Language Learners Perceptions and Experiences on the Use of Mobile Applications for Independent Language Learning in Higher Education

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Abstract

With the widespread use of mobile phones and portable devices it is inevitable to think of Mobile Assisted Language Learning as a means of independent learning in Higher Education.

Nowadays many learners are keen to explore the wide variety of applications available in their portable and always readily available mobile phones and tablets. The fact that they are keen to take control of their learning and autonomy is thought to lead to greater motivation and engagement, and the link with games-based learning suggests that the fun factor involved should not be overseen.

This paper focuses on the use of mobile applications for independent language learning in higher education. It investigates how learners use mobile apps in line with their classes to enhance their learning experience. We base our analysis on a survey carried out in autumn 2013 in which 286 credited and non-credited language students from various levels of proficiency at The University of Manchester express their perceptions on the advantages and disadvantages of the use of mobile applications for independent language learning, together with examples of useful apps and suggestions of how these could be integrated in the language class.

Keywords: Mobile assisted language learning (MALL); mobile language learning; higher education (HE); student perspectives; independent language learning.

Introduction

Mobile technologies are expanding very rapidly providing multiple resources, including interactive apps, suitable for independent language learning opening up new contexts for learning (Pachler et al. 2010) where the students are at the centre of the scenario deciding which technologies are best for their own learning styles, according to their command of the language, own interests and/or needs. These ubiquitous technologies in this respect constitute a simple yet appealing means to create meaning and improve accuracy by exposing students to the language in a more autonomous way. Connecting this independent practice with the contents seen in class and with social context for meaningful interaction, however, requires tutor's monitoring and guidance leading to a more efficient and enriching way of teaching.

This investigation looks at the results of a survey on the use of Mobile Assisted Language Learning (MALL) apps by students at Higher Education to learn about the language learners' perceptions and experiences on their use of mobile apps for independent language learning.

We will start by defining MALL and its relation to m-learning and CALL, for it provides the theoretical foundations of this investigation. Then we will guide you through the results of this study, which will provide answers to the following open ended questions:

1. How do students use MALL?
2. How do they perceive its usefulness?
3. How MALL can be integrated in the class according to students?
4. What implications does this have for the future? both from the learning and teaching point of view.

Research questions 1 and 2 will be answered in the Results and findings section, whereas questions 3 and 4 will be dealt with in the sections Students suggestions for integrating MALL in the language class, and Pedagogical implications.

Theoretical background

Mobile Assisted Language Learning (MALL) constitutes the theoretical framework for this study. MALL describes an approach to language learning that is enhanced through the use of a handheld device or mobile technology, such as pocket electronic dictionaries, e-books, personal digital assistants (PDAs), MP3 players and, most recently, ultra portable tablet PCs and smartphones.

MALL is a subset of both m-learning and CALL. M-learning or mobile learning is defined as "learning across multiple contexts, through social and content interactions, using personal electronic devices" (Crompton 2013: 4). Sharples et al. (2005:225) put it this way: M-learning is "a process of coming to know through conversations across multiple contexts among people and personal interactive technologies". The common factors in this state-of-the-art way of learning are mobile devices that allow for social interaction and collaboration in various contexts.

According to Kukulska-Hulme and Shield 2008, MALL differs from CALL mainly "in its use of personal, portable devices that enable new ways of learning, emphasizing continuity or spontaneity of access and interaction across different contexts of use". This emphasises the role of students as main experimenters/explorers and the role of teachers as mere guiders or facilitators in their mobile applications endeavours outside the class. Let's not forget that, precisely, one of the main advantages of MALL is the freedom to use language-learning resources at anytime from anywhere, as well as the freedom to communicate with fellow students and with the tutor. In this sense it makes sense to learn more about the students' preferences, needs and motivations to use mobile devices with a view to experiment innovative effective ways to maximise their language acquisition.

