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Profiling a MALL App for English Oral Practice A Case Study

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Abstract: The field of MALL (Mobile Assisted Language Learning) is in its golden era. Nowadays, there are more than 80,000 apps on the market, around 30,000 of which are devoted to language learning, especially English. Most of them have been developed outside the academic world. [Calle-Martínez et al., 13] and [Martín Monje et al., 14] suggest that, although several studies assess and propose rubrics to analyse the technical, pedagogical and cognitive validity of educational apps [Santiago, 12, Santiago et al., 14], in the field of language learning there is a need for a solid theoretical framework which, based on pedagogical, linguistic and technical precepts, can constitute a guide of good practices in the development and use of MALL apps, as well as an assessment tool to distinguish those apps that lead to successful learning outcomes from those that are mere time-fillers. VISP (VIdeos for Speaking) is a MALL app developed by members of the UNED-based ATLAS research group and the Ghent University-based GOLLD research group to promote oral practice in English, based on pedagogical and linguistic standards. In order to assess its validity it has been tested with two different user groups: Spanish and Belgian students of English as a Foreign Language (EFL). This paper shows the similarities and differences in their use and production. Given the differences in the ways of approaching and using the app, the results show that even though this MALL app was more effective with Spanish students in terms of motivation, Belgian students, though less motivated, performed better. In this light, the present study is in line with [Byrne, 14], concluding that this type of MALL app should be 'localized' according to the learners' cultural and linguistic factors, and suggesting that pedagogical standards of MALL apps should also take into account cultural factors.

Keywords: English as a Foreign Language (EFL), Mobile Learning (ML), Mobile-Assisted Language Learning (MALL) profiling, Technology-Enriched Learning (TEL), oral skills **Categories:** L.3.6

1 Introduction

Nowadays, most university students are expected to be digital natives who carry their mobile phones with them everywhere they go. Not an hour passes by without them checking Facebook, WhatsApp, Instagram, Twitter, etc. Therefore, the logical step within the field of Foreign Language Learning (hereafter FLL), already heavily intertwined with ICTs (Information and Communication Technologies), is to offer mobile apps for language learners, which enable the latter to 'play' with them anywhere and at any time. In fact, there are already around 30,000 apps available for

learning languages, most of them English as a Foreign Language (EFL), and this number is growing exponentially. The market is developing so fast that it is difficult to assess the academic validity of all the apps available. Mobile devices are increasingly common, but the academic field of MALL is still in its infancy [Byrne, 14]. Although in recent years, they have gained increased interest among language researchers [Godwin-Jones, 11; García Laborda & Giménez López, 10; Kukulska-Hulme, 12; Calle-Martínez et al., 14], only a few scholars [Zervas, 13; Martín Monje et al., 14] have studied the convenience of applying the Common European Framework of Reference for Languages [Council of Europe, 01] to the development of MALL apps that are serious and coherent, based on previous research proper of the field of teaching and learning of second languages. They suggest the need for a MALL framework to develop apps. There are also many unanswered questions concerning mobile platform effects on learners' activities and decisions [Stockwell, 10], while at the same time language app developers are working fast. Nonetheless, [Kukulska-Hulme, 15] answer some of these questions, with the proposal of the first pedagogical guide of good practices for teachers, to design their lessons incorporating MALL activities. They propose, hence, the first framework for mobile pedagogy for EFL. In the present study we do not focus on the pedagogical implementation of apps in the classroom, as [Kukulska-Hulme, 15] do, but on the pedagogical and educational value of one app itself that has been developed as a native app, in [Santiago et al., 15] terms, id est, an app that can be used anytime and everywhere, in and outside the classroom and by any independent user. In this sense, the app under study here, VISP, was implemented in an EFL setting as an extra task, not related to other classroom topics.

In order to meet the needs and expectations of the oncoming wave of digitallyproficient pupils, the education system is currently modifying its teaching methods. Emerging ICTs present interesting opportunities, unlimited potential to multiple uses for autonomous FLL in the context of globalized online spaces (Flickr, YouTube, FanFiction), where students and users can share and discuss a range of digital artefacts [Benson & Chik, 10]. The teachers/tutors/coaches/instructors -if anybecome merely facilitators who give support and help out when needed. Technologyenriched Learning (TEL) enhances motivation and has proved to be beneficial for FLL [Ma & Kelly, 06]. The use of technology builds learners' confidence and enables them to develop their own learning process and strategies [Sun & Yang, 13]. According to [Daggett, 05], a learner-centred teaching helps pupils develop transferrable skills, such as leadership, teamwork and other competences necessary and relevant to address challenging issues in everyday life and the needs of the future workforce. In this sense, mobile learning is becoming a popular approach to learning with technology, particularly with the increase of BYOD (Bring Your Own Device) approaches [Norris & Soloway, 11] to classroom learning, where students are using their own mobile devices to learn [Parsons, 14]. This approach, in combination with the flipped classroom [Tourón & Santiago, in press], contributes to develop learners' autonomy and talents. However, despite the increasing call to integrate new technologies in FLL to promote students' interaction and engagement in their learning [Carter, 10], the students' perceptions about the usefulness of ICT for the development of all skills and areas of language in blended courses still need to be explored [Bueno-Alastuey & López Pérez, 15]. For all this, standards are needed, and

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one way to define them is by testing apps with learners, analysing their learning outcomes at different levels and taking all factors that influence them into account.

In this sense, the present study seeks to examine the students' willingness to get involved in their own learning process by seeing the effects of adding a MALL app to their daily face-to-face EFL instruction. That is, to observe the level of motivation towards a MALL app depending on the students' profile. The authors are involved in the development of an Android language-learning app called VISP (VIdeos for SPeaking), which will be available in Google Play soon. This app has been tested with two different groups: Spanish students of EFL and Belgian (Dutch speaking) students of EFL. We have analysed their performance when using VISP -which is aimed at helping users practise and use specific vocabulary when speaking in English-, as well as their different perspectives about the usefulness of such a MALL app. The main question was: What are the differences, if any, between the two groups? A secondary question was: What challenges did they face while performing the task on their mobile phone? Up until know, learner demographics have been analysed by very few authors. [Gwee *et al.*, 11: 1] studied the role of gender, by analysing how this factor can be significant in the learning outcomes of users of a mobile learning game, Statecraft X. They showed that, while boys spent significantly more time playing than girls, there were no significant gender differences in their scores, thus concluding that "higher engagement in gameplay alone does not necessarily lead to higher-order learning outcomes."

Other factors have been studied by [Byrne & Diem, 14] by means of a survey that was included in a FLL app developed by the authors themselves. In an attempt to provide a methodological foundation for research into learner habits and preferences, they analysed the age, gender, first language and user-level profile of the EFL MALL app user. Their quantitative study (almost 4,000 respondents) showed that there are indeed differences in age, gender, level and self-assessment of their MALL app users: most users are under 35, there are slightly more male users than females –with not really significant rates–, most of them are beginners or lower-intermediates. It is remarkable that the majority of respondents from Asian origin evaluated themselves below their actual level, as opposed to their French, Spanish and German counterparts.

Whereas [Byrne & Diem, 14] focus on the users' level, gender, L1 and age, our study focuses on the respondents' approach to the app due to their cultural differences and nationality. [Byrne & Diem, 14: 15] leave one question open for future research: "What are learner preferences when it comes to MALL apps?". In the present study such question is addressed, by means of a limited case study that involves 20 students of two nationalities, as described in section 3.

