

# Developing speaking skills and learning pronunciation with new technologies in the French as a Foreign Language classroom

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## **ABSTRACT:**

*This study examines the role that new technologies, social media and telecollaborative projects have played in the development of oral production skills, as well as in learning and correction in pronunciation. During the period 2005 to 2015 several experiments were conducted for this purpose as part of a French language course at the University of León, Spain. We sought to examine the characteristics and modalities of different oral productions from students, as well as ICT tools and teaching tasks which led to the creation of audiovisual recordings published in several educational web environments (weblogs, podcasts, social networks, education platforms). We looked also at the role which students, tutors and teachers play in the correction of pronunciation, taking into consideration the feedback strategies that have been observed in their interaction, with the main focus on autocorrective feedback, such as in collaborative pronunciation tasks corrected by the students. We have also attempted to gauge the reactions of students to the use of these tools, learning environments and pronunciation tasks, by undertaking three surveys which focus on their pronunciation and ICT skills in the context of French as a Foreign Language.*

**KEY WORDS:** CALL, Computer-assisted pronunciation teaching, French as a Foreign Language, feedback strategies.

## Desarrollo de la competencia de producción oral y aprendizaje de la pronunciación a través del uso de las nuevas tecnologías en la clase de Francés como Lengua Extranjera

### RESUMEN:

*Este estudio aborda el papel que las nuevas tecnologías, las redes sociales y los proyectos de telecolaboración han desempeñado en el desarrollo de competencias de producción oral, así como en el aprendizaje y la corrección de la pronunciación. Durante el período 2005 a 2015, se realizaron varios experimentos con este fin en el marco de un curso de francés lengua extranjera en la Universidad de León, España. Se examinan las características y modalidades de las diferentes producciones orales de los estudiantes, así como las herramientas NTIC y las tareas pedagógicas que permitieron la creación de grabaciones audiovisuales publicadas en varios entornos web educativos (weblogs, podcasts, redes sociales, plataformas educativas). También observamos el papel que juegan los estudiantes, tutores y profesores en la corrección de la pronunciación, teniendo en cuenta distintas estrategias de retroalimentación, atendiendo especialmente al feedback autocorrectivo, así como en las tareas colaborativas de corrección de la pronunciación. Asimismo, hemos intentado medir las reacciones de los estudiantes ante estas herramientas, entornos de aprendizaje y tareas de pronunciación, mediante la realización de tres encuestas que se centran en su pronunciación y competencias NTIC en el contexto del Francés lengua extranjera.*

**PALABRAS CLAVE:** CALL, enseñanza de la pronunciación asistida por ordenador, Francés lengua extranjera, estrategias de retroalimentación.

### 1. Introduction

In the field of Computer-Assisted Language Learning (CALL), most of the applications and research studies focus on vocabulary, grammar or writing skills, while pronunciation and oral skills are often neglected. This shows that the earlier trend in the teaching of languages, in which pronunciation is rarely mentioned in textbooks and classroom methods, continues. Such a situation was understandable in the era of the printing and literary culture, which prioritised the written aspect of language learning over the oral. However, in recent years, various media

and technologies have been introduced into the classroom (tape, radio, television, language laboratory), gradually standardizing the use of the spoken word.

Today, information technology and communication (ICT) and the Internet especially, are crucial in education, as demonstrated by various national and international standards (UNESCO, 2008, ISTE, 2007, 2008). Also, the European directives on the teaching of languages (CEFR, 2001) highlight the importance of oral skills in their new communication perspectives. Thus, it is increasingly apparent and necessary that pronunciation forms a key aspect of methods and practices for learning foreign languages.

Computer-assisted pronunciation teaching (CAPT), has a broad horizon for exploration and the sharing of methods and research with other disciplines, and its great potential as well as its limitations must not be ignored, as indicated in the work of Chun, 1989, 1998; Engwall, 2006; Hardison, 2004; Hincks, 2003; Llisterri, 2007, Menzel et al., 2001; Molholt, 1988, Morris, 2005; Neri et al., 2002, Pennington, 1999, Pi-Hua, 2006 and Volle, 2005.

Whilst many of these studies are concerned with voice recognition systems and technologies (ASR), computer programs and software and virtual tutors or teachers, our experiments address the potential of the current network (web 2.0) and ICT in the classroom. When students, accompanied by a teacher, use the resources, tools, tasks, interactions and communication, they develop their oral skills (especially oral output) as well as their consideration and practice of correct pronunciation.

Since 2001 we have been developing different educational activities within the programme *Campus Virtuel FLE*, for learning both in the classroom and at home, that forms part of the research project *FLENET (Français langue étrangère et Internet)* at the University of Leon (Spain). Taking into account the results obtained, the aim of this paper is to consider the following objectives:

- Identify tools and web environments that favour students' oral production in situations of real and collaborative communication.
- Establish different types of pedagogical tasks that allow a better development of these oral productions.
- Analyze the characteristics and patterns of oral productions performed by students.
- Evaluate students' reaction to the application of these tools, environments and tasks.
- Explore the feedback strategies in relation to the students, tutors and teachers, focusing particularly on autocorrective feedback and collaborative practices to correct pronunciation.