Pedagogical approaches such as Social Constructivism (Vygovksy 1978) and Connectivism are well suited for MALL. Constructivism stresses on social learning, and must be viewed as an active student-centered process where learners actively construct their knowledge through their interaction with mobile devices and with each other. Task-based and problem-based cases are commonly used with a view to progress in their language learning. Connectivism describes the nature of learning as a process of making connections with people, resources, and networks, and creating networks of personal knowledge mediated by ubiquitous technology (Downes, 2007; Siemens, 2007).

In this paper we will explore contexts in which MALL can be used and examples of social and content interactions for independent language learning as suggested by students at Higher Education.

In terms of how can MALL enhance language learning, Kukulska-Hulme (2006) identified four main ways in which mobile devices are typically used at the moment:

1. To support communication, arranging students in groups to encourage collaborative practice.
2. For content delivery and creation, for mobile devices allow for a faster turnaround of learning resources creating a continuum of in-class and outside-class learning resources and opportunities.
3. To encourage personal engagement by social interaction and personalisation.
4. In contextual learning, where students use mobile devices as part of a larger activity, e.g. for data collection, location awareness, collaboration or to support retention or understanding of specific learning items.

These main uses of mobile technologies will be revisited in the last sections of this paper where we will present various examples of the use of mobile apps for independent language practice by students, together with discussions around their integration in the language class.

In this theoretical background we would also like to mention a couple of factors that we deem as essential to better understand the findings and pedagogical implications of language learning in a mobile technologies setting. Firstly, an efficient use of in-class time, especially if this is rather limited, by expanding the opportunities for language exposure outside the class to ensure language acquisition (Kennedy and Levy 2009). Mobile technologies in this respect allow frequent independent informal practice for the students, which according to Kukulska-Hulme (2012), constitutes an essential requirement for foreign language mastery. Secondly, we should not forget the major language areas and skills to be considered for language acquisition to take place. According to Levy (2009), these areas, in CALL, are grammar, vocabulary, reading, writing, pronunciation, listening, speaking and culture. This study considers these areas in terms of students' reported use of mobile apps and the learning benefits and limitations they perceive. The types of apps that are used by language learners are also described in the results and discussion section.

Given the growing availability of mobile devices in the university language class, we were interested in investigating the educational use of this omnipresent mobile technology from the students' perspective. We sought to find out whether students use mobile apps for their independent language learning, and, if so, which are these and how they use them, what do they think about their use for independent language learning purposes, and whether they had any recommendations on how language tutors can implement MALL in the class.
For this purpose in autumn 2013 we run a survey for language students at The University of Manchester. Participants ranged from credited students studying a language or more as their main degree, to credited non-specialist students, non credited students and MoPs (members of the public). As represented in table 1, there were a total of 252 respondents (n=252) and the languages being studied ranged from widely studied languages such as French (74), Spanish (67), German (53),

English (32), Arabic (27) or Chinese (21), to other languages such as Italian (21), Portuguese (9), Korean (7) or Urdu (1).

Table 1. Respondents' languages of study

LANGUAGE	RESPONSE TOTAL	RESPONSE PERCENT
FRENCH	74	29%
SPANISH	67	27%
GERMAN	53	21%
ENGLISH	32	13%
ARABIC	27	11%
CHINESE	21	8%
ITALIAN	21	8%
JAPANESE	15	6%
RUSSIAN	10	4%
PORTUGUESE	9	4%
KOREAN	7	3%
POLISH	6	2%
PERSIAN, HEBREW, DUCTH	2	1%
URDU	1	
	252 TOTAL RESPONDENTS	

As for the level of the language of the students participating, the great majority of them had an A1 level (91%), followed by a B1-B2 level (21 and 19% respectively), A2, 17%, with only a 14% having a C1 and just 7% with a proficient /C2 level (see figure 1).