Before entering into the details and analysis of our app, we wish to point out the benefits and limitations of mobile learning and the use of MALL apps.

2 Mobile Learning and MALL apps

Following [Traxler, 10], mobile technologies are more unrestricted and omnipresent than previous computer technologies. They are an "extension of physical space through the creation and juxtaposition of a mobile social place" [Traxler, 10: 151]. Mobile learning is in its golden era, and it will go on increasing. [Traxler, 10: 13] has

pointed out at the power of the ICTs and of mobile devices in the near future, which will not only be a support for learning but also change our way of learning:

Mobile devices will soon support every pedagogic option including the didactic and the discursive, the individual learning and the social (...). Mobile devices affect many aspects of the process by which knowledge, ideas, images, information and, hence, learning material is produced, stored, distributed, delivered and consumed.

There are aspects that are exclusively related to the field of mobile learning: personalized learning, based on user-generated contexts [Traxler, 11]. Thus, the technology needed for mobile learning is also much more varied and flexible: personal digital assistants (PDAs), smartphones, iPads, iPods, netbooks, mediaplayers, etc. According to [Parsons, 14], it was in 2008 that the first mobile learning apps began to appear in the App stores for both Apple and Android devices, enabling mobile learning apps to be distributed for both platforms. Following all these authors' views, with the term *mobile* we refer informally to anything that can be used when working around in a portable device that is not a laptop, also in line with [Seifert, 15: 2], who describes the pervasiveness of mobile learning as the possibility of being implemented "24 hours a day, 7 days a week. It allows mobility at five levels: mobility in the physical space, technological mobility, mobility in the conceptual space, mobility in the social space and decentralized learning (Sharples et al., 2007)". Mobile learning is also learner-centred, and the user becomes the indisputable protagonist of his/her own learning process [Kearney et al., 12]. Going further, [Squire, 07] points at the fact that mobile learning is an individual process, and very personal. We believe, in this line, that mobile apps should reinforce this sense of ownership and autonomy of the user's learning process [Kearney et al., 12], and this is one of the aims in VISP.

If we focus on a specialized area of mobile learning, MALL, under discussion here, following [Viberg, 13]'s definition, *MALL* refers to mobile technology use for learning language. It is a specialized area of mobile learning. [Hockly, 13] establishes its emergence in 2009, with the first app to learn languages, developed by the British Council. In this sense, the term *MALL* is intimately linked to the development that mobile technology has experienced in the last decade as well as the wide variety of mobile devices, users and uses included, in this growing world.

[Viberg, 13] provide an in-depth review of MALL research within the specific area of second language acquisition (SLA) during the period of 2005-2012. They outline the different research approaches, theories and methods, technology, and the linguistic knowledge and skills' results. Their findings show that while in the past (2005 to 2009) most innovative MALL projects were based on tasked-based SMS communication, nowadays more advanced multimedia and intelligent learning systems are used. Many studies focus on the design of MALL systems and on evaluations of their effectiveness by means of small-scale descriptive studies.

In the present work the same approach is followed: by means of a qualitative case study we pay attention to the effectiveness of the VISP app on two different user groups, coming from two different nationalities.

Regarding oral skills, there are multiple resources to practise and improve students' oral competences using mobile technology. For example, [Kim *et al.*, 13] report on a project based on using mobile phones outside the classroom. One of the

most successful activities was recording and sharing videos on *YouTube* to practise students' oral skills. Podcastig has been one of the pioneering activities in MALL to improve oral competences [Rosell-Aguilar 13, 15].

Nonetheless, previous work of the ATLAS research group, in which a number of EFL-teaching apps were evaluated, has identified the need to strengthen the pedagogical framework of MALL apps [Arús *et al.*, 13; Martín Monje *et al.*, 14; Pareja-Lora *et al.*, 13; Castrillo *et al.*, 14a]. After examining the technical features and limitations of the most salient EFL MALL apps available, as well as their pedagogic suitability with rubric-based evaluations [Arús *et al.*, 13], they conclude that some apps that are attractive to students do not have a sound linguistic content and, what is more important, most apps lack theoretical and methodological underpinnings. In this context, [Castrillo *et al.*, 14a: 41] explain the goals and motivation behind all the apps developed by ATLAS research group, including VISP:

This represented a challenge that our group decided to face by engaging in the development of second language learning apps that are interesting, attractive and pedagogically sound at the same time.

In this light, the ATLAS group undertook the creation of a number of MALL applications in the broader context of language for specific purposes apps. These apps should (i) not be a mere mobile version of traditional online courses, (ii) provide quality teaching and practice, and thus, (iii) have a sound pedagogical, linguistic and methodological base. Therefore, a suitable methodology had to be chosen for their development. For this purpose, we decided to use the conceptual framework and methodology presented in Kukulska-Hulme (2012). This methodological framework was supplemented from a linguistic and pedagogical point of view with some suitable linguistic theories, such as the Systemic Functional Grammar [Arús, 08; Halliday & Matthiessen, 04] or the socio-linguistic theory [Canale & Swain, 80], with an emphasis on meaning and communication, and a goal to develop learners' communicative competence.

[Castrillo *et al.*, 14a] also suggest that research on MALL is progressing at a good pace on the best practices around mobile devices as learning tools [Castrillo *et al.*, 14b; Kukulska-Hulme *et al.*, 15]. In line with these authors, we believe that apps are viewed as an effective FLL formula because of their flexibility: they can be used individually or collaboratively, they can incorporating the user's own preferences and environment into the learning process, they are pervasive, etc.

In what follows, we first present the theoretical and methodological underpinnings of VISP, the first MALL app that is based on a very specific linguistic content, namely, the creation of an audio description (AD). We also add the precepts of the task-based approach, which is also part of the umbrella-term of communicative approach and, therefore, derives from the socio-linguistic theory of [Canale, 80].

3 VISP: An audio description-based app

3.1 The use of Audio Description in FLL

Audio description (AD), one of the most recent modes of multimodal audio-visual texts, was initially created for a specific audience (the blind and visually impaired)

and for a special purpose (to make the visual content of an event accessible by conveying it in spoken words). Like other modes of audio-visual texts, such as subtiling and revoicing, it is a non-autonomous form of linguistic transfer, where the lexical choices and the syntax of an AD must be connected to the audio and the image of the audio-visual material. Consequently, the coherence of an AD is based on the semiotic cohesion, the interaction between the sound and the image or, as [Remael, 14: 136] puts it: AD entails "creating a new coherent audio-visual text involving intersemiotic cohesion or interaction between all the information channels of the source text and the newly added translation". Creating an AD means selecting, retrieving, structuring and reformulating the relevant information from the visual content in a way that the users can understand and enjoy it. Although it was first meant to serve as a tool for integration and social inclusion of the blind and visually challenged people, it soon proved to be very effective to foster the degree of comprehension of audio-visual documents of sighted people as well.

Due to its social relevance and its multidisciplinary approach, it has become more and more attractive for scholars, who have studied this kind of intersemiotic translation from different points of view: From a linguistic point of view, scholars such as [Piety, 04; Bourne & Jiménez Hurtado, 07; and Salway, 07] have studied its syntactic, grammatical and pragmatic aspects, whereas [Ballester, 06] has described the macro-structure, the cohesion and coherence mechanisms of the AD discourse. Audio describers follow established guidelines that consider telling a story as their communicative function. [Matamala, 06] has addressed the competences and skills of the good audio describer, who has to be aware of his/her role as a social intermediary. As for the linguistic aspects, she emphasizes that audio describers need an excellent command of language and conventions. [Díaz-Cintas, 07] offers an extensive review of the competences of audio describers, including -besides linguistic competencescompetences related to content (knowledge of disabilities, accessibility, semiotics of the image, labour market, laws, theatre, cinema, opera...), technological or applied competences (computer literacy, willingness to update and learn new software...), and personal and general competences.