## **2. Review of literature**

The educational potential of ICT and the web are recognized by many authors (For the teaching of languages, see Cameron, 1999; Chappelle, 2001; Fotos & Browne, 2004), but we believe that the most important are those that highlight their communicative and collaborative potential (Downes, 2005, 2007; Lamy & Hampel, 2007; O'Hear, 2006, Siemens, 2008; Warschauer & Kern, 2000), as well as the interactive role within this context. We can also provide guidance on integrating ICT in education, the ICT Competency Standards for Teachers (UNESCO, 2008) and the National educational technology standards for students and for teachers (ISTE, 2007, 2008), especially in the following areas: using class resources and digital tools or Web sites, participating in education or virtual intercultural projects with other students or teachers and developing communication and collaboration between students and teachers in social networks and the wider teaching community.

Several authors and directives (CEFR, 2001) have also stressed the importance of task-based teaching of communication skills (Nunan, 1989, 1991; Skehan, 1998) and of using different ICT devices in the classroom or online (Oliver & Herrington, 2001; Pothier, 2003). Nunan (1989) defines the task as "piece of meaning-

focused work involving learners in comprehending, producing and / or interacting in the target language." It is also necessary to provide suggestions for the classification of learning tasks and to search for the same kind of variety in their implementation of ICT: De Lièvre, Depover & Quintin, 2002; Henri & Lundgren-Cayrol, 1997; Tomé, 2006.

With regards to Computer-Assisted Pronunciation Training (CAPT), it is necessary to highlight the research of Neri, Cucchiarini, Strik & Boves (2002) on the three key factors: input, output and feedback. It is also important to consider the reflections of Engwall (2006) on the feedback received from the teaching of pronunciation. We will also take into account, to a greater or lesser extent, work which has addressed didactics and correct pronunciation such as that of Celce-Murcia (2001), Engwall & Bälter (2007), Morley (1991), Morris (2005), Murphy (1991) or Pi-Hua (2006). The following aspects summarized below are the confluence in our research:

- The importance of tailored and varied tasks and resources, so that students are motivated to develop their oral skills.
- Both oral practice and tasks should take place within a realistic communicative and collaborative context in which the student feels comfortable and encouraged.
- The requirement that the student plays an active role in order to achieve a balance between the development of their written and oral skills.
- The student's oral practice is essential in improving their awareness of phonology and allows them to detect errors and articulatory problems and therefore correct themselves.
- Feedback can be given in various forms, whether it be from the teacher or guardian, other students or by the students themselves (tasks and resources which allow students to correct themselves) and distinctions can be made between different types of feedback (explicit, implicit, elicitation, negotiation, interaction).

- Interaction with other students, tutors or native speakers in class or on the Web can motivate students to develop their oral skills and feedback (peer feedback, Morris 2005).

- Communication is prioritised in the learning of the pronunciation of a foreign language, more so than the acquisition of a perfect accent and articulation. Particularly with regards to beginner students we consider it essential to work with the phonemes which cause major mistakes and articulatory difficulties and to address a simple and non-regulatory vocalic (Companys, 1981, Leon, 1964; Tomé, 1994; Wioland, 1991).

- The fundamental errors of Spanish students in FLE are linked to both suprasegmental factors (rhythm and intonation in general) and segmental factors. Among this last group it is important to highlight the vowels [y] / EO / and nasal vowels, the semivowels; consonants [v], [z] [R] and the palatal fricatives that correspond to the spelling "ch" and "j" (Duflot & Tomé, 2005); Tomé, 1994).

### 3. Research methodology

Students taking part in this research study are taught in different areas of French as a foreign language (at either beginner or advanced level) at the University of Leon. The central and largest group (85%) belongs to the program level of beginner or remedial learners, which from October to June have three teaching hours per week: two in the computer room and one in the traditional classroom. The textbooks used by this group are *Taxi 1!* (Capelle & Menand, 2003) and *Cahier de prononciation française* (Duflot & Tomé, 2005). In the first semester students participate in an online telecollaborative project with the University Stendhal - Grenoble 3 (France).

Our study is mainly based on a selection of oral productions from FLE pupils who have been recorded in various digital media (mp3, wave or wav files, podcasts or online audioblogs, video sequences in flv or avi format) that can be found at website *ORAL FLE AUDIO Projet*. The following parameters should be recorded in transcripts and references: Title, number of students involved

(1A, 2A, 3A) whether the interaction takes place with the teacher (A & P), a guardian or a native speaker (A & T), the level of French: beginner (N1), intermediate (N2), advanced (N3), digital media used: audio (A) or video (V); type of activity: Oral (PO) or oral correction (CO), exercise (E) or task (T), form in which it is placed on the web: learning platform (EP), education blog (BE), social networking education (RE) or telecollaborative project (PT) and finally, the year (Example: Title-2A-N1-A-PO-TBE-Year).

Three types of questionnaires were proposed to students in FLE to evaluate their reactions to this type of training as well as their perception of the skills acquired:

- Questionnaire: ICT competences (CCTIC).
- Questionnaire: FLE pronunciation skills (CCP).
- ICT and pronunciation (CFTICP); (see Appendix 2).

In the following chapters the tools and web environments that have been used over the course of our research and pedagogical investigation will be presented, as well as the different types of tasks proposed to the students.

### **3.1. Web Environments and Tools**

The training method with which we have developed our research has been mainly face to face, with the teacher accompanying the students in a computer room at the University of Leon. Sometimes students have worked on their own at home, usually to make audio recordings of the exercises in the textbook *Cahier de prononciation française* (Duflot & Tomé, 2005).

Normally the ICT room was equipped with computers provided with headphones and microphone, a high speed internet connection and also occasionally, a webcam, a digital camcorder or digital camera. The computers had all the hardware, software, programs and web tools necessary for the development of the proposed tasks: Moodle platform, web browsers, MS Word, Paint, audio recorders, etc.

