

Podcasting as a tool to develop speaking skills in the foreign language classroom

Mario Tomé Díez* and Marlisa Amanda Richters**
Universidad de León, Spain

*mtomd@unileon.es | **mrich@unileon.es

Abstract

It is essential for foreign language learners to have adequate opportunities for speaking in order to enhance the acquisition of oral communicative competence. Although research over the last few years has dealt with the potential of podcasting for the development of oral competencies, little has been done towards its application in the *improvement* of speaking skills or the *correction* of pronunciation. This article presents experiments with podcasts developed in French foreign language classes over the course of ten years. The results obtained relate to the following three aspects: firstly, selection and analysis of the available tools fostering greater oral activity and effective correction of pronunciation; secondly, the quantification of spoken language according to the actual duration of the podcasts, as well as preparation time estimated by the students; finally, the evaluation of spoken language using certain indicators of improvement of pronunciation.

Keywords: Podcasting, speaking skills, pronunciation, foreign language acquisition.

1. Introduction

This article illuminates experiments carried out with podcasting and social media in ‘French as a foreign language’ classes (FFL) at the University of León in Spain. The authors have worked with these tools for several years in order to develop speaking skills and improve the pronunciation of students of French. It is the authors’ belief that competency in speaking, frequently neglected or even forgotten, will gain more importance, thanks to new media, with respect to other competencies.

Written and oral comprehension competencies are predominant tasks in learners’ classrooms and social media. We believe that speaking skills and pronunciation practice must gain ground in both of the aforementioned areas. It is therefore necessary to quantify spoken language, easily done by measuring the true duration of an audio recording or podcast. However, to understand all aspects of spoken language, self-assessment questionnaires completed by the learners will also be analysed.

Finally, we will evaluate each student’s spoken language qualitatively. For this, we will analyse several indicators of pronunciation improvement which can be measured with the help of the recordings or podcasts. The correction of pronunciation, a further often-neglected practice in language learning, can benefit from the use of podcasts in the teaching of a foreign language, thereby reversing this tendency. Audio recordings help the teacher in evaluation, and, at the same time, increase possibilities for learners to become aware of their phonetic errors, apply correction techniques and collaborate with other learners.

2. Literature Review

The terms ‘podcast’ and ‘podcasting’ (a blend of *Pod* – from *Apple iPod*– and *broadcast*) refer to a digital audio file (generally in MP3-format), as well as a system of distribution or syndication on the Web: RSS (*Really Simple Syndication*).

The use of podcasts for language teaching was broached by various authors as well as in bibliographical reviews (Lomicka & Lord, 2011; Burstson, 2013; Hassan & Hoon, 2013). Many studies center on technical aspects of creation and distribution, use of the tool and, naturally, authentic materials, which podcasts can provide in a foreign language class (Godwin-Jones, 2005; McCarty, 2005; Meng, 2005; Stakes and Al, 2005; Stanley, 2006; Young, 2007; Gromik, 2008; McBride, 2009; Abdous and Al 2009; Fareed, 2010).

Several authors have pointed out that the use of podcasts for foreign language learning favors interaction and collaboration among students, as well as the acquisition of intercultural and socio-constructivist competencies (Petersen & Divitini, 2005, Dervin (2006); Ducate & Lomicka 2006, Rosell-Aguilar 2007; Sun, 2009; Fareed 2010; Chan et al., 2011; Jain & Hashmi, 2013).

Research work so far has demonstrated the importance of podcasting for the development of the following linguistic abilities: mastery of grammar (Istanto, 2011), knowledge of vocabulary (Borgia, 2010; Putman & Kingsley, 2012) and oral comprehension (O' Bryan & Hegelheimer, 2007; Lee & Chan, 2007, Schmidt, 2008; Facer, Abdous & Camarena, 2009, Pettes Guikema, 2009; Knight 2010; Hawke, 2010; Li, 2010; Hassan & Hoon, 2012); Rosell-Aguilar, F. 2013; Al Fadda & Al Qasim, 2013; Yeh, 2013; Kohar et al., 2014; Shiri, 2015).

Only a small number of studies has dealt with the application of podcasting for pronunciation improvement and speaking skills (McQuillan, 2006; Sze, 2006; Sathe & Waltje, 2008; Ducate & Lomicka, 2009; Tomé, 2009, 2011). McQuillan (2006) and Travis & Joseph (2009) proposed several speaking tasks, e.g., classroom presentations, audio diaries, interviews with native speakers, responding to questions, spontaneous talks, as well as expressing and justifying opinions. Sze (2006) concluded that oral expression activities in podcasts could help to improve pronunciation and intonation. Sathe & Waltje (2008) used iPods as mini-language-laboratories so that students could train their competencies of oral comprehension and production. Lord (2008) worked with audio recording tasks (tongue-twisters, reading and personal reflections) to improve the pronunciation of students in a phonetics course. Ducate & Lomicka (2009) examined the effects of the use of podcasts to improve pronunciation competencies as well as the resulting changes of attitude in students in a foreign language course. Lomicka & Lord (2011) highlighted three main uses of podcasting by teachers, with the following percentages: 41.10% for listening practice, 23.29% for speaking practice, and 12.33% for pronunciation practice. Tomé (2009, 2011) underlined the importance of podcasts for the development of speaking skills and pronunciation correction in several French courses as well as in inter-university telecollaboration projects. Fitria et al. (2015) observed important differences in the acquisition of competencies in oral comprehension and production among students who worked with podcasts, and those who did not.

