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## Research paper

### *The Future of Foreign Language Instructional Technology: BYOD MALL*

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#### **Abstract**

This paper describes trends in instructional technology that are influencing foreign language teaching today and that can be expected to increasingly do so in the future. Though already an integral part of foreign language instruction, digital technology is bound to play an increasing role in language teaching in the coming years. The greatest stimulus for this will undoubtedly be the accessibility of Mobile-Assisted Language Learning (MALL), made possible through the exploitation of mobile devices owned by students themselves. The ubiquitous ownership of smartphones and tablet computers among adolescents and adults now makes a Bring Your Own Device (BYOD) approach a feasible alternative to desktop computer labs. Making this work, however, especially in a financially and technologically restricted environment, presents a number of challenges which are the focus of this paper.

**Keywords:** Mobile-Assisted Language Learning, Bring Your Own Device approach, instructional technology.

#### **1. Introduction**

Already today, the contribution of instructional technology to language teaching is well established. What foreign language instructor these days would teach a language class without the support of computer-based multimedia: audio, graphics, video? Likewise, the Internet is regularly used as a teaching resource. There can be little doubt that the role of instructional technology in language teaching and learning will continue to increase in the future. That future, however, is certain to be strongly influenced by two ongoing developments: the use of mobile devices and the exploitation of learner-based technology resources.

Mobile-Assisted-Language Learning (MALL) has in fact been around now for over 20 years. When thinking of mobile technologies, undoubtedly the first thing that comes to mind is the mobile phone. While few people owned mobile phones 20 years ago, mobile phone subscriptions today have surpassed 7 billion, representing a penetration rate of 97% (Dazeinfo.com). In developed countries, over half the adult population already owns a smartphone. Western Europe in particular has one of the highest smartphone adoption rates in the world (O'Neill, 2015). In the US, some 85% of 18-29 year olds are smartphone owners (Pew Research Center, 2015). Moreover, as any senior high school or university teacher in these countries can attest, rare indeed is a student without a smartphone.

However, the first appearance of MALL did not involve mobile phones but rather pocket electronic dictionaries for L2 English (Burston, 2014). It was not until about ten years ago that the size and cost of mobile phones reached a point where their ownership started to become more widespread, especially in Asia, most particularly among university students in Japan. This prompted their use primarily for L2 English vocabulary learning via SMS text messaging to deliver words, translations, definitions and sample sentences for rote learning. More sophisticated MALL applications required the use of a Personal Digital Assistant (PDA), a mini handheld computer with basic programming capabilities. Again, these targeted L2 English and were initially used to take notes, do tutorial exercises, and play vocabulary games.

As technology improved, PDAs added colour screens, multimedia functionality and optional telephone and Internet connectivity. Mobile phones and PDAs in effect merged into what is today called a smartphone with the advent of the iPhone some eight years ago. This quickly gave rise to a host of other smartphone producers, with the Android platform being the most dominant. Likewise, the release of the iPad a couple of years later ushered in the age of the mobile tablet computer with its many Android (and Windows) competitors, which are now increasingly being used to support foreign language teaching. The latest mobile technological innovation is the phablet, a tablet computer with mobile phone functionality, i.e. a large screen smartphone. However, these have yet to make their appearance in MALL applications.

## **2. Past MALL Applications**

From the very beginning, the application of mobile technologies to foreign language learning has above all targeted L2 English, with over 60% of all implementations focusing on ESL/EFL (Burston, 2014). So, too, about three-quarters of all studies have involved post-secondary school learners (university/adult education). Pedagogically, however, it must be said that primary and secondary language teachers have not missed out very much in what MALL has to offer, for to date the vast majority of implementations at all academic levels has focused on very traditional structuralist and audiolingual exercises: vocabulary, grammar, reading and listening comprehension (Burston, 2015). Most notably, except for the use of SMS, the interpersonal communication functionality of mobile phones has gone virtually unexploited. Despite the enormous improvements in the functionality of current mobile devices in recent years, very few MALL implementations have engaged students in interactive, communicative, language learning activities. That being said, though few in number, the most pedagogically innovative MALL applications have in fact been undertaken with younger EFL learners.

A good example of how modern mobile technology can be exploited to support task-based communicative language learning can be found in Tai (2012). This Taiwanese study involved 35 sixth graders, working in groups of between three and four, who were set the task of helping to solve an imaginary museum burglary. Their job was to assist international investigators who could only communicate in English. Learners used smartphones as part of a classroom response system to prepare for an out-of-class task (going to the scene of an imaginary burglary to track down the culprit) in which they used their GPS-equipped devices to collect and share Internet-based data and communicate with each other and their teacher to obtain information and guidance. Subtasks were distributed according to the mode of communication, a caller, an SMS reporter, a secretary for recording and requesting help. On their return to class, learners reviewed and compared the resources they collected and discussed their solutions, all in English of course.

In sum, as Tai's project demonstrates, even at primary school level, much more innovative and effective foreign language learning can be achieved with mobile instructional technologies than has typically been the case up to now. And the kind of teaching Tai was able to undertake in Taiwan could certainly be replicated at least as well elsewhere. Firstly, the L2 linguistic competence of Tai's pupils was relatively limited. More advanced learners, especially at the high school and university level, could be expected to perform even better. Moreover, Tai's teaching took place in an environment in which the L2 was virtually never encountered out of the classroom. Certainly in the case of English, teachers elsewhere are likely to find the extracurricular environment more accommodating. So, too, Tai's project was actually undertaken in 2010 and mobile technology and accessibility has improved enormously in the meantime.

### **3. Challenges to MALL integration**

Two main challenges face the effective integration of MALL into the foreign language curriculum: technology access and pedagogical methodology.

#### *3.1. Technology Access*

Since its inception, MALL has been seriously hampered by a lack of access to suitable technology. Initially, this was because of the limitations of mobile-based technologies. Not much could be done with the PDAs and mobile phones of yesteryear. But even though mobile technology has improved by leaps and bounds, its cost has remained prohibitive for all but a minority of language teachers. With one or two very recent exceptions, any MALL application that has gone beyond the use of SMS on basic mobile phones has had to provide learners with the necessary hardware. This includes the project reported in Tai's study. It is largely for this reason that the great majority of MALL implementations have taken place on University campuses, where research support has been available to fund the acquisition of mobile devices for student usage.

Mobile device ownership, however, in the form of smartphones and tablet computers, has now reached a point where it is feasible to implement a BYOD approach to Mobile-Assisted Language Learning. BYOD, that is to say Bring Your Own Device, is in fact not in the future at all, but is already very much part of current foreign language instructional technology. Every major digital language lab producer, SANS, SANAKO, ReLANPro, Robotel, XCLASS, etc. now markets a version of their product that is accessible to Apple and Android smartphones and tablets. This move to mobile accessibility has largely been spurred by the potential of increasing market share through the exploitation of BYOD MALL

As educational institutions replace their aging labs, desktop installations are bound to give way to mobile devices for very good financial and pedagogical reasons. Firstly, it is much more cost effective to invest in wireless networks and exploit the potential of the mobile devices which learners are already buying, maintaining and replacing themselves. So, too, the use of mobile devices allows any classroom with wireless network access to take on the functions of a language lab when required, thereby reducing if not altogether eliminating, the need for such facilities. Even in situations, such as primary schools, where learners themselves cannot be expected to provide their own mobile devices, their acquisition for in-class usage is far less costly than that of desktop computer lab equipment. Above all, the use of BYOD mobile devices allows pedagogical activities to extend beyond the computer lab, and indeed beyond the classroom, virtually anywhere, anytime.

Needless to say, digital language labs have their costs, which many institutions – especially in the public sector – cannot afford. For those that can, going mobile is no more expensive, and in fact less so, than traditional desktop lab installations. Moreover,

students are usually provided accompanying mobile apps at no cost. One producer, ReLANpro, even offers schools in Europe and the US a totally free mobile system for up to 30 users. It is called BYOLL (Bring Your Own Language Lab) and can be obtained via online registration (ReLANpro Europe; ReLANpro USA).

### *3.2. Pedagogical methodology*

#### *3.2.1. Theory*

While BYOD MALL implementations can, and undoubtedly will, overcome the challenge of technology access, pedagogical methodology remains a critical factor in the successful implementation of MALL. As the example of Tai demonstrates, the effective exploitation of mobile technologies requires careful planning and has to be firmly grounded in learning theory in general and second language acquisition principles in particular. Student activities need to be constructivist, collaborative, learner-centred, task-based, and require communicative linguistic interaction to complete. No less importantly, they need to engage the learners' creativity. When these elements are in place, mobile-based learning can be highly motivating, pedagogically effective, and even fun to undertake.

#### *3.2.2. Practice*

While the requirements of pedagogical theory are clear enough, how can BYOD MALL be realized within the practical constraints that most language teachers have to face? The most convincing answer to this question is best given with concrete examples that assume a worst case scenario: teaching in a school environment with no money to spend on technology, only minimal technical support, if any, and no wireless networking facilities. However, as is most probably the case in senior high school or beyond, virtually all students have smartphones and/or tablet computers of their own. Even within such a restricted technological environment, very effective use can be made of mobile devices to promote foreign language learning.

The free ReLANpro mobile system mentioned earlier allows teachers to implement BYOD MALL at least on a small scale, enough to meet the needs of one or two classes and demonstrate to the holders of institutional purse strings the pedagogical effectiveness of BYOD MALL. Using *BYOLL*, teachers can create lessons based on audio and video sources, which students can access on their mobile devices wherever an Internet connection is available. Such lessons can provide preparatory vocabulary/grammar exercises as well as listening comprehension activities that furnish background information related to task-based assignments. Students working in small groups – inside or outside of class – then apply what they have learned to accomplish an assigned task through the collaborative use of the language. In doing so, they use their own mobile devices to communicate with each other as needed via phone, SMS, MMS, Skype, Twitter, whatever meets their needs. Using mobile technology in this way can not only take instruction out of the classroom but bring language learning into the real world. It also exploits not only the mobile hardware and software of learners, but also their technological literacy skills.

Real world language activities can make very good use of student mobile devices to create personal artefacts linked to assigned tasks. For instance, a great variety of activities can engage students in using their mobile devices to take task-related photos (Wong et al, 2011). Students could be told, for instance, that they have a certain amount of money to spend on a birthday, Christmas, or wedding gift for someone. They then do some research on the Internet and go off on their own to some shops, take pictures of possible choices, share their photos and collectively decide which gift they prefer. While such activities would involve out-of-class conversations, how much of this takes place in the L2 very much depends on the competence level of the students and

the ultimate requirements of the task. Follow-up graded in-class oral activities, for example, can have a very positive effect on the use of the L2 in preparatory tasks since they provide rehearsal opportunities which improve final assessed task performance. In any event, discussions and final decisions need to be made in-class to ensure that the L2 is being used. Photo-based tasks are adaptable to any language proficiency level. So, too, they are limited only by the imagination of the instructor, and indeed the students themselves.

Audio and video recordings made with student mobile devices likewise lend themselves well to effective language learning activities. This could be as simple as audio recording the reading of a text out loud and comparing this to a model for pronunciation practice (Papadima-Sophocleous, Charalambous & Mallouris, 2013). Students could similarly use their audio recorders to practice dialogues which they subsequently perform in class. Video recordings could just as readily be made of role plays that students prepare and practice beforehand for instructor feedback (Leis, Tohei & Cooke, 2015). Recorded interviews, audio or video, are other real world activities that students can profitably undertake with their mobile devices. L2-speaking tourists might be approached to inquire where they are from and the places they have visited. With more advanced learners, job-related information could be sought from L2-speaking workers in shops, banks, restaurants, hospitals, etc. (Gjedde & Bo-Kristensen, 2012). As with photo-based tasks, the audio-video artefacts created by students provide the substance for the subsequent collaborative use of the L2 and follow-up activities. So, too, the language level and topics of such tasks can be easily adapted to the linguistic proficiency and personal interests of students.

The GPS functionality of student mobile devices can similarly be exploited for language learning purposes. For example, students can be assigned the task of providing directions for getting from their home to some point of interest, the airport for instance. Treasure hunts are another good way that mobile device GPS systems can be exploited in language learning activities (Freiermutha, 2015).

In all these BYOD mobile-assisted activities, the basic principle is to link projects to tasks that students have to prepare and complete through the collaborative, interactive, use of the target language. As these examples demonstrate, provided students have their own mobile devices, MALL can be innovatively and effectively implemented even in the absence of institutional financial or technical support. Being able to teach in a wireless networked environment, which if not already a reality certainly should be in the foreseeable future, allows even greater exploitation of mobile technologies. Most notably, the vast resources of the Internet, including the work of students themselves, can be accessed and shared at any time by teachers and students alike. Likewise, Internet access opens the door for communication with remote native speakers, for example, via small group tele-collaborative exchanges.

#### **4. Final practical considerations**

While BYOD MALL is certainly feasible now, its implementation is subject to a number of practical challenges. Many primary and secondary schools flatly prohibit the student use of mobile phones on campus. There are very good reasons for this as they can be very disruptive. No teacher wants students to be texting or playing games in class. Disruptive technology, however, is nothing new in the classroom. Students have been sneaking notes back and forth in class for as long as there have been pencils and paper to allow them to do so. Yet schools do not forbid students to use paper and pencils on campus. Teachers who find themselves in a situation where the student use of mobile phones is banned need to talk to the powers-that-be about relaxing this restriction to allow the pedagogical use of mobile devices in class.

Engaging in BYOD MALL is time-consuming. It requires of the teacher considerable preparation to scaffold task-based assignments and integrate them into the curriculum with follow-up communicative language activities. So, too, the implementation of task-based activities requires substantial class time. Collaborative assignments need first to be discussed by students to decide details and allocate responsibilities. The results of outside activities also have to be brought back to the classroom for subsequent discussion and finalization of the project. Student-centred classroom discussion, however, is time well spent since it engages learners in the communicative use of language and in activities that foster the negotiation of form and meaning which are essential to language acquisition.

The logistics of disseminating digital resources to students, of collecting, sharing and returning their work also requires special attention. There is, however, a readily available solution to this challenge and that is to create online class storage folders, for example on a freely accessible GoogleDrive. Being cloud-based, these are then accessible anytime/anywhere from any device, desktop, laptop, netbook, tablet, smartphone.

Lastly, teachers, no less than students, learn best through social interaction. Two heads are better than one. When setting off in the direction of BYOD MALL, working collaboratively with colleagues is essential.

## References

- Burston, J. (2014). The reality of MALL project implementations: Still on the fringes. *CALICO Journal*, 31(1): 43-65. Retrieved from <https://journals.equinoxpub.com/index.php/CALICO/article/view/22804>.
- Burston, J. (2015). 20 years of MALL project implementation: A meta-analysis of learning outcomes. *ReCALL*, 27(1), 4-20. Retrieved from <http://journals.cambridge.org/action/displayAbstract?fromPage=online&aid=9455682&fileId=S0958344014000159>.
- Dazeinfo.com (2015). Internet & Mobile Phone Users Worldwide 2015: 50% Population Is On Internet. May 27, 2015. <http://dazeinfo.com/2015/05/27/internet-mobile-phone-users-worldwide-2000-2015-report>.
- Freiermutha, M. (2015). 'I Found It!' A smartphone GPS treasure-hunting game in a flipped English class. *Innovation in Language Learning and Teaching*. Retrieved from <http://dx.doi.org/10.1080/17501229.2015.1066793>.
- Gjedde, L., & Bo-Kristensen, M. (2012). Workplace mobile-assisted second language learning: Designing for learner generated authenticity. In J. Díaz-Vera (Ed.), *Left to my own devices: Learner autonomy and mobile-assisted language learning innovation and leadership in English language teaching* (pp. 183-195). Bingley, UK: Emerald Group Publishing Limited. Retrieved from [https://www.academia.edu/1117622/Left\\_to\\_My\\_Own\\_Devices\\_Learner\\_Autonomy\\_and\\_Mobile-Assisted\\_Language\\_Learning](https://www.academia.edu/1117622/Left_to_My_Own_Devices_Learner_Autonomy_and_Mobile-Assisted_Language_Learning).
- Leis, A., Tohei, A., & Cooke, S. (2015). Smartphone assisted language learning and autonomy. *International Journal of Computer-Assisted Language Learning and Teaching*, 5(3), 75-88. Retrieved from <http://www.igi-global.com/article/smartphone-assisted-language-learning-and-autonomy/135580>.
- O'Neill, J. (2015). Global smartphone ownership in world's top digital markets to top 66% by 2018. *Videomind*, November 25, 2015. Retrieved from

<http://www.ooyala.com/videomind/blog/global-smartphone-ownership-world-s-top-digital-markets>.

Papadima-Sophocleous, S., & Charalambous, M. (2014). Impact of iPod Touch-supported repeated reading on the English oral reading fluency of L2 students with specific learning difficulties. *The EuroCALL Review*, 22(1), 47-58. Retrieved from <http://polipapers.upv.es/index.php/eurocall/article/view/3639/3871>.

Pew Research Center (2015). Chapter 1: A Portrait of Smartphone Ownership, April 1, 2015. Retrieved from <http://www.pewinternet.org/2015/04/01/chapter-one-a-portrait-of-smartphone-ownership>.

Tai, Y. (2012). Contextualizing a MALL: Practice design and evaluation. *Educational Technology & Society*, 15(2), 220-230. Retrieved from [http://www.ifets.info/journals/15\\_2/19.pdf](http://www.ifets.info/journals/15_2/19.pdf). Last accessed on 18th September 2012.

Wong, L-H., Song, Y., Chai, C-S., & Zhan, Y. (2011). Analyzing students' after-school artifact creation processes in a mobile-assisted language learning environment. In T. Hirashima et al. (Eds.), *Proceedings of the 19th International Conference on Computers in Education*. Taoyuan, Taiwan: Asia-Pacific Society for Computers in Education. Retrieved from [http://www.nectec.or.th/icce2011/program/proceedings/pdf/C4\\_F1\\_88F.pdf](http://www.nectec.or.th/icce2011/program/proceedings/pdf/C4_F1_88F.pdf).

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## Research paper

### *Why and how do distance learners use mobile devices for language learning?*

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#### Abstract

Most of the literature on mobile language learning is located in classroom contexts, and often concerns the use of resources developed by teachers or researchers. However, we also need to understand learner initiated practices, in informal as well as formal settings, where mobile language learners are increasingly using digital resources. In this paper, we focus on the emerging practices of students learning languages at a distance. Adult students of five languages at different levels were surveyed about using their mobile devices to support their learning as well as their motivations in doing so. We also draw on eight follow-up interviews.

We discuss the learners' preferred activities, the resources and apps that they use, and also their motivations for their mobile language practices. These distance learners are very aware of how their devices provide them with high exposure to their target language and the importance of such exposure. They also use their mobile devices to introduce variety into their learning and to make it enjoyable. This knowledge of self-directed learners' practices is extremely valuable in informing educators about how mobile devices feature in language learning and can be harnessed in contributing to it.

**Keywords:** Language learning, Mobile-Assisted Language Learning, distance learning; flexible learning.

#### 1. Introduction

As digital technologies become cheaper, more portable and widely owned, language learning can be supported across multiple settings encompassing educational institutions, workplaces, home life, travel and leisure. The implications of this apparent flexibility and wider access to learning opportunities are gradually being worked out. By providing access to an array of digital resources and multiple communication tools, mobile devices offer significant advantages in promoting exposure to the target language. It has been argued that personal mobile technologies have a role in sustaining and promoting lifelong learning more generally (e.g. Dimakopoulos and Magoulas, 2009). However, in order to understand how best to support mobile language learners, we need to understand learner practices, across both formal and informal settings.

The empirical research we report in this paper seeks to contribute to collective knowledge about the emerging practices of language learners who are using their own

mobile devices - typically smartphones, personal media players and tablets - to enhance their language studies in the context of tutor-supported distance learning. These learners are not directed to use mobile devices within or alongside their language studies, they are doing it of their own choice. Language learning is frequently a lifelong pursuit, straddling formal and informal learning and can be especially challenging for distance learning students who work largely independently and have limited contact with a tutor and fellow students. We hypothesize that the availability of connected, mobile devices may open up learning and invite more people to participate, for example by introducing new types of content and interaction, enabling different patterns of access, supporting and motivating learners, and helping them identify their language and communication needs. In reflecting on the role of motivation in mobile language learning, Ushioda suggests that "autonomy, flexibility, freedom and choice are intrinsic features of mobile learning and by exploiting these features teachers and materials designers may well be able to promote internalised motivation for independent learning" (Ushioda, 2013, p2). Such independent learning is likely to make a positive contribution as even where the curriculum is set, the learner needs to have sufficient flexibility and choice over their own learning and to be able to direct their learning themselves to be successful. Indeed, in the field of language learning, the notion of self-directed learning is expressed in terms of *learner autonomy* which emphasizes freedom of choice (Schwienhorst, 2007). In terms of motivation, the focus in this paper is on the desire to make use of mobile devices for language learning. There is little literature on this in the context of mobile language learning, and although there have been a number of meta-reviews this topic is not one that appears in such reviews – see e.g. Duman, Orhnon and Gedik (2015). Some studies have investigated student motivation with mobile devices in different contexts, such as Ciampa's (2014) case study of a teacher and students using tablets in the classroom where Malone and Leppers' taxonomy of motivation for game playing was successfully applied. Early work in mobile learning in general (not focussed on language learning) noted the motivational aspects of mobile devices, e.g. (Jones *et al*, 2006), and features of mobile devices that attracted learners to using them: "learners often find their informal learning activities more motivating than learning in formal settings such as schools because they have the freedom to define tasks and relate activities to their own goals and control over their goals. By the very nature of informal learning, there is a strong relationship to learners' goals and interests which means that intrinsic motivation is likely to be high" (Sharples, 2006, p16.) However in more recent research there has been little attention paid to this area of motivation and mobile devices. The study reported in this paper returns to this topic to investigate why and how adult distance language learners use mobile devices for their language learning.