The students' speech has been recorded with the programs installed on the computer (*Windows Sound Recorder* or *StepVoice Recorder*) or more often with online recorders of web-blogs and social networks (*Podomatic, Jamglue, AudioBoo, Evoca, Voki*). *StepVoice Recorder* is a simple program that is installed on your computer that lets you easily record audio sequences of good quality and in mp3 format, and which allows for a more dynamic management of audio files to be sent or published on the website.

*Podomatic* is an online community for exchange of podcasts with a blog platform that allows the free publication of written messages with audio or video sequences. The student can send their mp3 files and record their voice directly through the recorder provided by the web site. Our experiments with 'Podomatic' have focused on the creation of collective audioblogs for the class in which the students and professor were participating, publishing their work and speech. The recordings are available at *Oral FLE Audio Projet: Audio Blog FLE 2006, Audio Blog FLE 2007*.

*Jamglue* is a social network for sharing and remixing music. Its main feature is the creation and processing of sound sequences in mp3 format as well as its web-friendly recorder. As in other cases we have carried out a *détournement* of this tool for educational purposes to teach FLE so that students can create and record their speech as podcasts. To do this they should open a free Jamglue space, they will therefore be able to organize their recordings and then send the files to the Moodle platform or create a Web link that leads the reader to where the audio can be heard. *Jamglue* has been canceled and these oral productions are available at *Oral FLE Audio Projet: AudioBlogs Jamglue 2007-2009 - ArchivesRedIRIS*.

*Chinswing* is a website that allows you to create audio conversations asynchronously as a forum for discussion but with the voice of the participants. With the help of a microphone and a web video recorder we can talk with others directly therefore it has good potential for application in online linguistic projects and exchanges that may be interested in the practice and



development of oral skills for the learning of a foreign language. These recordings are available online at *Chinswing – FLE Campus*.

*UStream TV* is a community of live broadcasting video that enables the retransmission of live video footage by simply connecting a webcam to the PC, which allows television broadcasts or webconferences. We have used this area of audiovisual communication within the proposed online communication (*Projet Leon - Grenoble*), and for the tasks of the type of pronunciation dramatized into games, which we filmed video clips of students “performing” scenes preparing their work and correcting pronunciation. These recordings are available at *Oral FLE Audio Projet: Archives AUDIOVISUELLES - Weblogs, podcast et réseaux*.

*Moodle* is a learning platform that provides e-learning courses and allows for the creation of learning communities on the web. This CMS (content management system) has significant communication features to create an environment of teaching and learning online, and to encourage interaction between teachers and guardians, students and educational resources or tasks. Our experience in this learning environment can be summarized in two directions:

1. FLE development courses for students who can not follow the programs of attendance: completion of oral tasks at home.

2. Support exchanges of telecollaborative projects (*Projet Leon - Grenoble*), which has been used especially the “Forum” which allows a quick and convivial communication through sending written messages (tasks, information, questions) or lower case attachments (documents, images, audio or video recordings). Our platform *Moodle* is hosted on the server of the University of Leon in the Internet address that is listed in Appendix 1.

### **3.2. Teaching Tasks**

In our goal to develop the oral skills and speech of FLE students, we have always believed that tasks are a key factor, since

they create an environment which encourages communication and cooperation, stimulate interaction and provoke speech production (Engwall, 2006, Neri et al., 2002, Nunan, 1989).

The model for pedagogical tasks which we have usually undertaken consists of the following:

- Web Resources (texts, websites, audiovisual materials).
- Audio or video sequences which enhance listening skills.
- Clear advice concerning speech or written work as well as oral comprehension.
- Guidelines, information and tools to accompany and help the student.

The following example, *CybeRallye FLE: Le train se découvre*, summarizes all of these components. This audiovisual task for speech enhancement is directed at students of beginner or intermediate level, and can be carried out within a blog in class or using the *Moodle* platform. The maximum time allowed for the completion of the two sessions is about an hour each. Students work with the teacher in the computer room or occasionally independently outside of the classroom. The student's work will primarily consist of his/her oral work recorded in the form of an MP3 attachment or a link to a podcast, accompanied by a text with these answers and the link to the audio sequence. The work may give way to a third sharing session or discussion in which teachers and students examine the content produced, suggest alternatives, and share the difficulties and discoveries that they have made on correct pronunciation, (mainly suggested by the teacher and sometimes among students).

**CybeRallye FLE: Le train se découvre**

Dans la Cité des Sciences nous allons visiter l'exposition virtuelle *Le train se découvre*.  
Suivons les étapes..

**CONSIGNE :**

Etape 1: D'abord nous regarderons le plan général de l'exposition.

Cliquez sur l'image pour voir la vidéo et répondez aux questions suivantes:

- Où devons-nous aller pour voir les photos?
- Où se trouve le plan de l'exposition?

Etape 2: Ensuite nous allons visiter une exposition sur le train dans le monde de la peinture.

Cliquez sur l'image pour écouter la présentation des tableaux:

Répondez aux questions suivantes:

- Qui est l'auteur du tableau La Gare St. Lazare?
- Quel est le titre du tableau de Van Gogh?
- Quelle peinture préférez-vous et pourquoi?

Etape 3: Vous devez enregistrer vos réponses avec un magnétophone web ou logiciel d'enregistrement.

Etape 4: Vous pouvez déposer votre travail dans l'espace "Commentaires" ou dans votre blog en téléchargeant le fichier mp3 ou en indiquant le lien audio vers votre podcast.