[Hyks, 05] stressed that AD styles might differ from one country or culture to another. Also [Orero & Vercauteren, 13], who described universals in narrative clues processing, have worked on culturally bound audio description. They conclude that the description of body expressions and gestures in an objective manner differs culturally. Additionally, [Palomo López, 10] links relevance theory to the theoretical framework of Film Studies and the analysis of meaning provided provided by [Chaume, 04: 165]. She also focuses on the social role AD plays with regard to the education and literacy acquisition of blind children. [Schmeidler & Kirchner, 01] reported on the benefits of adding AD to a program, which significantly increased the factual information the participants absorbed. It also enhanced the participation's evaluation of the programs and their level of comfort in discussing them with sighted people. [Peskoe, 09] explored the educational benefits of AD for both blind and sighted preschool children, showing that new pieces of information rendered by the AD in addition to the images opened up much dialogue and created a greater social and cultural awareness. The depth of information provided with AD helped to develop more sophisticated language skills. That brings us to the use of AD as a didactic tool in language learning, which is discussed below.

Regarding its application as a didactic tool in the FLL classroom, it is motivated, among other things, by the multimodal nature of audio-visual texts, which combine the verbal sign with images and sound, and represent a stimulating background for language learners. Since it provides information through multiple channels, it strengthens memory retrieval [Moreno, 07]. According to the Dual Coding Theory [Paivio, 86; Sadoski & Paivio, 01, 04], information can be stored and retrieved in both non-verbal and verbal forms, and this dual capacity can facilitate learning because the same information is available through multiple channels. In the same vein, the Cognitive Theory of Multimedia Learning [Mayer, 01] states that the processing of information enhances when two channels, the auditory and the visual, provide it. Back in 1992, studies on multimodal learning which compared learning with and without AD indicated that students with no narration perform significantly worse on problemsolving tests than those who heard the AD [Mayer & Anderson, 92]. For the first time, [Clouet, 05] proposed the use of AD as a didactic tool to promote writing skills in English as a FL. [Martínez Martínez, 09] conducted a successful experiment on the possibilities of self-learning vocabulary in a second language through AD.

In Spain, at the University of Granada, several research projects such as TRACCE¹ and AMATRA² (Accessibility to audio-visual Media Through TRanslation), explored the possibility of tagging a multimodal corpus based on AD in order to extract different types of information on discourse phenomena. Based on their findings, packages of tasks were designed to increase students' awareness of the translation process and its related problems as well as the techniques needed to overcome those difficulties. In the same vein, the ARDELE (Audiodescripción como Recurso Didáctico en Enseñanza de Lenguas Extranjeras-Audio description as a Didactic Resource in the Teaching of Foreign Languages) project (2010-2015), carried out at Ghent University (Belgium), aims to explore the benefits and limitations of the use of AD in the FLL classroom as well as in translation courses. To date, the results on the analysis of the students' learning outcomes show that AD enhances the lexical and phraseological competences: the students learned to use accurate words, synonyms, adequate collocations, and more idiomatic grammatical structures, such as the use of pronouns, the gerund, the pronominal verbs in Spanish [Ibáñez & Vermeulen, 13]. Since AD can be rendered recorded (based on a written script, the socalled Audio description script, hereafter ADS) as well as live, it serves to train both, written and oral competences [Ibáñez & Vermeulen, 14]. Moreover, with regards to the social value of AD, the fact that the tasks are useful not only to communicate something but also to present the world of images to blind and visually impaired audiences was highly motivating for students and contributed to foster their intercultural competence [Vermeulen & Ibáñez, forthcoming].

3.2 Overview of the app VISP: VIdeos for SPeaking

VISP is the first MALL app that is based on AD. As mentioned above, AD, as a mode of audio-visual translation, has been recently applied to the FLL classroom with successful results. Therefore, we decided to take a step further and implement it into

¹ Funded by the Science and Education Ministry.

² Funded by the Andalusian Government.

an app. VISP has been conceived for the promotion of oral skills, specially speaking. It addresses the need for MALL apps, and also the need for pedagogical standards. In this sense, VISP has been conceived as an example of applying pedagogical standards to a mobile app. Therefore, it departs from a specific theoretical background as well as from recent research on the field of FLL. In this sense, the following series of premises have been considered.

Firstly, from the language learning perspective, VISP follows the principles of the communicative approach to language teaching and learning, and within it, of the taskbased approach [Willis, 07]. In this sense, our application consists of a communicative activity whose goal is to achieve a specific learning objective [Ellis, 03]. Tasks are the backbone of VISP. VISP is in line with the current trend of applying audio-visual translation to language learning and teaching, as in [Díaz Cintas, 08; Talaván, 13, etc.]. It is conceived for B1 students of English (Independent user, according to the CEFR, 01) who are interested in practising their oral skills while improving their lexical competence, which is considered by many as the primacy aspect for SLA [Tight, 10]. Exposing the learner to audio-visual material containing specific lexicon and making him use it, will help him learn it more efficiently. In this respect, as mentioned above, VISP is therefore the first MALL application based on one modality of audio-visual translation: AD.

Secondly, from the perspective of mobile learning, this application is conceived for those moments when the users have nothing else to do: when they are waiting for the bus, the metro or the train, or in a waiting room. To start a (new) session and work with it, users only need a few minutes. They can pause the application, and then continue or repeat the activities whenever they want. The activities of one session, altogether, take an average of 30 minutes, but users may decide to devote more or less time, depending on their time, skills and motivation. VISP is currently compatible with Android. Illustration 1 shows the home screen of the application:

AD is the learning technique used in VISP, once proven its value within the traditional classroom setting [Ibáñez & Vermeulen, 13, 14]. Nonetheless, bearing in mind that instructional design that may be suitable for desktop computers does not transfer well to mobile phones [Batchelor & Botha, 09], the AD task has been customised by taking several decisions, as described in [Ibáñez et al., forthcoming]. Briefly: a clip was selected from the film Moulin Rouge [Luhrmann, 01], which is only 30 seconds long, as opposed to the clips that have been used when working with AD in the classroom [Ibáñez & Vermeulen, 13, 14), which last around three minutes.

In normal circumstances, following the conventions of AD [Matamala & Orero, 07] an audio describer is allowed to use 180 words per minute. In this particular case, the users will employ a maximum of 60 words. The selected clip does not contain dialogue, or much action. This gives users time to describe what they see). The ADS of the whole clip is provided below:

A handsome young man, Christian, in his twenties, with dark hair and beard, takes a new line on his typewriter. He puts his hand to his forehead. Through his open window lies Paris at night. Tearfully, he stares out of the window, at the Moulin Rouge. He turns back to the typewriter. The Paris cityscape.