## **2. What is known about mobile language learning?**

The literature on mobile-assisted language learning has been dominated by project implementation descriptions, as noted by Burston (2013). Many of these projects have been lab and classroom experiments or pilots and trials within formal education settings, with some investigating supplementary use of mobile learning (Al-Jarf, 2012; Chi and Chan, 2011), both integrated and supplementary use (Abdous, Facer and Yen, 2012), or supplementary to a course with another learner group using it independently (Pearson, 2011). On a continuum where teacher-led, classroom based language provision is at one end, and out-of-class, learner-led, independent use at the other (Kukulska-Hulme, 2010), there is increasing interest in finding out how students create personalized learning experiences outside the classroom and how they experience mobile learning (Kim, Rueckert, Kim and Seo, 2013; Gikas and Grant, 2013).

Lai and Gu (2011) drawing on the work of (Lamb, 2002; Nunan, 1991 and Pickard, 1996), amongst others, note that “successful language learners often attribute their achievements in language learning to active engagement with the target language beyond the classroom” (p.318) and this is supported by the positive association between learning out of class and language gain (Gan, Humphries and Hamp-Lyons, 2004). Mobile devices may help with active engagement beyond the classroom, and language gain may occur partly through informal learning or interactions on social networks and media. We observe a permeable border between formal and informal learning that our research seeks to explore. In the following sections we briefly review research on mobile language learning in or around the classroom and out of class; after that, we consider informal language learning where the technologies used may include mobile devices.

### 2.1. Mobile language learning in or around the classroom

Kukulska-Hulme & Shield (2008) reviewed the then emerging mobile language learning field and noted the emphasis on developing and delivering *content* rather than on offering ways of interacting with the language, with much of the focus on vocabulary acquisition. The affordances of mobile learning were not being fully exploited. Studies published since then indicate that the focus on content delivery has continued. Many such implementations are successful in supporting vocabulary learning, for example Hwang and Chen’s (2013) system using personal digital assistants (PDAs) for situated learning in familiar situations, such as during lunch at school. Viberg and Grönlund’s (2013) review confirms that research has so far paid most attention to learners’ vocabulary acquisition, however they also note that the focus is shifting towards creating authentic and/or social mobile learning environments. One recent example is Ducate and Lomicka’s (2013) account of a project in which students used the iPod Touch for class and homework activities involving use of websites, apps, YouTube, Google Maps and Twitter. In addition, the students completed four formal out-of-class projects using their devices, which leads us to the next section in which we consider out-of-class learning.

### 2.2. Out of class mobile language learning

Some studies focus on the advantages that smart mobile devices may offer such as context awareness and personalisation. For example Chen and Li (2010) developed a Personalised Context-Aware Ubiquitous Language System (PCULS) to teach English vocabulary to high school students. Their work showed that the use of context-aware techniques tailored to the learning environment and content to support memorising English vocabulary via mobile devices was successful in improving English vocabulary. In Kim, Rueckert, Kim and Seo’s (2013) study, six class projects were developed: students participated using either laptops or iPhones and the researchers also rated the participants’ technology comfort and adoption. Examples of projects included YouTube videos, developing Bios and watching VoiceThread presentations. The results of this study are in line with some other studies that have found that students were reluctant to use devices such as smartphones outside the classroom (Stockwell, 2008, 2010). However, exposure during the study lowered students’ resistance to using iPhones. Kim, Rueckert, Kim and Seo (*op. cit.*) comment that some learners chose not to use mobile devices because of perceived inconvenience, and moved to using laptops, but there is no discussion about the effect of different tasks on using different devices. Moving between different devices has been noted in reviews of other mobile learning projects. For example Kukulska-Hume *et al* (2009, *op. cit.*, p. 20) comment that learning experiences may involve interactions with fixed technologies as well as mobile devices.

Some researchers have reported on mobile blogging as an out of class activity, for example, to support the L2 English cultural and linguistic integration of Chinese university students in the UK (Shao, 2011; Shao, Crook, and Koleva, 2007). Another such use connected up L2 Spanish learners on a visit to Spain, allowing them to share their experiences with other students on the same course in the UK (Comas-Quinn, Mardomingo, and Valentine, 2009).

### 2.3. Informal language learning with technologies

According to Lai and Gu (2011), the “literature on out-of-classroom language learning generally shows that second language learners engage in a variety of language activities outside the classroom” (*op. cit.* p. 318). Even so, they found just two studies discussing learners’ self-initiated use and readiness to use technology for language learning, although neither are specifically about *mobile* use. One was a survey of over 900 beginner level foreign language learners on their access to technology for language learning (Winke and Goether, 2008). Whilst there was very good access to computers and the internet, access to tools such as digital cameras, microphones and webcams lagged behind.

In the second study cited by Lai and Gui (*op. cit.*), Zhang (2010) investigated Chinese EFL learners’ use of technology for language learning and found that whilst her learners used technology for their language learning, the use was very limited. Songs and films were used most and Web 2.0 resources least – less than 20 minutes a week. Lai and Gui’s own study investigated how learners use technology to regulate their language learning outside the classroom and what factors affect this use. These students used technologies more outside the classroom than inside. They reported using a variety of technologies and their use for self-regulation included monitoring and evaluating their learning, increasing their motivation and seeking help from native speakers. However, Lai and Gui do not report on the extent to which this use was via mobile technologies.

To summarise, in most of the studies learners are given tasks or materials developed by their instructors. Many studies take a comparative quasi-experimental approach, focusing on significant, measurable learning benefits, and so are unlikely to yield much insight into learners’ practices in self-directed learning – where the learners themselves choose what, where and how they will learn. Thus, in the same way as Lai and Gu (*op. cit.*) argue that there is a gap in literature that informs our understanding of learners’ self-initiated use of technology for language learning, this is particularly true for mobile language learning. The empirical work reported here, therefore addresses this gap by reporting on adult language learners’ mobile practices, across formal and informal settings.

## 3. Research questions and methodology

### 3.1. Overall aim and research questions

Our study focuses on adult distance language learners who use mobile devices independently but in connection with their language studies. As such, these learners may often be more motivated to succeed in achieving their language learning goals than adult students in a face to face setting. However, we believe that our findings have relevance for practitioners operating in different contexts.

The overall aim of our study is to build collective knowledge, using both quantitative and qualitative data, about the emerging practices of adult learners studying languages at a distance who use their own mobile devices to support their learning. We are also interested in understanding *why* these learners choose to use mobile devices, i.e. their motivations in using their mobiles for language learning, and in considering i) what we can learn from these practices; and ii) how these motivations and practices might

impact on designs for learning and shape emerging pedagogies and future curricula. We hypothesize that mobile devices may “open up” learning, for example by introducing new types of content and interaction, enabling different patterns of access, supporting and motivating learners, and helping them identify their needs. We also believe, as suggested by Kukulska-Hulme & de los Arcos (2011), that “other learners, who have limited experience using mobile devices for language study, will benefit from guidance on how to make the most of everyday, situated opportunities for learning” (Kukulska-Hulme & de los Arcos, 2011: 76).

Our research questions are:

1. What are the learners’ motivations for using mobile devices?
2. What are the emerging practices of mobile language learners?

### *3.2. Data collection and analysis*

To address the research questions, students registered on eight languages courses at an institution of higher education have been surveyed since March 2013, covering five languages from beginners to advanced levels. Updated versions of the survey will be repeated over the next two years of the same modules, in order to assess any change in behaviour, practices and motivations. The data reported in this paper are mainly from the first phase (March to July 2013). See Table 1 for some key figures from this first phase.

A mixed method of research approach was used, combining a short online survey questionnaire with semi-structured interviews on Skype. The survey questionnaire focused on usage and behaviour. Questions included which devices were used, which activity or resource was accessed on a regular basis and preferred. The survey also focused on learners’ current practices and behaviours, including the mode and frequency of device use, and the impact they perceived it had on their learning. It also investigated what prompted them to use a mobile device for language learning in the first place (1).

The semi-structured interviews attempted to delve deeper into participants’ experiences and invited them to reflect on their personal motives and modus-operandi as regards their own use of mobile devices for language learning. For logistical reasons, these follow-up interviews were conducted with only eight beginner students (2) who took part in the online survey and volunteered to be interviewed. They were selected on the basis that their answers suggested they were regular, versatile and enthusiastic users of mobile devices for language learning and therefore as such these learners do not represent the majority of distance language learners. However the interviews can provide a more detailed picture than the survey, so in conjunction they can provide us with a good insight into how mobile devices can be used in language learning and why these learners think they are a real enhancement to their studies.

Each interview lasted between 30 – 40 minutes and was recorded and transcribed. The analysis is based on data from respondents who used mobile devices for language learning. Quantitative data from the survey were examined to establish distinctive features relating to age, gender, language and device. Qualitative data from the interviews as well as open comments from the survey were analysed manually by the researchers and coded into broad themes using content analysis to identify salient features in their practices which iteratively could be established as emerging practices. The second phase (3) of the study started in February 2014, but only a small amount of the data has been analysed so far.

Table 1: Key figures from Phase 1.

Number of students invited	1525
Number of responses	269
Age of respondents	20 – 65 +
Gender of respondents	65.4% female; 34.6% male
Complete responses	243
Response rate based on complete responses	15.9%
Numbers by language based on complete responses	French (69), Spanish (90), German (33), Italian (42), Chinese (9)
Numbers by level (4) based on complete responses	Beginner (79), Intermediate (94), Upper Intermediate (38), Advanced (32)
Of complete responses, number and percentage of people using mobile devices for language learning	143 (53%)

#### 4. Findings

This section looks at the data provided by the 143 students, who gave an affirmative response to the question 'Do you use a mobile device (such as a tablet or a phone) for language learning?' in the online survey questionnaire during Phase 1. No data other than demographic information was collected on the 116 students who answered 'no' to that question in this phase of the Study. However, it also draws on partial data from Phase 2, when that information provides useful additional commentary. Unless otherwise stated the findings below refer to Phase 1.

##### 4.1. Number of users

The 143 mobile device users make up 53% of the 243 survey respondents, and they declared that they use at least one mobile device while studying a foreign language. It is interesting to note that in March 2013, a month-long snapshot survey done by the institution's IT department independently of our survey revealed that the proportion of mobile users (excluding tablet users) amounted to 16% on our French intermediate course. The reality of mobile device use probably lies somewhere between the two figures. Additionally, not all of these self-declared users are proficient and very regular users of mobile devices.

##### 4.2. Devices used

In most cases, the first mobile device ever used for language learning was the mobile phone used by 45.9% of respondents on the two beginners' courses surveyed (Chinese and Spanish), 51.65% on upper intermediate (French and German) and 60.25% on advanced courses (Spanish and German). iPads and tablets came a close second (or even first in the case of intermediate French) with 32.79% on the beginners' courses, 26.65% for upper intermediate and 23.75% on advanced courses. MP3 players and iPods also featured highly in the respondents' list of devices used.

#### *4.3. Preferred activities*

The students surveyed have access to a mobile-friendly view of their course website and increasingly to content available off-line in mobile-friendly formats (e.g. eBooks), or apps developed in-house which allow them to stream or download audio-visual resources for use on mobile devices. However, there is no requirement currently for the students to access their language course content or communication tools via mobile devices. Nevertheless, in all but one case, the students' language course website was the very first resource or service the students had accessed on their mobile device (responses range from 31.6% to 50%).

In most cases, the first time students used their mobile device for language learning was to listen to the target language (listening to audio clips, audio programmes or watching videos ranged from 20% to 52.6% of the responses given depending on the course). Listening is a key activity in language learning and is an ideal match for mobile devices as it lends itself to being done in "dead time", on the move or while performing other activities. Even before the digital age, providing audio resources to language students in portable/mobile format was common practice (e.g. audio cassettes). Mobile technological advances have increased opportunities and variety. However, despite the availability of an increasing number of resources and services allowing students to practise other areas or skills such as grammar, reading or writing on mobile devices, the survey results show that "listening to audio or watching videos" remains one of the most popular language activity types (and sometimes the most popular) carried out on a mobile device. Beginners and intermediate students rate it as their most preferred activity (respectively 41.82% and 50.35% of responses), with grammar and vocabulary practice or reading in some cases in second position. As one of the interviewed participants said: 'I don't understand how people who do not hear the language regularly are able to repeat it or I don't know how they absorb it'. It is only when we move up the level ladder that listening increasingly competes with reading but still comes second most favourite on the advanced courses (35.9% of responses against 64.1% for reading).

#### *4.4. Preferred resources and apps*

Phase 1 of the study gave some insight, mainly through interviewing our 8 beginners' students, into the breadth and variety of resources, services and apps that mobile language learners accessed on a regular basis and prompted us to gather more data from the students surveyed in phase 2. In phase 2, when asked which resources or apps they used most for language learning, using reference material such as dictionaries and online translation tools scored very highly on the 4 courses surveyed so far (61.4% and 77.1% of beginner respondents selected this answer and 83.8% and 58.3% of intermediate students).

Language learning websites and apps, authentic audio-visual and reading resources are also very popular choices but interestingly, instant messaging, forums or social networks have consistently the lowest scores on all 4 courses. This finding confirms what was strongly suspected in phase 1 of the study: namely, that the mobile language learners prefer to use their devices for independent study. This could be for various reasons, not least because the students in this study are all learning a language in distance learning mode and are therefore more likely to study independently and are more used to it, but there might be other reasons.

#### *4.5. Usage and behaviours*

74% of the participants use their mobile device for language learning daily or at least several times a week. When asked how they used their mobile device, whether in planned sessions (e.g. routine evening sessions to work on course materials or on

regular journeys), or informally (as and when and where the opportunity arose) or both, most participants selected the second option. Still, quite a number of participants selected the last option as Figure 1 illustrates. These results show that mobile devices do feature regularly and significantly in these language students' use of tools and resources for language learning and to some degree form part of a more structured and conscious approach to the learning process. For some, using their device for language learning becomes embedded in their daily routines as they commute or take lunch breaks at work.

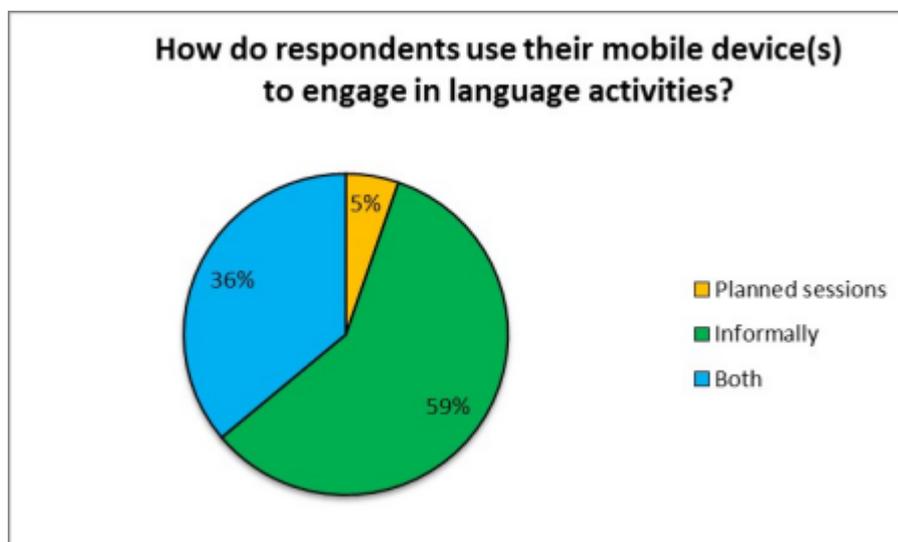


Figure 1. Percentage of answers to the Question: 'How do you use your mobile device(s) to engage in language activities?'

Out of the 119 participants across all courses who answered the question 'Has the use of mobile devices enabled you to study at times and in places where you would not have normally studied in the past?' an emphatic 86.5% recorded a 'yes' ('no' was the only other option). When asked if they thought they spent more time on language learning as a result of using mobile devices, out of 103 who answered the question, 78.6% answered 'yes', 8.7% 'no' and 12.6% 'Don't know'. A beginners participant says that without a mobile device, 'I wouldn't have done any language learning in my breaks [at work] otherwise. So I mean my breaks are two 15 minutes and a half an hour, so it's an extra hour a day minimum. (...) I do it most days'.

## 5. Getting to know more about mobile distance language learners

While spending more time on language learning thanks to mobile devices is likely to have a positive impact on language learning, it is no guarantee of success. So what are the benefits for the distance language learners? How do they go about their language learning using mobile devices? What motivates them in using smartphones and tablets? This section will propose some answers to these questions, based on the data gathered via the survey and the comments made in our follow-up interviews.

### 5.1. Why do they do it?

In the survey 46.4% (the top answer) of beginners participants indicated they started using mobile devices for language learning because they used their device regularly for other purposes and wanted to see how it could help language learning. This was also the case in most of the other language courses surveyed in this study. The mobile distance language learners own the device, know what it affords and already make frequent use of its tools, resources and apps for other purposes. As it transpires in the interviews, most are not shy of technology and quite readily embrace its rapid changes

and novelties. Having long ago answered the question 'What does my mobile device do?' their next question is 'What can I do with it when it comes to language learning?'. Explaining how she uses her mobile devices, one of the students interviewed said: 'I have a certain amount of knowledge in order to find lots of information on the internet and [...] I'm willing to use lots of apps and things and embrace the technology available to me'. It is this curiosity paired with the awareness of the potential novel applications of a familiar device that often results in the adoption and regular use of mobile devices for language learning.

The desire to maximise gaps in their daily schedule to practise language skills also features strongly and is the second most frequent answer given to the survey question, 'how did you get started using mobile devices for language learning?', with between 50% and 8% of the students surveyed choosing it as the second most frequent reason for using mobile devices in our survey. From the early days, mobile devices have always lent themselves to language learning because of their affordances; digitisation of learning resources and advances in technology have only increased this. As one interviewee remarks: 'It [the mobile device] allows me to constantly stay in touch, learn and review my lessons'; and another says: 'cos I wouldn't have done any language learning in my breaks otherwise. [...] it exposes me to language'. One of our learners of Chinese (and interviewee) imported vocabulary and sentences, audio files from the module materials, as well as his own vocabulary into Anki, an app that allows learners to create their own flashcards to memorise vocabulary: 'I can go on a bus ride for five minutes and I can whip out Anki and I can do five minutes of work.' If they don't know it already language learners discover quickly that language learning requires frequent contact with the language and a certain amount of exposure. An interviewee remarks: 'I see language as immersion as much as possible. [...] you should be listening to songs and doing this and that...' It soon becomes apparent to these learners that mobile devices provide an excellent opportunity for increasing exposure and frequent contact as well as for practice.

The potential of mobile devices to link to the real world and to offer multiple interactive resources brings a sense of authenticity to the language learning experience which is regularly reported by research participants (Demouy and Kukulska-Hulme, 2010). As both our survey and interviews testify, listening features highly in the list of preferred activities the surveyed students engaged in. Participants on five of the courses surveyed declare that this is the activity they engage in the most on their mobile device. Accessing authentic resources is also a popular choice. 'I use YouTube to listen to French also I use the iPad to listen to French speakers and watch French films' says one survey participant, while another studying German declares: 'I like to listen to foreign language programmes: I've selected several cultural programmes and I can easily find them again, I've registered some of them. I've also downloaded iTunesU programmes and I listen to them when I want, I sometimes listen to them many times in order to learn the vocabulary, etc.' But whether it is a learner of Spanish listening to songs in Spanish via her iPad or a Beginner in Chinese using Memrise to listen to the pronunciation of a new word, it is clear that mobile devices can support very well one of the key ambitions of language learners: sounding authentic. Though sounding authentic is not just about being able to pronounce well, be fluent or produce sentences free of grammatical errors, learners often mainly focus on pronunciation and fluency. For our mobile distance learners listening is perceived as a preparation for real life challenges such as coping with how fast people speak, different voices and accents and trying to acquire an authentic accent. It gives them the confidence to launch themselves and overcome their fear of speaking the language, as one of our interviewees explains: 'When you want to sound authentic, when you're speaking or when you're listening,

having that sense of authenticity gives you the confidence to actually approach the exercise’.