3. Research questions

This study investigates the following research questions:

1. Which recording and social media (podcast) tools have been the subject of research regarding the development of students' speaking skills?
2. How can students' spoken language be measured quantitatively?
3. How can students' correction and pronunciation improvement be evaluated in this type of oral production?

4. Materials and methods

4.1. Participants

The students who took part in this research were enrolled in *Lengua Francesa I* (French Language I) (6 ECTS), one of the required courses for *Filología inglesa* (degree in English) at the University of León. The course took place (3 hours per week) from March to June, from 2005 to 2015, with an average of 35 students in each group. The course was designed for beginning students (A1 Level of the Common European Framework of Reference for Languages, CEFR).

The textbooks used were *Le Nouveau Taxi 1!* (Capelle & Menand, 2009) and *Cahier de prononciation française* (Dufлот & Tomé, 2005). The syllabus can be consulted online in the bibliographical reference: *Guía docente de la asignatura Lengua Francesa I*. From 2005 to 2010 the students took part in two inter-university telecollaboration projects: the León-Grenoble project and the León-Lille exchange project.

4.2. Tools

For the creation of podcasts and the recording of oral work three methods were proposed to the students, of which the first was especially recommended by the teacher: A) social networking apps for recording audios (*PodOmatic, Jamglue, Twaudio.io, AudioBoo, Soundcloud*); B) telephone and mobile device apps for recording audios; C) PC and browser-based audio recorders (*Windows, Audacity, Freecorder*).

Each student's audio recordings were stored on easily-accessible online platforms or podcast-sharing communities such as *Podomatic, AudioBoom* and *Soundcloud*. Each sequence of oral production was identifiable by a clear and concise title based on the teacher's designation: *Leçon 2 Exercice 1; 2CO L5 E1 (= Second correction Lesson 5 Exercise 1); Taxi Leçon 8; COL Sofia & Monica L3 E1 (= Pairwork students Sofia and Mónica Lesson 3 Exercise 1); Echauffement Estefanía; TL20 Avec EA, AC et E Final (= Taxi Lesson 20 with vocal warm-up, autocorrection and final warm-up)*. Figure 1 (see Appendix C) shows a unit of speech recording in a student podcast.

When selecting and testing platforms and social networks for podcasting the following criteria were stipulated:

- Integrated microphone for the recording of audio sequences.
- Ease of publication of students' speech recordings.
- Space for storing each student's work, which constituted their work for oral evaluation.
- Easy and dynamic access to podcasts by teacher and students.
- Possibility for the learner to decide if a podcast was public or private.
- Enhanced collaboration among students (mutual listening, comments, corrections and joint creations).

Between 2005 and 2015 the following podcasting tools were tested:

Podomatic is a website for audio blogs which allows the recording of podcasts accompanied by written messages; it combines a Web microphone and an editing and publishing system like the ones found on blogs. An example is the *Audio Notebook FLE 2005-06* (<http://campus6.podomatic.com>), an audio blog by the 2005-2006 French class, which represents the first podcasts of spoken language in history within an educational context of language learning.

The content management system (CMS) *Loudblog* was used to manage the *Audio Blog – FLE Virtual Campus*, installed on the León University server from 2005 to 2009. Each written message could be accompanied by an audio file, the "comments" function making it possible to deposit audio files with the voices of the students.

UStream is a live video broadcasting community, which makes the retransmission of video sequences possible using a simple webcam. This tool was used to link remote students within the framework of a telecollaboration project (*Projet León – Grenoble*) as well as to record video sequences of the teaching activities that the students carried out in the computer room (<http://www.ustream.tv/campus>).

Voxopop is a social network which allows the creation of audio conversations in talkgroups. From 2009 to 2011 the students recorded comments and exchanged ideas on current affairs within the framework of speaking tasks proposed by the teacher. They are still available online in the

group *Echanger en Français* (<http://www.voxopop.com/group/ea0b3f69-f674-4716-bbe2-d6d9eceb2e2c>).

The audio-sharing platforms *Jamglue*, *Tward.io*, *AudioBoom*, *Soundcloud*, and *Chirbit* were the most powerful tools in our projects for speaking skills and pronunciation correction. These social networks include a microphone and webcam, a publishing interface and dynamic audio readings. They also make it possible to store students' audio work in an authentic, easily consultable sound book on the Internet. Such platforms take part in the communicative force of the current Web, but at the same time run the risk of disappearing or closing, as was the case with *Jamglue* and *Tward.io*. Table 1 shows the history of the use of these podcast hosting services for the period 2007 to 2015.

Students' podcasts and audio recordings are available online at *Oral FLE Prononciation*, a data base containing the speech recordings of learners of French as a foreign language who belong to the *Projet FLENET* of the University of León. Under the heading *Audio-visual files – weblogs, podcast and networks*, each school year's podcasts, organized into files, can be consulted as a whole (for example: *EtuPodcasts2014*), or individually by selecting recordings including vocal warm-ups, reinforcement activities, autocorrections, drama activities or collaborative student correction.

