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# A Comparative Analysis of a Mobile App to Practise Oral Skills: in Classroom or Self-directed Use?

Ana Ibañez Moreno (UNED, Madrid, Spain https://orcid.org/0000-0002-4602-4871, aibanez@flog.uned.es)

### Anna Vermeulen

(Ghent University, Ghent, Belgium [bhttps://orcid.org/0000-0002-0483-69904, anna.vermeulen@ugent.be)

**Abstract:** In this paper we present our findings on analyzing two different uses of a mobile application, VISP (VIdeos-for-SPeaking), designed to promote oral skills based on audio description: one use is integrated in the classroom and the other one is self-directed. Participants were divided in two groups: one group received an introduction on audio description and an explanation of how to use the app. They were also informed about what was expected from them. The other group was just asked to download the app and try it out, that is, they were supposed to direct their own learning autonomously. The results show that, regarding language practice, VISP is equally effective as a support tool in the classroom and as an independent app, used outside the app as part of the classroom activities were more positive towards the app than the ones who used the app in a self-directed way, who were less motivated about the app uses and benefits. This shows the effectivity and potential of mobile apps as support resources in the foreign language classroom and the need to design strategies to improve VISP towards learners' autonomy and self regulated learning.

Keywords: Mobile Assisted Language Learning (MALL), audio description (AD), oral skills, Foreign Language Learning (FLL), autonomous learning Categories: L.0.0, L.0.1, L.3.0, L.3.5, L.3.6 DOI: 10.3897/jucs.67032

# 1 Introduction

*VISP* (*VIdeos for SPeaking*) is a MALL (Mobile Assisted Language Learning) application conceived for English as a foreign language (hereafter FL) students who possess a B1-B2 level of English to practice their oral skills based on audio description (hereafter AD). This mode of audiovisual translation consists of making audiovisual material accessible to the visually or cognitively impaired by offering a verbal description, expressed aurally, of a visual content. The efficiency of AD as a pedagogical technique to promote accuracy and fluency in oral production in the FL classroom has already been shown, both in face-to-face contexts [Martínez, 11; Ibáñez, 13, 14; Sadowska, 15, Walczak, 16] and in distance language learning contexts [Talaván, 16). The results of the experiments which we have carried out until now with VISP [Ibáñez, 15a, 15b, 15c] reveal that the students showed motivation and a positive attitude towards the app, but they tended to overestimate their performance. So, their

actual learning of vocabulary still needed improvement [Ibáñez, 15a]. We also noticed that the learners' outcomes and attitude towards the use of VISP depends on the users' profile, that is, their nationality. Whereas Belgian students seemed to look for effectiveness and focus on quality, Spanish students were more flexible to adapt to new ways of ubiquitous learning outside the traditional classroom setting [Ibáñez, 15b].

In this work we aim to explore the differences in outcomes and attitude that language learners show when they perform tasks in the classroom, with introduction, guidance and clear instructions on the expectations (as in the framework proposed by [Kukulska-Hulme, 15], as opposed to when they use a mobile device beyond the classroom, in an autonomous, self-directed way (as proposed by [Kondo, 12; Lai and Zheng, 17], etc.). Thus, the main aim of this paper is to answer to the question: *What is more effective: to use the app in the classroom with guidance and instructions or to use it in a self-directed way*? We consider effectiveness in terms of: performance, results, students' attitude and students' awareness of their own learning (which we consider essential for a B1-B2 learner, as in [Ibáñez, 2016].

# 2 Theoretical Framework

AD is a culture-based translating or mediation activity of intersemiotic, intermodal or cross-modal nature that consists in turning images into spoken language and translating information that is received trough vision into information that is received through audition [Braun, 08, p. 02]. In the words of [Snyder, 14], AD is the visual made verbal. It offers an oral commentary or description of a visual scene, both static (in a museum, at an exhibition, etc.) and dynamic (in the theatre, the cinema, the opera, etc.) so that users who are unable to perceive or interpret visual content, such as visually or cognitively impaired people, or audiences that are not acquainted with the imagery of a specific culture, can fully grasp the message, get involved and empathize with the information that is rendered visually. In the same way other modes of audiovisual translation (dubbing, subtitling and voice over), promote the access to audiovisual material, AD also enhances accessibility, a human right for all [UNCRPD, 14]. However, unlike the other modes, AD does not focus on dialogues and generally the audio description script (ADS) is generated from scratch, that, it is directly based on the images and not on a script. Only when there is an existing ADS in the source language of the film available, the audio describer of the version in another language will perform an interlingual translation based on the original ADS.