Finally, the mobile distance language learners in our study love variety and want to have fun learning the language. Technology and not simply mobile devices have long favoured this. This aspect of learning cannot be ignored as it could play an important part in motivation. Regarding the use of mobile devices, our learners do not see it as formal learning. They are just ‘doing it with a greater variety of devices and in a slightly different way’ because ‘if you approach a subject from more different directions then actually that helps the learning process’, ‘because it’s more fun and interactive [...] which will kind of feel [I’m] chilling out, but at the same time [I’m] actually learning as well’ and ‘because just learning in one way is boring’. So, mobile devices can enhance the language learning experience and make it more ‘fun’, ‘kind of a leisure activity’. There is no doubt that mobile devices have the potential to ‘lift’ the language learning out of the formal learning setting, often thought as intellectually demanding as one of our interviewees remarked: ‘If I am not in the mood for structured learning, I use Memrise to increase my vocabulary’. He thus increases his exposure to the language, practises a skill and renews his contact with the language.

### *5.2. How do they do it?*

Either curious by nature and/or drawn by both their interest and knowledge in technology and language learning, the mobile distance language learners manage to find tools, resources and apps that can help them along. Their knowledge of what is available may surpass educational practitioners’ knowledge. They often know the best dictionaries, tools or language apps: ‘I’ve got my Collins dictionary [...] as an app which I wouldn’t go anywhere without. [...] I’ve got an app called Conju Verb which is also very good [...] an audio book app which I use [...] I have a Sonos audio system at home and I have a Sonos controller app on my phone and iPad which means I can play from my chair anything on the Sonos speaker. I can listen to audio books [...] I don’t want to bore you, I’ve got so many’; ‘There’s Babel, [...] in Spanish and Italian and there’s Busuu [...] those are the interactive ones I use the most’. Many are up to date with new offerings and can recognise novel approaches, as one of our interviewees testifies when he makes the following comments about Yabla (5): ‘the way they are approaching things is gonna be a kind of revolution [...] they’re going to be developing an iPhone and an Android app so you can actually take this stuff offline’. Whether the prediction will prove to be true or not does not in itself matter, what is interesting is that our mobile language learner has recognised the potential of a new resource and can see how different it is from the vast array of tools, apps and resources he already uses.

Mobile distance language learners seem to have harnessed the potential of their mobile devices to suit their needs, situation, mood or preferred approach to learning. They have broadened their choice and opportunities by actively searching and selecting what suits their own situation and needs. One of our interviewees explains how she simply would not be able to study without her mobile devices as her health necessitates she spends much of her time in hospital: ‘if you took my mobiles away, I’d throw the cards in [...] I’m expanding beyond what’s in the module.’ Another learner reports on how using her mobile devices at home in the evening, at work during breaks and while travelling, has meant that she has found additional study times in environments that have fostered learning. Interestingly, simply being in those environments seems to trigger the learning: ‘instead of being in the classroom, where I’m not familiar with the setting, it’s in a familiar environment, like the break room at work or on the bus and it means that when I’m making that journey and I’m not listening or I’m looking at the Spanish or Italian, it will come in my mind automatically when I’m in that situation.’ This is not an isolated case as many learners seem to have adopted a similar modus

operandi whereby a situation triggers the learning that will take place as the numerous survey comments testify: 'I listen to French programmes when driving from work' says one survey participant; 'iTunes U in the evenings listening to audio clips online or news in foreign language or radio' explains another; 'When I drive I plug in the iPad and listen to the OU audios' says yet another survey participant.

While more work is needed to look further into how mobile distance language learners integrate mobile devices and digital resources into their formal studies, it is interesting to note that the more proficient and dedicated users and learners seem to be very aware and articulate about their own practice. One learner of Chinese and interviewee comments for instance on how he uses his iPad for further practice: 'This is just a way of reinforcing in a [...] relatively light hearted way, an easy way of keeping going. I haven't used it to continue the learning, just to reinforce it while I have been away and then I restart the learning when I am home again'. Another interviewee explains how mobile devices help her reconnect with her desire to learn: 'I think that's what really is great about using these devices, which is whatever mood I'm in, there's always going to be something available to match that mood, I can easily go back to the textbook and carry on from there where I was, because I will have put myself in the right kind of frame of mind'. It is clear that, for this learner as for many others, mobile devices are instrumental in allowing her to maintain the connection with their language learning and perhaps even regain motivation and renewed confidence in her ability to learn.

## **6. Summary and conclusion**

Not all distance language learners use mobile devices for language learning but as we have seen, a notable proportion do so. The language learners surveyed in this study including those interviewed are all studying a language at a distance and we need to bear in mind that they are to some extent different from language learners in other contexts not least because they are often more self-motivated and because they need to find ways of compensating for the lack of frequent regular classroom contact with teachers and peers. So although they may not represent typical language learners, they share the characteristics of the successful learners referred to by Li and Gu (op. cit.) that we noted earlier; in particular that they actively engage with the language they are learning outside the classroom. We would therefore argue that teachers can learn from our participants' practices about how such engagement can be supported by mobile devices. Amongst our participants, we saw that those who are proficient mobile users display a high level of curiosity and knowledge regarding the affordances of mobile devices and what potential resources are available. They feel more in control of their own learning, understand the necessity for exposure and frequent contact with the language and are adept at mixing formal and informal learning. The findings show that they use mobile devices because they already have them; to make use of otherwise 'dead' time; for immersion; to listen and to access authentic resources and to have fun – and through that, at times, to rekindle their motivation. They seem well informed about the resources available and interestingly, as some of them learn repeatedly in the same context (in the car or on the bus) they find over time that this context 'triggers' the target language.

It could be argued that these learners are no different from the self-motivated learners of 50 years ago; they simply have access more easily and quickly to an array of tools and resources. But along the way to discovery, they have probably acquired a better awareness of what works for them. They may have discovered that 'personalised' learning is possible but that it cannot be delivered by mass education, and that they need to play an active part in their learning in order to give themselves better chances to succeed. What better than mobile devices to help them achieve this?

There is still a lot to be learnt in how these learners integrate mobile device activities into their formal language learning which this study has not investigated. We saw for instance how the use of mobile devices is often part and parcel of scheduled sessions strongly connected with a given context (e.g. regular travel to work, regular lunch breaks), but more research is needed in understanding how these sessions feature in the broader picture of language learning. We also know that it is not simply the context or the situation which might drive mobile language learners to use their devices for language learning but also perceived needs or gaps they have identified in their learning proficiency, some of which such as listening can easily be addressed via the use of mobile devices. In some cases, mobile devices are instrumental in overcoming specific difficulties as in the case of an interviewee who managed to overcome a difficult stage by approaching the language issue via an exercise offering 'a different way of looking at it' before returning to the course materials. All these behaviours and strategies have yet to be unpacked more systematically.

As with all studies ours has some limitations. Firstly, although the survey participants had a range of experience of language learning, our eight interviewees were beginners, and we intend to address this in future work by interviewing participants at intermediate and advanced levels. Secondly, the mobile distance language learners in our research may not be 'average' learners on their courses and it would be interesting and helpful to find out about the practices of other mobile language learners. However, as noted above, we believe that we can benefit from their practices and that they may be an excellent under-valued and under-used resource of dynamic knowledge for other language learners. When trying to convince less comfortable users that mobile devices can be helpful for language learning, perhaps educators should invite their mobile language learners to do the talking and explain how mobile devices offer great potential for language learning and can be instrumental in motivation and proficiency. Educators wishing to harness knowledge of learners' practices for the enhancement of their curriculum should also strive to keep improving their collective knowledge of device affordances and software tools including apps, and to keep discovering more about learners' motivations in terms of aspects such as prolonged language contact, their sense of autonomy, and the accommodation of individual needs.

## References

Abdous, M., Facer, B. and Yen, C-J. (2012). Academic effectiveness of podcasting: A comparative study of integrated versus supplemental use of podcasting in second language classes. *Computers and Education*, 58: 43–52. Retrieved from <http://www.sciencedirect.com>.

Åkerlind, G. S. and Trevitt, A. C. (1999). Enhancing self-directed learning through educational technology: when students resist the change. *Innovations in Education and Teaching International*, 36(2): 96-105.

Al-Jarf, R. (2012). Mobile technology and student autonomy in oral skill acquisition. In J. Díaz-Vera (Ed.), *Left to my own devices: Learner autonomy and mobile-assisted language learning innovation and leadership in English language teaching* (pp. 105-130). Bingley, UK: Emerald Group. Retrieved from <http://dx.doi.org>

Burston, J. (2013). Mobile-assisted language learning: A selected annotated bibliography of implementation studies 1994–2012. *Language Learning and Technology*, 17(3): 157-224. Retrieved from <http://llt.msu.edu/issues/october2013/burston.pdf>.

- Chen, C.-M. and Li, Y.-L. (2010). Personalised context-aware ubiquitous learning system for supporting effective English vocabulary learning. *Interactive Learning Environments*, 18(4): 341-364.
- Chen, I.-J. and Chang, C.-C. (2011). Content presentation modes in mobile language listening tasks: English proficiency as a moderator. *Computer Assisted Language Learning*, 24(5): 451-470. Retrieved from <http://www.tandfonline.com>.
- Chi, S-W. and Chan, W-M. (2011). Learning beyond the classroom: Language podcast as supplementary learning material. *Ubiquitous Learning: An International Journal*, 3(2): 21-40. Retrieved from <http://ijq.cgpublisher.com>.
- Ciampa, K. (2014). Learning in a mobile age: an investigation of student motivation. *Journal of Computer Assisted Learning*, 30: 82-96. Doi: 10.1111/jcal.12036
- Comas-Quinn, A., Mardomingo, R. and Valentine, C. (2009). Mobile blogs in language learning: Making the most of informal and situated learning opportunities. *ReCall*, 21(1): 96-112. Doi: 10.1017/S0958344009000032.
- Demouy, V., Kukulska-Hulme, A. (2010). On the spot: using mobile devices for listening and speaking practice on a French language programme. *Open Learning: The Journal of Open and Distance Learning*, 25(3), 217-232.
- Dimakopoulos, D.N. and Magoulas, G.D. (2009). An Architecture for a Personalized Mobile Environment to Facilitate Contextual Lifelong Learning. In H. Ryu and D. Parsons (Eds.), *Innovative Mobile Learning: Techniques and Technologies* (pp. 232-254). IGI Global.
- Ducate, L. and Lomicka, L. (2013). Going Mobile: Language Learning With an iPod Touch in Intermediate French and German Classes. *Foreign Language Annals*, 46(3): 445-468.
- Duman, G., Orhon, G. and Gedik, R. (2015) Research trends in mobile assisted language learning from 2000 to 2012. *ReCall*, 27(2): 197-216. Doi: 10.1017/S0958344014000287.
- Gan, Z., Humphries, G. and Hamp-Lyons, L. (2004). Understanding successful and unsuccessful EFL students in Chinese universities. *Modern Language Journal*, 88: 229-244.
- Gikas, J. and Grant, M.M. (2013). Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones and social media. *The Internet and Higher Education*, 19: 18-26.
- Hwang, W.Y. and Chen, H.S.L. (2013). Users' familiar situational contexts facilitate the practice of EFL in elementary schools with mobile devices. *Computer Assisted Language Learning*, 26(2): 101-125.
- Jones, A; Issroff, K; Scanlon, E; Clough, G; McAndrew, P and Blake, C (2006). Using mobile devices for learning in informal settings: is it motivating? In: IADIS International Conference on Mobile Learning, 14-16 July 2006, Dublin, IADIS Press, pp. 251-255.
- Kim, D., Rueckert, D., Kim, D.-J. and Seo, D. (2013). Students' perceptions and experiences of mobile learning. *Language Learning and Technology*, 17(3): 52-73. Retrieved from <http://ilt.msu.edu/issues/october2013/kimetal.pdf>.
- Krashen, S. (1981). *Second language acquisition and second language learning*. Oxford: Pergamon.

- Kukulska-Hulme, A. (2010). Charting unknown territory: Models of participation in mobile language learning. *International Journal of Mobile Learning and Organisation*, 4(2), 116-129.
- Kukulska-Hulme, A., Sharples, M., Milrad, M., Arnedillo-Sanchez, I., & Vavoula, G. (2009). Innovation in Mobile Learning: A European Perspective. *International Journal of Mobile and Blended Learning*, 1(1), 13-35.
- Kukulska-Hulme, A., & de los Arcos, B. (2011, April). Researching emergent practice among mobile language learners. In: Yu, S. (Ed.) Proceedings of mLearn 2011, 10th World Conference on Mobile and Contextual Learning, Beijing, China.
- Kukulska-Hulme, A., & Shield, L. (2008). An overview of mobile assisted language learning: From content delivery to supported collaboration and interaction. *ReCALL*, 20(3), 271-289.
- Lai, C. and Gu, M. (2011.) Self-regulated out-of-class language learning with technology, *CALL*, 24 (4): 317-335.
- Lamb, M. (2002). Explaining successful language learning in difficult circumstances. *Prospect: An Australian Journal of TERSOL Quarterly*, 34:457 – 482.
- Nunan, D. (1991). *Language Teaching Methodology*. London: Prentice Hall.
- Pearson, L. (2011). Exploring the effectiveness of mobile phones to support English language learning for migrant groups. *Journal of the Research Centre of Educational Technology*, 7(1): 90-105. Retrieved from <http://www.rcetj.org>.
- Pickard, N. (1996). Out-of-class language learning strategies. *ELT Journal*, 50: 150-159.
- Shao, Y. (2011). Second language learning by exchanging cultural contexts through the mobile group blog. In S. Thouësny and L. Bradley (Eds.), *Second language teaching and learning with technology: Views of emergent researchers* (pp. 143-168). Dublin: Research-publishing.net.
- Shao, Y., Crook, C. and Koleva, B. (2007). Designing a mobile group blog to support cultural learning. Proceedings of mLearn'07, Melbourne, Australia, pp. 223-226. Retrieved from: [http://www.mlearn.org/mlearn2007/files/mLearn\\_2007\\_Conference\\_Proceedings.pdf](http://www.mlearn.org/mlearn2007/files/mLearn_2007_Conference_Proceedings.pdf).
- Sharples, M. (2006) Big Issues in Mobile Learning. Report of a workshop by the Kaleidoscope, Network of Excellence Mobile Learning Initiative. 2006. <hal-00190254>
- Schwienhorst, K. (2007). *Learner Autonomy and CALL Environments*. New York: Routledge.
- Stockwell, G. (2008). Investigating Learner Preparedness for and Usage Patterns of Mobile Language Learning. *ReCALL*, 20(03): 253-270.
- Stockwell, G. (2010). Using mobile phones for vocabulary activities: Examining the effect of the platform. *Language Learning and Technology*, 14(2): 95-110.
- Ushioda, E. (2013). Motivation matters in mobile language learning: A brief commentary. *Special Issue of Language Learning and Technology*, 17 (3): 1-5.
- Viberg, O. and Grönlund, Å. (2013). Systematising the Field of Mobile Assisted Language Learning. *International Journal of Mobile and Blended Learning*, 5(4): 72-90.
- Winke, P. and Goertler, S. (2008). Did we forget someone? Students' computer access and literacy for CALL. *CALICO*, 25:482-409.

Zhang, B., Looi, C-K., Seow, P., Chia, G., Wong, L-H., Chen, W., So, H-J., Soloway, E. and Norris, C. (2010). Deconstructing and reconstructing: Transforming primary science learning via a mobilized curriculum. *Computers and Education*, 55(4): 1504–1523.

### **Notes**

[1] The survey questions are available on request to the authors.

[2] The first two courses surveyed were beginners' courses. Intermediate and advanced students will be interviewed later in the study.

[3] In Phase 2, 1262 language students were invited to take the survey. In total, 376 students responded with 357 complete responses (28.2% response rate based on complete responses) and 231 were users of mobile devices.

[4] The learning outcomes of each level are benchmarked with the Common European Framework of Reference for Languages (CEFR): A2 for Beginners; B1 for Intermediate; B2 for Upper Intermediate; and C1 for Advanced.

[5] A language learning website created in 2013 and claiming to offer an immersion-like experience.

## Research paper

### *Variations in motivation, anxiety and boredom in learning English in Second Life*

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#### Abstract

The article presents the results of a study whose main aim was to investigate the changes in motivation, language anxiety and boredom in learning English in *Second Life*. The sample consisted of 16 second year students of English philology. The study was conducted over the period of a summer semester. During that time the participants of the study were asked to use *Second Life* and practice English there in their own time. The data were obtained by means of a background questionnaire and session logs and subjected to quantitative and qualitative analysis. The results show that the students declared quite high level of motivation to learn English in *Second Life*, low level of anxiety and relatively low level of boredom. In addition, the findings of the study revealed that both the reported motivation as well as the experience of boredom fluctuated over time. In contrast, the levels of foreign language anxiety declared by the subjects remained almost unchanged. Possible causes of such fluctuations are offered.

**Keywords:** Changes in motivation, anxiety and boredom, virtual worlds, learning English in *Second Life*.

#### 1. Introduction

In recent times there has been a growing interest in virtual worlds (e.g. *Second Life* or *Active Worlds*). This is because they offer a range of opportunities for supporting learning and cost-effective collaboration (Smart, Cascio & Paffendorf, 2007) as well as a space to meet, share and collaborate (de Freitas, 2008). In addition, virtual worlds offer, among other things, the feeling of presence (Peterson, 2006), the possibility of experiencing simulations of real world (Topol, 2011), motivation for using the target language in communication (Kruk, 2015), communication through avatar movement and gestures (Robbins, 2007) and anonymity (van Deusen-Scholl, Frei & Dixon, 2005). It has to be noted, however, that there is not much empirical research on using virtual worlds and their impact on changes in motivation, language anxiety and boredom while learning a foreign language. The rationale behind this study comes from the assumption that deeper comprehension of how motivation, anxiety and boredom changes during learning a foreign language in a virtual world and what causes such fluctuations may assist in creating better conditions and occasions that facilitate the process of learning the target language in virtual worlds. At the outset, a brief overview of the literature related to the concept of motivation, language anxiety and boredom will be presented. This will be followed by the description of the research project, including its aims, subjects, data collection instruments and analysis, as well as the presentation of the results. The article will close with a discussion of the findings and a short conclusion.

## 2. Literature review

### 2.1. Motivation, anxiety and boredom

Motivation in language learning is generally understood to denote “the desire to initiate L2 learning and the effort employed to sustain it” (Ortega, 2009: 168). Motivation has been “responsible for *why* people decide to do something, *how long* they are willing to sustain the activity and *how hard* they are going to pursue it” (Dörnyei & Skehan, 2003: 614). The issue of motivation has been considered as one of the most important variables that can affect how and to what extent a language is learned. It is thus not surprising that for decades researchers have been making efforts to comprehend the concept. Dörnyei (2005) differentiates three main phases in research into motivation in language learning: (1) the social psychological period, (2) the cognitive situated period and (3) the process-oriented period. The first phase is characterized by Gardner’s motivation theory (1985) and Clément’s theory of linguistic self-confidence (1980). The second phase was influenced by Deci and Ryan’s Self-Determination Theory (1985) and Weiner’s attribution theory (1992). The third phase stressed the significance of motivational changes (e.g. Ushioda, 1996; Williams & Burden, 1997; Dörnyei & Ottó, 1998; Dörnyei, 2000).

The fact that motivation is a dynamic factor has been acknowledged, among others, by Williams and Burden (1997), Dörnyei and Ottó (1998) and Ushioda (1998). For example, Ushioda (1998) claims that in the case of institutionalized learning motivation is not likely to remain stable over time but alter. This is because students’ objectives are subject to change in reaction to negative or positive experiences linked with the target language and the process of learning it. It should be noted, however, that the dynamic dimension of motivation can also be described by Vygotsky’s sociocultural theory (1978) and dynamic systems theory (Larsen-Freeman & Cameron, 2008). According to the latter, students’ motives, effort and engagement are characterized by incessant changes related to the impact of internal and external factors, which are intricately interconnected and are themselves subject to substantial variations.

As far as anxiety is concerned, alike motivation, has been studied as a potential factor influencing foreign language learning success for many years. In general, anxiety is defined as “the subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the autonomic nervous system” (Spielberger, 1983: 15). In the context of language learning, however, anxiety is viewed as the feeling of tension and apprehension (MacIntyre & Gardner, 1994), or, as a “distinct complex of self-perceptions, beliefs, feelings, and behaviours related to classroom language learning arising from the uniqueness of the language learning process” (Horwitz, Horwitz & Cope, 1986: 128).