4.3. Tasks for oral production and pronunciation correction

From 2005 to 2009 the teachers and tutors (telecollaboration projects) prepared teaching tasks which fostered speaking and the recording of audio sequences. These tasks were varied: a presentation of the students themselves or their city/region; *CybeRallyes* (Webquests) on cultural discoveries in France; discoveries of web tools; exercises on opposing phonemes; reading aloud; exercises related to the correction of pronunciation and collaborative drama activities (see Tomé, 2009, 2011).

Between 2010 and 2015, the teacher proposed a work scheme in which the learner had to record the following tasks and exercises:

- Listening, repeating or reading of exercises from the *Cahier de prononciation française* (Duflet & Tomé, 2005) or the textbook *Le Nouveau Taxi 1!*
- Application of reinforcement strategies and articulatory practice related to problematic phonemes for Spanish speakers.
- Learners had to proceed to a second or third repetition after tutoring and assessment by the teacher, using techniques of vocal warm-up and reinforcement related to the highlighted errors. The students had to prepare these recordings starting with vocal training, discovered errors and comments received which they had to write in their notebook or written evaluation.
- Optional creations related to song recordings, reading, drama activities, etc. in which the student had to apply the methods and strategies of pronunciation correction proposed in class (warm-up, self-correction, articulatory effort, etc.).
- Collaborative recordings among learners, which could be of two types: A) help or tutorial for a student experiencing difficulties: the tutor indicated errors as well as reinforcement activities and techniques which the learner had to repeat or correct; B) creative speech such as described previously.

For practice on pronunciation correction various methods by the teacher (explicit correction, recasts, clarification requests, metalinguistic feedback, elicitation, repetition) and by the learner (repetition, incorporation, self-correction, peer correction), and techniques for phonetic correction such as repetitions, reinforcement activities, vocal warm-up, linguistic indications, drama activities, self-correction, collaborative correction between pairs, etc. were drawn from the works of Fox (1979), Lyster & Ranta (1997), Callamand (1981), Murphy (1991), Morris (2005), Engwall & Bälter (2007) and Lauret (2007).

The fundamental errors of Spanish FFL learners are related to supra-segmental factors (rhythm and intonation), as well as to articulatory difficulties, represented by the phonemes [y], /OE/ and the nasal vowels, semi-consonants, the consonants [v], [z], [R] and palatal fricatives which correspond to the written forms “ch” and “j” (Tomé, 1994). When teaching pronunciation to beginners, a simplified and non-normative vowel system was used (Company, 1981; Leon, 1964; Wioland, 1991; Tomé, 1994).

4.4. Questionnaires

Different types of questionnaires were employed. These were improved and modified between 2005 and 2015. A summary of the models used follows:

- Questionnaire on student ICT competencies and the discovery of podcasting tools in the ‘French as a foreign language’ class. See Appendix A: *Questionnaire: ICT Skills and Podcasting*
- Questionnaire on the opinion of the students regarding tools, tasks and methods used, as well as their perception of the correction and improvement of their pronunciation. See Appendix B: *Questionnaire: Pronunciation*
- Self-report questionnaire to measure the time devoted to oral production by each learner. It was divided into two parts: A) oral production – timetable in the classroom, where oral interventions by the learner during class hours (answers, reading, consultations, etc.) were assessed. B) Spoken language – audio recordings – podcasts. In this case the time estimated for the preparation of the audio recordings as well as the actual time of verifiable speech in podcasts by each student was assessed. The learner was expected to note the estimated duration (minutes, seconds) of their spoken language by completing the different boxes referring to weeks and months in the self-report questionnaire. See: Appendix C: *Self-report questionnaire on the Student’s Spoken Language*

4.5. Legal aspects

In order to guarantee the various student rights in the use of podcast hosting services and social networks the teacher proposed a Charter or Convention, to be signed by students, in which the following points were specified:

- Dangers, rights and obligations when taking part in a social network.
- Risks and rights with respect to the recording of podcasts in public sites.
- Awareness of the use of social media in an educational context.
- Exclusive use of audio files for teaching or research purposes by the teacher.

5. Results

5.1. Use of podcasts

Table 1, *A History of Podcasts Used in the Research*, lists podcasts and social media used between 2005 to 2015. All these tools enabled the authors to suitably carry out the various teaching tasks as well as the work scheme of spoken language and pronunciation correction. The platforms *Jamglue* and *Twad.io* closed down, and *AudioBoom* did not allow accessing podcasts publicly in 2015, so that the teacher recommended using *SoundCloud* and *Chirbit*.

According to the selection criteria listed in section 3.2. we regard the following podcasts as the most effective and powerful: 1. *AudioBoom*, 2. *SoundCloud*, 3. *Twad.io*. Those most used by learners were: 1. *AudioBoom*, 2. *Twad.io*, 3. *Jamglue*.

The assessment of podcasts by students was positive, both with respect to their use and to the questionnaires proposed. They considered these tools to be easy to use, lively and helpful to them as regards speaking and pronunciation improvement.

Table 1. A History of podcasts used in the research.