**Pistes et outils:**

- Testez vos connaissances sur le train en cliquant sur la rubrique "Le train en Quizz".
- Cliquez sur les liens audio pour écouter les informations sur la l'exposition.
- Consultez les rubriques suivantes pour préparer votre enregistrement audio:

Articulation des sons – Phonétique FLE

Synthèse vocale en ligne

*Jamglue* - Mode d'emploi

Without establishing at this point a comprehensive classification of the proposed tasks, we can note the following tasks, all available on the web addresses given in the final chapter and in previous publications (Tomé, 2006, 2007).

- Listening comprehension exercises that allow the student to correct themselves could be part of a task or teaching scenario. They are often integrated into *CybeRallye* audio sequences (*quête*

*au trésor*, WebQuest, *jeu de piste*) that students must listen to or put into writing: identification and discernment of phonemes or words, dictation (usually created with a Java program or a generator of exercises which allow self-correction such as *HotPotatoes* and similar programs.

- Audio presentations and discussions. These are designed to provide authentic communication and collaboration scenarios (telecollaborative projects, participation in an educational social network or blog) in which students must present themselves, their city, region or university, through an audio or video recording individually or in a dialogue with another student. There are other alternatives such as tasks which require the pupil to express, either individually or in a conversation, their personal tastes or views on a famous person, book, film or website.

- Discoveries and intercultural exchanges. In these exploration tasks or virtual journeys through the Internet, students must play an active role and improve their intercultural and sociolinguistic knowledge. Usually within a scénario pédagogique (*CybeRallye*) the student discovers and comes into contact with different aspects of the social and cultural life of another country (France): works of art, museums, writers, artists, historical figures, customs, etc. Resources and streaming media that accompany this type of exercise are available on the web.

- Dramatizations and pronunciation games. These speaking and comprehension tasks often include video sequences which address the correction of a pronunciation error or articulatory difficulty common for Spanish speakers. Students should consider and apply these sequences to their own experience in order to recreate or interpret them later in genuine situations where correction is required amongst other students. They consist of simulated dramatizations that can be recorded in the form of a podcast or filmed with a webcam or digital camera to be published later in a social network or blog in class. In recent years we have used the *UStream TV* site for publishing these small dramas in which students and amateur players alike interpreted the roles

of teacher or student in a scene giving examples of pronunciation correction. There are other variants of the tasks in which pupils play sounds or cries of animals or use onomatopoeia, poems or songs to promote understanding and improved oral production of certain phonemes or phonological oppositions in French.

- The search and analysis of ICT and web resources. Designed for middle and advanced level students, these tasks seek to develop their critical capacities, corresponding to the type of exploration work, critical analysis and problem solving collectively proposed by Henri & Lundgren-Cayrol (1997). The student must make an audio or video recording in which he/she presents and analyzes a website, a blog, a podcast, a radio broadcast or a video community like *Dailymotion*, *Google Video* or *Youtube*.

- Discoveries and practice exercises on social websites. Students first discovered certain environments and tools in the present social web, including blogs, wikis, social networks, discussion forums or chat rooms (synchronous mode conversation). They must register, open spaces and create their own web of communication, collaboration and publishing. Naturally the practice of oral skills is prioritised within these tasks and sites which allow the user to create audio or video content are suggested, especially social networks like *AudioBoo*, *Chinswing*, *Evoca*, *Jamglue*, *Ning*, *Podomatic*, *UStream TV* or *Voki*.

### **3.3. Research Questions**

As we can see, in the development of this research various factors and important participants that are closely interrelated come together: the web tools and environments, pedagogical tasks and the people involved (students, tutors, teacher). Hence the questions that have guided our study are:

1. What are the characteristics and trends in the speech productions of students?
2. How have students reacted to the implementation of these web tools and pedagogical tasks in the learning of pronunciation?

3. What role do the students, tutors and the teacher play in the correction of pronunciation and what feedback strategies have been observed in their interaction?

#### 4. Results and discussion

##### 4.1. Oral production of students

For our research a large variety of oral productions have been chosen that work at both the level of the students and the teaching tasks they had to enhance. Difficulties with articulation and errors in pronunciation that are observed in most of the recordings correspond with what we can view as typical errors of Spanish speakers, which have been studied previously. (Tomé 1994, 1995, 1997) the errors can be summarized as the following: nasal vowels and [y], /OE/; semivowels yod [j] and [ʷ]; consonants [v], [z], [ʃ], [ʒ], [R], and also different problems associated with the rhythm and intonation of French.

We can distinguish the following methods of oral production, taking into account the following key factors that characterize them:

- The type of online tool or environment used
- The type of task in which it is situated
- The type of interaction and context of communication
- The type of corrective feedback that is implied.

With regard to the tools and web environments used, there are two fundamental types: A) productions that are solely audio, performed with the help of digital recorders (software installed on PCs such as *StepVoice Recorder*, or available on social networks like *Jamglue*); B) audiovisual productions, which are comprised of sequences filmed with a digital video camera or more frequently with a webcam for the social networking network *UStream TV*. We must also consider the area of web publishing or production (blog, podcast, social network, teaching platform etc.) as it may determine or generate different forms of communication, interaction and collaboration.

Paying attention to the nature of the task in which the characteristics of oral productions vary and showed the different types of behavior (carrying out of listening and repetition exercises and also reading texts and self-corrected dictation) or communication and collaboration (audio presentations and dialogues between students).

Through the type of interaction and context of communication in which students are immersed we have obtained both individual and group oral productions, the latter usually between two people, whether it be a tutor, teacher or another student. Also we have observed different patterns of interaction in terms of web environments, the type of task and context to a greater or lesser degree of authentic communication and collaboration. Finally we will focus on the different types of corrective feedback that we have observed in the oral production of students and discuss them in more depth in the next paragraph.