Anxiety can be classified in three ways: *state*, *trait* and *situation-specific*. As for the first two types, they can be considered as the apprehension that people experience at specific moments in reaction to certain situations and as a characteristic of an individual’s personality, respectively. As regards the third type, it can be viewed as the anxiety generated by a specific type of situation or event (Ellis, 2008: 954). It has to be added that language anxiety is seen as a situation-specific anxiety linked with the language learning context, suggesting that it “can play a significant causal role in creating individual differences in language learning” (Tallon, 2011: 75).

The SLA literature distinguishes various sources of language anxiety. It can be caused by (1) personal and interpersonal anxiety, (2) learner beliefs about language learning, (3) teacher beliefs about language teaching, (4) teacher-learner interactions, (5) classroom procedures and (6) testing (Young, 1991). What is more, research on anxiety distinguishes between *facilitative* anxiety and *debilitative* anxiety. The former is linked

with a positive impact anxiety can have on foreign language learning and the latter is connected with a negative effect of anxiety on foreign language learning (Alpert & Haber, 1960; Scovel, 1978; Ellis, 2008). It should also be added that the level of difficulty of a task may affect students who can develop facilitating or debilitating anxiety (MacIntyre, 1995: 92).

When it comes to boredom, it can be defined as a sense of emptiness and a frame of mind accompanied by the lack of activity, the lack of actions towards experiencing and learning about the world (Gurycka, 1977) or as a rather negative emotional state consisting in the feeling of inner emptiness and the lack of interest, usually caused by monotony, invariability of environment, the same activities and the absence of incentives (Buksik, 2009). Boredom is often understood as an affective state encompassing absence of stimulation, unpleasant feelings and low physiological arousal (Mikulas & Vodanovich, 1993).

According to component theories of emotional experiences (Kleinginna & Kleinginna, 1981; Scherer, 2000), boredom can be viewed as a type of emotion comprising five components: affective (i.e. unpleasant feelings), cognitive (i.e. alerted perception of time), motivational (i.e. a desire to change an activity), expressive (i.e. facial and bodily expressions showing a lack of excitement) and physiological (i.e. reduced arousal and overall tiredness). It is also important to note that boredom is not the opposite of interest or enjoyment in view of the fact that it is seen as a distinctive emotional experience that consists of multiple components (Pekrun, Götz, Daniels, Stupnisky & Perry, 2010).

There are two general perspectives on the causes of boredom: *situational* and *dispositional*. The former are caused by situational attributes, for example, specific characteristics of the classroom settings (Kanevsky & Keighley, 2003) and the latter are the outcomes of individuals' inclinations to understand a given condition as boring in nature (Vodanovich, 2003). According to Kanevsky & Keighley (2003), a true learning situation can be presented by a stimulating classroom environment that is not boredom provoking. It has to be pointed out, however, that individual characteristics of students and their interests may play an important role in perceiving various activities as inherently boring. In addition, boredom can be caused by specific aspects of instructional design (e.g. little diversity), aspects of the teacher personality (e.g. teacher burnout) and students themselves (Götz, Frenzel & Haag, 2006).

## 2.2. Empirical investigations into (changes in) motivation, anxiety and boredom in language learning

To the best of the present author knowledge, there currently exist no published empirical investigations into changes in boredom in foreign/second language learning by means of computer technology. This makes a review of such literature impossible. In lieu thereof, a short discussion of two research projects that have focused on boredom in a traditional language classroom will be offered. In addition, despite the fact that quite a large body of research on motivation and anxiety in learning a second/foreign language by means of computer technology has been published (e.g. Deutschmann, Panichi & Molka-Danielsen, 2010; Peterson, 2010; Wang & Shao, 2012), only one study (Kruk, 2013) investigated the changes in motivation in learning the target language by means of Internet resources and virtual worlds and some studies examined motivation, anxiety and learning a foreign language in virtual worlds (e.g. Ho, Rappa & Chee, 2009; Wehner, Gump & Downey, 2011; Balcikanli 2012 and Wehner, 2014).

As far as boredom in learning a second or foreign language is concerned, only two such studies investigated the problem directly (Beerman & Cronjäger, 2011 and Chapman, 2013). The study carried out Beerman and Cronjäger (2011) comprised data from 548

German secondary school learners who studied French as a foreign language. The purpose of the study was to investigate the subjects' perceptions of the value of French language teaching linked with their experiences of joy, boredom and anxiety. The outcome showed a significant and negative correlation of boredom with their favorable perceptions of the target language instruction. In addition, the researchers found that with time the subjects experienced more boredom and less joy while studying French. As for the study conducted by Chapman (2013), it aimed at investigating occurrences of boredom among 57 university-level learners of German as a foreign language and their teachers. The data were collected by means of questionnaires, field notes and semi-structured interviews with selected subjects. Among other things, the results of the study showed a connection between the subjects' interpretation of their reported experiences of boredom during class time and their attitude toward their teachers. In addition, it was found that a meaningful predictor of boredom was not related to a language activity or its feature, but to the students' attitude toward their teachers.

As noted above, Kruk (2013) examined the impact of Internet resources and a browser-based virtual world on the subjects' motivation and its changes over a three-week period. The study comprised thirteen third grade students of Polish senior high school. The data were collected by a variety of tools: a background questionnaire, interest grids, overall assessment of lessons questionnaire, an evaluation sheet and learners' logs. The analysis of the data showed that the intensity of motivation tended to change over time (i.e. both during single lessons and from one lesson to the next). It is interesting to note, however, that the students showed more interest and engagement while performing online and virtual world activities and that the fluctuations in the level of motivation were less susceptible to changes during that time. Conversely, when asked to do the coursebook activities (i.e. traditional ones) their motivation proved to be more susceptible to changes. As Kruk concludes, the observed fluctuations in motivational intensity could be the direct result of the treatment employed and the activities the participants were requested to perform.

Wehner et al. (2011) attempted to examine the relationship between motivation, virtual worlds and language learning. The research looked at how the use of *Second Life* affected the motivation of two courses of second semester Spanish students at university level. The researchers utilized an attitude/motivation test battery in order to see if there was a difference in the motivations between two groups. One group used *Second Life* as part of instruction and the other group participated in traditional curriculum. Despite the fact that the two groups did not differ significantly the overall trend in motivations revealed that the students who used *Second Life* were more motivated than the students who were taught traditionally. What is more, the results demonstrated that levels of anxiety between the groups varied more than any of the other variables. All in all, the findings indicate that virtual worlds could be a valuable resource to enhance motivation and lower anxiety.

In another study, Balcikanli (2012) investigated the use of *Second Life* as a language learning environment among American and Turkish students (i.e. American college students learning Turkish as a foreign language in the USA and Turkish students learning English as a foreign language in Turkey). The researcher found that *Second Life* contributed to authentic interactions as well as provided a less threatening learning environment.

Finally, Wehner (2014) attempted to examine the relationship between motivation, anxiety and virtual worlds with the aim of seeing how participation in activities in *Second Life* interacted in two individual students, Jessica and Melissa. Wehner used a case study approach. She observed and interviewed her subjects in order to determine how these variables acted together in the subjects' online experiences. The researcher

found that avatar presence affected participants' anxiety; however, the amount of that affect was determined by their pre-existing motivations for learning the Spanish language and the richness and credibility of their Ideal L2 Self. What is more, for both students an avatar served as a face-saving device, but this was more evident in Jessica in view of the fact that she engaged in conversations with *Second Life* users.

Virtual worlds have been gaining increased attention in second/foreign language education in recent years. It should be noted, however, that little research has been conducted on how the use of virtual worlds affects motivation and anxiety and no research projects have dealt with the issue of boredom and its change in virtual worlds.

### 3. The study

#### 3.1. Research questions

The study set out to investigate the changes in motivation, language anxiety and boredom in learning English in *Second Life*. In more specific terms, the study sought to address the following research questions:

1. What is the level of the subjects' motivation to learn English in *Second Life* as well as their level of foreign language anxiety and their experience of boredom?
2. Do the students' motivation to learn English in *Second Life* as well as their foreign language anxiety and the experience of boredom change during sessions in *Second Life*?
3. If there are changes in the level of the participants' motivation to learn English in *Second Life* as well as in the levels of the declared foreign language anxiety and the experience of boredom, are there any patterns?
4. If there are changes in the level of the students' motivation to learn English in *Second Life* as well as in the levels of their foreign language anxiety and the experience of boredom, what causes these fluctuations?

#### 3.2. Participants

The participants of the study were 16 second year students of English philology, all of whom were females. The subjects were regular students, had classes during the week and studying was their main occupation. Their main age was 21.44 years, with a range of 20 to 26 years. On average, they had been learning the English language for 12.6 years. Some of the students contacted foreign speakers of English using Internet communicators; however, none of them used *Second Life* or any other virtual world for this purpose before. Most of the subjects read Internet websites in English and watched movies in English or with English/Polish subtitles. When asked to evaluate their command of English on a scale from 2 (fail) to 5 (very good), 73% claimed they represented level 4, the rest, level 3.

#### 3.3. Procedures, data collection and analysis

The study was conducted over the period of a summer semester. During that time the subjects were asked to use *Second Life* in order to practice their language skills in their own time. Since the participants of the study did not use *Second Life*, or any other virtual world for the purpose of studying a foreign language or any other purpose before the study, they were provided with necessary information concerning the world in question during an orientation session. Among other things, the students were shown how to create an account, choose an avatar and move around the world as well as they were instructed in how to communicate with other avatars by means of a text chat or voice function.

As far as the data collection instruments are concerned, they included a background questionnaire and a session log. The background questionnaire was filled out by the students at the start of the study and queried them about their age, the length of their

English instruction, their self-assessment of the target language proficiency, their out-of-class exposure to the target language and the use of virtual worlds (e.g. *Second Life*) in order to learn a foreign language. As for the session log, it comprised three parts: *before* (filled out by the subjects before each session), *during* (completed by the students during each session) and *after* (filled out by the students after each session). The first part required the students to provide their name and date of the session, write a topic and aim/aims of their visit to the virtual world. The second part consisted of three grids. The subjects were requested to self-rate their level of motivation, foreign language anxiety and boredom every a few minutes on a scale ranging from 1 (minimum) to 7 (maximum). In addition, the students were requested to indicate the amount of time spent in *Second Life* during each session. The last part of the session log asked the participants of the study to describe their activities in *Second Life*, summarize what they learned during a particular visit to this virtual world, reflect on the their learning and plan their future activities there.

The self-ratings were analysed quantitatively and a paired samples *t*-test was used to compare the results. The significance value was set at  $p \leq .05$  for all analyses. The students' responses/entries to the third part of the session log were analysed qualitatively. This type of analysis involved identification of items or themes in the data. First the researcher transcribed the data on a computer word processor and then read them several times in order to search for the most typical and frequently occurring information.

### 3.4. Results

Table 1 outlines the participants' *Second Life* usage statistics. The table shows that the subjects visited the world in question 78 times and spent there in total 3.089 minutes. The average number of visits and the average amount of time spent in *Second Life* equalled 5 and 193.06 minutes, respectively.

	Student	Number of sessions	Total amount of time spent in <i>Second Life</i> (minutes)
	S1	5	131
	S2	4	370
	S3	3	75
	S4	6	206
	S5	4	110
	S6	4	148
	S7	4	104
	S8	6	311
	S9	7	405

	S10	6	209
	S11	4	210
	S12	5	135
	S13	3	75
	S14	5	145
	S15	4	165
	S16	8	290
<b>Total</b>		78	3.089

Table 1. The students' *Second Life* usage statistics.

*What is the level of the subjects' motivation to learn English in Second Life as well as their level of foreign language anxiety and their experience of boredom?*

As can be seen from Table 2, the students were quite willing to learn English in *Second Life* (their overall motivation equalled 4.51 or 64.43%); however, they also experienced some boredom (their total experience of boredom amounted to 3.25 or 46.43%). The analysis of the gathered data also demonstrated that the participants of the study were not particularly anxious during their visits to *Second Life* (the overall level of their language anxiety totalled 2.54 or 36.29%). In addition, the values of standard deviation for the declared levels of motivation and boredom were quite small and almost identical (they amounted to 0.97 and 0.96, respectively). This shows that the group as a whole was quite uniform in this respect. It should be noted, however, that the values of standard deviation concerning the declared level of foreign language anxiety were higher than those related to motivation and boredom (a difference of 0.35 and 0.36, respectively), which may indicate some individual variation.

Time points	Mean (Standard deviation)		
	Motivation	Anxiety	Boredom
Start of session (SoS)	5.28 (0.80)	2.60 (1.45)	3.03 (0.97)
Middle of session (MoS)	4.75 (0.96)	2.49 (1.13)	2.97 (0.73)
End of session (EoS)	3.49 (1.15)	2.54 (1.38)	3.77 (1.18)
<b>Total</b>	<b>4.51 (0.97)</b>	<b>2.54 (1.32)</b>	<b>3.25 (0.96)</b>

Table 2. Mean scores for the level of the students' motivation, the level of foreign language anxiety and boredom.

Such results find support in the data derived from session logs. This is because the analysis revealed that the students regarded their visits and activities performed in *Second Life* as interesting. What is more, they found their visits enjoyable and relaxing. This is visible in the following comments:

- *I had a chance to meet some interesting people, exchange messages, and, what is more, I have proven myself that I can speak with native speakers without any trouble.*
- *My activities were very enjoyable. I've never expected a virtual world to have such a big amount of very well prepared various parties. Those activities were very useful. We have to not only know where we can learn but also where we can relax and have fun.*
- *It's a good way to relax. You can spend some time here when you feel bored. It's a great opportunity to check your skills.*
- *In fact at some point I really had fun. I listened to really good music and met nice people who were eager to talk to me.*
- *It was a very interesting experience because apart from dancing I was also talking, drinking and eating with those people in the club.*

*Do the students' motivation to learn English in Second Life as well as their foreign language anxiety and the experience of boredom change during sessions in Second Life?*

As can be seen from the graphical representation in Figure 1 and the numerical data included in Table 2, which offer the mean scores for the group on sessions in *Second Life*, there were changes in the reported level of motivation to learn English in the world in question as well as in the levels of foreign language anxiety and boredom. It should be noted that the most pronounced to change turned out to be motivation and boredom. As for as motivation is concerned, it was the highest at the beginning of the sessions (SoS) and the lowest at the end of the visits (EoS) with the difference between these time points standing at 1.79 or 25.57%. In addition, a *t*-test which was performed on the data revealed that there were statistically significant differences in the means between SoS and the middle of sessions (MoS) ( $t(15) = 2.652, p = 0.018$ ) as well as MoS and EoS ( $t(15) = 4.830, p = 0.000$ ) and SoS and EoS ( $t(15) = 5.354, p = 0.000$ ). Cohen's *d* reached the level of 0.66, 1.34 and 1.21, respectively, which testifies to large effect sizes. When it comes to the changes in the levels of boredom experienced by the subjects in *Second Life*, they were quite stable from the beginning of sessions to the middle of sessions (the difference in the means equalled 0.06 or 0.86%,  $p > 0.05$ ); however, the degree of boredom increased at the end of the visits to *Second Life* (the difference between MoS and EoS amounted to 0.08 or 11.43%). A *t*-test which was performed on the data revealed that there was a statistically significant difference in the means between MoS and EoS ( $t(15) = -2.332, p = 0.034, d = 0.73$ ) as well as SoS and EoS ( $t(15) = -2.924, p = 0.010, d = 0.58$ ). Finally, the levels of foreign language anxiety from the beginning of sessions to the end of them proved to be the least susceptible to change (the largest difference in the mean scores, although not statistically significant, was observed between SoS and MoS and equalled 0.11 or 1.57%).

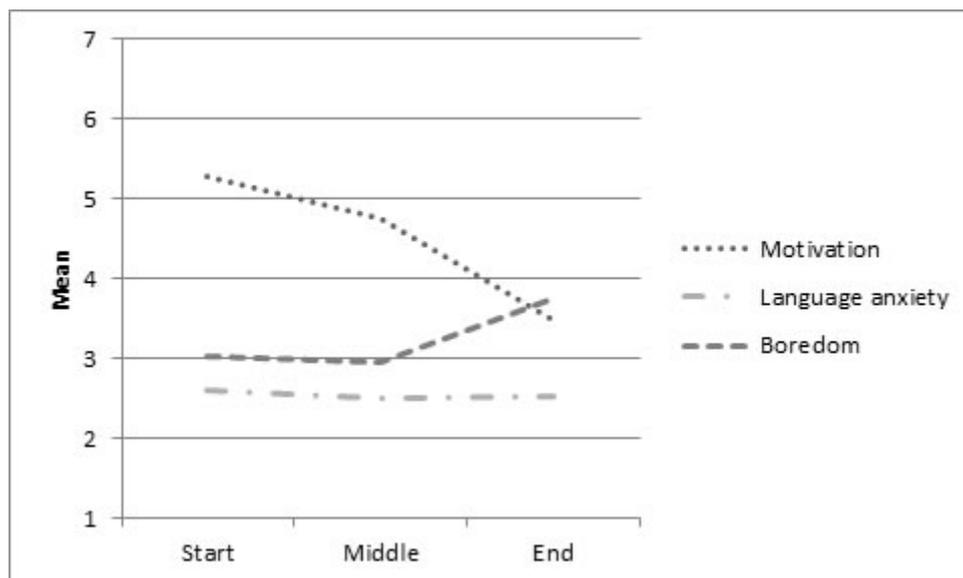


Figure 1. Changes in the students' motivation, foreign language anxiety and boredom.

*If there are changes in the level of the participants' motivation to learn English in Second Life as well as in the levels of the declared foreign language anxiety and the experience of boredom, are there any patterns?*

The analysis of the data demonstrated that the subjects' motivation to learn the English language during their visits to *Second Life* and the experience of boredom showed similar, although contradictory or upturned patterns (i.e. the students' declared levels of motivation and boredom were the highest at the start of sessions and the end of their visits, respectively). It should also be noted that the level of the reported motivation kept decreasing from SoS to EoS while the levels of boredom remained almost unchanged between SoS and MoS. The degree of boredom increased suddenly at the end of the sessions (i.e. on EoS). When it comes to the levels of foreign language anxiety, they remained quite stable throughout the visits (i.e. from SoS to EoS) and turned out to be quite low, with the mean score never exciding 2.60 on a 1-7 scale.

*If there are changes in the level of the students' motivation to learn English in Second Life as well as in the levels of their foreign language anxiety and the experience of boredom, what causes these fluctuations?*

Before moving on to present the remaining research area that the study sought to investigate, it is interesting to note that the students were the most willing to use *Second Life* in order to have conversations in English. They referred to this type of activity in 55 session logs (70.51%). What is more, the participants of the study also liked exploring *Second Life*. They mentioned this activity in 34 session logs (43.59%). It has to be added that the exploration of this virtual world was mostly performed during their initial visits; however, the subjects used it as an additional activity during which they were searching for new places and avatars in order to converse with them. It should also be noted that only a few students explicitly pointed to practicing reading (referred to in 4 logs) and listening (mentioned in 4 logs) skills as well as vocabulary (stated in 6 logs) and learning about English culture (detected in 6 logs).