Figure 1: Home screen of VISP

Clips contain the language material of the task, and therefore they should also be selected on the basis of their narrative content, according to the vocabulary that the users have to learn. In this sense, the ADS above includes a number of lexical items that are part of the curriculum of B1 learners, as proposed by the [Council of Europe, 01], such as phrasal verbs and prepositions. VISP consists of four basic steps, beginning with a very brief introduction to AD. The image below shows the *Introduction* screen:

Third, from the perspective of mobile apps design, a great effort had to be made in order to select the most essential information about AD, for reasons proper of mobile learning. For smart phones and tablets sentences have to be short and direct [Fling, 09]. In digital devices, words are not read, but scanned, which means that the text has to be concise in order to be readable. In an eye tracking visualizations study where 232 users looking at thousands of Web pages were recorded, [Nielsen, 06] found out, that users often read Web pages in an F-shaped pattern: two horizontal lines followed by a vertical line. For this reason, all the important information should be located along these lines. Thus, in order to enhance readability, we created bulleted lists where each line includes some basic information under a general heading.



Figure 2: Introduction screen in VISP

As can be seen in Figure 2, the introduction screen has two buttons. The one above (Sample Audio Description) directs the users to a real AD sample, consistent with the idea of using as much audio-visual material as possible and of avoiding longwinded explanations. By clicking on that button, the users gain access to a clip of 5 seconds, extracted from Memoirs of a Geisha [Marshall, 05] with AD. This introduction is intended as a warming-up listening task. After listening to this example, the users can read a very basic introduction to AD, and a bulleted list of three simple rules on how to audio describe. Finally, the button at the bottom of the screen (Before going on, please register your data and check your previous knowledge here) takes you to a Google Docs questionnaire, where users can fill in their personal data: name, surname and e-mail. They also complete a short test, which includes language content that will appear (without them knowing) on the AD task, and therefore on the ADS. Also, this questionnaire includes a link to the YouTube trailer of the movie Moulin Rouge, from which the clip is obtained. This video is also meant as a part of the warming-up phase, in the sense that users can start familiarizing themselves with the audio-visual material that they will encounter immediately afterwards for the activity. The 10 fill-in language questions of the questionnaire are drafted in language with the necessary vocabulary to accomplish the AD task. This will allow for scaffolding in their knowledge of English, in line with the constructivist perspective of learning of [Seifert, 15], and with this previous knowledge, users are expected to perform better in their task.

Once users have been introduced to AD, watched an example, and filled in their data, they can proceed to the next step, the *Instructions* screen. These instructions are very simple, brief and direct, about the task to be performed: to record an AD of a clip. In the *Practice* screen, users can watch the clip as many times as they like, by clicking on Play and Rewind, until they feel ready to record their own AD. When this moment comes, they will have to click on Record. After recording themselves, they have the option of watching, and listening to, their own performance. This permits them to assess themselves, to decide on their own accuracy, and to choose when their task is finished and ready to be sent. Once the users are satisfied with their AD, they can send it to the coaches by pressing the button Finish. Their mp3 recording is then sent to an e-mail address, and is kept in their own e-mail in the Sent e-mails folder. In this last screen, the users just fill in their name, and send their recordings. In this way, we can keep track of all the users' tasks. If the users have filled in their personal data in the initial questionnaire, they will receive feedback on their performance. Besides, this screen also includes a self-evaluation section, to which the users access by pressing one button that is just below the send button: In order to assess and reflect upon your performance and get more information of how to audio describe click here. This button directs the users to a Google Docs post-questionnaire.

On the one hand, this final questionnaire has been conceived to obtain data on the users perception of the application and on the idea of using AD as a learning tool, and, on the other, to help them assess their own performance. For this, it includes the original clip with AD, performed by a native, as well as the ADS. Thus, they can both listen to it while they reads the AD, and see how the audio describer talks during the gaps with no relevant music or sound. Another more specific self-assessment, where reflection on their performance is elicited, consists of comparing, more specifically, their own AD with the several parts of the original AD. For this, several questions are included related to the language used and with suggestions. This last phase of the app is aimed at eliciting the user's reflection on his/her own learning process. Finally, the users can leave some comments in an open question format, which will allow this paper's authors to improve the app in a future version.

4 Aims of the study and procedures

Our main objective in the case study presented here was to analyse the correlation between our app's design and contents and the language learners' nationality and learning context, taking into account one variable: the users' nationality, thus their socio-cultural and sociolinguistic background. Therefore, the main research question was: *Does VISP –a MALL app to practise oral skills– have the same effects on Spanish and Belgian (Flemish) students of EFL?* As [Parsons, 14: 13] suggests, profiling app users by categorising them according to age, nationality, language or role, among other categories, is of paramount importance if we want to design pedagogically sound apps:

Mobile learning solutions cannot be considered independently of the learner group for which they are intended. The learner category is mainly concerned with particular groups of individuals whose physical or social constraints lead to specific goals and needs. Groups of learners might be categorized in number of ways, for example by age, nationality, language or role, among many other possible categories. Age is an important learner category, because content and learning style need to be age appropriate. This does not just mean differentiating between the stages of institutionalized schooling, such as higher education (Alexander, 2004) or school, but may also involve other age groups outside of formal institutions, such as the elderly (Lam & Chung, 2009) [...]. The nationality and/or language of the learner can also be a major factor, since some mobile learning applications are designed for a particular country or wider geographical context, often focusing on issues in developing countries, such as in Africa (Traxler & Leach, 2006; Lwoga, 2012), or India (Kumar et al., 2010), while others are specifically about teaching foreign languages (Viberg & Grönlund, 2013).

In order to obtain the necessary data to analyse, we compared the results of two different groups of users: a group of Spanish students of EFL who were on an Erasmus interchange at Ghent University, and a group of Belgian (Flemish) students of EFL. Both groups were composed of 10 students aged between 22 and 25, who were studying at Ghent University. They were enrolled in their third year of the Bachelor degree in Applied Language studies, and they were attending English courses with the goal of reaching a B2 level. The Spanish students were asked to try VISP in the first semester of the academic year 2014-2015. The Belgian Dutchspeaking students were in the second semester of the same year when they were asked to try the app. The main categorical variable of analysis was, therefore, their nationality: Spanish nationality in the case of group A and Belgian nationality in the case of group B. We may consider the fact that the data may be slightly affected by a "noise", since the Spanish Erasmus students, who were not in their own country at the time, may not be fully representative of the average Spanish user. Nonetheless, we consider this sample, to be within the parameters of normal sampling distribution, because previous tests on VISP [Ibáñez & Vermeulen, 15] with Spanish students showed similar attitudes and reactions towards it. [Hofstede, 05], in his cultural dimension theory, establishes four cultural dimensions that can be taken into account at the time of localising a product: power distance, collectivism versus individualism, masculinity versus femininity, and uncertainty avoidance (short-term oriented societies are less worried about uncertainty that long-term oriented societies). Out of these four dimensions, two can be relevant for our study: collectivism versus individualism and uncertainty avoidance. In these terms, Spain is identified as a more short-term oriented culture, focusing on achieving short-term results, and as a collective culture. On the other hand, he locates the Belgian (Flemish, that is, Dutchspeaking) culture as a long-term oriented society, where good quality prevails over quantity, and is considered an individualistic culture. In section 5 below we see how these features are actually reflected in the students' performance.

In this small-scale qualitative case study (given the reduced sample of 20 subjects and recordings) we also use some basic quantitative tools, such as counting the media of words used by the respect groups, as seen in section 5 below. The instruments used to gather the data were those integrated in the app itself: the pre and postquestionnaires, and the students' recordings. It should be remarked that, given the nature of this study, we do not analyse the results of the pre and post questionnaires, but we take the number of respondents into account. What we wanted to see is whether the students used the app completely, that is, whether they followed all the four steps of the app, as described in section 3 above. This involves going through the four screens by arranged order, including going to the pre-questionnaire in the first screen (1. *Introduction*), and ending up sending their task and filling in the post-questionnaire in the last screen (4. *Finish*). Our observation is also a data-collection instrument, given the fact that the students were under our controlled observation during the whole process.

