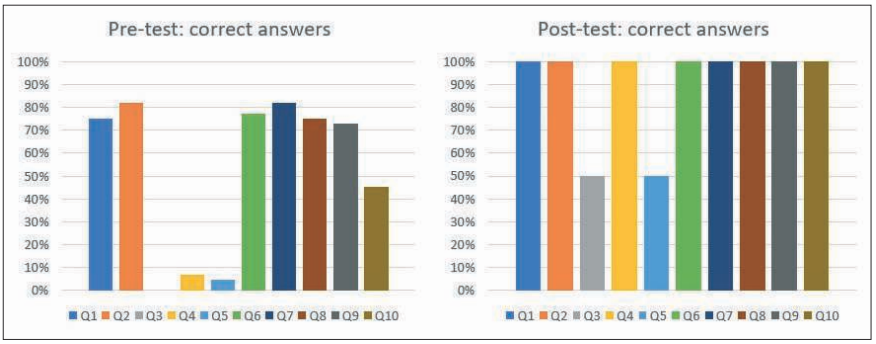


Figure 3. Pre-test and post-test results.

Questionnaire 2 (see appendices) is intended mainly to provide feedback on the perceived difficulty, usefulness of the resources, and to provide the participants with the opportunity to give their opinions and tell us about any technical problems. As only one participant completed this questionnaire, the results are not worth reporting here.

Conclusions

Despite (and thanks to) the extremely high attrition rate, this pilot study was able to provide us with some very valuable data. Firstly, we were able to correct several errors in the learning path that we had not detected earlier, such as typing errors and duplicated activities. Most importantly, the contents of the learning path seem to be aimed at the right level (A2–B2) and the contents seem to address problems which the participants themselves identify as needing attention. And more pragmatically, we have decided that we will encourage participation over the remaining three years of the project with a reward system: participation in the research project will still be voluntary, but an extra two credits will be given to those participants who complete the pre-test, initial questionnaire, all 24 units, post-test and final questionnaire—this will give us our experimental group. The control group will be composed of those participants who elect only to complete the pre-test, first questionnaire, post-test and final questionnaire—for this, they will receive one extra credit. We hope in this way to gain more insight into the feasibility and usefulness of our cognitive and embodied approach to learning pronunciation online.

References

• AKITA, M. (2005): "The effectiveness of a prosody-oriented approach in L2 perception and pronunciation training", *Gakujyutsu Kenkyuu* 53, p. 1-22. https://core.ac.uk/reader/286928385 (accessed 28 September 2021).

• ANDERSON-HSIEH, J., JOHNSON, R., & KOEHLER, K. (1992): "The relationship between native speaker judgments of nonnative pronunciation and deviance in segmentals, prosody, and syllable structure", *Language Learning* 42, p. 529–555. https://doi.org/10.1111/j.1467-1770.1992.tb01043.x.

• BAESE-BERK, M.M., & SAMUEL, A.G. (2016): "Listeners beware: Speech production may be bad for learning speech sounds", *Journal of Memory and Language* 89: 23–36. https://doi.org/10.1016/j.jml.2015.10.008.

• BASSETTI, B., & ATKINSON, N. (2015): "Effects of orthographic forms on pronunciation in experienced instructed second language learners", *Applied Psycholinguistics* 36.1, p. 67-91. DOI:10.1017/S0142716414000435.

• BASSETTI, B., MAIRANO, P., MASTERSON, J., & CERNI, T. (2020): "Effects of orthographic forms on second language speech production and phonological awareness, with consideration of speaker-level predictors", *Language Learning* 70.4, p. 1218-1256. https://doi.org/10.1111/lang.12423.

• BIROS, C., & MATTHYS, L. (2020): "Anglais des biotechnologies santé à l'Université Grenoble Alpes pendant la crise sanitaire du printemps 2020", *ASp* 78, p. 65-73. https://doi.org/10.4000/asp.6656.

• BÜRKI, A., WELBY, P., CLÉMENT, M., & SPINELLI, E. (2019): "Orthography and second language word learning: Moving beyond 'friend or foe'?", *The Journal of the Acoustical Society of America* 145.4, p. 265-271. https://doi.org/10.1121/1.5094923

• CHAN, M. (2018): "Embodied Pronunciation Learning: Research and Practice", *The CATESOL Journal* 30.1, p. 47-68. https://files.eric.ed.gov/fulltext/EJ1174234.pdf (accessed 28 September 2021).