	2005-2007	2007-2009	2009-2011	2011-2013	2013-2015
Podcast media	Podomatic Loudblog	Jamglue UStream Loudblog	Tward.io Voxopop UStream	AudioBoom SoundCloud	AudioBoom Chirbit SoundCloud
Most efficient	Podomatic	Jamglue	Tward.io	AudioBoom	SoundCloud
Most used	Podomatic	Jamglue	Tward.io	AudioBoom	Column 6 Value 3
Assessment	Positive	Positive	Positive	Positive	AudioBoom

5.2. Quantification of oral production

Podcasts can contribute to the development of spoken language when using teaching tasks which are effective and conceived for this purpose. But what was determining in our research was the possibility of measuring the time allotted to spoken language by FFL learners utilizing podcasts. Each audio sequence recorded by the student is of a precise duration visible on the interface of the various podcasting platforms. By tallying the duration of each podcast the teacher or learner can sum up the total time of spoken language at any given moment or at the end of the school year.

To be able to measure the entirety of each learner's spoken language two criteria were used:

1. The actual time of the recordings, verifiable with the duration of the student's audio files or podcasts.
2. A self-report questionnaire on spoken language by each of the students, in which they took note of estimated duration of speech in the classroom, preparation time for tasks and exercises, as well as the actual speech posted in the podcasts.

In Table 2, *Quantification of Oral Production*, the percentages and averages of speech by learners are presented for the period 2010 – 2015, which corresponds to the application of the work scheme described in section 3.3.

- Number of recordings or podcasts (average duration: 1 to 2 minutes).
- Average of actual time in minutes by the student, verifiable by the duration of the audio recordings.
- Average in minutes estimated by each student, according to the self-report questionnaire.
- Assessment of this spoken language by learners for the improvement and correction of pronunciation.

Table 2. Quantification of oral production.

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Oral Production	40-50 podcasts	45-55 podcasts	45-55 podcasts	55-65 podcasts	50-50 podcasts
Actual time	45-55 minutes	55-65 minutes	55-65 minutes	65-75 minutes	60-70 minutes
Estimated time	135-145 minutes	140-150 minutes	140-150 minutes	155-165 minutes	150-160 minutes
Assessment	Positive	Positive	Positive	Positive	Positive

5.3. Assessment of oral production

In order to be able to also assess the qualitative aspects of the entirety of each learner's speech the various criteria and indicators present in the audio recordings were taken into account. These indicators, related to the practice of pronunciation correction, were as follows:

1. Repetitions supervised by the teacher or tutor. When the learner is required to repeat a recording, he needs to locate the error, reflect on it and proceed to drills. The new recording can then be accompanied by a vocal warm-up or reinforcement exercises. It is noteworthy that these supervised repetitions led to an improvement of articulation issues as well as the acquisition of correct pronunciation.
2. Self-reflection by the learner in the discovery of articulatory difficulties and pronunciation errors. The teacher indicates an exercise or sequence in which the learner must find pronunciation mistakes and write them in a notebook or written evaluation. Particularly, those passages of the audio recording which contain autocorrections reveal this factor, and are determining elements in the improvement and correction of pronunciation.
3. Application of correction methods and techniques autonomously or collaboratively. Listening to students' podcasts makes it possible to observe the articulatory effort put into practice in successive repetitions of a phoneme, word or sentence, in exaggeration or reinforcement of a phoneme, noises or onomatopoeias, drills with vocal warm-up or drama activities. All these indicators thus constitute both elements of improvement and correction.
4. Collaborative correction among students. Recordings where students have helped each other imply prior preparation and reflection, the application of effective correction strategies, as well as simulation of interaction between teacher (tutor) and learner. When students produce this kind of recording they are normally able to improve phonetic errors and acquire correct pronunciation.

Table 3, *Indicators of Improvement of Pronunciation*, presents the percentages and averages by student of the various indicators or factors of improvement and pronunciation correction for the period 2010 and 2015. As described in section 3.3., a more homogeneous and exhaustive work scheme for correction of pronunciation was developed here.

Table 3. Indicators of pronunciation improvement.

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
Vocal warm-up	20-30 podcasts	20-30 podcasts	25-35 podcasts	30-40 podcasts	30-40 podcasts
Reinforcement	30-40 podcasts	30-40 podcasts	35-45 podcasts	30-40 podcasts	30-40 podcasts
Self-correction	10-20 podcasts	10-20 podcasts	15-25 podcasts	10-20 podcasts	15-25 podcasts
Shouts, noises, songs	5-10 podcasts	5-15 podcasts	5-15 podcasts	10-20 podcasts	5-15 podcasts
Drama activities in collaboration	15-25 podcasts	15-25 podcasts	20-30 podcasts	20-30 podcasts	15-25 podcasts

In the questionnaires, students indicated their preferences regarding the utility and effectiveness of these methods. As they could select a maximum of 3 in order of importance, the following classification was obtained: 1. reinforcement activities; 2. shouts, noises, songs; 3. drama activities, collaborations.

When these indicators or factors of improvement and correction are part of the learners' audio recordings we have qualitative indications for the evaluation of oral production. The process of pronunciation correction thus achieves its goals and enriches the students' learning experience because they will be able to apply these tools and methods to other courses, tasks and situations of real communication. As observed in the results of the questionnaire on pronunciation, the learners recognized having discovered methods and strategies to correct their own pronunciation, as well as being able to apply them or teach them if they one day became foreign language teachers or professors.

6. Discussion

From 2005 to 2015 we used several audio recording tools provided by various podcasting platforms. The students easily adapted to their functions/functionalities and were able to carry out the various speaking tasks proposed by the teacher without problems. Most appreciated were the advantages of a web recorder as well as a system of immediate publication of audio sequences. The podcasts of each student were stored in the same easily-accessible space, as an aid for tutoring by the teacher, as well as collaboration among learners.