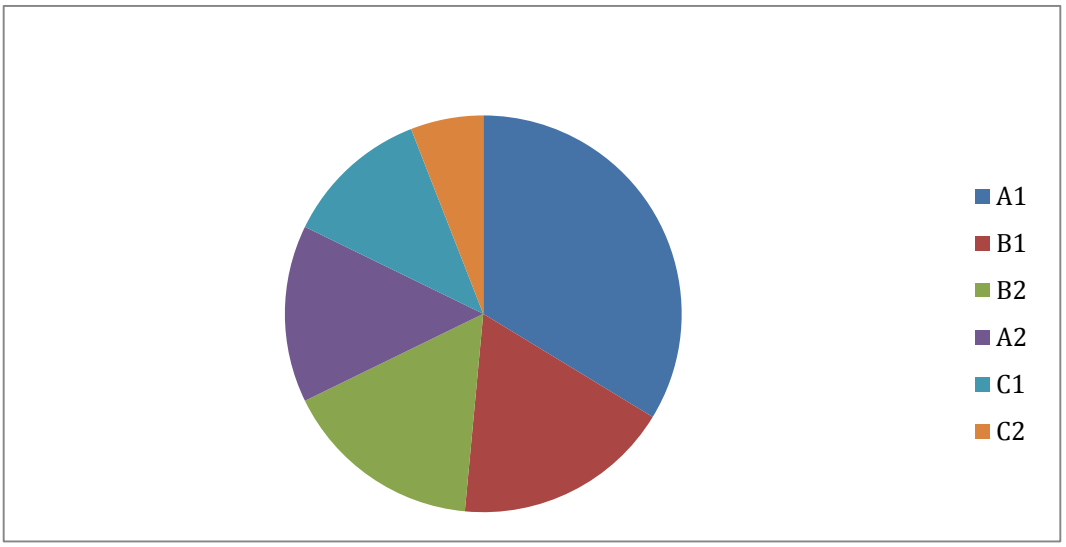

Figure 1. Respondents' language level

Results and Discussion

As pointed out before, one of the main purposes of this paper is to provide some indication of how do Higher Education students use MALL. For this purpose, we presented them with a series of closed questions with multiple choice options which are easier to code and allow for statistical summaries of a large number of cases. Some questions also gave respondents the opportunity to answer them in their own words.

To the question *Have you used mobile apps to support your language learning?* 33% of the respondents replied Often, followed by a close 31% Sometimes, however, 36% of them had Never or rarely used them and this will show in their comments later on.

To the question *How often have you used mobile apps?* it is clear that they great majority of them used them often or sometimes with a total of 80% as opposed to just a 20% who never or rarely used them.

With regard to the students' actual use of mobile apps for language learning, students were enquired to complete the statement *For my language learning I use mobile apps in order to …* and prompted with various suggestions of use (see table 2 below). These were the results by order of frequency:

Table 2. Use of mobile apps for language learning

STATEMENTS	RESPONSES	%
Look up words, phrases and idiomatic expressions	156	72
Translate words/phrases I do not understand into my language	115	53
Translate words/phrases into the language I am learning	106	49
Listen how words are pronounced	93	43
Look for definitions in the target language	92	43
Revise and practise vocabulary	84	39
Help me conjugate verbs	68	31
Look up synonyms in the target language	59	27
Listen and repeat to improve my pronunciation	51	24
To read	48	22
To revise and practise grammar	47	22
To listen to mp3s, podcasts, radio, etc.	45	21
For social networking	40	19
To listen to music	35	16
To speak with my friends, conversation exchanges, etc.	30	14
To watch authentic videos and TV	26	12
To play games	22	10
To chat	20	9
For professional networking	8	4
For checking infographics for inspiration	5	2

By far the most frequent use was looking up words, phrases and idiomatic expressions with a 72% of responses, followed closely by translating words/phrases into the L1 first (for comprehension purposes), and into the L2 secondly (for production purposes). Two other main uses were listening how words are pronounced, looking for definitions in the target language or revising and practicing vocabulary. This suggests that the meaning of small chunks of language (and their pronunciation) is at the top of students' priorities when checking their mobile apps, and suggests we can be mainly looking at beginners' level students. The quickness of access to these apps whilst completing a language task inside or outside of class reinforces retention and accuracy, thus simplifying the language task process.