As indicated earlier in this section and shown in Table 2 and Figure 1, there were changes in the degree of the declared motivation and boredom. The analysis of the data obtained from the session logs revealed that despite the fact that the students were quite willing to use *Second Life* in order to practice English (for example, each student was able to set a goal or goals before entering the virtual world in question as well as to

choose a topic for a conversation or activities to be conducted there), the students' initial enthusiasm faded during their visits due to the unwillingness to join or continue conversations on the part of some residents of *Second Life*, approaching unfriendly or impolite users, difficulties with understanding the language produced by *Second Life* users or being understood by them, the unexpected termination of conversations and some technical problems experienced by some students (they mostly related to slow Internet connection and hardware requirements). As a consequence, some subjects could find the end of their visits to *Second Life* as disappointing, unsatisfying or simply boring. The following excerpts illustrate these points:

- *I tried to put forward the theme of studying conditions because it's interesting what conditions are there in other countries. Unfortunately, these conversations weren't satisfying even though I was very willing to talk. (...) sometimes people don't want to speak about more serious topics than every day issues.*
- *What really upset me was that people weren't able to answer me. It was obvious for them that there are shops in Second Life and people want to buy something and they think these things are really necessary for them. (...) I didn't get any valuable information.*
- *We were talking about our daily life. Unfortunately I couldn't understand everything what he was talking about.*
- *I've met a person. I wanted to talk with him but he didn't want to talk with me. Finally, I've talked with a man from Chile. It was difficult because he didn't understand my questions.*
- *I've learned that you have to be very careful about who you are talking to. The first person I talked to was rather unpleasant and discouraged me from further talking with other users.*
- *After a few minutes it seemed to me a bit boring.*
- *My visit to Virlantis was rather an enjoyable experience. My only problem was that at the end of my session I started to have problems with my Internet connection and had to end my visit earlier than I originally planned.*
- *I was bored in places in which there were few users and most of the time I had to walk around and look for people to talk with.*
- *I was bored when successive users didn't want to talk with me (...).*

When it comes to the low level of the declared foreign language anxiety at the start, middle and the end of sessions, the analysis of the gathered data showed that the participants of the study very infrequently made explicit comments concerning the way how anxious they felt during their visits to *Second Life*. Instead, as noted earlier in this section, the subjects perceived *Second Life* and the way they practiced the target language as relaxing and comfortable. Nevertheless, some references to possible causes of tension or nervousness could be detected in the data. For example, some of the students felt anxious about the way their interlocutors behaved or talked to them. The following extracts provide examples of these types of statements:

- *(...) the conversation could have been enjoyable if the user wasn't kind of rude.*
- *(...) people rather are not very friendly, they are aggressive.*
- *Sometimes I have a problem with strange people who ask strong and not proper questions.*

#### **4. Discussion and conclusion**

The results of the study showed that, on the whole, the students declared quite high level of motivation to learn English in *Second Life* and a relatively low level of boredom. What is more, they were not particularly anxious during their visits to the world in question. These findings could be explained by the fact that the participants of the study found *Second Life* to be a valuable and a relaxing place to practice the target language. This is because they often described their experiences and activities as useful, enjoyable, nice, stimulating or comforting. In addition, the outcomes of the study may indicate a beneficial effect of employing the virtual world *Second Life* in learning a

foreign language outside of school. It should be noted, however, that these conclusions can only be tentative given the small numbers of participants and the fact that they were novice users of this virtual world.

The findings of the study also revealed that both the reported motivation as well as the experience of boredom fluctuated from the start of sessions to the end of the visits. In contrast, the levels of foreign language anxiety declared by the subjects remained almost unchanged. What is more, some of the changes in the levels of motivation and boredom turned out to be statistically significant. The reported changes in the levels of boredom experienced by the participants of the study during their visits to *Second Life* as well as their pattern somehow mirrored (although invertedly) those related to the levels of declared motivation. This might point to the existence of a relationship between motivation and boredom as well as the way the two constructs complement each other. In a word, the more willing, engaged and interested the students are in performing a language task the less boredom they might experience. As for the reported foreign language anxiety, its low and stable level does not appear to be affected by neither motivation nor boredom. A plausible explanation of this steady level of the reported anxiety could lie in the very nature of learning the target language in the computer assisted environment. This is because empirical investigations into the use of online learning, virtual worlds in language learning and studies on computer-mediated communication (CMC) indicate that the use of computer technology can reduce levels of language anxiety and produce a stress-free setting for language learners (e.g. Peterson, 2011; Majid, Sharil, Luaran & Nadzri, 2012; Grant, Huang & Pasfield-Neofitou, 2013).

As regards the possible causes of the changes in the levels of motivation and boredom, the high level of motivation and the low level of boredom declared by the students at the beginning of sessions, these could be explained by the subjects' willingness to use *Second Life* as a medium through which they could practice the target language at that time in order to have conversations with the residents of this virtual world, perform language activities or explore the world. In addition to this, the opportunity to choose a topic for conversation or to create a goal of a visit could also have played a part in motivating the students and reducing the feeling of boredom during the performance of a language activity. As for the decrease in the level of the observed motivation and the increase of boredom at the end of sessions, these were found to be related to the reluctance to join or carry on conversations by *Second Life* users, meeting impolite or aggressive users, problems with comprehending the language produced by the residents of *Second Life* as well as difficulties with being understood by them. In addition to this, the students felt less motivated at the end of their visits to *Second Life* due to the sudden end of conversations as well as problems related to computer hardware and slow Internet connection. As a result, some students could find the end of their visits to *Second Life* as disappointing, unsatisfying or simply boring. As for the probable source of anxiety, the subjects' tension and apprehension may be explained by the fact of meeting and talking with aggressive users.

Although the study has provided interesting insights into the changes in motivation, language anxiety and boredom in learning English in *Second Life*, it is not immune from limitations. One weakness concerns the small sample size which reduces generalizability of the findings. Another limitation is related to the design of this study, the data collection instrument and potential flaws it contained. This is because the data were mainly gathered by means of the session log. For example, the tool employed the self-rating procedure in which the participants were asked to indicate their willingness to use *Second Life* in language learning, show the level of language anxiety and boredom. This procedure might have been somehow unnatural for them and thus could have impinged

on the ratings. It also has to be added that more research tools should be used (e.g. interviews with the learners) in order to collect more data that could shed more light on the changes in motivation, language anxiety and boredom. Finally, a novelty factor may have played a role. This is because some of the students may have perceived *Second Life* as something unique which, in turn, may in itself have influenced their self-assessment of motivation, anxiety and boredom.

In light of those weaknesses just reported more research is needed in this area, such that would involve larger samples comprising male and female students as well as groups of younger and older language learners representing different types of school. In addition, future studies should employ a variety of instruments of data collection (e.g. group or individual interviews) and combine quantitative and qualitative procedures in analysing gathered data.

Despite the limitations of the study reported above it is still possible to offer some pedagogical implications. One of them relates to the fact that teachers should encourage their students to use *Second Life* (or any other virtual world) in order to practice their language skills outside of school, or, if possible, during foreign language classes. This is because, as the results of the present study demonstrated, the subjects' level of motivation and the experience of boredom were, on the whole, quite high and relatively low, respectively. Another tentative pedagogical implication emerges on the basis of the analysis of the results of the study related to the changes in the levels of motivation, language anxiety and boredom. Taking the causes of the decrease in motivation and the increase in the experience of boredom enumerated in the previous section into account, teachers should, for example, set up a website, write a blog or conduct short discussions during regular classes devoted to problems students may experience in virtual worlds, create a variety of language tasks or provide students with links to various websites that offer ideas for language activities. In addition to this, a social networking portal (e.g. Facebook) "can function as a Web2 scaffolding for virtual world language learning community of practice" (Sobkowiak, 2015) so as to allow students exchanges their ideas related to language learning in virtual worlds, suggest interesting places to visit in order to practice language skills and tips for solving different problems users can encounter while being there. Finally, students as well as teachers should also know how to deal with aggressive and spiteful behaviour, or grieving. For example, Sobkowiak (2012: 44) suggests persuading the griever to behave sensibly or ignoring him/her.

## References

- Alpert, R., and Haber, R. (1960). Anxiety in academic achievement situations. *Journal of Abnormal and Social Psychology*, 61: 207-215.
- Beerman, C. and Cronjäger, H. (2011). Die Rolle der Fachwerteschätzung für Freude, Langeweile und Angst im Fach Französisch: Eine mehrebenenanalytische Längsschnittstudie über die Sekundarstufe I unter Verwendung von Piecewise Growth Modellen. *Zeitschrift für Interkulturellen Fremdsprachenunterricht*, 16(2): 18-34.
- Balcikanli, C. (2012). Language learning in Second Life: American and Turkish students' experiences. *Turkish Online Journal of Distance Education-TOJDE*, 13(2): 131-146.
- Buksik, D. (2009). Nuda, apocomia, pustka - choroby dotykająca współczesnego człowieka czy nerwica noogenna w ujęciu V. E. Frankla. *Studia Psychologica* 9: 191-199.
- Chapman, K. E. (2013). *Boredom in the German foreign language classroom*. The University of Wisconsin-Madison, unpublished PhD.

Clément, R. (1980). Ethnicity, contact, and communicative competence in a second language. In Giles, H., Robinson, W. P. & Smiths, P. M. (Eds.), *Language: Social psychological perspectives*. Oxford: Pergamon.

Deci, E. L. and Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.

de Freitas, S. (2008). *Serious virtual worlds: a scoping study*. Bristol: Joint Information Systems Committee.

Deutschmann, M., Panichi, L. & Molka-Danielsen, J. (2009). Designing oral participation in Second Life - a comparative study of two language proficiency courses. *ReCALL*, 21(2): 206-226.

Dörnyei, Z. (2000). Motivation in action: towards a process-oriented conceptualization of student motivation. *British Journal of Educational Psychology*, 70: 519-538.

Dörnyei, Z. (2005). *The psychology of the language learner: individual differences in second language acquisition*. Mahwah, NJ: Lawrence Erlbaum.

Dörnyei, Z. and Ottó, I. (1998). Motivation in action: a process model of motivation. *Working Papers in Applied Linguistics*, 4: 43-69.

Dörnyei, Z. Skehan, P. (2003). Individual differences in second language learning. In Doughty, C. J. and Long, M. H. (Eds.), *The handbook of second language acquisition*. Oxford: Blackwell.

Ellis, R. (2008). *The study of second language acquisition*. Oxford: Oxford University Press.

Gardner, R. C. (1985). *Social psychology and second language learning: the role of attitudes and motivation*. London: Edward Arnold.

Götz, T., Frenzel, A. C. & Haag, L. (2006). Ursachen von Langweile im Unterricht. *Empirische Pädagogik*, 20: 113-134.

Grant, S., Huang, H. & Pasfield-Neofitou, S. (2013). Language learning in virtual worlds: the role of foreign language and technical anxiety. *Journal of Virtual Worlds Research*, 6(1): 1-9.

Gurycka, A. (1977). *Przeciw nudzie: o aktywności*. Warszawa: Nasza Księgarnia.

Ho, C. M. L., Rappa, N. A. & Chee, Y. S. (2009). Designing and implementing virtual enactive role-play and structured argumentations: promises and pitfalls. *Computer Assisted Language Learning*, 22(5): 381-408.

Horwitz, E. K., Horwitz, M. B. & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2): 125-132.

Kanevsky, L. and Keighley, T. (2003). To produce or not to produce? Understanding boredom and the honor in underachievement. *Roeper Review*, 26(1): 20-28.

Kleinginna, P. R. and Kleinginna, A. M. (1981). A categorized list of emotion definitions, with suggestions for a consensual definition. *Motivation and Emotion*, 5(4): 345-379.

Kruk, M. (2013). Virtual worlds, Internet resources, motivation: the results of a research project. In Salski, Ł. and Szubko-Sitarek, W. (Eds.), *Perspectives on foreign language learning*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.

Kruk, M. (2015). Willingness to communicate in English in Active Worlds. In Turula, A. and Chojnacka, M. (Eds.), *CALL for bridges between school and academia*. Frankfurt am Main: Peter Lang Edition.

- Larsen-Freeman, D. and Cameron, L. (2008). *Complex systems and applied linguistics*. Oxford: Oxford University Press.
- Majid, F. A., Elia, W., M., Sharil, H, Luanan, J. E. & Nadzri, F. A. (2012). A study on the on-line language learning anxiety among adult learners. *International Journal of e-Education, e-Business, e-Management and e-Learning*, 2(3): 187-192.
- MacIntyre, P. D. (1995). How does anxiety affect second language learning? A reply to Sparks and Ganschow. *Modern Language Journal*, 79(1): 90-99.
- MacIntyre, P. D. and Gardner, R. C. (1994). The effects of induced anxiety on three stages of cognitive processing in computerized vocabulary learning. *Studies in Second Language Acquisition*, 16: 1-17.
- Mikulas, W. L. and Vodanovich, S. J. (1993). The essence of boredom. *Psychological Record*, 43: 3-12.
- Ortega, L. (2009). *Understanding second language acquisition*. London: Hodder Education.
- Preckel, F., Götz, T. & Frenzel, A. (2010). Ability grouping of gifted students: effects on academic self-concept and boredom. *British Journal of Educational Psychology*, 80(3): 451-472.
- Peterson, M. (2010). Learner participation patterns and strategy use in Second Life: an exploratory case study. *ReCALL*, 22(3): 273-292.
- Peterson, M. (2011). Towards a research agenda for the use of three-dimensional virtual worlds in language learning. *CALICO Journal*, 29(1): 67-80.
- Peterson, M. (2006). Learner interaction management in an avatar and chat-based virtual world. *Computer Assisted Language Learning*, 19(1): 79-103.
- Robbins, S. (2007). A futurist' view of Second Life education: a developing taxonomy of digital spaces. In Livingstone, D. and Kemp, J. (Eds.), *Proceedings of the Second Life education workshop*. Chicago: IL.
- Scherer, K. R. (2000). Emotions as episodes of subsystems synchronization driven by nonlinear appraisal processes. In Lewis, M. L. and Granic, I. (Eds.), *Emotion, development, and self-organization*. Cambridge: Cambridge University Press.
- Sobkowiak W. (2015). Virlantis, Facebook and Second Life: web2 scaffolding for virtual world language learning community of practice. In Tutula, A. and Mikołajewska, B. (Eds.), *Insights into technology enhanced language pedagogy*. Frankfurt: Peter Lang Verlag.
- Sobkowiak W. (2012). *Five years in Second Life, or: phonetically augmented virtuality in Second Life English as a foreign language*. On-line: Scribd. <http://www.scribd.com/doc/108718699/Paving-EFL-in-SL>.
- Scovel, T. (1978). The effect of affect on foreign language learning: a review of the anxiety research. *Language Learning*, 28: 129-142.
- Smart, J., C. J. and Paffendorf, J. (2007). *Metaverse Roadmap 2007: pathways to the 3D Web*. A Cross-industry Public Foresight Project. <http://metaverseroadmap.org/MetaverseRoadmapOverview.pdf>.
- Spielberger, C. D. (1983). *Manual for the state-trait anxiety inventory*. Palo Alto, California: Consulting Psychological Press.
- Tallon, M. (2011). Heritage speakers of Spanish and foreign language anxiety: a pilot study. *Texas Papers in Foreign Language Education*, 15(1): 70-87.

- Topol, P. (2011). Nowe obszary edukacji – trójwymiarowe światy wirtualne. In Cybal-Michalska, A., Segiet W. & Kopeć, D. (Eds). *Studia z pedagogiki i nauk pogranicza*. Poznań: Wydawnictwo Naukowe UAM.
- Ushioda, E. (1996). Developing a dynamic concept of motivation. In Hickey, T. and Williams, J. (Eds.), *Language, education and society in a changing world*. Clevedon: Multilingual Matters.
- Ushioda, E. (1998). Effective motivational thinking: a cognitive theoretical approach to the study of language learning motivation. In Soler, E. A. and Espurz, V. C. (Eds.), *Current issues in English language methodology*. Castelló de la Plana: Universitat Jaume I.
- van Deusen-Scholl, N., Frei, C. & Dixon, E (2005). Constructing learning: the dynamic nature of foreign language pedagogy in a CMC Environment. *CALICO Journal*, 22(3): 657-678.
- Vodanovich, S. J. (2003). Psychometric measures of boredom: a review of the literature. *The Journal of Psychology*, 137(6): 569-595.
- Vygotsky, L. (1978). *Mind and society: the development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Wang, F. and Shao, E. (2012). Using Second Life to assist EFL teaching: we do not have to sign in to the program. *TechTrends*, 56(4): 15-18.
- Wehner, A. K. (2014). *Exploring the relationship of motivation, anxiety, and virtual worlds in the experiences of two Spanish language learners: a case study*. University of South Florida, unpublished PhD.
- Wehner, A., Gump, A. & Downey, S. (2011) The effects of Second Life on the motivation of undergraduate students learning a foreign language. *Computer Assisted Language Learning*, 24(3): 277-289.
- Weiner, B. (1992). *Human motivation: metaphors, theories and research*. Newbury Park, CA: Sage.
- Williams, M., and Burden, R. (1997). *Psychology for language teachers*. Cambridge: Cambridge University Press.
- Young, D. J. (1991). Creating a low-anxiety classroom environment: what does language anxiety research suggest? *The Modern Language Journal*, 75: 426-439.
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## Research paper

### *Creating an avatar to become a "spect-actor" of one's learning of English for specific purposes*

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#### Abstract

In this article, we shall examine why the creation of avatars in virtual worlds facilitates the learning of business English. We are committed to determining the factors that enable students in a French business school to consolidate their skills in English (from linguistic, socio-linguistic and pragmatic standpoints) and to develop more general competences (such as self-confidence, the management of space and time, interpersonal relationships) through the creation and use of avatars. Our article aims at showing that these skills are then transferable to real communication situations. Our research comes within the scope of a "communic-actional" approach of English learning. It relies on the notions of "distanciation", "fragmentation" and "spect-actor" of dramaturgs Bertolt Brecht and Augusto Boal, which give a scientific framework to our research.

**Keywords:** Cognitive sciences, drama, e-learning, learning English, serious games, virtual worlds.

#### 1. Introduction

The Common European Framework indicates that learners must be the actors of their own learning of languages. They must find learning strategies that enable them to learn autonomously and become aware of their future as "social agents" (CEF, 2001, p. 1). This is what we always have in mind when we teach English to business students. We are committed to inviting them to realize that foreign languages are communication tools which enable them to reach a social and professional autonomy. Following the recommendations of the CEF, we adopt an "action-oriented approach" (CEF, 2001, p. 9) and use all the pedagogical resources at our disposal, including video games in virtual worlds.

We have recently led several experiments with our students in business English. Since they are interested in a variety of themes such as human resources, marketing, management, international trade, we have imagined real business situations in virtual worlds to complete their formation. Through the creation of their own avatars in the online multi-players video game *Second Life*, the students could practice English following the scenarios we had previously invented.

This article aims at highlighting the didactic added value of the creation of avatars in virtual worlds when it comes to learning English for specific purposes. After reminding the readers of our theoretical framework and the context of the experiment, we shall analyse the impact of using virtual worlds and avatars so as to consolidate linguistic,

socio-linguistic and pragmatic competences. The strengths and limits of the device will finally be pointed out.

## 2. Theoretical Framework

In the 1960s, Bertolt Brecht wrote about the didactic power of drama. For him, theatre practitioners had to bear in mind "its ability to amuse, and [...] its value as education." (Brecht, 1964, p.130). Since then, it has been demonstrated that drama, precisely because of its didactic value, can be well adapted to language learning situations. In *Drama Techniques in language Learning*, Alan Maley and Alan Duff explain:

*Language is not purely an intellectual matter. Our minds are attached to our bodies, and our bodies to our minds. The intellect rarely functions without an element of emotion, yet it is so often just this element that is lacking in teaching material. Drama attempts to put back some of this forgotten emotional content into language - and to put the body back too.* (Maley & Duff, 1978, p. 7)

We are deeply convinced that learning a language does not only mean taking in (more or less efficiently) a lot of information in a passive way (i.e. remaining seated and listening to the teacher). Moreover, after reading the books of Donald Winnicott (*Playing and the Reality*) and Johann Huizinga (*Ludo ergo Sum*), we have been seduced by the "edutainment" quality of drama and have resorted to dramatic techniques in our business English courses. However, after scientific research on drama and dramatic activities for ESP, we have also realized that this device does not suit every student when it comes to consolidating general and linguistic competences. Indeed, in her article "L'utilisation des stratégies d'apprentissage d'une langue dans un environnement des TICE", Janet Atlan explains that there are generally four types of individual differences in language learning: cognitive, affective, socio-cultural differences and differences in using learning strategies. (Atlan, 2000, p. 111). Depending on the personality of the student, learning must absolutely be differentiated. We have thus decided to turn to new devices and started to use new technologies for information and communication for education such as digital educational platforms or the Internet. Our teaching method has become blended and multimodal.

In *La créativité artistique à l'école: Refonder l'acte d'apprendre*, Joëlle Aden asserts that research in cognitive sciences has demonstrated that learning is non-linear. Learning does not consist of acquiring new information, but rather reorganising what we know and incorporating new elements. (Aden, 2009, p. 175). This reminds us of Brecht's conception of fragmented reality. Brecht would advise to: "take a pair of scissors and cut [reality] into individual pieces which remain fully capable of life." (Brecht, 1964, p. 70). Because e-learning makes it possible to cut reality into pieces through changing our relationship with time and space, and to fragment and segment the development of certain competencies, it can be a useful pedagogical device for language acquisition.

We immediately understood the benefits of all those tools for everyone. More particularly, multimodal NTICE give both the teachers the means to enrich their teaching resources so as to increase the exposure of the student to the language and to differentiate learning strategies. Furthermore, the students can better autonomise their actions and reflexions as Julié and Pierrot explain in their book *Enseigner les langues*. (Julié & Pierrot, 2008, p. 138). In her article "Helping Students become autonomous Learners: Can Technology help?", Rubena St. Louis praises the use of the Internet when it comes to teaching a language because it is a multimodal device. She explains:

The use of different types of activities, with input being received by the learner through a visual, aural or kinesthetic medium, not only caters for individual learning styles, but may also lead to the information being processed on different levels in the learner's

cognitive system and so increase the likelihood that it will be stored in memory. (St Louis, 2006, p. 8).