The creation of an AD is governed by various constraints, and, while, according to [Fryer, 16, p.3], many translation and interpreting students find it 'taxing', others find it to be 'an exciting challenge' that requires a fascinating linguistic creativity. The three most important questions an audio describer has to address are to know when, what and how to describe the visual information [Holsanova, 16]. When dealing with recorded media, as is the case in VISP, the descriptions must fit in an existing soundtrack. The delivery of oral comments must not interfere with the dialogues, narrations or relevant sound, so the audio describer has to look for the natural pauses in the track to describe the visual information. Given the lack of time, only the most essential information that helps the audience to keep up with the action must be offered. Dealing with characters entails a description of their appearance, body language, facial expressions and movements. But also the spatial and temporal setting plays an essential role, especially the changes of place (inside, outside) and time (day, night) can be very relevant. As for how an AD is generated, audio describers are recommend to avoid pronouns instead of names because these words are a potential source of ambiguity. They are also asked to use simple sentences and to be very specific when vocabulary is concerned (e.g. a man versus a young man in his twenties). Since AD is supposed to describe what is actually occurring on the screen, the verbs are used in the present tense. Also crucial for the clarity of meaning is the use of the definite or indefinite article. Only if the character or an object has been mentioned before, a definite article can be used, as in the clip taken from the musical *Moulin Rouge* [Luhrman, 01] –used for our app, VISP 2.0., where the AD had to be included between a song and the narration (from 00:00:04:12 to 00:00:04:25). The ADS is provided below:

The [he has been mentioned before] handsome young man [appearance], Christian [name], in his twenties [age], with dark hair and beard [appearance], takes a new line on his typewriter [action]. He puts his hand to his forehead [action, body language]. Through his open window lies Paris at night [place, time]. Tearfully [expression, he stares out of the window [action, body language], at the Moulin Rouge [place]. He turns back to the typewriter [action]. The Paris cityscape. [place].

The combination of images and a written (ADS) or oral (AD) text describing them makes AD especially interesting for FL learners, who not only are interested in learning a new language, but also a new culture, that might see or interpret the reality in a different way. According to the Dual Coding Theory [Paivio, 86] and the Cognitive Theory of Multimedia Learning [Mayer, 15], processing of information improves when it is provided by multiple channels (auditory and visual), which strengthens memory retrieval. Moreover, theories on Mental Imagery [Holsanova, 08] and Embodied Cognition [Rosch, 91] clearly show that the creation of mental images based on information through direct sensory input (visual in the case of AD) is intimately linked to our everyday experiences, and that our bodily experiences affect how we interpret, evaluate and understand visual and linguistic information. The verbal formulation of images, and the coupling between language and thought, reflect how we conceptualize the world, how we interpret what we see, how we understand what others say and how we mentally imagine things and events. Creating an AD means putting ourselves in the shoes of somebody else, a blind, cognitively challenged or elderly person, a child, an immigrant, a FL student, and makes us aware that they might interpret and formulate what we see in a different way. So, the use of AD in FL learning not only strengthens language learning, but, in our intention to empathize with the users of the service we are offering, it also helps us to open our minds and to see things differently.

In order to meet the needs of the 'on demand' generation, as well as to promote learner's autonomy, we developed, as already mentioned a MALL app called *VISP* (*VIdeos-for-SPeaking*), which is already in its second version [Ibáñez, 15b]. This app is based on AD and it is framed within the principles of the task-based approach –in the sense that it consists of communicative activities whose goal is to achieve a specific learning objective [Ellis, 03]–. Tasks are the backbone, and they are based on AD, as described in [Section 4] below.