We will comment on and transcribe some of these examples to get an idea of the different methods, characteristics and implicit teaching strategies that they involve. These can be seen on the web *ORAL FLE AUDIO Projet*.

*GemmaDavidDaniUnileon* (3A-N1-A-PO-TPT-2005). This speech task, carried out by students Gemma, David and Dani who are at beginner level, is an audio recording that is part of a telecollaborative project (*Projet Leon - Grenoble: PLG*) in 2005. For this dialogue students from the University of Leon have used the recorder installed on their computer (*StepVoice Recorder*) and the mp3 file has been uploaded onto one of the *Moodle* forums for the tutor to check.

*Gemma: Je m'appelle Gemma et je vais parler de notre université. Je suis une étudiante de Philologie Anglaise qui est dans la faculté de Philosophie et Lettres.*  
*David: Je m'appelle David. Je vais à la Faculté à pied. Mes cours sont le matin et l'après-midi.*  
*Dani: Je suis Dani. J'aime aller à la cafeteria du campus et prendre un café avec mes amis. Les "tapas" et le jambon de León sont très bons.*

*TO5texteEsmeralda* (1A-N1-V-PO-TRE-2007). The beginner level student Esmeralda has been recorded with a webcam during the preparation of an oral task (writing and reading of a text) proposed by the tutor Ombika (University of Grenoble) within a telecollaborative project (PLG) in the year 2007, which was uploaded onto the social network *UStream TV* and the *Moodle* platform.

*Salut Ombika, je vais enregistrer le texte. Monsieur, la dame de saumon est à droite dans votre assiette. Le riz sauvage est au milieu de votre assiette. Les crevettes sont à gauche. Finalement le cocktail est devant votre assiette.*  
*Mademoiselle, le verre d'eau et le verre de vin rouge sont devant votre assiette.*  
*La bouteille d'eau gazeuse est au milieu de la table à gauche. La brick d'agneau est au coin de votre assiette. Finalement la fricassée de flèves est devant vous dans votre assiette.*  
*Pour vous, le couteau est à gauche de la table. L'assiette est devant vous sur la table.*  
*Mademoiselle, la fourchette est à gauche de votre assiette. La corbeille à pain est au milieu de la table à gauche. Monsieur, la corbeille à pain est au milieu de la table.*

*PaulaL4Ex2* (1A-N1-A-PO-ERE-2013). This speech exercise created by a beginner level student, Paula, was made with the recording device on the social network website *AudioBoo* in 2013. This is a standard activity of listening and repetition of words and phrases and is intended to help students tackle nasal vowels, which present one of the most notable difficulties for Spanish speakers with regards to both listening and speaking.

*Cahier de prononciation française (Leçon 4 – Exercice 2)*

*Exemple : Don*

- 1. Brésilienne*
- 2. Le temps*
- 3. Le pain*
- 4. J'ai faim*
- 5. Ils viennent*

#### ***4.2 Reactions of students***

We have proposed to pupils 3 types of questionnaires regarding their language skills and ICT, in order to assess their ideas and views on this type of innovative pilot training (see



Appendix 3). The number of students who have participated (with the average age of between 18 and 21 years) is as follows: 128 (beginner level), 34 (intermediate level), 15 (advanced level). We will now discuss the most significant results.

The ICT skills of students at the beginning of the course were adequate and sufficient to participate in this type of experience. 95% showed knowledge of the basic web and electronic tools (text editors, presentation programs, web browsers, multimedia DVDs, games and virtual environments, etc.). As far as means of communication, 95% said they had used e-mail, Messenger or had at some point participated in a chat or discussion forum.

By contrast, 95% said they had never participated in virtual learning environments, online collaboration projects, or educational social networks. With regard to the application of digital resources and tools for learning a foreign language, 76% said they had used websites, educational DVDs, and online dictionaries and exercises in previous courses, but only 12% had used an audio recorder in a teaching context. Finally, their legal and ethical behavior with the use of information technology is ambivalent and have therefore recognized to having occasionally illegally acquired resources (songs, movies, software), 63% claim to know how to cite documents and resources and use ICT appropriately. Thus, new tools, resources and learning environments that students have discovered for the first time are different to those mentioned above, for example, online collaboration projects, *Moodle*, *Jamglue*, *UStream.TV*, *Podomatic*, *Chinswing*, etc.

In the questionnaire regarding pronunciation skills at the beginning of the course (CCP), the consciousness of students about their difficulties and articulation errors is primarily reflected: 55% acknowledged having pronunciation problems when it comes to communicating in French, compared with 45% who stated problems of grammar, syntax and vocabulary. 85% declared they had greatest difficulty in articulating sounds, compared to 15% who struggled to understand or differentiate

sounds. 78% said that their difficulties with pronunciation are related to vowels, consonants and semivowels, whereas 22% said the issue lay with rhythm and intonation. Finally, 80% considered that the development of their speaking skills was most crucial, 18% thought writing skills were of most importance and 2% focused on the acquisition of intercultural skills.

In the Final questionnaire: ICT and pronunciation (CFTICP), 56% of students recognized to have improved their skills and knowledge of French in relation to aspects of pronunciation, while 44% believed to have improved in other areas (grammar, syntax, vocabulary, culture, civilization). By means of which they have made progress in pronunciation: 21% through the teacher of the help, 56% from the help of tutors or native speakers, and 14% via the help of other students. In relation with the correction of pronunciation, 44% considered it more useful to hear and repeat sounds, compared to 56% who appreciate the assistance of another person (teacher, mentor, partner). Finally, the methods that students prefer to correct their own pronunciation would be: 50% for articulatory phonetics; 28% for listening repeating the sounds, 15% for the models and games practiced in class, 7% for other methods.