Encouraging students to use the Internet to consolidate language learning is an excellent idea. Moreover, we are convinced that students learn more efficiently through experience. Multi-player video games on the Internet require the users to see, to talk, to listen and to move. The video game called *Second Life* even offers players to express themselves through writing. In his paper entitled "Second Life in Education and Language Learning", Vance Stevens praises the use of this game in particular for qualities that have "been transformative for education". (Stevens, 2006, p. 2). Hence our decision to resort to it. Because it is synchronous, the actor may use diverse modes at the same time to communicate: speak and read, speak and move, show or/and manipulate objects. So, it appeals to all the senses of the learner and, in the context of learning, is an added value.

In "Virtual world teaching, experiential learning, and assessment: An interdisciplinary communication course in *Second Life*", Jarmon et al. write that "project-based instructional activities have been found to provide an effective setting for [...] experiential cycles." (Jarmon, 2009, p.170). They analysed an experiment they conducted with students and their results demonstrated "the effectiveness of the SL environment for a project-based experiential learning approach, particularly as students were able to learn by doing and by applying learned concepts to the real world". (Jarmon, 2009, p. 178) E-learning based on multimodality and projects based on pedagogical scenarios have therefore become one dominating aspect of our fields of interest and a strong device to facilitate English learning. This is how we have progressively come across the use of virtual worlds for pedagogical purposes and started to focus on their didactic value.

We started an experiment in November 2013 with a group of voluntary second year students interested in customer relationship management in international companies. Our objective was to have our undergraduates use English for a professional purpose. It was thus an interdisciplinary project. Jarmion et al. explain that virtual worlds meet this objective and mention: "the potential effectiveness of virtual world environments for learning strategies to communicate effectively across different academic disciplines." (Jarmion, 2009, p. 171). Our students were eager to be given tasks to practice what they had learnt previously. The project was supervised by the English teacher, the marketing teacher, two experts in e-learning through virtual worlds and a technical engineer. A tight agenda was agreed upon, the pedagogical scenarios were validated and after numerous meetings, the experiment started in January 2014.

For the occasion, *Copets*, a company selling toys for pets, was created and its offices were built in *Second Life*. In "Massively Multiplayer Online Games (MMOs) in the new Media Classroom", Aaron Delwiche writes about a preliminary classroom experience with massively multiplayer environments and reminds his readers of the importance of defining learning objectives if teachers want learning with emerging technologies to be effective:

*For an MMO-themed class to be effective, learning objectives should be identified at the outset. Along with the macroscopic theoretical goals, students should be given a series of smaller objectives or "baby steps" that are related to game mechanics.* (Delwiche, 2006, p. 168)

So, we imagined scenarios and assigned students to tasks broken down into steps.

The participatory students endorsed the roles of members of the CRM team who had to face problems with angry customers (played by the teachers). We were committed to being as close to reality as possible and were careful to propose a truthful social and

professional experience. The teams (teachers and students alike) were all equipped with headphones which facilitated audio exchanges. They each had to create their own avatar.

One week before the first synchronous connection, the students were given the first scenario, the steps they had to follow and the competences that the teachers would observe (see appendix 1). They could meet, figure out and prepare what conversation they could have with the client. After the one hour and a half first simulation, the teams were encouraged to give their opinions on the device, the scenarios and the quality of their language.

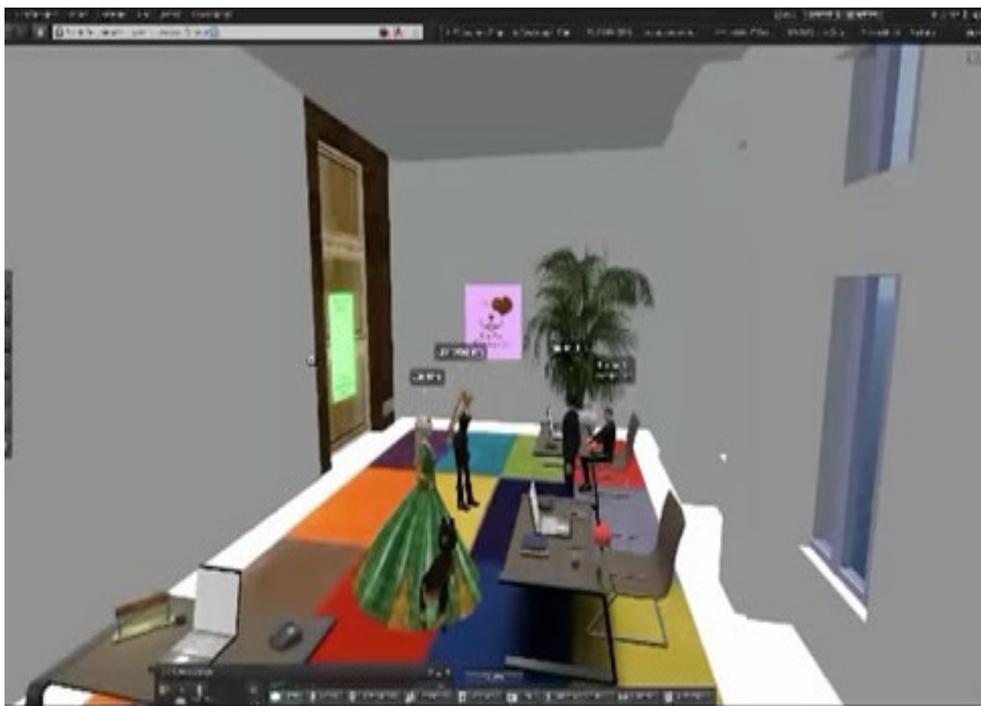


Figure 1. Image of the first simulation.

One month after, they were given the second scenario (see appendix 2). The simulation lasted one hour and a new debriefing followed. All the students were motivated volunteers. These hours were optional and required them some supplementary personal investment. For St Louis, motivation fuels learning. She explains that “when students become more involved in their own learning, taking an active part in making decisions, they might feel a sense of ownership and commitment to the process, and learning might be more meaningful.” (St. Louis, 2006, p. 1). Motivation is thus another strong factor of successful language acquisition. Joëlle Aden adds to this that motivation is what fuels all cognitive investment and is linked to the meaning we give to any social interaction in the context of learning. (Aden, 2004 p. 29). The meaning we give to the activity and the frame we define (for Erving Goffman these two elements are important in learning situations) are essential in the learning context. Therefore, when students get to know the pedagogical scenarios created for them, the roles they must take on and their use of a video game to learn English, they feel motivated and show their interest (a further key-factor to success for St. Louis, 2006, p.7).

These are the reasons why we think that multimodal virtual worlds are efficient devices in language learning. Now we shall study how the creation of an avatar facilitates the acquisition and consolidation of general and linguistic competences from a cognitive standpoint.

### 3. Results

In his PhD thesis "Le corps dans la langue. Les techniques dramatiques dans l'enseignement/apprentissage des langues étrangères", Alex Cormanski says that paradoxical as it may seem, if the comedian wants to be really involved in the dramatic action, he or she must take some distance from what he or she is playing. This helps him or her be more invested in the role. (Cormanski, 1993, p. 94-95). This aspect of didactic drama, echoing the notion of Brecht's "Verfremdungseffekt" (translated in English by the phrase "distancing effect"), is the guiding principle of our research. We indeed aim at enticing the students to take some distance from their learning and realize what they know and what they still need to learn. Taking some distance helps them to be more involved in the learning process. We therefore devise strategies promoting a meta-cognitive reflection on their own learning (for example, questionnaires).

As said earlier, both the teachers and the students had to create their own avatars for this experiment. In their paper "Constructing my Online Self: Avatars that Increase Self-focused Attention", Asimina Vasalou et al. define avatars as personal, non-anonymous symbolic artefacts that "emit individuating properties back to their owners and outwards to the community". (Vasalou, 2007, p. 445). The choice of an avatar tells a lot about oneself. *Second Life* offers the players the possibility to embody human beings but also animals, objects, fantasy characters. Vincent Berry explains in *L'Expérience virtuelle* that the players who choose avatars who look like real people are people who stay - or show how much they want to stay - close to real life. They live the game like an exploration of their own selves. After some research and interviews on virtual worlds' players, Berry discovered that the homologous relation between the player and his/her avatar was the norm (Berry, 2012, p.174). On the contrary, the players who choose other non-anthropomorphic physical appearances aim at getting further from reality. This is the occasion for them to change aspects and bodies and to live the game like a sheer moment of entertainment. Behind this observation lies the thesis that virtual worlds are spaces where one can learn about another self, a second self. (Berry, 2012, p. 176). The same observation applies for the choice of names. For Berry, if a player chooses to keep his/her real name, it shows he/she is eager to transfer his/her skills. Vasalou et al. write that the use of avatars increases private self-awareness. It is interesting to notice that, during our experiment, the majority of the teachers and students decided to keep their real names and chose avatars close to their real physical appearance. One student, called "Michael" in real life, wanted to be called "Mike" though. This may show that he wanted to transfer his skills but take on a new identity closer to a native English one, therefore creating further distance between himself (reality) and his avatar (fiction), between his learning (reality) and the game (fiction).

Creating an avatar to play in a virtual world enables teachers and students for the first time to become the spectators of their own actions. This makes students become both actors and spectators of their learning, an idea that echoes the concept of "spect-actor" coined by Augusto Boal. Boal was a Brazilian dramaturg inspired by Brechtian drama theories. In his book, *Theatre of the Oppressed*, he explains that a spectator must not be passive. On the contrary, a spectator must actively participate in the performance he/she is watching:

*The spectator is less than a man and it is necessary to humanize him, to restore to him his capacity of action in all its fullness. He too must be a subject, an actor on an equal plane with those generally accepted as actors, who must also be spectators.* (Boal, 1979, p. 155)

This attitude also applies to learners who should be active at all times. People's theatre, or forum theatre, as he called the theatre he promoted, was experimental and aimed at liberating the spectator. He writes: "all these experiments of people's theater have the same objective - the liberation of the spectator" (Boal, 1979, p.155). Similarly, our pedagogical objective aims at liberating learners when they are in learning situations and to have them express themselves freely through several languages: words or/and the body of their avatars.

One of the reasons why drama does not work with all students in the context of learning a language is precisely the problem of the use of their own body and the expression of their feelings. Some students are indeed too shy to show their emotions and/or use their bodies in front of the class and, thus, remain seated. They have not been trained and encouraged to use them in class. Yet, Joëlle Aden, as well as cognitive sciences researchers such as Francisco Varela and Antonio Damasio, has long demonstrated that learning a language involves everything that makes up a person: body and mind. Garau et al. lamented the "low avatar expressiveness" in "The impact of avatar realism and eye gaze control on perceived quality of communication in a shared immersive virtual environment" (Garau, 2003, p.529), tried to find alternatives to compensate it and studied eye gaze animation in particular. They concluded that "inferred eye animations can have a significant positive effect on participants' responses to an immersive interaction". (Garau, 2003, p. 535). However, the aim is not to humanize avatars. It is rather to have students become aware of the role of their body in language acquisition.

In *La réalité virtuelle : Avec ou sans le corps ?*, Alain Milon questions the place of the body and warns us to be careful of the mirage of technologies that would exclude the body. Because cyberspace does not abide by the basic rules of physics, it immerses people into a new space and time with a multitude of dimensions. Yet, this has an impact on the body since the question is then to know about one's territory, one's limits and the time-space frame we are used to. After research on the ground, Vincent Berry suggests that all the players of virtual worlds he interviewed realized that they have a new perception of time, space and their body. Their body is completely committed to the game. (Berry, 2012, p. 237). They feel "telepresent", which means that they have a "compelling sense of being in a mediated space and not where their physical body is located". (Nowak and Biocca, 2003, p. 482). Thus, digital technology also places the body at the heart of the learning issue. Avatars and virtual worlds put the body at the centre of discussions since avatars, whom we can view as metaphors of the actors, shed light to the existence of a pedagogical corporeity. The immersion is also corporeal and serious games make us understand the central position of the body when it comes to learning. Ultimately, creating an avatar leads users to become self-aware of the place of the body in language learning and can facilitate linguistic acquisitions.

It goes further than this. In *Alone Together*, Sherry Turkle writes that when we create avatars online, we get the impression that we have built improved versions of ourselves. (Turkle, 2015, p. 244). Turkle carried out some interviews of virtual world players and the general impression that they have is that virtual worlds are essential for their offline life because they help them blossom in their real lives. (Turkle, 2015, p. 333). As a matter of fact, they say that the lives they live in *Second Life* help them to better prepare their real lives. Their avatars permit them to identify what they want and what they are missing. More importantly they allow them to go beyond blockages or complexes. (Turkle, 2015, p. 331). This reinforces the idea that virtual worlds are very serious games. They provide the link between playing and learning as advertisement for the game reads: "training simulations are incredibly powerful in *Second Life* because they simulate complex, processes in the physical world and avatars can take on

different roles to enhance learning". So, not only do learners learn a language but they also develop more general competences like self-confidence.

On the home page of the game one can read that "*Second Life* was designed as a social networking platform - to encourage social interaction. It enables deeply immersive, meaningful, and memorable experiences". Vincent Berry agrees with that in so far as giving a precise role to an avatar and assigning it with precise competences make a certain form of sociability between the members possible: the relationship that each team member has with the others is more determined and meaningful. (Berry, 2012, p.73). Players develop interpersonal skills unconsciously and Sherry Turkle even states that the more we play with an avatar the more we think it is an authentic replica of ourselves. (Turkle, 2015, p.242).

Turkle discovered that even if people create avatars, they sometimes express truths about themselves that may well go beyond words (Turkle 2015, p.357-358). Indeed, reality is always present behind the game. The constraints and rules of the real world are always there (Berry, 2012, p.200). Therefore we shall now study the strengths and weaknesses of this device when it comes to learning English but also the competences that students can transfer.

#### 4. Observations

We were able to make the list of the positive and negative aspects of using avatars and virtual worlds to learn English after we asked the students and the teachers to give their opinions on the device. It was indeed crucial for us to get some feedback from the teams since we wanted to improve our teaching methods. Some of our results are similar to those put into light by H. Sezgi Sarac in his research study "Benefits and challenges of using *Second Life* in English teaching: Experts' opinions". We suggest taking some distance from these observations; therefore, in this part, we would rather offer some guidelines for reflection.

##### 4.1. The strengths of the device

Since the 1990s, a lot of researchers (e.g. Levine and Scollon, 2004) have defined multimodality as a dynamic process of the building of meaning deeply intertwined with the notion of interaction (Betbeder et al, 2008, 2.3). For Claire Tardieu, interaction is crucial in language acquisition. In her book, *La Didactique des langues en 4 mots-clés: Communication, Culture, Méthode et Evaluation*, she reminds us that Vygotsky first shedded light to the social dimension of a human being (which Piaget had forgotten before him). For Vygotsky, knowledge is developed through social interaction since the latter can create a socio-cognitive conflictual state. Tardieu thus asserts that working and studying in pairs and teams favors social interaction and consequently cognitive processing. (Tardieu, 2008, p. 155). Drama and virtual worlds both facilitate team work. Students can confront their viewpoints, the strategies they use, share their ideas and make new ideas emerge. Teamwork leads students to question themselves and their learning strategies. Virtual worlds, according to Berry, facilitate participatory appropriation (Berry, 2012, p.241), incorporated knowledge and the notion of synchronous multimodal interaction puts to the question how the actors study and communicate. After studying 3D virtual environments in learning contexts, Andreas Schmeil et al. put to the fore the precious collaborative quality of these new pedagogical tools: "being embodied as avatars in an immersive 3D virtual environment will lead to more effective and sustainable knowledge sharing and to a higher satisfaction, motivation and recall of other team members' backgrounds". (Schmeil, 2009, p. 639). We have come up to the same conclusions since our teams unanimously agreed to say that they particularly appreciated the possibility of interaction and close collaboration that our scenarios on *Second Life* offered.

The meaning we give to the scenarios is as important as the kinds of situations we propose to the learners. Joëlle Aden advises teachers to offer learners the possibility to speak and communicate about realistic situations with realistic stakes. (Aden, 2009, p. 174-175). For her, learners must see the link between learning a language and living in the present, the languages they learn must speak about themselves and enable them to speak about themselves and their present environment. That is the reason why, whenever we imagine a scenario for our business students, we carefully study and choose the stakes: they must be realistic and truthful. They must permit our students to project themselves in the situations they will be when they start working in the real world. When giving an account of their experiment, Jarmon et al. realized that : "the sense of embodiment in SL helped [their students] to make their experiences in the virtual environment real and fostered their sense of concrete experiences. This sense of embodied social presence initiated and enhanced the experiential learning cycle" (Jarmon, 2009, p. 179). That is why we consider virtual worlds and serious games as devices that prepare them for their future social and professional lives.

Furthermore, the notion of transferability of linguistic and general competences is an important aspect of our formation. Berry reminds us that for some observers and researchers like Moisy, Mora or Negroponte, the strategies that players acquire in serious games are know-how and social competences transferable later in real life: helping others, listening to people, knowing how to manage conflicts. (Berry, 2012, p. 151). Yann Bergheaud calls social learning "Eldorado" because it is rich in learning units. He says that when students are made into actors and collaborators, they are better equipped to enter the professional world. (Vaufrey, 2010, p.56). Effectively, not only do they develop linguistic and general competences, but they also benefit from what is called "collateral learning", in this case, using NTICE and the new literacies. (Berry, 2012, p. 111). And for those who are skeptical, Berry suggests the notion of "situated learning" and refers to some researchers like Lave, Rogoff, Brown, Duguid and Greenfield for whom the learner builds up competences when he/she engages himself/herself in social practices.

For other researchers, videogames are like microsocieties, replicas of social worlds which facilitate experience, understanding and learning. (Berry, 2012, p. 151). They enable teachers to devise problem-based tasks and resolutions of issues. In this context, the notions of creativity and freedom are undeniable assets for language learning. Joëlle Aden indicates that creativity and language mastering are tightly linked. Indeed, the more you master a language the better you create, and the more you create the better you speak a language. (Aden, 2009, p. 174-175). Sherry Turkle adds to this that simulations offer the exaltation of creativity without pressure, the excitement of exploration without risk. (Turkle, 2015, p. 347) while Mayrath et al. remind us that "it is this flexible creativity that makes *Second Life* ideal for creating instructional tools, such as games, problem based learning environments, simulation activities, and distance learning settings" (Mayrath et al, 2007, p.2). As a matter of fact, when asked what they liked the most in the device, our students unanimously said they liked it when they had to co-create the scenario. They could invent it together because some tasks allowed them to be creative. This reinforces the idea that learning is smoother when students create, when some freedom is allowed. However, students and teachers realized that the game presented some limits.

#### 4.2. *The limits*

In his paper, Stevens makes the lists of the positives and negatives of *Second Life* - which he calls "a prototype for some future form of learning" (Stevens, 2006, p.3) - and some drawbacks might indeed hamper learning. Let us first remember that the aim of this activity and the scenarios was to learn linguistic competences and develop general

skills linked to communication in society. In "Intégrer les Tice à une approche cognitive de la grammaire du discours", Muriel Barbazan makes it clear that the use of software and technological devices must be as transparent and ergonomic as possible when the aim of the teacher is to teach a language (Barbazan, 2011, 44) while Mayrath et al. state that "accessibility is making sure that the technology is usable by the students, and extensibility is having the power to create new scenarios and extend the real world into the virtual world". (Mayrath et al., 2007, p.2). Playing a videogame requires the players to master several skills and competences before playing. Yet, not all students have these skills and competences.

Another problem that arose during the experiment was due to the synchronous multimodal possibilities of *Second life*. Creating an avatar goes together with getting to know the codes of the video game and of the avatars. However, the students did not have a lot of time to practice, so it was always difficult for them to know when they could speak or not. Most of the time, either they remained silent or they talked at the same time. So, a multi-player immersive videogame requires some practice before it can be used as a pedagogical tool to its full capacities.

## 5. Conclusion

In conclusion, *Second Life* and the creation of avatars that goes with it is undeniably a device that facilitates the development of linguistic and general competences as the Common European Framework for language learning defines them. Using a video game to learn a language is part and parcel of "informal education", which is characterised by several educational experiences which are lived through throughout our whole lives and which favour the acquisition of knowledge, skills and competences thanks to the everyday interaction that the individual has with his/her environment (Berry, 2012, p. 22).

Virtual reality enhances experience and *Second life* facilitates language learning in so far as it gives meaning to practice, it teaches students to stick to a very precise role, interact and give importance to the stake of the game. Betdeder et al. explain that in a learning context, multimodality evolves as communication grows and, consequently, language learning through NTICE is a work in progress (Betbeder et al, 2008, 2.3). This perfectly echoes the idea that autonomy (what teachers aim at for their students) is acquired progressively. Becoming an autonomous foreign language speaker is a process that one builds progressively (Rivens Mompean, 2011, p. 76), so playing serious video games encourages autonomy. However, as Delwiche writes in the conclusion of his paper, players and students alike should not forget that virtual worlds are part and parcel of a series of pedagogical devices meant to enable them to acquire competences autonomously (Delwiche, 2006, p. 169). Students should thus bear in mind that the ultimate aim is to help them practice the language in both personal and professional contexts.