As regards the MALL framework, VISP is a the pioneering MALL app, in the sense of using AD as a technique to practice oral production skills in FLL; Since the emergence of MALL, in 2009 (as stated in [Hockly, 13], it is linked to the development that mobile technology has experienced in the last decade, as well as to the wide variety of mobile devices, users and uses included. [Siskin, 09] already proposed a classification of ways to teach languages through mobile learning, and [Kim, 13] accounted for one of the first successful projects based on the use of mobile phones outside the classroom. In this work we are inspired by both the use of MALL outside the classroom (as in [Kim, 2013; Pareja-Lora, 13; Lai & Zheng, 17] and inside the classroom (as proposed by [Kukulska-Hulme, 15].

### **3** Research Design

### 3.1 Participants

The VISP app was administered to 28 Spanish Erasmus students of English (with a B2 level) in the department of Translation, Interpreting and Communication of the Faculty of Arts of Ghent University, during one classroom session of two hours in the school year 2017-2018. The students were divided into two groups, according to their class group: one group (group A) was composed of 12 students, and they received a previous description of the app, with an exhaustive explanation of how to use it and why it makes use of AD; they were also informed about what was expected from them. This group of students had already received a master class on AD. So, they followed the procedures as described by [Kukulska-Hulme, 15] in their pedagogical framework for MALL. The 16 students in the second group (group B) were just asked to download the app and try it out, that is, to direct their own learning completely by themselves. In this case, we followed the procedures as described in [Kondo, 12] for self-regulated learning in MALL. The different amount of students of each group is due to their random attendance to class the day when the experiment was carried out.

### 3.2 Instruments

VISP is thoroughly described in Ibáñez Moreno & Vermeulen (2016). It contains four screens, to which we access from the home screen, as shown in [fig. 1] below:



Figure 1: Home screen of VISP

As can be seen in [fig. 1], the first screen is the Introduction and it contains a very brief description of AD and a sample, taken from the film *Memoirs of a Geisha*. It also includes a pre-questionnaire, where there is a short language test, meant to prepare the vocabulary needed to describe the clip: they are asked to translate some words and expressions that they would need to create the AD of the clip: 'forehead', 'typewriter', 'beard', 'to look through the window' 'to start a new line', and 'to put his hand to', 'tearfully'.

The *Instructions* button consists in guiding the user to create an AD for 18 seconds of a clip taken from *Moulin Rouge* [Luhrman, 01]. Then, in the *Practice* screen they have the task of creating the AD itself and of recording themselves, and finally, in the *Finish* button they send the task, which is received by us in an email account in mp3 format, and they fill in a post-questionnaire, conceived as a self-evaluation assessment, where they can also compare their own version with the original AD. There are no time limits to perform the task, the users can watch the clip as many times as needed, record their AD and listen to it. They can also repeat the recording as many times as they want before sending it.

Regarding the post questionnaire, the participants are asked to answer some questions on the way they created the AD, in order to draw the attention on the differences between their own recording and the official one. According to two of the

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three main topics that play an essential role in the creation of an AD, namely, what has to be described and how, participants are asked what exactly they described. Illustration (1) below shows the *what* questions:

(1)

a) Did you describe in the same way the time?

b) Did you describe the setting?

c) Did you describe the character?

d) Did you describe the character's mood?

e) Did you describe the action?

Secondly, they are inquired about *how* they described, with the questions that are also included in (2) below:

(2)

a) Did you use expressions such as "we see", "we observe"

b) Did you use adjectives or adverbs other than the ones used in the original AD?

c) Did you describe more than the official AD?

Finally, the questionnaire triggers their awareness on their own language learning, by asking them to indicate their agreement on the following statements:

#### (3)

a) This task has made me think about my own language learning

b) This task has made me reflect on how what we communicate is strongly influenced by our particular way of looking at things

c) AD made me aware of the importance of using accurate vocabulary

d) This app has been useful to make me aware of how important it is to make all type of audiovisual material accessible to visually impaired persons, by using the language in such a way that the recipient is taken into account.