#### *4.3. The correction of pronunciation*

In the learning and practice of a foreign language corrective feedback of pronunciation is an essential element. Traditionally, it has been the teacher who assumes the difficult task of correcting pronunciation, but is usually overwhelmed by uncertainty of the effectiveness of the methods used, as well as by the student's expectations that he will be able to resolve all their difficulties and shortcomings. Unlike grammar or vocabulary, teaching of pronunciation requires much effort and provides little satisfaction, for it is often forgotten or relegated to the background. Fortunately, new technologies can help, as with display systems and voice recognition or the virtual tutors applied to the teaching of languages, but also the students can be crucial when they are actively involved, confident in their abilities and find a way to

correct their mistakes and improve for themselves. The following examples of the correction of pronunciation try to show the central role of the student and the importance of their collaboration for the teaching and learning of pronunciation in their French classes.

Lyster & Ranta (1997) suggest that the teacher use the following types of feedback when teaching a foreign language: explicit correction, recast, repetition, clarification requests, metalinguistic feedback and elicitation. Explicit correction (the teacher gives the correct form and clearly indicates that what the student said was incorrect) and recast (the teacher reformulates the student's utterance, removing the error) are very frequent and effective and are perceived as a communicative confirmation rather than a correction. However, clarification requests, metalinguistic feedback and elicitation (the teacher encourages the student to provide the correct pronunciation by open-ended questions or fill-in-the-gap utterances) encourage motivation and the involvement of the student in the development of independent correction (Engwall, 2006; Engwall & Baltes, 2007; Lyster & Ranta, 1997; Neri et al., 2002).

First question: What kind of feedback should be given? Engwall & Balter (2007) give the following suggestions:

- "Feedback that is varied and of different types (recasts, repetitions, elicitations, and explanations metalinguistic).
- Feedback that is suitable for the exercise and the error.
- Feedback that involves the learner actively in monitoring and pronunciation correction.
- Feedback that is explicit enough to be perceived, but limited enough to not intrude on the exercise more than necessary" (2007: 240).

For our research we have taken into account the different types of feedback mentioned above, which have been implemented by the teacher and tutors in different learning environments both in class and outside of it (*Projet Léon-Grenoble*). However, we particularly wanted to take into account the role of the student

with regards to autocorrective feedback as we believe that is a determining factor in the development of the self-awareness and the self-monitoring of a student, while at the same time being crucial for the effective learning of pronunciation.

The following examples of corrective and collaborative feedback show the centrality of the learner, their interaction and creativity when faced with various authentic communication situations that allow the combination of new tools, environments and tasks. Although the following comments and transcripts allow us to get an idea of the different types of feedback, their characteristics and the teaching strategies implicit in them, it is advisable to consult them in their audiovisual format (see Appendix 1) in order to understand their nature and significance.

*Sara: corPron* (A&P-1A-N1-A-CO-TBE-2006). The next task takes an audio recording made between the teacher and a student at beginner level, Sara, and is published in an educational blog. After reading a text, the teacher focuses on correcting the phoneme [y] or nasal vowels. When faced with a difficulties of articulation the teacher would propose repetition of certain syllables in order to encourage students to spelling their own errors and provide a beneficial articulatory context.

*Etudiante : Bon, alors; c'est contre le mur*  
*Professeur : Attention, répétez : mur.*  
*E. : mur*  
*P : mi, mi, mi, mi ; mu, mu, mu, mu.*  
*E. : mi, mi, mi, mi ; mu, mu, mu, mu*  
*P : Continuez.*  
*E : Il a un blouson.*  
*P : Attention. La nasale A, an.*  
*E : A, an.*  
*P : E, in.*  
*E : E, in.*  
*P : O, on.*  
*E : O, on.*  
*P : Ici, nous avons la voyelle nasale: E, in.*  
*E : E, in.*  
*P : un livre.*  
*E : un livre.*  
*P : E, in. Un livre.*  
*E : E, in. Un livre.*  
*P : D'accord, très bien.*

*DaniElena: vache* (2A-N1-A-CP-TBE-2006). Beginner level students Daniel and Elena created an audio recording about correct pronunciation between two characters. This speaking task which was uploaded into a class blog (*Podomatic - Audio Blog FLE 2006*) focuses on the sound /OE/ and consists of a dramatisation in a form of dialogue with words that contain the sound. Thus a poetic game is created, which also includes the cry of a cow (meuh!), in order to foster a correct pronunciation of the sound, while also encouraging a greater effort in articulatory labialisation (arrondissement) in the pronunciation of a sound which Spanish speakers often relax, confusing it with articulatory variants of the sound /E/ (none labialised vowel).

*Daniel: Alors, Elena, répétez s'il vous plaît: Docteur, mon cœur est malade. Un cœur, des heures, je meurs*  
*Elena: Docteur, mon cœur est malade. Un cœur, des heures, je meurs*  
*D.: Non, non, non, avec plus d'effort articulatoire, s'il vous plaît*  
*E.: Docteur, mon cœur est malade. Un cœur, des heures, je meurs*  
*D.: Bien, bien. Comment est-ce qu'elle fait, la vache*  
*E.: meuh, meuh*  
*D.: Très bien, très bien.*

*TODavidOlga* (2A-N1-A-CO-TRE-2006). This audio recording shows us two students at beginner level (David and Olga), preparing a task published into a class blog. In this dialogue we see a collaborative situation in which the student David proposes the correction of the phoneme [z] with repetitions.