The experiment with the podcasts was thus positive both for students as well as for the teacher, but we were also conscious of certain risks and limitations related to the situation. If a podcasting platform closed or changed its policy of exemption from payment, work could have been lost and it would have had to have been redone in another web space. This occurred

with *Jamglue* and *Twaudio.io*, but fortunately only after the work assigned had been completed and evaluated. Learners were therefore advised to make a back-up copy of their audio recordings. Other risks were in relation to the implicit legal aspects regarding the use of social networks and the public character of podcasts. In order to protect students' rights they were suitably informed by a Charter or Convention, and the teacher often advised them to preserve their anonymity by avoiding the use of names or photographs which might identify them.

There are no known studies on the quantification of spoken language in foreign language courses, either in the classroom or with an ICT teaching device. This first attempt is, however, incomplete because, although we could measure the actual duration of the podcasts, the total time devoted to spoken language is an estimate based on a self-report questionnaire. The learners presented an approximation of preparation and speaking practice time necessary before recording their work. But it is very difficult to keep track of time spent speaking in the classroom or at home. It would be necessary to make a sophisticated measuring device available to each learner, such as a stopwatch or speech calculator which saves recordings; but for the time being the technical or human means to set up such a device are not available.

The qualitative evaluation of oral production was based on indicators or factors of improvement of pronunciation, which can be observed in the students' audio recordings. Five indicators were taken into account (1. vocal warm-up; 2. reinforcement activities; 3. autocorrection; 4. shouts or songs; 5. drama activities), though we are aware that there are other methods and criteria to evaluate the improvements of linguistic abilities in foreign language learning (see: North, 1993; Bachman & Palmer, 1996; Puren, 2001; Pekarek Doeler, 2009; Huver & Springer, 2011). In addition, obtaining the students' opinion by means of questionnaires is not very reliable and oftentimes subjective. Like the majority of the tests for competency assessment, our proposal is imperfect, but it takes into account verifiable indicators in the podcasts. The improvement of pronunciation noticeable in the recordings is also subject to certain limitations. Conceivably the learner, pronouncing phonemes and words correctly in a podcast, could make mistakes in other communication or learning situations. We cannot be sure that those methods of phonetic correction put into practice by the student are applied in other contexts, even if they are recorded in a podcast. Nevertheless, we believe that exercising attention and increasing awareness is essential to detecting and eliminating pronunciation errors.

The speech recordings collected in the podcasts are thus fundamental since they are always available in a digital file that can be listened to several times to identify errors, encourage reflection and apply techniques to improve the pronunciation (warm-up, reinforcement, autocorrection, drama activities). In the past, speech was transitory within the framework of the classroom, even if occasionally it could be collected in the form of written notes, or take place in the language laboratory, where it was recorded in an audio cassette that was not normally kept. Nowadays, podcasts make it possible to deploy at will all this teaching potential both for teacher and learner.

7. Conclusions

One of the objectives of our research was the development of oral production using tools, tasks and methods which increased and favored students' speech. The podcasts used contributed greatly to this purpose thanks to their flexibility and effectiveness when recording the learners' voices. Speaking practice was thus more easily integrated into the French foreign language course (FFL), and a more balanced distribution in the exercise of written and oral competencies could be established.

Thanks to the podcasts we could carry out a true quantification of students' speech, which was accompanied by an estimate collected in the form of a self-report questionnaire which measured spoken language at home. Future research will have to improve this second step in order to bring us closer to an exhaustive quantification of the entirety of spoken language.

The qualitative evaluation of spoken language was based on five indicators or factors of improvement of pronunciation, which were observable in the students' audio recordings. It is still

necessary to improve and integrate other criteria to evaluate the acquisition of correct pronunciation. Furthermore, such assessment, somewhat elusive at times, can lead to several grounds for exploration with podcasts and audio recordings, not only for future research work and new teaching practices, but also for students in order to help them make decisive discoveries in their learning process.