Therefore, the postquestionnaire is conceived to be a very important part of the task, since without it users cannot evaluate their own learning and assess their own errors. It is also conceived to promote their autonomy, as well as their own critical thinking on how AD is carried out. In order to do so, they can finish the questionnaire by making some open comments on it.

#### 3.3 Procedures

As mentioned above, participants were divided in two groups: Group A received clear instructions on how to use the app, which was described to them before they used it. Besides this, the app use was linked to the classroom contents and activities, in line with [Kukulska-Hulme, 15]'s framework for mobile pedagogy for the English as an FL classroom. By contrast, group B received no instructions. They were asked to download the app, and they were given an hour-time to use it autonomously, in a self-directed way, in line with [Kondo, 12] and [Lai & Zheng, 17]'s proposals for the use of mobile devices beyond the FL classroom.

Thus, the data analyzed in the *Findings* section [see Section 4] below were obtained from the following tools: researcher observation –to see whether the approach to the use of the app was different in one group or in another–, the transcriptions of the participants' recordings (see appendix), –to see whether there was any remarkable difference in performance between the two the groups, and the post questionnaire –to see any differences regarding students' self assessment and attitude towards the app and its usefulness–. After discarding those students who did not complete the questionnaires (2 students from group A and 5 from group B), and those participants who did not send the recordings or sent invalid ones (in group A one student did not send it, one sent it in Spanish, and another one sent a too low recording; in group B 5 students did not send it), a data set of 22 valid survey responses and recordings remained. Transcriptions were made of all the recordings, and they were all assessed. In what follows, an account of the most relevant results is provided.

# 4 Findings

Regarding the researchers' observations on the use of the app, some differences were observed between the two groups, although there were also common issues: nobody made use of the dictionary, even though it is indicated in the instructions that they can make use of it. In group A, all students performed the whole task in about 45 minutes. Only one student did not finish it. As for technical or procedural issues, one student asked how she was going to be able to record so much information in such a small amount of time, and another student had difficulties in downloading the app. In group B students took longer to complete the task (around 55 minutes). Three students did not perform the task, and regarding technical issues there were more doubts than among the students in group A: five students asked how they could send the recording, two students did not know whether they had to record the AD in Spanish or in English, and another student did not know how to navigate through the different screens of the app. Besides this, two students performed the task together, and it took them one hour (five minutes more than the rest). Besides that, they did not complete the post questionnaire, so they could not compare their version with the original AD. Another student declared that she had not found the way to the post questionnaire, so she did not complete it either. A summary of all these issues is presented in [tab. 1]:

	Group A (with instructions)	Group B (Self-directed)		
Time used (media)	45' aprox. (13:15-14:05)	55' aprox. (13:20-14:25)		
Doubts about how to use VISP	<ul> <li>How do I send the recording? (5)</li> <li>Is the volume of my voice high enough to record? (2)</li> </ul>	<ul> <li>How do I send the recording? (4)</li> <li>Where is the post-questionnaire? (1)</li> <li>What is this app for? (2)</li> <li>How can I navigate through the different screens? (1)</li> </ul>		
Downloading issues	Yes (1)	Yes (1)		

Completion of the	11 out of 12	11 out of 16
Post-questionnaire		
8	11 out of 12	13 out of 16
recording		

#### Table 1: Students' use of VISP

The analysis of the transcriptions did not reveal significant differences in the way the students of both groups, those who received instructions and the self-directed one, formulated what they saw in the clip. In both groups, only 8 of them described the clip completely. Based on the words and expressions they had to translate in the prequestionnaire, in order to prepare the creation of the AD, we obtained the results provided in [tab. 2] below. Notice that when the words or expressions appeared several times in the audio descriptions we only counted them once:

Words/Expressions	Group A	Group B
forehead	5	7
typewriter	6	8
beard	0	0
he looks / looking/ stares through the	5	7
window		
he takes / starts a new line	4	3
he puts / putting his hand to	6	3
tearfully	6	2