As for the procedures, they consisted in sending the app by e-mail to a selected amount of students, so they could download it and try it. The downloading was an easy and simple process, and the time they took to perform the whole task was between 15 and 30 minutes, as expected. The task was not introduced as an assignment, nor was it assessed with a certain weighting. Thus, the app was tested as a native app (in [Santiago *et al.*, 15] terms), independently of the FLL classroom everyday activities, so it was not part of their curriculum. Students were invited to complete the task on a voluntary basis. None of the groups was given further indications apart from the fact that it was an app to practice English. In both groups the app was presented and passed to the students by us, who were not the actual teacher in their daily EFL instruction. Our attitude towards the students was therefore not a learner-teacher or teacher-learner approach, but a user-oriented one. We were there exclusively as coaches, assessing them in the downloading process.

5 Results and Analysis

In terms of the students' attitudes towards the app, as just mentioned, the results of the present limited case study show that Spanish students were more open and positive towards VISP than their Belgian counterparts. Group B really needed encouragement from the coaches and precise instructions on how to install the app on their phones (changing the security) without damaging it. Also the fact that they had to use their own Internet data was an obstacle for them. This was not the case for group A, who used the WiFi available and they connected to Eduroam, Spanish students were also more willing to record themselves in front of their classmates, while Belgian students were more reluctant to do so.

As for the pre and post-questionnaires, all the 10 Spanish students filled both of them in, whereas only three of the Belgian students completed the pre-questionnaire, and two of them filled in the post-questionnaire. As said before, the pre-questionnaire prepares them to the task while the post-questionnaire is the step where users can assess their own performance and compare their own recording with the original AD of the clip. Also, the users can leave some comments and rate the app. The Spanish students rated VISP positively (with a media of 3.74, where 1 was the lowest rating and 5 the highest) while the two Belgian students were more critical: one of them rated it with a 3, and another one with a 2. That is, VISP does not pass their evaluation. Besides, the fact that all the Spanish students filled in this post-questionnaire, as opposed to a few of the Belgian students, should be taken into consideration when developing MALL apps in the future. Spanish students seem to be more willing to receive feedback than Belgian students, as well as to give it. This is seen in the fact that half of the Spanish students left comments about the app, all of them positive, and they included suggestions for the future, while none of the Belgian

students did. It is in line with [Hofstede, 05]'s cultural dimensions theory mentioned above: individualistic cultures avoid showing their views on facts. This is also reflected in language: [Goethals & Depreitere, 09], quoting [Haverkate, 03], analyse the cultural differences of the Spanish and the Belgian (Flemish) cultures and how they are reflected in the pragmatics and in communicative acts. These authors remark that in the Flemish culture, it is of primary importance to respect the individuality of the other, by pragmatically emitting signs that involve asking for permission to invade the others' space, while in the Spanish culture, a group-oriented culture, the individual space is at the service of the social group interaction. This cultural distance is also reflected in the attitude towards the different features of the app: Belgian students are less willing to give personal data or personal opinions. In the light of these data, then, we could deduce that questionnaires in apps are not motivating for Belgian users, while Spanish users seem to accept them better. If we want to create a playful app to practice oral skills in a ubiquitous way, this should be taken into consideration.

Regarding the step of recording an AD (in the *Practice* screen), all the students did it. Therefore, we can deduce that all the students understood the importance of this step, which is in fact the main and essential part of the whole task. As for the transcriptions of the students' recordings, they were analysed in detail, see below, in terms of accuracy, fluency and communicative competence (measured here in terms of the amount of words used to describe the three parts of the clip) and correctness (measured here in terms of the grammatical or lexical mistakes made). Table 1 contains an account of all the main words of the original ADS and the words that the students used. In case the students used other words to express the same concept, they are included in column 4, under the rubric *What they used instead*. The number of students that used each of these expressions is mentioned between brackets:

	Spanish students	Belgian students	What they used instead
A young man	7	0	Gentleman (1 Spanish)
A man	0	8	-
Christian	0	2 (instead of <i>man</i>)	
Dark hair/beard	0	0	
Forehead	1	0	Face (3 Spanish/1 Belgian)/ Head (3 Belgian)/
Typewriter	6	3	Typing machine (2 Belgian)
To stare	1	1	Look through (7 Spanish)/Look outside (4 Belgian)/ /*Look at (1 Spanish)/*Look out of (3 Belgian/1 Spanish)/
To put	2	1	Touch (3 Spanish)/Rub (2 Belgian)/
Tearfully	0	0	Crying (1 Spanish/4 Belgian)/sad (1 Spanish)/Desperately (1 Belgian)

Table 1: Accurate vocabulary (based on the words that appear in the original ADS)

As can be observed in Table 1, none of the students used certain words that appear in the original ADS, such as *tearfully, beard*, or *dark hair*. In the case of *tearfully*, one Spanish student and four Belgian students described the act as *crying*, one Spanish student used the word *sad* and one Belgian student used the word *desperately*. In this case, then, the Belgian students performed slightly more accurately than the Spanish, and they showed more creativity. In the case of *beard* and *dark hair*, none of the students found it was relevant information to mention. Other lexical items, such as *forehead*, were used inaccurately by both Spanish and Belgian students, who used more general words such as *face* or *head*. In the case of the verb *to stare*, both groups showed similar little accuracy: only one user of each group used this same verb. As for the rest, Spanish students look *outside*.

In what follows, we analyse the communicative abilities employed by the users, checking whether they described all the images of the clip in a way that a blind person would be able to understand the unfolding events on the screen. In order to do this, we have divided the clip's original AD into three parts, each of which contains one whole descriptive and relevant event. Table 2 below shows the amount of students that described this part:

	Spanish Students	Belgian students
Number of students	7	10

*Table 2: Description of part 1 (*The handsome young man, Christian, in his twenties, with dark hair and beard, takes a new line on his typewriter*)*

As we can see, all the Belgian students described this part, while there were three Spanish students who omitted it. This is because, instead, the Spanish students described things that are not included in the original AD, regarding the scenery, as seen below in table 5. As for table 3 below, it shows opposite results:

	Spanish Students	Belgian students
Number of students	10	8

 Table 3: Description of part 2 (He puts his hand to his forehead. Through his open window lies
 Paris at night. Tearfully, he stares out of the window, at the Moulin Rouge)

According to the data in Table 3, all Spanish students described (not as accurately as in the original AD, though) this part of the clip, while two Belgian students omitted it. Finally, almost nobody described the last part of the clip, as shown in table 4 below, probably due to time limitations:

	Spanish Students	Belgian students
Number of students	1	1

Table 4: Description of part 3 (He turns back to the typewriter. The Paris cityscape)

What is remarkable is that, as seen in table 5 below, most Spanish students described elements that were not included in the original AD, related to the scenery, such as the

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Cancan dancers, the windmill with lights, this was not described by any of the Belgian students.

	Spanish Students	Belgian students
Number of students	9	0

 Table 5: Description of elements not described in the original AD Script (Can-can dancers, light bulbs, a windmill, a party...)