• COLOMBO, L., & TABOSSI, P. (1992): "Strategies and Stress Assignment: Evidence from a Shallow Orthography", in FROST, R. & KATZ, L. (eds.), *Advances in Psychology: Orthography, phonology, morphology, and meaning vol. 94*. Elsevier, p. 319–340.

• COUNCIL OF EUROPE. (2001): *Common European Framework of Reference for Languages: Learning, teaching, assessment*, Cambridge, Cambridge University Press, 273 p.

• CROSNIER, E., & DECURE, N. (2018): "Parler ou ne rien dire : La prise de parole en classe d'anglais Lansad", *Recherches en didactique des langues et des cultures* 15.2. http://journals.openedition.org/rdlc/3062 (accessed 28 September 2021).

• DE MEO, A. (2012): "How credible is a non-native speaker? Prosody and surroundings", in GRAZIA BUSÀ, M. & STELLA, A. (eds.), *Methodological*

Perspectives on Second Language Prosody. Papers from ML2P 2012, p. 3-9. http://www.maldura.unipd.it/LCL/ML2P/proc/rognoni.pdf (accessed 28 September 2021).
• DERWING, T. M. (2010): "Utopian Goals for Pronunciation Teaching", in LEVIS, J. & LEVELLE, K. (eds.), *Proceedings of the 1st Pronunciation in Second Language Learning and Teaching Conference,* Iowa State University, p. 24-37.
• DUPOUX, E., PEPERKAMP, S., & SEBASTIAN-GALLES, N. (2001): "A robust method to study stress 'deafness'", *Journal of the Acoustical Society of America* 110.3, p. 1606-1618. https://doi.org/10.1121/1.1380437.
• FABRICIUS, R. T. (2007): *Pourquoi les Français éprouvent-ils autant de difficultés à apprendre l´anglais?* [Unpublished Master's thesis, University of Aarhus]. https://gerflint.fr/Base/Paysscandinaves2/paysscandinaves2.html (accessed 28 September 2021).
• FROST, D. (2011): "Stress cues in English and French: A perceptual study", *Journal of the International Phonetic Association* 41.01, p. 67-84. https://doi.org/10.1017/S0025100310000253.
• FROST, D. & HENDERSON, A. (2013): « Les résultats du sondage EPTiES (English Pronunciation Teaching in Europe Survey) : L'enseignement de la prononciation dans plusieurs pays européens vu par les enseignants », *Recherche et pratiques pédagogiques en langues de spécialité – Cahiers de l'APLIUT* 32.1, p. 92113. DOI:10.4000/apliut.3586.
• FROST, D. & GUY, R. (2016): "L'innovation est le ton qui fait la chanson : une approche musico-prosodique en secteur Lansad", *Recherche et pratiques pédagogiques en langues de spécialité – Cahiers de l'APLIUT* 35.1. https://doi.org/10.4000/apliut.5526.
• FROST, D. & O'DONNELL, J. (2015): "Success: B2 or not B2, that is the question (the ELLO project – Étude Longitudinale sur la Langue Orale)", *Recherche et pratiques pédagogiques en langues de spécialité – Cahiers de l'APLIUT* 34.2.
• FROST, D. & O'DONNELL, J. (2018): "Evaluating the essentials: The place of prosody in oral production", in VOLÍN, J. (ed.), *The Pronunciation of English as a Foreign or Second Language* Cambridge, Cambridge University Press, p. 228-259.
• GILLESEN, C. (2021): *Rapport du jury, Agrégation externe, Langues vivantes étrangères, option anglais,* Ministère de l'éducation nationale, de la jeunesse et des sports. 205 p. https://media.devenirenseignant.gouv.fr/file/agregation_externe/56/0/rj-2021-agregation-externe-lve-anglais_1419560.pdf (accessed 28 September 2021).
• GOULLIER, F. (2005): *Les outils du Conseil de l'Europe en classe de langues. Cadre européen commun et Portfolios*, Paris, Didier, 52 p.
• HERRY-BENIT, N., NISHINUMA, Y., & GHIO, A. (2003): *Prosodia : Auto-aprentissage de la prosodie anglaise*. https://hal.archives-ouvertes.fr/hal-00136760 (accessed 28 September 2021).
• JENKINS, J. (2000): *The Phonology of English as an International Language*, Oxford, Oxford University Press, 258 p.