Table 2: Frequency of the words / expressions used by the students in their AD

Statistically, then, there is no evidence that one group performed better than the other one. The analysis of variance through a paired sample T-Test revealed the following results:

Т	Df	Sig (2-tailed)
0,303	6	0,772

### Table 3: results of the paired sample T-test

Those rather poor results also reveal that the students did not really benefit from the help we thought we were offering in the prequestionnaire. On the contrary, they often choose to express what they saw in their own way, using synonyms (correctly or not), such as the ones below:

(4)

\*typing machine he \*makes / writes a new line he moves / places / resting his hand to his head he is sad/\*sad he looks None of them mentioned the beard to describe the character. Regarding AD techniques, we found just two errors, both in group B. This shows that the explanations on AD given to group A were effective. The two errors are transcribed below in italics:

(5)

### "Close up to his face [...]"

"The big title has appeared. Christian writes Moulin Rouge in his typewriter.

They can be considered mistakes when creating an AD because it is superfluous information and therefore not conform to the instructions they received.

As for the post questionnaire results, two sets of data are relevant for our purposes: those that show how the students evaluated themselves, and those that show the participants' satisfaction with the app (for which they were asked to rate it, among other things).

As for their own self assessment, results show that students who received guidance were less accurate with their own performance, while those who use the app in a self-directed way were slightly more aware of their own mistakes. For example: as for the question in the post-questionnaire *Did you describe the time in the same way [as in the original AD]?*, the original AD says: *Through his open window lies Paris at night*. Therefore, if students respond affirmatively, their AD should include the expression "at night". However, from the 4 students that responded they had actually used the same expressions, this is what they actually said:

### (6)

Group A: "it is dark outside"/ ... (no description) Group B: "It is dark at night"/ "It is night"

As can be observed, students in group B were telling the truth, while students in group A were not. To the question *Did you use adjectives or adverbs in your ADS other than the ones of the original ADS?*, the recordings show that almost all students used different adjectives: nobody used *handsome* or *young* to describe the character. However, when asked to select which words they had used to describe him, two students in each group ticked *young*. As regards these two terms, it is true that they might be relative, subjective, or culturally/gender specific. In the future, we plan to include a battery of clips that take these factors into account, to prevent confusion.

*Tearfully* was actually used by 5 students in group A and by 2 in group B. However, the students' answers do not correspond to these data. 7 students in group A answered No (thus stating that they had not used different adjectives or adverbs, which is not correct), and only 4 admitted they had, while in group B 8 students admitted they had used different expressions other than the ones in the original AD. This indicates that, while some degree of guidance promotes metacognitive skills, which are essential for learning, the fact that students were given indications on the use of the app (group) and of its utility for their own language learning did not guarantee their ability to evaluate their performance realistically.

Regarding how students perceived their own language learning, the mean of the results to the four questions that elicited such information in the post-questionnaire are given in [tab. 4], were 1 is "not at all" and 5 is "absolutely":

	This AD task has made me think about my own language learning.	has made me	me aware of the importance and difficulty of using accurate	aware of how important it is to make all type of audiovisual material accessible to visually impaired persons, by using the language in such a way that
				taken into account.
Group A	4	4,6	4,6	4,4
Group B	2,8	3,7	4,2	4,2

Table 4: Students' evaluation of their own language learning

As can be observed, even if there was not significant difference on how both groups of students performed the task and on how they perceived their own performance, students in Group A were clearly more positive about their own progress and about how VISP had helped them in their language learning and in their learning about AD. Finally, with respect to how the students rated the app, the results are shown below:

(7) Group A: 4,1/5 Group B: 3,7/5

From all these data, we can see that the app is as useful as a MALL tool to be used in the classroom or as an independent app to be used in a self-directed way regarding task performance and self-assessment, but guidance and additional explanations (as with group A) can help to trigger the users' motivation and positive attitude towards their own language learning.