References

- Abdous, M., Camarena, M.M. & Facer, B.R. (2009). MALL Technology: Use of Academic Podcasting in the Foreign Language Classroom. *ReCALL*, 21(1), 76-95. Retrieved from http://journals.cambridge.org/abstract_S0958344009000020.
- Al Fadda, H. & Al Qasim, H. (2013). From Call to Mall: The Effectiveness of Podcast on EFL Higher Education Students' Listening Comprehension, *English Language Teaching*, 6(9), 30-41. Retrieved from <http://www.ccsenet.org/journal/index.php/elt/article/view/29635/17574>.
- Bachman, L. F., & Palmer, A. S. (1996). *Language testing in practice: Designing and developing useful language tests*. Oxford: Oxford University Press.
- Borgia, L. (2010). Enhanced Vocabulary Podcasts Implementation In Fifth Grade Classrooms. *Reading Improvement*, 46(4), 263-72.
- Burston, J. (2013). Mobile-assisted language learning: A selected annotated bibliography of implementation studies 1994-2012. *Language Learning & Technology*, 17(3), 157-225. Retrieved from <http://llt.msu.edu/issues/october2013/burston.pdf>.
- Callamand, M. (1981). *Méthodologie de l'enseignement de la prononciation*. Paris: Clé International.
- Capelle, G. & Menand, R. (2009). *Le Nouveau Taxi ! 1. Méthode de français*. Paris: Hachette.
- Company, M. (1981). *Méthodologie de l'enseignement de la prononciation*. Paris: Clé International.
- Dervin F. (2006). Podcasting demystified. *Language Magazine*, 30-31.
- Ducate, L. & Lomicka, L. (2009). Podcasting: An Effective Tool for Honing Language Students' Pronunciation? *Language Learning & Technology*, 13(3), 66-86. Retrieved from <http://llt.msu.edu/vol13num3/ducatelomicka.pdf>.
- Duflot, C. & Tomé, M. (2005). *Cahier de prononciation française. Exercices pour les étudiants espagnols*. León: Universidad de León. Retrieved from <http://flenet.unileon.es/phon/cahier/>.
- Engwall, O. & Balter, O. (2007). Pronunciation Feedback from Real and Virtual Language Teachers. *Computer Assisted Language Learning*, 20 (3), 235-262.
- Facer, B., Abdous, M. & Camarena, M. (2009). The Impact of Academic Podcasting on Students: Learning Outcomes and Study Habits. In de Cassia Veiga Marriott, R. and Lupion Torres, P. (Eds.), *Handbook of Research on E-Learning Methodologies for Language Acquisition*. IRM Press: Cypertech Publishing. Retrieved from <http://biblio.uabcs.mx/html/libros/pdf/12/21.pdf>.
- Fareed, W. (2010). Affordances Analysis of an Audioblog and Suggestions for its Recruitment and Use in Oral Lessons. *International Journal of Instructional Technology and Distance Learning*. Retrieved from http://itdl.org/Journal/Aug_10/article04.htm.

Fitria, U., Vianty, M. & Petrus, I. (2015). Using podcast to improve students' listening and speaking achievements. *Journal of english literacy education*, 2 (1). Retrieved from <http://ejournal.unsri.ac.id/index.php/jenglish/article/viewFile/2218/1036>.

Godwin-Jones, R. (2005). Skype and Podcasting: Disruptive Technologies for Language Learning. *Language Learning & Technology*, 9(3), 9-12. Retrieved from <http://llt.msu.edu/vol9num3/pdf/emerging.pdf>.

Gromik, N. (2008). EFL learner use of podcasting resources: A pilot study. *The JALT CALL Journal*, 4(2), 47–60.

Guía docente de la asignatura Lengua Francesa I de la Universidad de León; Código 00413010. Retrieved from https://guiadocente.unileon.es/docencia/guia_docent/doc/asignatura.php?asignatura=0413010&any_academic=2013_14&idioma=cast&doc=N#

Hasan, M., & Hoon, T. (2012). ESL Learners' perception and attitudes towards the use of podcast in developing listening skills. *The English Teacher*, 41(2), 160-173. Retrieved from <http://www.melta.org.my/ET/2012/vol2/MELTA-11.pdf>.

Hasan, M. & Hoon, T. (2013). Podcast Applications in Language Learning: A Review of Recent Studies. *English Language Teaching*, 6 (2). Retrieved from <http://www.ccsenet.org/journal/index.php/elt/article/viewFile/23820/15118>.

Hawke, P. (2010). Using internet- sourced podcasts in independent listening courses: Legal and pedagogical implications. *Jalt CALL Journal*, 6(3), 219-234. Retrieved from http://journal.jaltcall.org/articles/6_3_Hawke.pdf.

Huver, E. & Springer, C. (2011). *L'évaluation en langues*. Paris: Didier.

Istanto, J. W. (2011). Pelangi Bahasa Indonesia podcast: what, why and how? *Electronic Journal of Foreign Language Teaching*, 8(1), 371-384.

Jain, S., & Hashmi, F. (2013). Advantages of podcasts in English language classroom. *Journal of Indian Research*, 1(2), 158-163. Retrieved from <http://mujournal.mewaruniversity.in/JIR2/23.pdf>.

Knight, R. (2010). Sounds for Study: Speech and Language Therapy Students: Use and Perception of Exercise Podcasts for Phonetics. *International Society for Exploring Teaching and Learning*, 22 (3), 269-276.

Kohar, E., Salam, U. & Sumarni (2014). Students' perception towards the use of podcast for learning English, *Jurnal Pendidikan dan Pembelajaran*, 3(12). Retrieved from <http://jurnal.untan.ac.id/index.php/jpdpb/article/view/8501>.

Lauret, B. (2007). *Enseigner la prononciation: questions et outils*. Paris: Hachette.

Leon, P. & M. (1964). *Introduction à la phonétique corrective*. Paris: Hachette / Larousse.

Li, H. (2010). Using podcasts for learning English: perceptions of Hong Kong Secondary 6 ESL students. *Journal – Début: The undergraduate journal of languages, linguistics and area studies*, 1(2). Retrieved from <https://www.llas.ac.uk/resourcedownloads/3088/podcasting.pdf>.

Lomicka, L., & Lord, G. (2011). Podcasting-past, present and future: Applications of academic podcasting in and out of the language classroom. In R. Fischer, B. Facer, M. Abdous, & P. Lafford (Eds.), *Academic podcasting and mobile assisted language learning: Applications and outcomes* (pp. 1-20). Hershey, PA: Information Science Reference.