## References

- Aden, J. & Lovelace, K. (2004). *3, 2, 1, Action. Le drama pour apprendre l'anglais en cycle 3*. CNDP de l'Académie de Créteil, col. Devenir professeur aujourd'hui.
- Aden, J. (2009). La créativité artistique à l'école: refonder l'acte d'apprendre. Retrieved from <http://gerflint.fr/Base/Europe4/aden.pdf>. Last accessed on 29th March 2015.
- Aden J. & Anderson J. (2005). Le drama pour une approche interculturelle de l'enseignement des langues. Retrieved from [http://www.tesol-france.org/uploaded\\_files/files/coll2005AdenAnderson.pdf](http://www.tesol-france.org/uploaded_files/files/coll2005AdenAnderson.pdf). Last accessed on 29th March 2015.

- Alvarez, J. (2007). *Du Jeu vidéo au Serious game. Approches culturelle, pragmatique et formelle*. Unpublished PhD thesis, Toulouse.
- Atlan, J. (2000). L'utilisation des stratégies d'apprentissage d'une langue dans un environnement des TICE, *Alsic*, 3(1). Retrieved from <http://alsic.revues.org/1759>. Last accessed on 15th September 2013. Doi: 10.4000/alsic.1759.
- Barbazan, M. (2011). Intégrer les Tice à une approche cognitive de la grammaire du discours, *Alsic*, 14. Retrieved from <http://alsic.revues.org/2337>. Last accessed on 29th March 2014.
- Berry, V. (2012). *L'Expérience virtuelle. Jouer, vivre, apprendre dans un jeu vidéo*. Rennes: Presses Universitaires de Rennes.
- Betbeder, M.-L., Ciekanski, M., Greffier, F., Reffay, C. & Chanier, T. (2008). Interactions multimodales synchrones issues de formations en ligne: problématiques, méthodologie et analyses. *Revue Sciences et technologies de l'information et de la communication pour l'éducation et la formation*, 15. Retrieved from [http://sticef.univ-lemans.fr/num/vol2008/06-betbeder/sticef\\_2008\\_betbeder\\_06.htm](http://sticef.univ-lemans.fr/num/vol2008/06-betbeder/sticef_2008_betbeder_06.htm). Last accessed on 14th May 2014.
- Brecht, B. (1964). *On Theatre*. Edited and translated by John Willett, London: Methuen Drama.
- Boal, A. (1979). *Theatre of the Oppressed*. New York: Theatre Communications Group.
- Conseil de l'Europe (2000). *Apprentissage des langues et citoyenneté européenne. Un Cadre Européen Commun de Référence pour les Langues: apprendre, enseigner, évaluer*. Strasbourg: Division des politiques linguistiques.
- Cormanski, A. (1993). *Le Corps dans la langue. Les Techniques dramatiques dans l'enseignement/apprentissage des langues étrangères*. Unpublished PhD thesis, Université de la Sorbonne Nouvelle - Paris 3.
- Delwiche, A. (2006). Massively multiplayer online games (MMOs) in the new media classroom. *Educational Technology & Society*, 9(3), 160-172.
- Garau, M., Slater, M., Vinayagamoorthy, V., Brogni, A., Steed, A. & Sasse, M.A. (2003). The impact of avatar realism and eye gaze control on perceived quality of communication in a shared immersive virtual environment. In *Proceedings of the SIGCHI conference on Human Factors in Computing Systems*, 529-536, ACM.
- Goffman, E. (1974). *Frame Analysis. An essay on the organization of experience*. New York: Northeastern University Press.
- Huizinga, J. (1988). *Homo Ludens*. Paris: Gallimard.
- Jarmon, L., Traphagan, T., Mayrath, M. & Trivedi, A. (2009), Virtual world teaching, experiential learning and assessment: An interdisciplinary communication course in Second Life, *Computers & Education* 53, Elsevier, 169-182.
- Julié, K. & Perrot, L. (2008). *Enseigner l'anglais*. Paris: Hachette Education.
- Linden Lab. (2010). Second Life Education: The Virtual Learning Advantage. Retrieved from <http://lecs-static-secondlife-com.s3.amazonaws.com/work/SL-Edu-Brochure-112910.pdf>. Last accessed on 14th May 2014.
- Maley, A. & Duff, A. (1994). *Drama Techniques in Language Learning. A Resource Book of Communication Activities for Language Teachers*. Cambridge: Cambridge University Press.
- Mayrath, M., Sanchez, J., Traphagan, T., Heikes, J. & Trivedi, A. (2007). Using Second Life in an English Course: Designing Class Activities to Address Learning Objectives.

*Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications*, Chesapeake, VA: AACE.

Milon, A. (2005). *La réalité virtuelle: Avec ou sans le corps?* Paris: Editions Autrement.

Nowak, K.L. & Biocca, F. (2003). The effect of the agency and anthropomorphism on users' sense of telepresence, copresence, and social presence in virtual environments. *Presence: Teleoperators & Virtual Environments*, 12(5): 481-494.

Privas Bréauté, V. (2015). Dramatic Activities and ICT in Language Acquisition: Learning a Foreign Language for Professional/Specific Purposes through Role Plays and Online Games. *Journal of Global Research in Education and Social Science*, 3(3): 132-136. Available from <http://www.ikpress.org/issue.php?iid=552&id=46>.

Nissen, E. (2007). Quelles aides les formations hybrides en langues proposent-elles à l'apprenant pour favoriser son autonomie? Apprentissage des langues et systèmes d'information et de communication. *Alsic*, 10 (1): 129-144. Retrieved from: <http://alsic.revues.org/617>. Last accessed on 15th September 2015.

Rivens Mompean, A. (2011), Articuler des dispositifs innovants pour accompagner vers les certifications en langues. *Mélanges CRAPEL*, 32, 66-83. Retrieved from <http://www.atilf.fr/spip.php?article3796>. Last accessed on 29th April 2015.

Sarac, H.S. (2014). Benefits and challenges of using Second Life in English teaching: Experts' opinions. *Procedia - Social and Behavioral Sciences*, 158: 326-330. Elsevier.

Schmeil, A., Eppler, M.J. & Gubler, M. (2009). An experimental comparison of 3D virtual environments and text chat as collaboration tools. *Electronic Journal of Knowledge Management*, 7(5), 637-646.

Stevens, V. (2006). Second Life in Education and Language Learning. *Teaching English as a Second or Foreign Language*, 10(3): 1-8.

St. Louis, R. (2006). Helping Students become Autonomous Learners: Can Technology Help? *The Journal of Teaching English through Technology*, 6(3): n.p. Retrieved from <http://tewtjournal.org/issues/past-issue-2006/past-issue-2006-issue-3/>.

Tardieu C. (2008), *La Didactique des langues en 4 mots-clés : communication, culture, méthodologie et évaluation*, Paris, Ellipses.

Turkle, S. (2015). *Seuls ensemble. De plus en plus de technologies, de moins en moins de relations humaines*. Paris: Editions L'Echappée.

Vasalou, A., Joinson, N. & Pitt, J. (2007). Constructing my online self: avatars that increase self-focused attention. In *Proceedings of the SIGCHI conference on Human Factors in Computing Systems*, pp. 445-448. ACM.

Vaufrey, C. (2010). La composante sociale du e-learning, par la grâce des réseaux, in Lamontagne, D. (Ed.), *La Systématisation des Apprentissages Informels*, Thot Cursus, cursus.edu, 2011. Available from <http://cursus.edu/dossiers-articles/articles/9856/composante-sociale-elearning-par-grace-des/>.

Winnicott, D.W. (1975) [1971]. *Jeu et réalité. L'espace potentiel*. Paris: Gallimard. Trad. de l'anglais par Claude Monod et J.-B. Pontalis.

## Appendix 1

### Scenario #1: a phone conversation with an angry customer

Copets is a British firm selling toys for pets but it has been losing clients recently. It now needs to win clients back or acquire new ones.

#### Characters and roles:

1 angry customer (Mrs Privas-Bréauté)

3 members of the CRM of Copets: 1 manager, 1 person in charge of the phone, 1 person in contact with the supply department

#### Place:

Copets Company

210 Chiswick Road

London W4 1SY

UK

**Time:** 9 am

#### Tasks:

1. greetings in front of the building of the université of "les Quais" (meeting point on Second Life)
2. in the office
3. phone conversation between the secretary, the customer, the manager. The last member pretends he is working.
4. the manager tells the story to the others. A meeting is then organized. They go to the meeting room.
5. in the meeting room. It is not the first time it has happened with this toy. They need to find solutions.
6. Go to the computer room to work on the script of the angry customer and find all the complex sentences.

For this situation, you will have to go back to:

courses "on the phone", and customer relationship management (vocabulary)

+ intonation and pronunciation of questions and answers, politeness

+ grammar: simple tenses and modal auxiliaries.

You shall be evaluated upon:

1. your attitude (professional or relaxed)
2. your linguistic (grammar, vocabulary) and psycho-linguistic competences

## Appendix 2

### Scenario # 2: carrying out a customer satisfaction survey

**Reminder:** Copets is a British firm selling toys for pets but it has been losing clients recently. It now needs to win clients back or acquire new ones.

#### Characters and roles:

3 members of Copets: 1 manager, 2 staff members. The three of them work in the CRM department.

#### Place:

Copets Company  
210 Chiswick Road  
London W4 1SY  
UK

**Time:** 9 am

#### Tasks:

1. a new day is starting: greetings.
2. the manager explains that one of the solutions found previously to win customers back or acquire new ones was to write a customer satisfaction survey. So they need to build a team and work on such a document.
3. Brainstorming session in the meeting room.
4. to whom? clients? new clients? old ones? lost ones?
5. what for? to win customers back? acquire new ones? change policies? change strategies?
6. where to take it? in their shops? on streets? which streets? on the internet? on the phone? This will have an impact on its form.
7. once you have answered all the questions above, you may write up the survey.
8. what questions within the survey? how many?
9. end : the manager keeps the questionnaire and transmits it to another team in charge of dealing with it... they all go back to their offices

For this situation, you will have to review:

course on CRM

+ lecture on customer satisfaction

1. intonation and pronunciation
2. grammar

You shall be evaluated upon:

1. your sociocultural abilities
2. your linguistic and psycholinguistic competences (discussing/ arguing/ comparing and negotiating)
3. methodologic capacities: writing a customer satisfaction form, writing skill

# Project

## *EMMA: Towards multicultural learning*

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### Abstract

Interest on the part of European Institutions to explore the potential of MOOCs for providing the kind of inclusive and multicultural education that was needed for 21st century learners was confirmed by funding of projects such as EMMA (<http://www.europeanmoocs.eu>). The definition of “European” for the EMMA consortium was based on diversity - of culture, language and approach - and integration of the same. This paper looks at how EMMA is responding to the challenge of embracing diversity and integration in the same technological artefact through the use of embedded translation services, and an experimental PLE. We will also introduce the ad hoc evaluation services that are designed to test the impact of the EMMA concept.

**Keywords:** MOOCs, multilingualism, multiculturalism.

### 1. Introduction

In a special issue of the International Review of Education (Alidou et. al 2011) the editors state that quality multilingual education is a political and technical response to the educational rights and requirements of learners in the developed and developing world. Multilingual and multicultural skills are viewed as a communicative proficiency that is necessary for people to fully function in the 21st century, and language is obviously the main vehicle for the expression of culture.

The Unesco position paper, “Education in a Multilingual World”, (2003) states its support for mother tongue instruction to improve the knowledge and experience of the learners and teacher; bilingual and/or multilingual education at all levels of education as a means of promoting both social and gender equality; and supports language-learning as an essential component of inter-cultural education to encourage understanding between different population groups and ensure respect for fundamental rights.

European Institutions have also produced papers and events like the 2014 European conference: “Why languages matter: European and national perspectives on multilingualism” (1) to promote policies to encourage multilingualism in parallel with policies to modernise HE and create a pan-European approach with comparable, compatible and coherent systems across the continent.

MOOCs initiatives have mushroomed over the last few years and recent figures from Class Central indicate that 35 million students signed up to a MOOC in 2015, and that 500 universities offered 4,200 courses. One of the reasons for this explosion was the desire to democratise education and to make high-level learning content freely available as a tool for social growth and inclusion and respond to global needs for qualified digital and mobile citizens.

A recent survey shows that although MOOCs are sometimes delivered in national languages in Europe, the predominant language of delivery remains English and interestingly, this has not been an issue of major debate, and has not raised doubt about the effectiveness of global knowledge dissemination (Gaebel 2013). And where delivery is in the national language, the policy has been to deliver only in this language. This is true of F.U.N, the French government-led MOOC platform launched in 2013, and MiriadaX, the Spanish platform. In these cases the language can become the defining feature, with platform use expanding outside national boundaries but “geo-linguistically” rather than geo-politically, into francophone Africa and Spanish-speaking Latin America. Although Stephen Downes pointed out (Downes 2014) the desirability of including diverse linguistic cultures within any course delivery and learning community, few MOOC initiatives after his own actually seemed to provide this.

For EMMA (2) the major challenge was how to embrace diversity - of language, approach and culture - within a single technological artifact and how to propose an exploitation approach that would encourage comparative study and effective interaction between learners from diverse language groups in the one community. This paper aims to explore how the EMMA consortium responded to this challenge by experimenting with the creation of inbuilt translation systems and PLE tools. And describes the series of tracking and survey tools that were designed to evaluate MOOC provider and learner response to their proposal.

## **2. Multiculturalism through translation**

If EMMA wanted to preserve linguistic diversity and offer a variety of learning content from different HE Institutions in Europe via mother tongue instruction, then the only way that access could be broadened to a wider audience was through the provision of translations. Human translation is too expensive, crowd-sourcing unpredictable and Google incompatible, so The Universitat Politècnica de València, experts in machine translation system development, became the partner responsible for tackling this linguistic challenge. Their method was to develop ad hoc systems for the automatic speech recognition (ASR) and transcription and machine translation (MT) of the 7 partner languages into English (Catalan, Dutch, Estonian, French, Italian, Portuguese, Spanish) and also Polish. This meant that both video and textual courseware could be produced in these language combinations. UPV methodology involved training the machines using large amounts of in-domain parallel text and audio materials. Partners edited initial transcripts and translations thus providing further input for the machines to improve subsequent performance. Human editing of machine translations on new courses or revised editions of other MOOCs are also part of the feedback loop and help to account for continued improvement as the project goes on. UPV also developed 2 systems from English into Italian and Spanish in the same way. English is then used as a bridging language to produce three and four-language MOOCs as a first step towards multilingual delivery of MOOCs. The EMMA interface and signposting language is also available in multilingual version. In terms of human editing, EMMA partners have identified syntax, inflexions, word order in questions and proper nouns as problematic.

If we take quality measures like Word Error Rate for transcription, and Bleu (3) for translation the EMMA automatic systems are currently performing well when compared with similar services e.g. Google, as shown in the tables below. Dutch is a difficult language to transcribe because of articles, word order and modal particles and produces error rates of 41% on Google transcriptions for Youtube, whereas this reduces to 24.5% on EMMA (Brouns et al. 2015). Similarly, Portuguese is also considered difficult because of word stress and certain phonemes and Brazilian and Portuguese varieties but achieves 55.5% match with human translation on EMMA system compared to 45.4% on Google.

The tables also show how EMMA systems are themselves improving over time. Translation of text and video, taking into consideration the human editing work involved, is currently reduced by 50% on EMMA.

Language	EMMA		YouTube
	M10	M22	
Spanish	15.9	<b>14.8</b>	22.5 (+ 52%)
Italian	21.2	<b>17.1</b>	31.6 (+ 85%)
French	–	<b>20.6</b>	32.0 (+ 55%)
Dutch	27.5	<b>24.5</b>	41.1 (+ 67%)
Estonian	–	<b>27.1</b>	–
English	41.4	<b>39.2</b>	65.9 (+ 41%)
Portuguese	45.9	<b>43.0</b>	62.3 (+ 31%)

Figure 1. Results on transcription quality.

Languages	EMMA		Google
	M10	M22	
Pt→En	52.8	<b>55.5</b>	45.4 (- 18%)
It→En	42.9	<b>47.8</b>	37.5 (- 22%)
Nl→En	38.0	<b>41.6</b>	34.0 (- 18%)
Es→En	40.9	<b>40.9</b>	34.6 (- 15%)
Fr→En	–	<b>33.1</b>	30.8 (- 7%)
Et→En	–	<b>27.8</b>	26.3 (- 5%)
En→It	–	<b>52.6</b>	44.1 (- 16%)
En→Es	42.5	<b>42.5</b>	38.3 (- 10%)

Figure 2. Results on translation quality.

It is not only the quality of the translation system that has improved over time. UPV produced an attractive and easy to use interface with parallel editing windows as shown in the image below for both transcription and translation. Advanced features allow for segmentation of the subtitles to ensure synchrony. EMMA has a seamless interface with UPV enabling MOOC authors to do all their transcription and translation editing work as they author their courses.

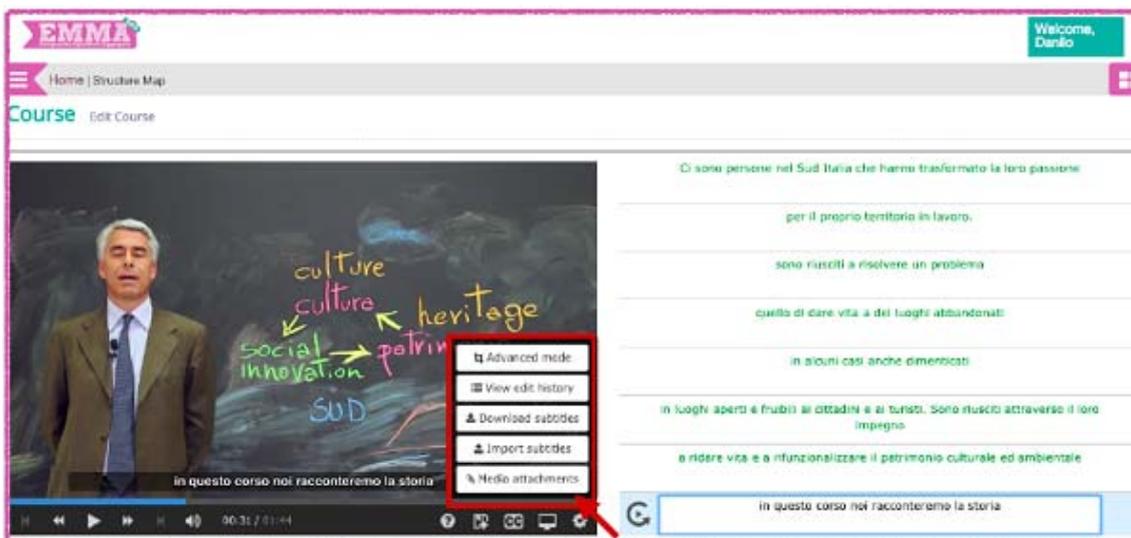


Figure 3. EMMA and UPV system.

Experimentation with three and four-language MOOCs is under way, despite the time commitment required to provide native speaker translation revisions in each of the target languages. Ethnographic data from expectations questionnaires provides information about student language competencies and interest, which can be triangulated with analytics data about which delivery language is chosen, and whether and where translations are accessed.

Recent data regarding a course from the Open University of Netherlands has shown that 75% of students studied the MOOC in a single language, whereas 25% preferred to use a mix of both languages.

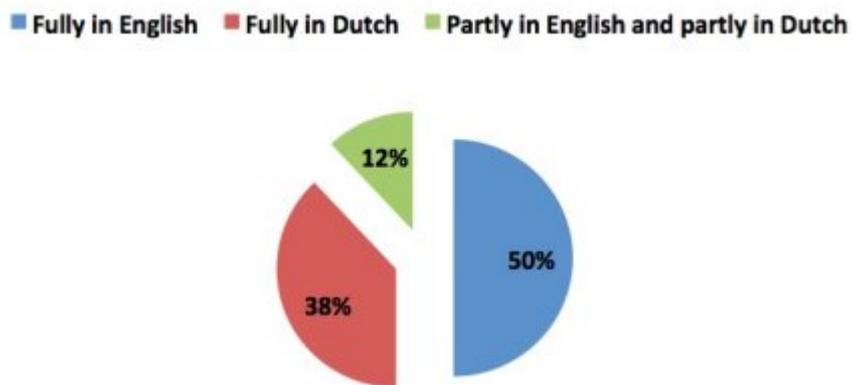


Figure 4. Dutch language.