# 5 Conclusions and Future Work

The aim of the present study was to explore the differences in outcome and attitude that language learners show when they perform tasks in the classroom, with introduction, guidance and clear instructions on the expectations (group A), as opposed to when they

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use a mobile device beyond the classroom, in an autonomous, self-directed way (group B). The results show that, regarding the outcomes of language practice, there is no statistical evidence that one group performed better than the other, although the dropout rate was higher among students who were not directed in their use of the app. This contradicts [Kondo, 12]'sfindings, which suggest that the use of MALL encourages study without teacher intervention, i.e., self study, and that self regulated learning improved the students' outcomes and motivation. This different results may be due to different apps, and more specifically, to the gamification component, which was present in the app they used (NINTENDO DS), but not in VISP. This is in line with [Chen, 19].

Therefore, we can say that VISP is equally effective as a support tool in the classroom and as a self-directed app outside the classroom regarding learning results. However, when it comes to attitudinal issues, the group of students who received information and guidance rated the use of the app higher. The students of group A were also more positive about their own progress. Most of them completed the whole task, pre- and post questionnaires included. Only one student out of 12 did not finish it, as opposed to the 5 of 16 students who dropped out in group B, who had to perform the task on their own. The limited engagement of the students in group B seems to have to do with the technological constraints of VISP, the tempo-spatial context of its use, besides the learners' language proficiency. Therefore, we plan to launch an updated version of VISP that also considers the personalization, authenticity and connectivity factors of learning, which are the three learning dimensions of such MALL apps, in line with the findings suggested by [Lai & Zheng, 17]. Also, given the findings shown in [Kondo, 12] and [Chen, 19], it seems that introducing a gaming component would encourage students to use the app in a more satisfactory way.

Finally, the various small technical problems can be confounding, and thus, in the future the data could also be analysed in another sophisticated analysis. For example, we might see what the raw data might be refuting or confounding by putting all the data of both groups in a heap and seeing if there are any obvious categorisations or behaviours that emerge (female students vs male students, for example).

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### References

[Braun, 08] Braun, S.: Audio description research: state of the art and beyond, Translation Studies in the New Millenium 6, 2008, 14-30.

[Chen, 19] Chen, C., Liu, H., & Huang, H: Effects of a mobile game-based English vocabulary learning app on learners' perceptions and learning performance: A case study of Taiwanese EFL learners, ReCALL, 31(2), 2019, 170-188. DOI:10.1017/S0958344018000228.

[Ellis, 03] Ellis, R.: Task-based Language Learning and Teaching, Oxford, Oxford University Press, 2003.

[Fryer, 16] Fryer, L.: An Introduction to Audio Description: A Practical Guide, London and New York, Routledge, Taylor and Francis Group, 2016.

[Hockly, 13] Hockly, N.: Mobile learning, English Language Teaching Journal 67 (1), 2013, 80-84, DOI: 10.1093/elt/ccs064, 2013.

[Holsanova, 08] Holsanova, J.: Discourse, Vision and Cognition, Amsterdam, John Benjamins, 2008.

[Holsanova, 16] Holsanova, J.: A cognitive approach to audio description, In A. Matamala and P. Orero (Eds.), Researching Audio Description: New Approaches, 2016, 49-73, Palgrave, MacMillan.

[Ibañez Moreno, 13] Ibañez Moreno, A. and Vermeulen, A.: Audio description as a tool to improve lexical and phraseological competence in foreign language learning, In D. Tsagari and G. Floros (eds.), Translation in Language Teaching and Assessment, 2013, 41-64, New Castle Upon Tyne, Cambridge Scholars Publishing. 2013.

[Ibañez Moreno, 14] Ibañez Moreno, A. and 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 in Hispanic Linguistics, 2014, 16-34, Lousiana, Cambridge Scholars Publishing.