As for the number of words used to audio-describe the clip, although none of the students managed to get close to the 55 words that the original AD contains, there is a remarkable difference regarding the language used by both groups. Spanish students used an average of 28 words, as opposed to the scarce 20 words used by the Belgians.

	Spanish Students	Belgian students
Average number of words used	28,7=28	20,3 = 20

Overall, we can observe that cultural differences are a factor that has a clear impact on the way the users approach VISP. Given that VISP is meant to promote oral competences and accuracy, it seems to be more useful and attractive for Spanish students than for Belgian ones, even if, as shown in table 7 below, the Spanish made more mistakes than the Belgians, both grammatical and lexical:

	Spanish students	Belgian students
Grammatical mistakes	He *stop writing (1)	
	He *look (1)	
Lexical mistakes	He looks *at (1)	*He looks out of the
	He looks *to (2)	window (3)
	He sits *in front of a	
	typewriter (3)	
	? writing machine (1)	
	He puts his hand *in (1) his	
	*front (1)	

Table 7: Mistakes per group

As seen in Table 7, Spanish students made several mistakes, both grammatical and lexical, although lexical mistakes were more frequent. Belgian students seemed to be much more cautious, and probably sent their recording once they were confident that it was flawless. The only mistake they made was including the preposition *of* in the verbal expression *he looks out of the window*, when it should be *he looks out the window*. We can say that for Spanish students quantity is more important than quality, while for Belgian students it is the other way round.

6 Conclusions

The main research question of the present study was to find out if learners' outcome and attitude towards the use of VISP, a MALL app for EFL, depends on the users' profile, in this case, their nationality. By answering this question we aimed at shedding light on the need to establish pedagogical standards for effective MALL apps. There are in fact cultural differences that have to be taken into account when profiling apps. In this paper we have analysed the differences between two groups of users coming from a different nationality. A deeper analysis of their linguistic background will shed some more light onto their sociolinguistic differences.

The current work shows that whereas in the case of Spanish students using technology engages them in a multimodal media and involves them in an online environment which they consider to be meaningful, Belgian students need extra motivation to engage in a task of this kind, such as obtaining extra points in class, or improving their knowledge and skills on the classroom-related topics. In this sense, MALL apps should be linked to a blended learning setting, or even to a traditional FLL classroom setting, and be used as a support, as a means to an end, in other words, not as an end in itself. Spanish students appear to feel more open to native apps and to their pervasive use, and show more motivation towards the use of these apps, even if they do not have an immediate impact on their learning goals. Although our study should be replicated with a bigger sample to test its validity, we could state that Belgian students look for effectiveness and focus on quality, while Spanish students are more flexible to adapt to new ways of ubiquitous learning outside the traditional classroom setting. A priori, the data suggest that if we want to define a number of pedagogical standards for MALL apps we should take cultural factors into account.

Overall, the project was successful in the sense that it enhanced the Spanish students' motivation and curiosity, in the light of the positive comments some users left in the post-questionnaire. Most items in the questionnaire received a positive response and suggest that using a mobile device as a didactic tool can result in a motivating and engaging learning activity that leads to improved outcomes. As for the Belgian students, the project was successful in terms of obtaining good learning outcomes, although regarding their motivation there is still work to do. Much like [Goulah, 07] described in a case study of a group of high-intermediate learners, who used digital video as a pedagogical tool, new technologies can bridge traditional and new literacies and encourage creative, multimodal, experiential, and hands-on learning. Our aim, in this sense, is to go on developing VISP so as to make it a flexible and creative tool for different cultures.

The results of our research show that there is still room for improvement, in terms of both the design and the use of VISP. Given the little success that the pre- and postquestionnaires had among Belgian students, we will consider to redesign and localise them so that they do not 'invade' in their personal space: instead of asking for personal data, the users may choose an avatar. In VISP, nonetheless, none of the sections of the questionnaires are compulsory, but apparently the current format is not appealing enough. Additionally, the app will be tested with more students and users. We expect to obtain more data once it is available in Google play. Quantitative results will be statistically analysed, with a focus on inferring those data that can allow us to further develop this app with more pedagogical content and for a wider profile of users. When testing the app in the classroom setting, we will include tests to further verify language development through quantifiable measures. This would contribute to assessing its efficiency at a content level.

Finally, regarding users' profiles, we aim to further advance in this line of research by testing the app with the teachers themselves, following the line of an interesting study [Seifert, 15] which examines how the use of smartphones for teaching affects pupils', teachers' and lecturers' motivation and attitudes. This study shows that there are differences in the level of technical difficulties which the various groups face: the personal use inherent to each generation and their attitude toward smartphone implementation. Trying VISP with different populations would therefore give us information on how MALL apps can be further developed and profiled in order to be pedagogically and technically sound.

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References

[Alexander, 04] Alexander, B.: "Going nomadic: Mobile Learning in Higher Education", *EDUCASE Review*, *39*(5), (2004), 28-35.

[Arús, 08] Arús, J.: "Teaching modality in context: a sample lesson", *Odense Working Papers in Language and Communication*, 29, (2008), 365-380.

[Arús et al., 13] Arús, J., Rodríguez-Arancón, P., Calle-Martínez, C.: "A pedagogic assessment of mobile learning applications", *Proceedings of the International Conference UNED-ICDE 2013. Mobilizing Distance Education for Social Justice and Education.* Madrid: UNED, (2013), 630-643.

[Batchelor & Botha, 09] Batchelor, J. & Botha, A.: "Design criteria for mobile phones: A teenagers' perspective", *Proceedings of M4Life*, Barcelona, (2009).

[Ballester, 06]. Ballester, A.: "La formación del audiodescriptor y el subtitulador para sordos: un reto europeo para la Universidad española. Adaptar la igualdad, normalizar la diversidad". *Actas del II Congreso Nacional sobre Universidad y Discapacidad*. Madrid: UCM, (2006), 410-420.

[Benson & Chik, 10] Benson, P., Chik, A.: "New literacies and autonomy in foreign language learning", In M.J. Luzon, M.N. Ruiz-Madrid, M.L. Villanueva (eds.), *Digital genres, new literacies and autonomy in language learning*, Newcastle: Cambridge Scholars, (2010). 63-80.

[Bourne & Jiménez Hurtado, 07] Bourne, J. & Jiménez Hurtado, C.: "From the visual to the verbal in two languages: a contrastive analysis of the audio description of The Hours in English and Spanish", In J. Díaz-Cintas et al. (eds): *Media for All: Subtitling for the Deaf, Audio Description and Sign Language.* Amsterdam: Rodopi, (2007), 175-187.

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[Bueno-Alastuey & López Pérez, 15] Bueno-Alastuey, M.C., López Pérez, M.V. : "Evaluation of a blended learning language course: students' perceptions of appropriateness for the development of skills and language areas", *Computer Assisted Language Learning*, 27(6), (2015), 509-527.

[Byrne & Diem, 14] Byrne, J., Diem, R. : "Profiling Mobile English Learners", *The JaltCALL Journal*, 10(1), (2014), 3-19.

[Calle-Martínez *et al.*, 13] Calle-Martínez, C., Rodríguez-Arancón, P., Arús-Hita, J.: "A Scrutiny of the Educational Value of EFL Mobile Learning Applications", In *Proceedings of the 4th World Conference on Learning, Teaching and Educational Leadership.* Barcelona, 25-27 October 2013.

[Canale & Swain, 80] Canale, M., Swain, M.: "Theoretical bases of communicative approaches to second language teaching and testing", In *Applied Linguistics*, 1, (1980), 1-47.