However, MOOC learning is also a social activity and without learning communities it is impossible to exploit their massive dimension (Siemens 2005). EMMA and UPV are responding to this challenge by accelerating translation time to almost real time, so that the same web services could be used by learners in the conversations and blogs to access comments in other languages and create multicultural environments.

### 3. Multiculturalism through customization

In a recent contribution to the EMMA newsletter, Stephen Downes writes about the importance of personal rather than personalised learning, where the role of the educational system is not to provide learning, it is to *support* learning. Meanwhile, the decisions about what to learn, how to learn, and where to learn are made outside the educational system, and principally, by the individual learners themselves.

Personal learning often begins informally, on an *ad hoc* basis, driven by the need to complete some task or achieve some objective. The learning is a means to an end, rather than the end in itself. EMMA wanted to encourage learners to interact with a variety of MOOCs on the platform and widen cultural perspectives through studying a course produced in another language, or comparing similar topics but treated in different ways by the Universities offering them. In order to do this, EMMA devised a series of editing tools. Users can create a customised learning path by selecting and harvesting different learning objects from various MOOCs and using them as building blocks, which they can then integrate with other authoritative resources from the web. These are saved in a coursebook in the PLE, where learners can reorganise the materials and add their own study notes. Personal adaptation of the learning content in this way is one of the metrics for evaluation of the EMMA project, to see how often and what type of coursebooks are created. To render this building block approach more effective, MOOC courses were sourced in clusters according to discipline or target audience (De Rosa et al. 2014).

It is essential to have a significant variety of topics on board to encourage this personalised and/or multicultural approach. MOOC sourcing activity has been intensive of late and EMMA is still inviting HE Institutions to join the team and host their MOOC on the platform.

### 4. Multiculturalism through pedagogy

Recent learning analytics data shows that the platform accommodates a range of instructional design:

- iMOOCs from Open University of Portugal whereby learning content is not predetermined and evolves through interaction between participants, teachers and materials;

- cMOOCs from University of Bourgogne, where learning is enhanced through the creation of a learning community and communication on a variety of social networks;
- MOOCs used as part of on-campus blended learning courses at University of Naples, Federico II in a flipped classroom approach;
- Hybrid MOOCs from University of Urbino, delivered in streaming with live chat;
- xMOOCs from University Polytechnic of Valencia with lecture-capture and authoritative learning content.

## 5. Conclusions

We have set out to show how we took the concept of multiculturalism that was central to our educational offer and split it up into its three constituent components. We defined the three drivers of diversity as approach, language and personalisation (i.e. the possibility to bring one's own culture into the learning experience), and we looked at how we could bring the three dimensions together in the one learning environment. Unique of its kind, EMMA is now in deployment phase and gaining recognition in Europe.

## References

- Alidou, H., Glanz, C. & Nikièma, N. (2011). Quality multilingual and multicultural education for lifelong learning. *International Review of Education*, 57(5-6): 529-539. Doi: 10.1007/s11159-011-9259-z.
- Brouns, F., Serrano, N., Civera, J., Kalz, M. & Juan, A. (2015). Supporting language diversity of European MOOCs with the EMMA platform. In *Proceedings of the European MOOC Stakeholder Summit 2015*.
- De Rosa, R., Kerr, R. & Merciai, I. (2014). Backpacking online – From individual to massive and back again: PLEs in the time of MOOC. PLE Conference 2014, Tallinn, 16-18 July. Unpublished paper.
- De Rosa, R. & Reda, V., (2013). The MOOC' (R)evolution. A policy framework analysis at a European level. *LEA - Lingue e letterature d'Oriente e d'Occidente*, n. 2, pp. 272-311. Retrieved from <http://www.fupress.net/index.php/bsfm-lea/article/view/13850>.
- Downes, S. (2014). La rinascita delle comunità di apprendimento in rete. *Tecnologie Didattiche*, 22(3), 165-172. Retrieved from <http://www.tdjournal.itd.cnr.it/files/pdfarticles/PDF63/165-Rinascita>.
- Gaebel, M., Kupriyanova, V., Morais, R. & Colucci, E. (2014). E-learning in European Higher Education Institutions: Results of a mapping survey conducted in October-December 2013. Retrieved from [http://www.eua.be/Libraries/Publication/e-learning\\_survey.sflb.ashx](http://www.eua.be/Libraries/Publication/e-learning_survey.sflb.ashx)
- Hassana, A, Glanz & C., Nikièma, N. (2012). Quality multilingual and multicultural education for lifelong learning. *International Review of Education*, 57(5): 529-539. Retrieved from: <http://link.springer.com/article/10.1007%2Fs11159-011-9259-z>.
- Siemens, G. (2005). Connectivism: A Learning Theory for the Digital Age. *International Journal of Instructional Technology and Distance Learning*, 2(1): n.p. Retrieved from [http://itdl.org/journal/jan\\_05/article01.htm](http://itdl.org/journal/jan_05/article01.htm).
- UNESCO (2003). Education in a multilingual world. UNESCO position paper. Paris: UNESCO.
- Visiongain Report (2015). Massive Open Online Course (MOOC) Market 2015-2020.
- Yuan L., Powell S. & Olivier B., (2014). Beyond MOOCs: Sustainable Online Learning in Institutions. Cetus, Bolton. Retrieved from <http://publications.cetus.ac.uk/2014/898>.

## Notes

[1] [http://ec.europa.eu/languages/inspire/1009-florence\\_en.htm](http://ec.europa.eu/languages/inspire/1009-florence_en.htm).

[2] The project is headed by University of Naples Federico II, leaders in the field of OER with a awarded project Federica (<http://www.federica.unina.it/>), now also with a MOOC offer (<http://www.federica.eu>). 11 different organisations from 7 European countries are involved in the EMMA Project: Università degli Studi di Napoli Federico II, Italy (Contractor); ATOS, Spain; IPSOS srl, Italy; Universitat Oberta de Catalunya, Spain; Open Universiteit, Netherlands; Universidade Aberta, Portugal; Université de Bourgogne, France; Tallinn University, Estonia; Universitat Politècnica de València, Spain; CSP – Innovazione nelle ICT S.C.A R.L, Italy; ATiT, Belgium. EMMA has received funding from the European Union's Competitiveness and Innovation framework Programme CIP 2007-2013, under grant agreement n. 621030.

[3] Bleu: Bilingual evaluation understudy. An evaluation system comparing machine translation word order and choice with human translation.

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## Recommended app

### *Aba English App*

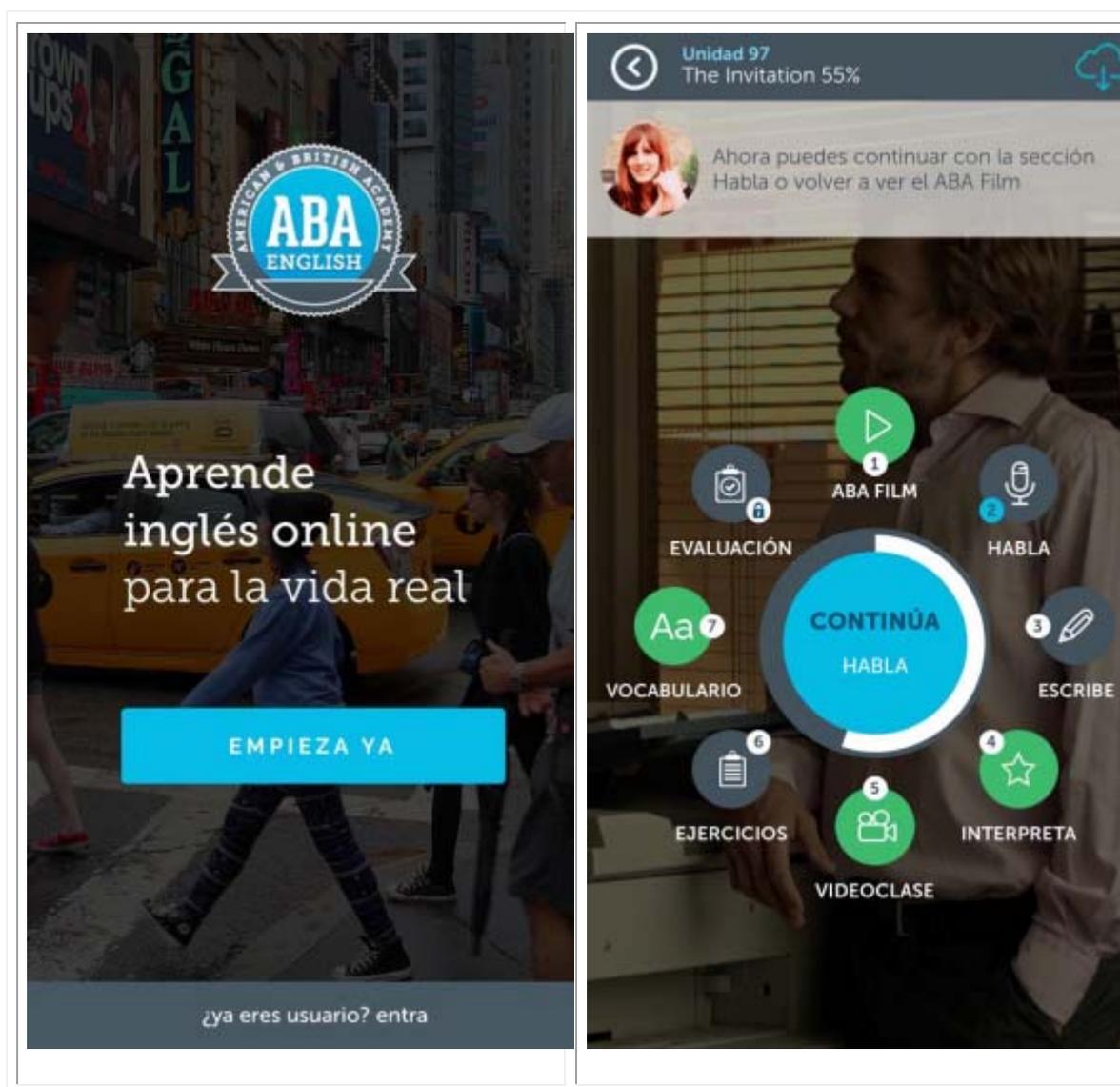
Mobile language learning application for iOS and Android

<http://www.abaenglish.com/en>

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## 1. Structure and description of the app

“ABA English” is a language learning application for mobile devices which has been developed by ABA (American and British Academy: <http://www.abaenglish.com>), an educational company, based in Barcelona, Spain, that has been active in the field of language learning for about 40 years. The app is actually a successful adaptation of a web-based English multimedia course previously delivered through the institution’s website at <http://campus.abaenglish.com> and, therefore, represents a natural step forward in the company’s language learning materials creation process. There are certain aspects, then, which are common to both the website course and the learning app. Nevertheless, the mobile application has been devised taking into account the specific characteristics of MALL (Mobile Assisted Language Learning) environments. The app, as well as the website, incorporates a complete general English interactive resource for adults that may be used as a stand-alone series of 144 modules or didactic units divided into 6 levels or courses, covering the entire range of the CEFR (Common European Framework of Reference for Languages): Beginners (A1), Lower Intermediate (A2), Intermediate (B1), Upper Intermediate (B2), Advanced (B2-C1) and Business (C1). Each level includes 24 units. The support languages of the app, i.e. the language in which help and instructions are expressed, are English and Spanish.

The learning content of the app basically coincides with that of the web-based course, comprising a total of 144 units. The structure of each unit is the same, incorporating 8 didactic sections:

- *ABA Film*: a short video, from 1 to 3 minutes long, showing a situation from daily life and including the language structures and expressions that will be covered in the other sections of the unit. The videos may be watched with subtitles in English, in Spanish or without subtitles.
- *Speak/Habla*: this section consists of the vocabulary and expressions of the unit, translated into Spanish. In a quite interactive way, learners can click on the expressions to listen to the right pronunciation first, and then record their own voice. The system plays both recordings so that learners can compare their performance with the model. This is a successful adaptation to a mobile learning environment of the company’s recording technology (“Listen-Record-Compare” or LRC™).
- *Write/Escribe*: this part is a dictation task where students click on a play button to listen to a short expression from the unit and then must write what they hear on the screen. The app corrects the student’s performance by marking it green (correct answer) or red, in which case the learner must rewrite the incorrect fragment.
- *Act/Interpreta*: this section of the app invites learners to take an active part in a role play that reproduces the video passage of the unit. They should first choose one of the 2 characters in the video and then interact with the app by saying the words of their chosen part. This task is focused on oral fluency. The app does not provide any feedback on learner’s performance this time.
- *Video-class/Videoclase*: a video recording where a teacher provides grammatical explanations to do with the unit’s content. Like in the “ABA Film”, learners can watch the video without subtitles or with subtitles in Spanish or English.
- *Exercises/Ejercicios*: students carry out fill-in-the-gap and/or translation tasks in order to improve their grammar and vocabulary. Feedback on learner’s performance is provided, including the provision of correct answers.
- *Vocabulary/Vocabulario*: this part provides a vocabulary list with the key words and expressions from the unit in alphabetical order. Learners may listen to them, practice their pronunciation and compare both versions. A Spanish translation is also included.
- *Assessment/Evaluación*: here the learners can do a test to check the acquisition of the unit contents; they cannot access this part unless they have completed the other sections of the unit.

The app delivers the learning objects and all related contents in a gradual way, which means that a very clear learning path is recommended, although learners can always follow their own path and jump between different parts of the course or the app. The learning content of this app, on the other hand, is mainly based on oral language, since all tasks, grammar and vocabulary contents of the app are focused on video passages that mirror daily communicative situations. A very important component of the app is the use and practice of oral English through the implementation of speech recognition technology. The prompt of nearly all tasks is oral. In order of importance, the app focuses on the following linguistic skills: listening, speaking, writing and reading. This latter skill has practically no treatment within the app, whereas there is a clear emphasis on productive skills. The multimedia and interactive components of the app, which makes extensive use of situational videos, are also worth mentioning. The application caters for variation since it presents a series of different characters, communicative situations, topics and accents, but the structure of all units is exactly the same, which at times becomes somewhat repetitive. The learning structure is not at all varied.

The app is aimed at adults and young learners who want to learn and produce general English language in an interactive and autonomous way. It matches well the CEFR parameters and, thus, can help learners to gradually advance in their command of English from whatever linguistic level they depart. In this respect, the app may be considered as learner-centred, since it may be adapted to many different learning needs and circumstances. It is easy to use, allowing clear and straightforward navigation, although, unlike the web-based version of the course, it has no links to other useful learning aids, such as dictionaries, grammar books, cultural explanations, and the like. The app does have a 'Contact' feature through which learners can both get technical support and obtain learning help from instructors by sending specific messages.

On top of the screen, the app provides information about the unit that the learners are working on, together with the percentage of the unit that has already been completed and indications about how learners can proceed from any given point in their learning process. Thus, it is easy for learners to monitor their progress throughout the course. In sum, the structure of the learning app is very clear and easy to understand and handle by the students.

## **2. Pedagogical analysis**

The language learning pedagogical approach advocated by the app is the Natural Method, a development of the Direct Method. In accordance with such a methodology, the oral component of the language is prevalent and becomes the focus of instruction, the axis around which tasks and learning objects are developed. The application is based on the extensive provision of linguistic input, particularly in the oral form, which is made comprehensible to students through the use of situational videos. Therefore, visual and oral prompts become paramount in the learning resource, which has a very clear focus on content. The approach known as Audiolingual is also noticeable in this app, since it relies on the use of multimedia (visual and oral aids) to contextualize learning and promotes a deductive attitude on the learner's side.

The type of syllabus that helps organize the learning materials is situational, and the topics that contextualize the units are closely related to recognizable daily situations, which arguably may foster motivation, since it also relates to the development of communicative competence, rather than simply the linguistic command of the language.

The oral skills come before the written ones, and the productive competences are also regarded as more important than the receptive ones, since the latter are practiced so as

to acquire the former. As regards the linguistic components, the app mainly focuses on pronunciation and vocabulary. Language is taught through situations in a learning environment which encourages learners to use those daily contexts to make their own assumptions about the language and its rules, an approach which has a lot to do with immersion scenarios, where students are put in direct contact with relevant input in the target language. Nevertheless, the app also, and very emphatically, focuses on grammar and the form of the language in two major ways. First, a whole section of each unit, that is the "Videoclass", is devoted to formal instruction on grammar. Second, most of the tasks in the "Exercises" section are grammar- and vocabulary-based drills, constructed around mimicry and memorization. Thus, the course delivered through this app has a remarkable structural component. Accordingly, it would seem at first sight that the application is more concerned with accuracy. Nevertheless, after a more thorough analysis, the ultimate aim of the app is the consolidation of oral fluency. Pedagogically speaking, therefore, in our view the course successfully combines an intuitive and indirect approach with a tutor-led, more direct, treatment of grammar and linguistic forms.

Regarding the crucial aspect of feedback on students' performance, a difference can be observed between written and oral production. On the one hand, when learners carry out oral pronunciation tasks, the app does not provide direct feedback, since it is the learners themselves who must compare their performance with the given recorded model. On the other hand, when doing written tasks, learners may receive two types of feedback. In the first type, the app marks the learners' mistakes in red and their correct answers in green, so they can make several attempts until they produce the correct answer. In the second type, the correct answer may be directly available for the learners if they click on a question mark icon on the screen. These types of feedback are not very metalinguistic or informative, but are consistent with the app's general objectives and can, to a certain extent, promote the learner's grammatical awareness. In terms of interactivity, i.e. the way the learner interacts with the learning resource, this application is quite rich, since there are multiple ways in which this is accomplished in a multimedia environment. But as regards interaction, i.e. humans communicating through the mobile technology, the app is more limited, because there is only the possibility of contacting the teacher through the app features. Therefore, the app is not very communicative, although this limitation is compensated for by means of a highly contextualized grammar and vocabulary instruction, a major feature of the communicative approach to language learning. The selected situations also encourage the learners to engage in communicative language production.

The ABA English App takes into account the specific characteristics and requirements of mobile language learning (MALL), three of which are worth emphasizing here. First, the learning objects should not be too long, since learners who opt for this type of learning normally use the materials during short periods of time and on the go. Second, mobile language learning must provide learners with a rich and varied exposure to comprehensible linguistic input in the target language to be processed usually as self-study, without time and place limitations. Last, but not least, mobile language learning apps may be valuable tools to complement specific aspects of language learning, such as oral language in the case of the app under examination. These three fundamental issues of mobile language learning resources are well solved by the ABA English App.

### **3. Technical analysis**

In terms of usability, the ABA English app is very user-friendly, which is clearly reflected in two of its technical strengths. On the one hand, the control features of the multimedia learning objects, mostly videos, as well as the interactive menus, are well designed and easy to operate, and, as a consequence, learners may access and

manipulate learning materials in a simple and effective manner and at their own pace, which contributes to a learner-centred approach to language learning. On the other hand, user-friendliness is achieved through straightforward, intuitive and efficient navigation throughout all the menus of the app. Learners always know exactly where they are, which is partly due to informative menus and consistent design of the app's structure from a graphic design point of view.

The app runs very smoothly without technical problems or delays and is provided with a solid interface that makes interaction easy and stable. The degree of technical reliability of the app is very high, since it works well on smart mobile devices, both in the online and offline modes. The quality of the multimedia components of the app is very high, including audio, video and graphic design, which guarantees an enhanced learning experience. The LRC™ (Listen-Record-Compare) technology, which was implemented in the web-based course has also been successfully applied to the corresponding app with excellent results. And, to round off the app's remarkable instructional design, the feedback on student's performance is flawless from a technical point of view, which is a fundamental issue for self-study. The app, then, is a good adaptation of a sound web-based language learning resource to the requirements of mobile technologies.

#### **4. Summary of the analysis**

The ABA English App is an example of good practice in the delivery of language learning courseware in a MALL (Mobile Assisted Language Learning) environment. The learning materials it contains perfectly meet the requirements of the self-study of English on the go at the different levels of the CEFRL. If we compare this app with other similar applications on the market, the ABA English App is a comprehensive resource without the limitations of other apps in terms of efficient language learning content. It is strong both pedagogically and from a technical standpoint. It provides extensive practice of oral skills, grammar and vocabulary in a contextualized way, through the use of videos that illustrate common daily situations. On the debit side of the app, there is the repetitive format of many of its exercises and drills, which lack communicative practice. The app can, nevertheless, become a motivating resource to practice the most mechanical aspects of language learning, such as the acquisition of vocabulary and grammar rules, which are also necessary to cover. On the other hand, two fundamental strengths of the app are the focus on oral fluency and accuracy, and also the pedagogically sound organization of the content in a comprehensive and stand-alone format that allows learners to gradually advance and improve their command of the English language in an autonomous way from several starting levels.



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