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

[Ibañez Moreno, 15b] Ibañez Moreno, A. and Vermeulen, A.: VISP 2.0: methodological considerations for the design and implementation of an audio-description based app to improve oral skills, In F. Helm, L. Bradley, M. Guarda, & S. Thouësny (eds), Critical CALL – Proceedings of the 2015 EUROCALL Conference, Padova, Italy, Dublin, Research-publishing.net, 2015, 132-138, DOI: http://dx.doi.org/10.14705/rpnet.2015.000341178,

[Ibañez Moreno, 15c] Ibañez Moreno, A. and Vermeulen, A.: Profiling a MALL App for English Oral Practice: A Case Study, In J. Garcia-Laborda, E. Barcena & J. Traxler (eds.), Mobile Technology for Foreign Language Teaching: Building Bridges between Non-Formal and Formal Scenarios. Journal of Universal Computer Science 21 (10), 2015, 1339-1361.

[Ibañez Moreno, 16] Ibañez Moreno, A. and Vermeulen, A.: Profiling a MALL app for English oral practice. A case study, In E. Martin-Monje, I. Elorza & B. Garcia-Riaza (eds.), Technology-Enhanced Language Learning for Specialized Domains: Practical applications and Mobility, London, Routledge, 2016, 266-275.

[Kim, 13] Hockly, N.: Mobile learning, English Language Teaching Journal 67 (1), 2013, 80-84, DOI: 10.1093/elt/ccs064, 2013.

[Kondo, 12] Kondo, M., Ishikawa, Y., Smith, C., Sakamoto, K., Shimomura, H., & Wada, N.: Mobile Assisted Language Learning in university EFL courses in Japan: Developing attitudes and skills for self-regulated learning, ReCALL, 24 (2), 2012, 169-187, DOI:10.1017/S0958344012000055.

[Kukulska-Hulme, 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.

[Lai, 18] Lai, C., & Zheng, D.: Self-directed use of mobile devices for language learning beyond the classroom, ReCALL, 30 (3), 2018, 299-318. DOI:10.1017/S0958344017000258.

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

[Martínez, 11] Martínez Martínez, S.: El texto multimodal audiodescrito como herramienta didáctica: el autoaprendizaje de léxico en una segunda lengua en traducción, La actual: nuevas vías de investigación en la disciplina, Editorial Comares, Granada, 2011, 44-59.

[Mayer, 15], Mayer, R.E.: Cognitive Theory of Multimedia Learning, 2015, https://www.learning-theories.com/cognitive-theory-of-multimedia-learning-mayer.html

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

[Pareja-Lora, 13] Pareja-Lora, A., Arús-Hita, J., Martín Monje, E., Read, T., Pomposo Yanes, L., Rodríguez Arancón, P. & Bárcena Madera, E.: Toward mobile assisted language learning apps for professionals that integrate learning into the daily routine, In L. Bradley, S. Thouësny (eds.), 20 Years of EUROCALL: Learning from the Past, Looking to the Future, Dublin, Research-publishing.net, 2013, 206-210, DOI: 10.14705/rpnet.2013.000162.

[Rosch, 91] Rosch, E., Thompson, E. & Varela, F. J.: The embodied mind: Cognitive Science and human experience, Cambridge, MA: MIT Press, 1991.

[Sadowkska, 15] Sadowska, A.: Learning English vocabulary from film audio description: a case of Polish sighted students, Roczniki Humanistyczne 11, 2015, 105-128.

[Siskin, 09], Siskin, C.B.: Language learning applications for smartphones, or small can be beautiful, Edvista. 2009, http://www.edvista.com/claire/pres/smartphones/

[Snyder, 14] Snyder, J.: The visual made verbal: a comprehensive training manual and guide to the history and applications of audio description, Arlington, VA: American Council of the Blind, 2014.

[Talavan, 16] Talavan, N. & Lertola, J.: Active audiodescription to promote speaking skills in online environments, Sintagma 28, 2016, 59-74.

[UNCRPD, 14] UNCRPD: General comment No.2, Article 9: Accessibility Convention on the Rights of persons with Disabilities, CRPD/C/GC/2: UN Committee on the Rights of Persons with Disabilities, 2014.

[Walczak, 16] Walczak, A.: Foreign Language Class with Audio Description: A Case Study, In A. Matamala & P.Orero (eds.), Researching Audio Description: New Approaches, Barcelona, Palgrave MacMillan, 2016, 187-204.