[Carter, 10] Carter, L.: "Neoliberal globalization and learner centered pedagogies: Posing some different questions", In *Canadian Journal of Science, Mathematics and Technology Education, 10* (3), (2010), 223-231.

[Castrillo et al., 14a] Castrillo, M. D., Bárcena, E., Pareja-Lora, "Preliminary conclusions after the design and implementation of mobile learning apps for professionals". *CALL design: Principles and Practice, Proceedings of the 2014 EUROCALL Conference*, Groningen, (2014), 40-46.

[Castrillo *et al.*, 14b] Castrillo, M.D., Martín-Monje, E., Bárcena, E.: "Mobile-based chatting for meaning negotiation in foreign language learning", *Proceedings of the 10th International Conference on Mobile Learning*. International Association for Development of the Information Society, (2014), 49-59.

[Council of Europe, 01] Council of Europe: Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Cambridge: Cambridge University Press, (2001).

[Chaume, 04] Chaume, F.: Cine y traducción. Madrid: Cátedra Signo e imagen, (2004).

[Clouet, 05] Clouet, R. : "Estrategia y propuestas para promover y practicar la escritura creativa en una clase de inglés para traductores", *Actas del IX Simposio Internacional de la Sociedad Española de Didáctica de la Lengua y la Literatura*, (2005), 319-326.

[Díaz Cintas, 08] Diaz Cintas, J.: *The didactics of audiovisual translation*. Amsterdam: John Benjamins, (2008).

[Ellis, 03] Ellis, R.: *Task-based language learning and teaching*. Oxford: Oxford University Press, (2003).

[Fling, 09] Fling, B.: *Mobile Technology and Development: Practical Techniques for creating Mobile Sites and Web Apps.* Sebastopol, CA: O'Reilly Books, (2009).

[García Laborda & Giménez López, 10] García Laborda, J., Giménez López, J.L. : "Aplicaciones ubicuas para la evaluación de lenguas extranjeras a través de dispositivos móviles: Evolución del proyecto PAULEX", In M.R. Caballero and M.J. Pinar (eds.). *Modos y formas de la comunicación humana*, Cuenca: Castilla La Mancha University Press, (2010). 941-946.

[Goethals & Depreitere 09] Goethals, P. & Depreitere, L.: "SpreekTaal: un proyecto didáctico y de investigación acerca de las funciones comunicativas", *Mosaico 21*, (2009), 14-18.

[Goulah, 07] Goulah, J.: "Village voices, Global Visions: Digital Videos as a Transformative Foreign Language Learning Tool", *Foreign Language Annals*, 40(1), (2007), 62-69.

[Godwin-Jones, 11] Godwin-Jones, R.: "Mobile apps for language learning", *Language Learning & Technology*, **15**(2), (2011), 2-11. http://llt.msu.edu/issues/june2011/emerging.pdf

[Gwee *et al.*, 11] Gwee, S., Yam San, C., Ek Min, T.: "The role of gender in mobile gamebased learning", *International Journal of Mobile and Blended Learning*. (2011), 19-37.

[Halliday & Mathiessen, 04] Halliday, M.A.K., Mathiessen, C.M.I.M.: An Introduction of Functional Grammar (3rd ed.) London: Arnold, (2004).

[Haverkate, 03] Haverkate, H.: "El análisis de la cortesía comunicativa: categorización pragmalingüística de la cultura española", In D. Bravo (ed.): Actas del Primer Coloquio del Programa de EDICE: la perspectiva no etnocentrista de la cortesía: identidad sociocultural de las comunidades hispanohablantes, (2003).

[Hofstede, 05] Hofstede, G.: *Cultures and organizations: software of the mind* (Revised and expanded 2nd ed.). New York: McGraw-Hill, (2005).

[Hyks, 05] Hyks, V.: "Audio Description and Translation. Two related but different skills", In *Translating Today*, *4*, (2005), 4-8.

[Ibáñez & Vermeulen, 13] Ibáñez Moreno, A. & Vermeulen, A.: "Audio Description as a tool to improve lexical and phraseological competence in Foreign Language Learning", In G. Floros & D. Tsigari (eds): *Translation in Language Teaching and Assessment*. Newcastle upon Tyne: Cambridge Scholars Publishing, (2013), 41-65.

[Ibáñez & Vermeulen, 14] Ibáñez Moreno, A., Vermeulen, A.: "La audiodescripción como técnica aplicada a la enseñanza y aprendizaje de lenguas para promover el desarrollo integrado de competencias", In R. Orozco (ed.): *New Directions on Hispanic Linguistics*. Newcastle upon Tyne: Cambridge Scholars Publishing, (2014), 264-292.

[Ibáñez & Vermeulen, 15] Ibáñez Moreno, A., Vermeulen, A.: "Using VISP (Videos for Speaking), a mobile app based on audio description, to promote English language learning: a case study", In *Procedia: Social and Behavioural Sciences* 178, (2015), 132-138.

[Ibáñez *et al.*, forthcoming] Ibáñez Moreno, A., Vermeulen, A., Jordano, M.: "El uso de la audio descripción en una aplicación de MALL: VISP (Videos for Speaking)", *Special issue of RIED of MALL: El aprendizaje a distancia de lenguas extranjeras mediante tecnología móvil: del podcasting a los MOOC*, (forthcoming).

[Kearney *et al.*, 12] Kearney, M., Schuck, S., Burden, K. and Aubusson, P.: "Viewing mobile learning from a pedagogical perspective", In *Research in Learning Technology*, 20(14), (2012), 406.

[Kim *et al.*, 13] Kim, D., Rueckert, D., &, D., Seo, D.: "Students' perceptions and experiences of mobile learning", In *Language Learning & Technology*, *17*(3), (2013), 52-73.

[Kukulska-Hulme, 12] Kukulska-Hulme, A.: "Language learning defined by time and place: A framework for next generation designs", In J.E: Díaz-Vera (ed.) *Left to My Own Devices: Learner Autonomy and Mobile Assisted Language Learning. Innovation and Leadership in English Language Teaching*, 6. Bingley, UK: Emerald Group Publishing Limited, (2012), 1–13.

[Kukulska-Hulme *et al.*, 15] Kukulska-Hulme, A., Norris, L., Donohue, J.: "Mobile Pedagogy for English Language Teachers: a guide for teachers", *ELT Research Papers* 14.07. London: British Council, (2015).

[Luhrmann, 01] Luhrmann, B.: Moulin Rouge. Twentieth Century Fox, (2001.

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[Martín Monje et al., 14] Martín Monje, E., Arús-Hita, J., Rodríguez-Arancón, P., Calle-Martínez, C.: "REALL: Rubric for the evaluation of apps in language Learning", Actas de las Jornadas Internacionales Tecnología Móvil e Innovación en el Aula: Nuevos Retos y Realidades Educativas. (2014), http://eprints.ucm.es/25096/.

[Ma & Kelly, 06] Ma, Q., Kelly, P.: "Computer assisted vocabulary learning: Design and evaluation", *Computer Assisted Language Learning*, 19(1), (2006), 15-45.

[Martínez Martínez, 09] Martínez Martínez, S: "El texto multimodal audiodescrito como herramienta didáctica: el autoaprendizaje de léxico en una segunda lengua en traducción", In *Traducción e Interpretación: nuevas vías de investigación*, (2009).