• JENKINS, J., BAKER, W., & DEWEY, M. (eds.). (2018): *The Routledge handbook of English as a Lingua Franca*. Routledge/Taylor & Francis Group.
• JUNG, Y., KIM, Y., & MURPHY, J. (2017): "The role of task repetition in learning word-stress patterns through auditory priming tasks", *Studies in Second Language Acquisition* 39.2, p. 319-346. https://doi.org/10.1017/S0272263117000031.
• LE PAGE-PITULLO, N. (2020): "*La multimodalité et le numérique pour la maîtrise du code écrit en anglais à l'école en France : Effets de l'écriture en couleurs*". [Unpublished PhD thesis]. https://www.theses.fr/2020GRALL010 (accessed 28 September 2021).
• LEV-ARI, S., & KEYSAR, B. (2010): "Why don't we believe non-native speakers? The influence of accent on credibility", *Journal of Experimental Social Psychology* 46.6, p. 1093-1096. https://doi.org/10.1016/j.jesp.2010.05.025.
• LEVIS, J. M., & LEVIS, G., MULLER. (2018): "Teaching High-Value Pronunciation Features: Contrastive Stress for Intermediate Learners", *The CATESOL Journal* 30.1, p. 139-160.
• MACRE, N. (2015): "Situation paradoxale ou *catch 22*: le cas d'un dispositif hybride mis en place pour des étudiants LANSAD de niveau A2/B1 en anglais en première année d'université", *Recherche et pratiques pédagogiques en langues de spécialité* 34.1, p. 106-126. DOI: 10.4000/apliut.5053.
• MAJOR, R. (2008): "Transfer in second language phonology: A review", in EDWARDS, J. G. & ZAMPINI, M. (eds.), *Phonology and Second Language Acquisition*, Amsterdam, John Benjamins, p. 63–94.
• MENNEN, I., & de LEEUW, E. (2014): "Beyond segments: Prosody in SLA", *Studies in Second Language Acquisition* 36.2, p. 183-194. DOI: 10.1017/S0272263114000138.
• MUNRO, M.J. & DERWING, T.M. (2011): "The foundations of accent and intelligibility in pronunciation research", *Language Teaching* 44.3, p. 316-327. DOI: 10.1017/S0261444811000103.
• MUNRO, M. J., & DERWING, T. M. (2015): "A prospectus for pronunciation research in the 21st century: A point of view", *Journal of Second Language Pronunciation* 1.1, p. 11-42. DOI: 10.1075/jslp.1.1.01mun.
• MURPHY, J. M. (2014): "Intelligible, comprehensible, non-native models in ESL/EFL pronunciation teaching", *System* 42, p. 258-269. https://doi.org/10.1016/j.system.2013.12.007.
• NOCAUDIE, O., ALAZARD-GUIU, C., & BILLIERES, M. (2019): "Oral d'aujourd'hui, oralité de demain : Et la phonétique corrective dans tout cela ?", *Recherches en didactique des langues et des cultures* 16.1, p. 67-73.
• REED, M., MICHAUD, C., LEVIS, J., & LEVELLE, K. (2010): "An Integrated Approach to Pronunciation: Listening Comprehension and Intelligibility in Theory and Practice", in LEVIS, J. & LEVELLE, K. (eds.), *Proceedings of the 1st Pronunciation in Second Language Learning and Teaching Conference,* Iowa State University, p. 95-102.