Steel (2012) curiously came up with similar results in her study reporting that mobile apps benefited most with vocabulary (particularly for memorization, accessing meaning and contexts for use) and with reading, writing, grammar and translation tasks. Within vocabulary apps, she highlighted

those that offer mobile versions of language dictionaries, translators and verb conjugators and labeled these as "indispensable" in any language learning portable device.

Surprisingly, in our study the conjugation of verbs only had a 31% of responses. This is a common concern at all levels, especially in Romance languages such as French or Spanish, followed by looking up synonyms into the target language (27%), which may suggest a more advanced level use. Reading use reported a 22% with apps such as e-books, digital newspapers and magazines, followed by a 22% of grammar revision use and 21% listening use, mainly MP3s, podcasts and radio.

Social networking had a return of 19% followed by other leisure-associated uses such as listening to music, speaking to friends over *Skype*, watching authentic videos, playing games, chatting, professional networking or checking infographics for inspiration. As for the usefulness of mobile apps for independent language learning, an overwhelming 88% of the students questioned considered them helpful for this particular purpose.

Mirroring the results from an aforementioned question (*For my language learning I use mobile apps in order to …*), table 3 below shows answers to the question *In what ways do you find mobile apps useful?* 73% of the students thought the main usefulness of these apps is their helping increase vocabulary. The portability and freedom of use for extra practice at any time and at the students' own pace was regarded as the second most important practicality, followed by help memorizing (41%), reading comprehension (32%), and the fact that it makes revision fun (39%).

Table 3. Usefulness of mobile apps for language learning

STATEMENTS	RESPONSES	%
Helps increase vocabulary	154	73
Provides resources for extra practice at any time and at my own pace	100	48
Helps memorizing words, phrases, genders, conjugations, etc.	86	41
Helps improve reading comprehension	68	32
Makes revision easier/fun	82	39
Helps improve pronunciation and intonation	70	33
Helps sentence building	69	33
Helps improve oral comprehension	68	32
Helps improve grammar accuracy	67	32
Helps me write properly	44	21

Other ways in which students found mobile apps useful were in improving pronunciation and intonation, in sentence building and oral comprehension, which also suggests a lower level (A1-B1), or, at least, that the student is still exploring the first stages of learning a language. Last in the list stand help improve grammar accuracy and help write properly, which usually demand more formal learning and a more deep knowledge of the language, together with contextualized practice and feedback or some way of interaction.

Most of the students questioned were widely aware of the various mobile apps available for language learning and this showed in their answers to the question *Can you mention examples of apps that you found useful for your independent language learning?* (see table 4 below).

Table 4. Examples of mobile apps respondents found useful for independent language learning

TYPE	APPS
DICTIONARIES AND CONCORDANCERS	*WordReference, Dict CC, LEO Pons, Jisho, Pleco, Arabic Dict, Linguee*

TRANSLATORS	*Google Translate, iTranslate*
L PRACTICE	*Duolingo, Busuu, Babble*
FLASHCARDS	*Quizlet, Memrise, Brainscape, Anki*
CONJUGATORS	*Iverbs French, I Verbi, Wiktionary, El Conjugador*
PODCASTS	*Itunes Podcasts, Chinese Pod, Deutsche Welle, France Culture, Tfs Radio Germany*
NEWSPAPERS	*Courier International, Der Spiegel, El País*
VIDEOS	*YouTube, RTVE, Atres Player*
GAMES	*Mind Snacks*
NOTES	*Notes, Notability*
MESSENGERS	*Whatsapp, FaceBook Messenger*

These mobile apps could be grouped in the following categories:

- **Dictionaries and concordancers** such as *Wordreference* with fast accurate translations of words, idioms and collocations, and language forums to discuss various linguistic issues; the overlay *QuickDict* and bidirectional offline dictionaries such as *Dictionary CC* or *Arabic Dict,* online dictionary apps such as *Pons*, *Jisho*, *Pleco*, or even a powerful combined offline and online dictionary plus concordancer such as *Linguee*.