[Matamala, 06]. Matamala, A.: "La accesibildad en los medios.: aspectos lingüísticos y retos de formación", In R. & A. Pérez-Ugena (eds.) *Sociedad, integración y televisión en España,* Madrid, Laberinto, (2006), 293-306.

[Matamala, & Orero, 07] Matamala, A., Orero, P.: "Designing a Course on Audio Description and Defining the Main Competences of the Future Professional", In *Linguistica Antverpiensia-New Series*, *6*, (2007), 329-343.

[Marshall, 05] Marshall, R: Memoirs of a Geisha, (2005).

[Mayer & Anderson, 92] Mayer, R., Anderson, R.: "The instructive animation: Helping students build connections between words and pictures in multimedia learning", *Journal of Educational Psychology*, *84*, (1992), 444- 452.

[Mayer, 01] Mayer, R.E.: *Multimedia learning*. New York: Cambridge University Press, (2001).

[Nielsen, 06] Nielsen, J.: *F-shaped pattern for reading web content*, (2006). http://www.useit.com/alertbox/reading_pattern.html

[Norris & Soloway, 11] Norris, C., Soloway, E.: "Learning and Schooling in the Age of Mobilism", In *Educational Technology*, (2011), 3-10.

[Orero & Vercauteren, 13] Orero, P., Vercauteren G.: "Describing Facial Expressions: much more than meets the eye", *Quaderns. Revista de Traducció 20*, (2013), 187-199.

[Paivio, 86] Paivio, A.: *Mental representations: A dual coding approach*. Oxford: Oxford University Press, (1986).

[Palomo López, 10] Palomo López, A.: "The benefits of audio description for blind children", In J. Díaz Cintas, A.Matamala & J. Neves (eds.) *New Insights into Audiovisual Translation and Media Accessibility. Media for All* 2. New York, NY: Rodopi, *33*, (2010), 213-225.

[Pareja-Lora *et al.*, 13] Pareja-Lora, A., Arús, J., Martín Monje, E., Read, T., Pomposo-Yanes, L., Rodríguez-Arancón, P., Calle-Martínez, C., & Bárcena, E.: "Toward Mobile Assisted Language Learning apps for professionals that integrate learning into the daily routine", In L. Bradley & S. Thouësny (eds.), *Proceedings of EUROCALL 2013: 20 years of EUROCALL: Learning from the Past, Looking to the Future, Dublin: Research Publishing, (2013), 206-210.*

[Parsons, 14] Parsons, D.A.: "Mobile learning overview by timeline. A mind map", *International Journal of Mobile and Blended Learning* 6 (4), (2014), 1-21.

[Peskoe, 09] Peskoe, M.: Descriptive Children's Television: Bridging the Gap for Blind Kids While Benefiting All Kids, University of Louisville, (2009).

[Piety, 04] Piety, P.: "The language system of audio description: an investigation as a discursive process", *JVIB*, 98(8), (2004), 453-469.

[Remael, 14] Remael, A.: "From Audiovisual Translation to Media Accessibility: Livesubtitling, Audio-description and Audio-subtitling", In A. Arnall and A. Gentile (eds). *AUSIT* 2012: Proceedings of the "JubilaTion 25" Biennar Conference of the Australian Institute of Interpreters and Translations. Cambridge: Cambridge Scholars Publishing, (2014), 134-144.

[Sadoski & Paivio, 01] Sadoski, M., Paivio, A.: *Imagery and text: A dual coding theory of reading and writing*. Mahwah, NJ: Lawrence Erlbaum Associates, (2001).

[Sadoski & Paivio, 04] Sadoski, M., Paivio, A.: "A dual coding theoretical model of reading", In R.B. Ruddell & N.J. Unrau (eds), *Theoretical models and processes of reading* (5th ed.). Newark: International Reading Association, (2004), 1329-1362.

[Santiago, 12] Santiago, R. : "Una revisión de la taxonomía del aprendizaje y de las apps educativas en el contexto del Mobile-Learning", In S. Trabaldo (ed.), *Diez años de vivencias en educación virtual*. Buenos Aires: Net-Learning, (20129.

[Santiago *et al.*, 14] Santiago, R., Amo, D., Díez, A. (2014): "¿Pueden las aplicaciones educativas de los dispositivos móviles ayudar al desarrollo de las inteligencias multiples?", *EDUTEC, Revista Electrónica de Tecnología Educativa*, 47, (2014).

[Santiago *et al.*, 15] Santiago, R., Trabaldo, S., Kamijo, M., Fernández, A.: "Mobile Learning: Nuevas Realidad en el Aula (Innovación Educativa)", *Digital-Text*. Madrid: Grupo Océano, (2015).

[Salway, 07] Salway, A.: "A Corpus-based analysis of Audio Description", In J. Díaz Cintas, P. Orero & A. Remael (eds.), *Media for All: Subtitling for the Deaf, Audio Description and Sign Language*, Amsterdam: Rodopi, (2007), 151-174.

[Schmeidler & Kirchner, 01] Schmeilder, E., Kirchner, C.: "Adding audio description: Does it make a difference?" *Journal of Visual Impairment and Blindness*, 95(4), (2001), 197-213.

[Seifert, 15] Seifert, T.: "Pedagogical Applications of Smart-phone Integration in Teaching: lecturers, Pre-service Teachers and Pupils' Perspectives", *International Journal of Mobile and Blended Learning* 7(2), (2015), 1-16.

[Stockwell, 10] Stockwell, G.: "Using mobile phones for vocabulary activities: examining the effect of the platform", *Language Learning and Technology*, *14*(2), (2010), 95-110.

[Sun & Yang, 13] Sun, Y.C., Yang, F.Y.: "I help, therefore I learn: service learning on Web 2.0 in an EFL speaking class", *Computer Assisted Language Learning*, (2013).

[Talaván, 13] Talaván, N.: La subtitulación en el aprendizaje de las lenguas extranjeras. Barcelona: Ediciones Octaedro, (2013).

[Tight, 10] Tight, D.: "Perceptual learning style matching and L2 vocabulary acquisition", *Language Learning Research Club*, 60(4), (2010), 792-833.

[Tourón & Santiago, in press] Tourón, J., Santiago, R.: "The Flipped Learning model and talent development in schools", In *Revista de Educación* (in press).

[Traxler, 10] Traxler, J.: "Students and mobile devices". Journal of Research in Learning Technology, 18 (2). (2010),149-160.

[Traxler, 11] Traxler, J.: "Research Essay: Mobile Learning", International Journal of Mobile and Blended Learning, 3(2), (2011).

[Vermeulen & Ibáñez, forthcoming] Vermeulen, A., Ibáñez Moreno, A.: "Audio description as a tool to promote intercultural competence", In H. Stengers, A. Sepp & P. Humblé (eds.) *Intercultural Competence in Translation*. LIT verlag, Viena (forthcoming).

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[Viberg & Grönlund, 13] Viberg, O., Grönlund, A.: "Systematising the Field of Mobile Assisted Language Learning", In *International Journal of Mobile and Blended Learning* (*IJMBL*) 5(4). (2013).

[Willis & Willis, 07] Willis, D., Willis, J.: *Doing Task-Based Teaching*. Oxford: Oxford University Press, (2007).

[Zervas, 13] Zervas, P., Sampson, D.G.: "Facilitating Teachers' Reuse of Mobile Assisted Language Learning Resources Using Educational Metadata, Learning Technologies", *IEEE Transactions*, 7(1), (2014), 6-16.