- Lord, G. (2008). Podcasting communities and second language pronunciation. *Foreign Language Annals*, 41(2), 364-379. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1944-9720.2008.tb03297.x/pdf>.
- Lyster, R. & Ranta, L. (1997). Corrective feedback and learner uptake. *Studies in Second Language Acquisition*, 19, 37-66. Retrieved from http://people.mcgill.ca/files/roy.lyster/Lyster_Ranta1997_SSLA.pdf.
- McBride, K. (2009). Podcasts and second language learning: Promoting listening comprehension and intercultural competence. In L. B. Abraham & L. Williams (Eds.), *Electronic discourse in language learning and language teaching* (pp. 153-167). Amsterdam: John Benjamins.
- McCarty, S. (2005). Cultural, disciplinary and temporal contexts of e-Learning and English as a Foreign Language. *eLearn Magazine: Research Papers*. Retrieved from <http://www.elearnmag.org/subpage.cfm?section=research&article=4-1>.
- McQuillan, J. (2006). Language on the go: Tuning in to podcasting. *The International Journal of Foreign Language Teaching*, 2, 16-18.
- Meng, P. (2005). *Podcasting & Vodcasting: a white paper, Definitions, discussions & implications*. University of Missouri IAT services.
- Morris, F. (2005). Child to child interaction and corrective in a computer mediated L2 class. *Language Learning and Technology*, 9 (1), 29-45. Retrieved from <http://ilt.msu.edu/vol9num1/morris/default.html>.
- Murphy, J. (1991). Oral communication in TESOL: Integrating speaking, listening and pronunciation. *TESOL Quarterly*, 25 (1): 51-75.
- North B. (1993). *Scales of language proficiency, A survey of some existing systems*. Conseil de l'Europe, monographie, Strasbourg.
- O'Bryan, A., & Hegelheimer, V. (2007). Integrating CALL into the classroom: The role of podcasting in an ESL listening strategies course. *ReCALL*, 19(2), 162-180.
- Pals, T., Randell, T. & Shawback, M. (2005). Podcasts: A Language Lab in Your Pocket. *Proceedings of the 13th Annual KOTESOL International Conference*, pp. 23-34. Retrieved from http://ns2.kotesol.org/sites/default/files/pdf_publications/KOTESOL-Proceeds2005web.pdf#page=23.
- Pekarek Doeler, S. (2009). Démythifier les compétences: vers une pratique écologique d'évaluation. In O. Galatanu, M. M. Pierrard, Michel & D. Van Raemdonck (eds), *Construction du sens et acquisition de la signification linguistique dans l'interaction*. (pp. 19-38) Bern : Peter Lang. Retrieved from <http://gramm-r.ulb.ac.be/fichiers/colloques/Nantes2007/PEKAREKDOEHLER.pdf>.
- Petersen, S.A. & Divitini, M. (2005) Language learning: from individual learners to communities. *Wireless and Mobile Technologies in Education*. Retrieved from <http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1579258>.
- Pettes Guikema, J. (2009). Discourse analysis of podcasts in French: Implications for foreign language listening development. In L. B. Abraham & L. Williams (Eds.), *Electronic discourse in language learning and language teaching* (pp. 169-189). Amsterdam: John Benjamins.
- Puren, C. (2001). La problématique de l'évaluation en didactique scolaire des langues. *Les langues modernes*, n° 2, pp. 12-29.

- Putman, S. M., & Kingsley, T. (2012). The Atoms Family: Using Podcasts to Enhance the Development of Science Vocabulary. *The Reading Teacher*, 63(2), 100-108.
- Rosell-Aguilar, F. (2007). Top of the Pods – In Search of a Podcasting «Podagogy» for Language Learning. *Computer Assisted Language Learning*, 20 (5), 471-492. Retrieved from <http://students.kennesaw.edu/~ppeoples/Podcasting%20For%20Language%20Learning.pdf>.
- Rosell-Aguilar, F. (2013). Podcasting for language learning through iTunes U: The learner's view. *Language Learning & Technology*, 17(3), 74–93. Retrieved from <http://llt.msu.edu/issues/october2013/rosellaguilar.pdf>.
- Sathe, N., & Waltje, J.R. (2008). The iPod project: A mobile mini-lab. *Journal of the Research Center for Educational Technology*, 4(2), 32–56.
- Schmidt, J. (2008). Podcasting as a learning tool: German language and culture every day. *Unterrichtspraxis*, 41, 186-194.
- Shiri, S. (2015). The Application of Podcasting as a Motivational Strategy to Iranian EFL Learners of English: A View toward Listening Comprehension. *Advances in Language and Literary Studies*, 6 (3). Retrieved from <http://www.journals.aiac.org.au/index.php/all/article/view/1522>.
- Sun, Y. C. (2009). Voice blog: An exploratory study of language learning. *Language Learning & Technology*, 2(88-103). Retrieved from <http://llt.msu.edu/vol13num2/sun.pdf>.
- Sze, P. (2006). Developing students' listening and speaking skills through ELT podcasts. *Education Journal*, 34, 115-134.
- Tomé, M. (1994). *Fonética francesa para uso de estudiantes españoles*. León: Universidad de León.
- Tomé, M. (2009). Productions orales, weblogs et projet de télécollaboration avec le web 2.0 pour l'enseignement du français (FLE). *Revue ALSIC*, vol. 12, pp. 90-108. Retrieved from <http://alsic.revues.org/index1279.html>.
- Tomé, M. (2011). Réseaux et médias sociaux sur internet pour l'apprentissage de la prononciation d'une langue étrangère. *International Journal of E-Learning & Distance Education*, vol. 25, No. 2. Retrieved from <http://www.jofde.ca/index.php/jde/article/view/724/1261>.
- Travis, P., & Joseph, F. (2009). Improving learners' speaking skills with podcasts. In M. Thomas (Ed.), *Handbook of research on Web 2.0 and second language learning* (pp. 313-330). Hershey, PA: Information Science Reference.
- Wioland, F. (1991). *Prononcer les mots du français*. Paris: Hachette.
- Yeh, C. (2013). An Investigation of a Podcast Learning Project for Extensive Listening. *Language Education in Asia*, Vol. 4, 2.
- Young, D. J. (2007). iPods, MP3 players and podcasts for FL learning: Current practices and future considerations. *NECTFL Review*, 60, 39-49.