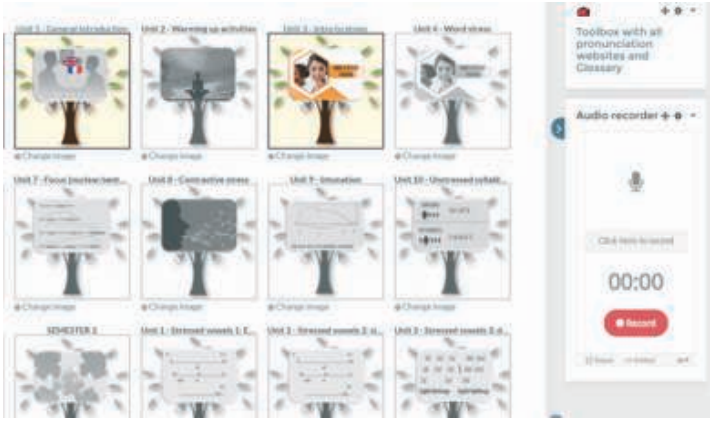
• REICH, J., & RUEIPEREZ-VALIENTE, J. A. (2019): "The MOOC pivot". *Science* 363.6423, p. 130-131. https://doi.org/10.1126/science.aav7958.
• SCHWAB, S., & LLISTERRI, J. (2013): "Does training make French speakers more able to identify lexical stress?", *New Sounds*, Montreal. http://archive-ouverte.unige.ch/unige:28676 (accessed 28 September 2021).
• STENTON, A. (2009): "The inhibition of mother tongue interference in foreign language speech perception and production—A proposed solution for European university students", in VILAS A. M., MARTIN, A. S. GONZÁLEZ, J.A.M. & GONZÁLEZ, J. M. (eds). *Research, Reflections and Innovations in Integrating ICT in Education*, p. 297-303. http://hdl.handle.net/20.500.12424/785039 (accessed 28 September 2021).
• TAILLEFER, G. (2002): "L'anglais dans les formations spécialisées à l'université : Un cheveu sur la soupe ? Peut-on rendre le plat plus appétissant ?", *ASp* 37-38, p. 155-165. https://doi.org/10.4000/asp.1531.
• TAILLEFER, G. (2007): "Le défi culturel de la mise en œuvre du Cadre européen commun de référence pour les langues : implications pour l'enseignement supérieur français", *Les Cahiers de l'APLIUT* 16.2, p. 33-49. https://doi.org/10.4000/apliut.1987.
• TROFIMOVICH, P., & BAKER, W. (2006): "Learning second language suprasegmentals: Effect of L2 experience on prosody and fluency characteristics of L2 speech", *Studies in Second Language Acquisition* 28.01, p. 1-30. https://doi.org/10.1017/S0272263106060013.
• TRUBETZKOY, N. S. (1939): Grundzüge der Phonologie. *Travaux du cercle linguistique de Prague* 7.
• WEILER, A. (2005): "Information-seeking behavior in generation y students: motivation, critical thinking, and learning theory", *The Journal of Academic Librarianship* 31.1, p. 46-53. https://doi.org/10.1016/j.acalib.2004.09.009.
• YOSHIDA, M.T. (2018): "Choosing technology tools to meet pronunciation teaching and learning goals", *The CATESOL Journal* 30.1, p. 195-212.

Appendix

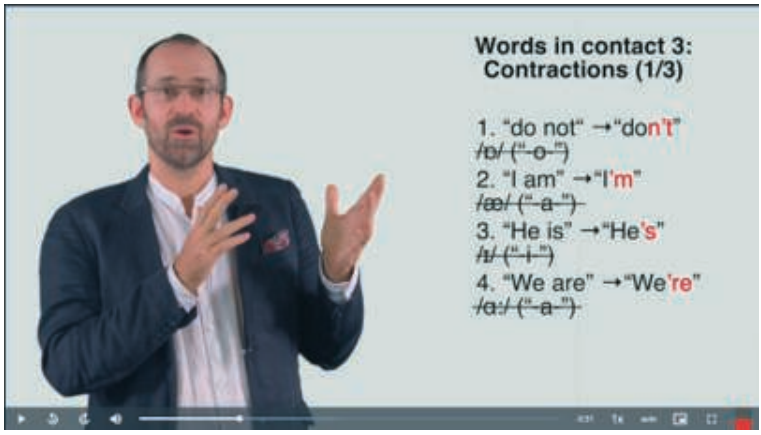
1: The 24 Units & 30 Videos of the English Pronunciation Learning Path