*David: Ecoutez et répétez les mots suivants : maison, oiseau, douze, chaise.*  
*Olga : maison, oiseau, douze, chaise. La maison est bleue. La maison est rose.*  
*D. : Attention, corrigez: maison, rose.*  
*O. : maison, rose, douze, chaise.*  
*D. : Plus d'effort articulatoire : maison, rose, douze, chaise.*  
*O. : maison, oiseau, les amis, cerise.*  
*D. : Très bien.*

*LauraJuan\_CPLecon5* (2A-N1-V-CO-TBE-2005). In the recorded dialogue with *UStream TV* between students at beginner level, Laura and Juan, we witness the reflections that they both make about the pronunciation of the sounds [y] and “ch”, during

the preparation of a task for an educational blog (*Campus Virtuel FLE - Audio Video Blog*).

Juan: C'est contre le mur, sous l'affiche.  
Laura: mur.  
J.: mur.  
L.: mur.  
J.: mur.  
L.: affiche.  
J.: affiche.  
L.: affiche.  
J.: affiche.  
L.: le chapeau.  
J.: le chapeau; répétez: chapeau.  
L.: chapeau.  
J.: Très bien.

*Helena Blog* (5A-N1-V-CO-TBE-2006). The following video sequence recorded by the teacher with a digital camera is based on an educational task that has the intention to share blogs published by the students (*Audioblogs Etudiants Campus FLE*). Two pupils of beginner level (Helena, Patricia, ) and two of intermediate (Olga, Marta) took part, creating a realistic situation in which the student Helena presents and displays her blog on the computer screen, while other students ask her questions and suggest corrections.

Helena: Bonjour, je vais vous montrer mon blog.  
Olga: Et quelle est l'adresse de ton blog ?  
H.: Regarde le blog de la classe.  
Marta: Tu as corrigé le texte?  
H.: Non.  
M.: Répétez : quelle heure.  
Patricia: quelle heure.  
M.: Non, plus d'effort articulatoire: quelle heure.  
P.: quelle heure.  
M.: C'est bien.  
P.: Helena, tu dois corriger l'orthographe du mot « vache ». Tu as oublié un « e ».  
H.: Oui, c'est vrai, merci.

## 5. Conclusion

Considering the observations and results obtained over the course of our experiment we can highlight the following aspects:

- A quantitative increase in the oral production of the pupils. Drawing on our experience with teaching a group of 25-30 students, we found that in the traditional classroom and during one hour of class each student speaks for approximately 4 minutes on average (questions or answers, exercises, reading texts) while in the computer room their speeches can vary between 15 and 30 minutes, depending on the proposed tasks.

- Students prefer real communication situations, as happens in exchanges carried out in types of telecollaborative project (*Projet Leon-Grenoble*), as well as the use of web resources, tools and environments they are familiar with to facilitate communication and collaboration.

- For the joint development of both language and ICT skills, we have seen the implementation of students' creativity (participation in social networks, creating blogs and podcasts), and also their discovery and understanding of the educational role of the Web and ICT, especially in relation to their ability communicate and collaborate.

- It also be noted that some social networks have disappeared (*Chinswing, Evoca, Jamglue*) but they could be replaced by new websites with similar characteristics.

- With regard to the learning and correction of pronunciation we have based our research on the proposed production of oral communication tasks with the aim that the students will speak in class and will be able to balance the development of their written and oral skills. We have tried a variety of methods and tools to encourage the practice of pronunciation, and most importantly, practice the correction of pronunciation. As studies such as Engwall (2006) and Neri et al. (2002) reflect on the feedback in the teaching and learning of pronunciation, we believe that the difficulties and uncertainties in this field (when and how

to correct, various types of feedback, status and motivation of the student) should be overcome with a proper combination between resources, tasks, teachers and students. The feedback is also essential for active involvement and creativity to develop the ability for self-correction, as this article shows.

- The teacher plays a decisive role as an intermediary between resources, tasks and students, accompanying the teaching process and acting as a coach of corrective feedback. In these technological contexts, the teacher's role is to be a pronunciation coach for the student, shifting from dependent (teacher led and assessed) to independent (self-monitoring) practice. With this method, the teacher can provide diagnostic analysis, choose and prioritize features with maximal impact, provide pronunciation models, develop a set of instruction formats and exercises and give cues and suggestions for modifications. The teacher can also promote the independence of the students by encouraging them towards self-awareness and self-monitoring. He gives suggestions on how the students can observe their own speech and practice the self-correction.

## Appendixes

### Appendix 1. Websites cited in this study

Projet León – Grenoble <http://flenet.rediris.es/projetLG/webProjetLG05.htm>

*Oral FLE Audio Projet* <http://flenet.rediris.es/OralFLEprojet/index.htm>

*Campus - UStream TV* <http://www.ustream.tv/campus>

*Campus FLE Ning* <http://campusfle.ning.com/>

Plataforma Moodle Departamento Filología Moderna (Universidad de León)

<http://www3.unileon.es/dp/dfm/moodle/>

Activités pédagogiques FLE <http://flenet.rediris.es/actipedago.html>

Typologie des activités dans les blogs <http://flenet.rediris.es/blog/typactiblogs.html>



*Campus Virtuel FLE - Audio Vidéo Blog* <http://www3.unileon.es/personal/wwdfmmttd/blogFLE/>