Appendix A

Questionnaire: ICT Skills and Podcasting

1. Which ICT tools and social media do you have experience with?

- Text editor, photos or videos (MSWord, Paint, web editor, blog, etc.).
- Presentation programs (PowerPoint, SlideShare, web page, etc.).
- Web browsers (Firefox, Explorer, Chrome, etc.).
- Social Media (blogs, podcasts, forums, CMS education, etc.).

2. Which digital tools/resources have you used in learning a foreign language?

- Use of audio recorder (MP3, PC/web recorder, mobile phone).
- Classroom activities (exercises, web resources, ICT tasks, etc.).
- Distance learning (courses, online exercises, web resources, etc.).
- Projects or exchanges with foreign students.

3. Which tools, resources and ICT technology have you discovered this year?

- New ICT tools and resources:
- New tasks and technologies:

4. How would you rate the following aspects of podcasts in the classroom? (very positive, positive, acceptable, negative)

- Recorder web:
- Interface and navigation:
- Technical problems or difficulties:

5. What activities have motivated you?

- Listening and recording oral sequences.
- Participating in a blog or social network.
- Participating in a telecollaboration project.

6. How have you interacted with other students?

- Listening to classmates' podcasts.
- Commenting on classmates' podcasts.
- Collaborating with classmates' podcasts.

7. Why did you consult your classmates' podcasts?

- Out of curiosity.
- To learn about their work method.
- To correct my pronunciation.

8. Which educational or virtual collaborative projects did you participate in?

- Teaching platforms or training outside the classroom.
- Telecollaboration projects with other students or another school.
- Educational social networks.

9. How did you find the proposed ICT tasks ?

- easy
- appropriate
- difficult
- other

10. Which legal aspects of ICT and social media in education were you informed about?

- Uses, roles, behaviour and moral rights.
- Students' rights and responsibilities.
- ICT and social media acceptable use agreement (policy) for students

Appendix B

Questionnaire: Pronunciation

1. I am aware of my difficulties of pronunciation:

- I have some problems with certain vowels or consonants.
- I have problems of articulation with certain sounds.
- I have problems related to rhythm and intonation.

2. My greatest difficulties with French sounds are:

- Listening: understanding, differentiation between phonemes
- Speaking: correct pronunciation and articulation of phonemes.
- Problems related to rhythm and intonation.

3. I consider that in my learning of French the most important goal is:

- To acquire good understanding and speaking skills.
- To acquire writing skills.
- To acquire grammatical, lexical or cultural understanding

4. Which activities were most helpful to you for the improvement of pronunciation?

- Individual audio recordings.
- Indications and help by the teacher.
- Activities and help from classmates.

5. How did you find the proposed tasks?

- easy
- appropriate
- difficult
- other

6. Have you improved your skills and knowledge of French in the following areas?

- Pronunciation (a lot – little – not at all).
- Grammar, syntax and vocabulary (a lot – little – not at all).
- Interculturality (a lot – little – not at all).

7. Which resources and tools helped you to improve your pronunciation?

- Web recorders in podcasts.
- Audiovisual documents and online resources in class.
- Participation in telecollaboration projects.

8. What did you find most useful when correcting your pronunciation?

- Listening and repeating sounds or words frequently.
- Receiving help from another person (student, tutor, native speaker, teacher).
- Participating more by talking and making recordings.

9. What methods of pronunciation correction did you find most useful and effective?

- Vocal warm-up.
- Exaggeration of phonemes and articulatory effort (reinforcement).
- Autocorrections.
- Sounds, songs
- Drama activities and collaborative corrections.

10. What memorable moments in the correction of pronunciation do you remember from the course?

- Videos, songs and games.
- Recordings with fellow students and/or Erasmus students.

Appendix C

Production Orale - Emploi du temps en cours

PRODUCTION ORALE		Minutes - Interventions			Autres	
En Cours	Février					
	Mars					
	Avril					
	Mai					
	TOTAL					

Production Orale - Enregistrements Audio – Podcasts

PRODUCTION ORALE		Minutes - Semaines			Entraînements	
Audio Podcasts	Mars					
	Avril					
	Mai					
	TOTAL					

Nom :	Prénom :
-------	----------

Figure 1: Self-report questionnaire on student oral production.