Unit	Video	Content	Focus
1	1	Introduction: English vs French pronunciation	+ prosody
2	2	Warming up activities	
3	3	Introduction to stress	
4	4	Word stress 1: what it is	
	5	Word stress 2: where it is	
	6	Word Stress 3: patterns	
5	7	Rhythm 1: An exercise	
	8	Rhythm 2: What is it & English vs French	
6	9	Tone units	
7	10	Focus (nuclear / sentence stress)	
8	11	Contrastive stress	
9	12	Intonation	
10	13	Unstressed syllables 1: the basics	
11	14	Unstressed syllables 2: schwa	
12	15	Unstressed syllables 3: disappearing vowels	
1	16	Stressed vowels 1: English vs French vowels	+ segmental
2	17	Stressed vowels 2: simple vowels	
3	18	Stressed vowels 3: diphthongs	
	19	Stressed vowels 3: triphthongs	
4	20	Consonants 1: English vs French	
5	21	Consonants 2: /p t k/	
6	22	Consonants 3: /r/	
7	23	Consonants 4: /l/ & /ɬ/	
8	24	Consonants 5: /w/	
9	25	Consonants 6: /h/	
10	26	Words in contact 1 (linking)	
	27	Words in contact 2 (assimilation)	
11	28	Words in contact 3 (contractions)	
	29	Words in contact 3 (deletions)	
12	30	UK vs. US English, and beyond…	

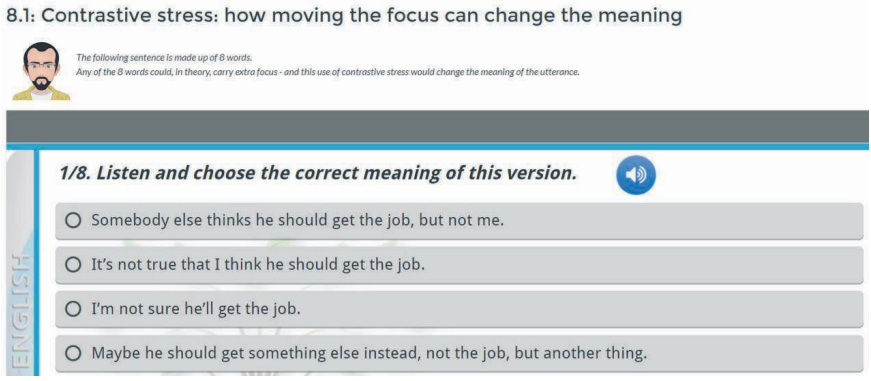
2: Screenshots of the Pronunciation Learning Path



4. Appendix-screenshot-contents



5. appendix-screenshot-video



6. Appendix-screenshot-activity

3: Questionnaire 1

1. *Vous êtes en :*
   - *LLCER anglais / LEA / Une autre filière en premier cycle (Licence) / Une autre filière en 2e cycle (Master) / Une autre filière en 3e cycle (Thèse) / Formation continue (enseignant, enseignant-chercheur, administration, etc.) / Autre*
2. *Votre sexe :*
   - *M / F / Autre / je préfère ne pas déclarer*
3. *Votre âge :*
   - *18 ans ou moins / 19-25 ans / 26-30 ans / 31-40 ans / 41-50 ans / Plus de 50 ans*
4. *Votre langue maternelle est :*
   - *Français / Une autre langue latine (espagnol, italien, etc.) / Une autre langue européenne (allemand, roumain, etc.) / Une langue asiatique (chinois, japonais, etc.)*
5. *Votre niveau en anglais selon le CECRL (si vous le connaissez) :*
   - *A1 / A2 / B1 / B2 / C1 / C2 / Je ne sais pas*
6. *Le temps que vous avez passé dans un pays anglophone en total :*
   - *Jamais / Une semaine ou moins / Entre une semaine et un mois / Entre un mois et 6 mois / Entre six mois et un an / Plus d'un an*
7. *Vous regardez des séries et/ou films en anglais :*
   - *Jamais / Une ou deux fois par an / Plusieurs fois par an / Plusieurs fois par mois / Plusieurs fois par semaine / Tous les jours ou quasiment*
8. *Vous parlez / écoutez de l'anglais dans votre vie professionnelle et/ou personnelle :*
   - *Jamais / Une ou deux fois par an / Plusieurs fois par an / Plusieurs fois par mois / Plusieurs fois par semaine / Tous les jours ou quasiment*
9. *Votre accent français (ou autre, selon votre nationalité) quand vous parlez anglais est :*
   - *Très fort / Fort / Assez fort / Pas très fort / A peine détectable / Je parle anglais comme un anglophone*
10. *Vous comprenez l'anglais parlé (à une vitesse « réelle » par des anglophones) :*
    - *Pas du tout / Un peu / Assez bien / Bien / Très bien / Parfaitement*
11. *Vous avez déjà eu des cours sur la prononciation / phonétique de l'anglais (à l'école ou ailleurs) :*
    - *Jamais / Presque jamais / De temps en temps / Assez souvent / Régulièrement / Très souvent*
12. *Si vous avez quelque chose à ajouter, veuillez l'écrire ici :*