- **Translation apps** such as *Google Translate* that students use to translate words between two languages back and forth quickly and easily. They were aware, though, that it does not work as well with full phrases, sentences to use in real life or grammar. Of *Google Translate* they liked the fact that it produces a list of synonyms with the translation, that it enables audio so you can hear the words you are translating, input words into the translator through your own voice and play back the words.

- **Language practice apps** such as *Duolingo*, which students find good for revision of basic and more advanced language skills. The fun and interactive tasks help enhance reading, writing, oral and listening skills and you can also set goals and do mini tests to monitor your progress and achievements. Their comments on this app provide lots of clues of mobile features they value such as the fact that they can have grammar and meaning explanations, translate to and from the language, practice their vocabulary and conjugations for a limited period of time (5 minutes), listen to the correct pronunciation of words, do speaking practice, and even compare themselves with their friends because the app is paired with *Facebook.* They also like the fact that they receive a reminder to practice every day. Similar apps to *Duolingo* are *Busuu* and *Babble*, a speech to text and text to speech app to practice accurate pronunciation of short phrases and sentences and challenges to you repeat them correctly in 4 seconds. Some advantages pointed out by students were that it has various levels to help you build up, you are given feedback and you can see your improvements over time.

- Among the **Flashcard applications** that they highlighted were *Quizlet*, to record their own vocabulary and be tested on it, *Memrise* which combines memorizing and gaming features, and similar tools such as *Brainscape* and *Anki*. Students seemed to enjoy not only the sharing and personalization of resources that these apps allow, but also the challenge and competition involved.
- Many of the students also suggested the use of **conjugation apps** such as *I Verbs French*, *I Verbi, Wiktionary* or *El Conjugador* to check for irregular verb use and help with their grammatical accuracy.

- For **listening comprehension** they seemed to make extensive use of podcasting apps and tools such as ITunes podcasts, *Notes in Spanish*, *Chinese pod*, *France Culture* , *tfs Radio Germany* with different accents and increasing oral understanding, or *Deutsche Welle* where they found useful its manageable speaking speed and transcriptions.

- They also mentioned **newspaper apps** such as *Courier International*, *Der Spiegel* or *El Pais* not only for reading and cultural awareness, but also for oral comprehension skills.

- **Video apps** such as *YouTube*, *RTVE* or *Atresplayer* with multiple opportunities for practice (watching video clips, TV extracts, full movies, listening to music with lyrics, etc.).

- **Games** such as *MIndsnacks*, which are great incentives, fun and allow you to unlock more games as you go up. On the negative side, they mentioned they can get repetitive after some time.

- **Note taking apps** such as Notes or *Notability* to write words and phrases and make learning more accessible and easier to memorize.

- And, finally, **chat or messenger apps** such as *Whatsapp* or *Facebook Messenger* to communicate with other people on the go.

These types of mobile apps suggested by the students cover areas and skills such as grammar, vocabulary, reading, writing, pronunciation, listening, speaking and culture, which were already identified by Levy (2009) as benefiting learning and contributing to language acquisition in CALL.

Students' suggestions for integrating MALL in the language class

Our research also looked into how can MALL be integrated in the class. To the question *Would it be helpful if your tutor would embed the use of mobile apps for language learning as extra materials in class or via the VLE?* a great majority, 82% of the students, found this Always (50%) or Sometimes helpful (50%), as opposed to a 16% who would Rarely or never find it useful, mainly claiming that mobile apps are not for everybody, that they work best as additional optional practice to use in their own time (for independent revision, rather than as a main part of the course), and that not everybody has smart phones so some people would be missing out.

In the last part of the survey we asked students to share their views on the educational potential of mobile apps inside and outside the language class. Students comments will be commented on in the form of suggestions for integration in a language course as well as pedagogical advantages and hindrances of their use.