*Audio Blog FLE 2006 - Podomatic* <http://campus6.podomatic.com/>

*Audio Blog FLE 2007- Podomatic* <http://campus7.podomatic.com/>

*AudioBlogs Jamglue 2008* <http://flenet.rediris.es/blog/actiblog4.html#Jamglue08>

*AudioBlogs Jamglue 2007* <http://flenet.rediris.es/blog/actiblog4.html#Jamglue07>

*AudioBlogs Etudiants Campus FLE* <http://flenet.rediris.es/blog/actiblog4.html#EtuBlogsAudio>

*Chinswing - FLE Campus*  
<http://www.chinswing.com/pages/discussion.aspx?id=69bc2b25-91ac-4fc1-afd9-fe68b9cee53d>

*Dailymotion* <http://www.dailymotion.com/>

*HotPotatoes* <http://hotpot.uvic.ca/>

*Ning* <http://www.ning.com/>

*Podomatic* <http://www.podomatic.com/>

*StepVoice Recorder* <http://www.stepvoice.com/>

*Voki* <http://www.voki.com/>

*Youtube* <http://www.youtube.com/>

## *Appendix 2. Questionnaires*

### **QUESTIONNAIRE: ICT COMPETENCES (CCTIC)**

Application of the standards of ICT for students - International Society for Technology in Education (ISTE), 2007

1. Digital tools or websites used:

- a. Text editor, photos or videos (MSWord, Paint, web editor, blog, etc.).
- b. Presentation programs (PowerPoint, SlideShare, web page, etc.).

2. Virtual navigation:

- a. Web browsers (Mozilla, Explorer, Chrome, etc.).
- b. DVD multimedia, digital books, games, virtual environments and any others.

3. Use and evaluation of resources, digital tools and the Internet:

- a. Databases, libraries, magazines, websites, dictionaries, Wikipedia.
- b. Critical view on a search engine (Google, Yahoo, Ask, search audio or video).
- c. Criteria for evaluating the credibility or validity of the content of a website.

4. Websites and media used:

- a. E-mail.
- b. Messenger, discussion forum, chat and any others.
- c. Social network (Facebook, MySpace, Tuenti, Twitter, Youtube, Fotolog, etc.).

5. Participation in educational or virtual collaborative projects:

- a. Teaching platform or training outside of the classroom.
- b. Telecollaboration project with other students or another school.
- c. Educational social networks.

6. Application of digital tools/resources in learning a foreign language:

- a. Use of audio recording (MP3, Windows or Web recorder).
- b. Classroom activities (exercises, specialized web, DVD, dictionaries, tasks, etc.).
- c. Independently (courses, DVD, online exercises, dictionaries, etc.).
- d. Projects or exchanges with foreign students.

7. Legal and ethical behaviour in the use of information and technology:

- a. Legal acquisition of resources and tools.
- b. Citation and use of texts, documents and resources in an appropriate manner.

**QUESTIONNAIRE: FLE PRONUNCIATION SKILLS**  
(CCP)

1. My greatest difficulties when communicating in French are:

- a. Problems with pronunciation.
- b. Problems of language (grammar, syntax, vocabulary).

2. My greatest difficulties with French sounds are :

- a. The understanding of, and differentiation between phonemes.
- b. The correct pronunciation and articulation of phonemes.

3. I am aware of my difficulties of pronunciation:

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

4. You think that your classmates or a native French speaker would understand your pronunciation:

- a. Absolutely.
- b. Partly.
- c. Not really.

5. I apply certain techniques to correct my difficulties with pronunciation:

- a. Listen and repeat sounds or words.
- b. Use the different methods to correct myself.
- c. I do not know.

6. My experience in the practice of pronunciation correction include:

- a. Exercises and correction given by the teacher in class.
- b. Activities in the language lab.
- c. Use of digital resources or the internet (courses, DVD, online exercises, etc.).
- d. Correction practices with classmates or native French speakers.

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

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

#### **FINAL QUESTIONNAIRE: ICT AND PRONUNCIATION (CFTICP)**

1. Indicate which tools, resources and ICT technology you have discovered this year:

- a. New ICT tools and resources.
- b. New tasks and technologies.

2. What activities have motivated you in the computer room?

- a. Listening and recording oral sequences.
- b. Participating in a blog or social network.
- c. Participate in the project Leon - Grenoble.

3. How did you find the proposed tasks?

- easy
- appropriate to your level
- difficult
- other

4. How have you preferred to carry out the tasks?

- Individually
- In a group
- With the help of the teacher
- With the help of a tutor

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

- a. Pronunciation (a lot - little - not at all).
- b. Grammar, syntax and vocabulary (a lot - little - not at all).
- c. Interculturally (a lot - little - not at all).

6. What kind of task have aided your progress most with regards to your pronunciation?

- a. Techniques and assistance from the teacher.
- b. Techniques and assistance from tutors or Erasmus students.
- c. Techniques and assistance from other students.
- d. Techniques and assistance gained from ICT.

7. What you find most useful when correcting your pronunciation ?

- a. Listening and repeating sounds or words frequently.
- b. The help of another person (student, tutor, native speaker, teacher).
- c. Participating more by talking and making recordings.

8. What methods will you continue to use in future to correct your own pronunciation?

- a. Greater articulatory effort (lips, vocal cords, nasal cavity).
- b. Models and games used in class (noise, onomatopoeia, rhyme).
- c. Listening and repetition of difficult sounds.
- d. Other

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

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

10. What do you think of your experience with ICT course?  
Will you continue it next year?

- Yes           • No
- Three adjectives to describe it:

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