4: Questionnaire 2

1. *Vous avez trouvé l'ergonomie du parcours :*
   - *Très mauvais / Mauvais / Assez mauvais / Pas mal / Bien / Très bien*
2. *Vous avez trouvé les vidéos :*
   - *Trop faciles / Faciles / Assez faciles / Assez difficiles / Difficiles / Très difficiles*
3. *Vous avez trouvé les activités :*
   - *Trop faciles / Faciles / Assez faciles / Assez difficiles / Difficiles / Très difficiles*
4. *Vous avez trouvé les vidéos :*
   - *Complètement inutiles / Pas très utiles / Un peu utiles / Utiles / Très utiles / Indispensables*
5. *Vous avez trouvé les activités :*
   - *Complètement inutiles / Pas très utiles / Un peu utiles / Utiles / Très utiles / Indispensables*

6. *Suite à la réalisation de ce parcours, comment vous vous sentez pour continuer à progresser en prononciation et compréhension de l'anglais*
   – *Complètement démotivé.e / Peu motivé.e / Un peu motivé.e / Motivé.e / Très motivé.e / Super-motivé.e*
7. *(Soyez honnête SVP, c'est important…) Depuis le pré-test, donc pendant le temps que j'ai travaillé sur ce parcours, j'ai aussi fait d'autres activités qui auraient pu améliorer ma prononciation et / ou compréhension de l'anglais :*
   – *Oui / Non*
8. *Si oui, il s'agit de (vous pouvez cocher plusieurs cases) :*
   – *Cours, TD ou TP dans le cadre d'une Licence ou Master LLCER anglais / Cours, TD ou TP dans le cadre d'une Licence / Master LEA / Cours de service des langues / Cours en formation continue / Lectures, vidéos, activités en ligne (site Web, Youtube, Duolinguo, etc.) // Autre*
9. *Si vous avez d'autres commentaires, veuillez les écrire ici :*

5: Pre- & Post-test

1. *English is a:*
   – *Stress-timed language / Syllable-timed language / I don't know*
2. *In English:*
   All syllables are stressed / Every word has a stressed syllable / No syllables are stressed / The last syllable of words is usually stressed / I don't know
3. *Nuclear stress usually falls on:*
   The verb / The noun / The first word in a tone unit / The last content word in a tone unit / I don't know
4. *"Schwa" is:*
   A syllable / A stressed vowel / An unstressed vowel / A consonant / A rule / I don't know
5. *The following consonants are useful for linking words ending in vowels:*
   /p/, /t/ & /k/ / /w/ /r/ & /j/ / /s/ & /z/ / /h/ / I don't know

Word stress patterns

Please select the stressed syllable in the following words (the one marked in capital letters):

1. *volcano*
   VOL*cano* / *vol***CA***no* / *volca***NO** / *I don't know*
2. *university*
   U*niversity* / *u***NI***versity* / *uni***VER***sity* / *univer***SI***ty* / *universi***TY** / *I don't know*
3. *photograph*
   PHO*tograph* / *pho***TO***graph* / *photo***GRAPH** / *I don't know*
4. *photography*
   PHO*tography* / *pho***TO***graphy* / *photo***GRAPH***y* / *photogra***PHY** / *I don't know*
5. *photographic*
   PHO*tographic* / *pho***TO***graphic* / *photo***GRA***phic* / *photogra***PHIC** / *I don't know*