Among the suggestions for integration in a language course, students provided the following:

- giving links on the VLE to some useful apps and sign posting these in class
- linking apps to pop up on your mobile to be able to learn at your own pace during the day
- setting problem-solving tasks as homework or challenges within class e.g. looking for synonyms
- as a 15 min. revision exercise in class
- incorporating interactive games to support covered topics per week for fun extra practice on the move, together with vocabulary lists, translation of phrases/words and short grammar/pronunciation online tests to help learning and progression, or even to compete against the class, in order to link them to contents seen in class so there is a sense of progression and
- to post on discussion fora about new apps as recommended by their fellow students.

Based on these suggestions, it appears that students are realizing the educational potential of mobile apps for language learning. Their suggestions are representative of how mobile devices are currently used for language learning purposes (as pointed out by Kukulska Hulme 2006), namely, their use in contextual learning (e.g. problem solving tasks), content delivery and creation (as exemplified by their suggestions on how to provide links and apps in a VLE), for personal

engagement and interaction (as suggested by the use of games, vocabulary lists and online tests), and for communication (via discussion fora, wikis and social media). However, they seem to need guidance to link all these components to the contents seen in class and realize the usefulness of these to practice the various linguistic skills involved in language learning. Tutors could encourage this by providing good examples of app use and presenting relevant contexts with clearly set learning outcomes in which these could be used as part of a larger language in-class or outside-of-class learning task for authentic, collaborative practice. We believe that, well conducted, this can improve learner engagement and motivation as well as foster language retention in the long term.

Pedagogical implications

Finally, we will discuss some of the pedagogical implications of the use of MALL for the future. Overall, it is clear that MALL has a lot of potential for blended VLEs, that it encourages autonomous learning, motivation and, we believe, social interaction as well, especially if the app is somehow connected to a form of social networking or there is a degree of competition involved. Key attributes such as the use of personalized, situated, authentic, spontaneous and informal tools (Kukulska-Hulme and Traxler, 2007) are also to be taken into consideration in the "rethinking" pedagogy for the use of mobile apps by language learners.

On the other hand, some pedagogical hindrances of the use of mobile apps for language learning, as identified by students, include the fact that there is not much current scope for extensive practice of speaking and writing skills. As opposed to authenticity, some words or phrases as used in mobile apps may become obsolete or different to real life use. Similarly, the free version of some apps may become boring and repetitive after a while, therefore affecting motivation. Students also realized that the quick automatic translations, especially of phrases and sentences, as produced by apps such as *Google Translate*, cannot always be trusted. This provides a good example of positive students' evaluation of language learning resources, where readiness and quickness of use does not necessarily lead to misuse and plagiarism. Students can then be encouraged to explore more fruitful resources such as concordance apps to look for parallel collocations and structures in the target language.

It is also true, as students well pointed out, that mobile technology is not suitable for all kinds of students and learning styles, that some students may not have smart phones and would automatically be left out.

Finally, students also pointed out that some apps are just condensed versions of websites or demand further guidance for their proper use and, therefore, are commonly left unused. This highlights the importance of induction, guidance and follow-up when it comes to implementing the use of applications inside and outside the language class.

On a final note, our investigation hinted that MALL does not always facilitates synchronous collaborative practice among students. We have seen a few example apps for this purpose such as messenger apps or videoconferencing apps, however, their use for independent language learning seems rather unexplored and the design of the tasks and appropriate /relevant context of learning would make it only suitable for one-to-one distance learning. In other words, students enrolled in a language course may still prefer the face-to-face interactive conversation practice with their fellow students, for example.

Conclusions

From the results of this survey and to conclude we can say that among the pedagogical benefits of MALL, as pointed out by our surveyed students, we can highlight its suitability for passive language skills such as vocabulary acquisition, written and oral comprehension, pronunciation, vocabulary and grammar practice in particular.

Students also indicated that other advantages of the use of mobile apps for language learning include convenience (as a quick check they are always available, at any time and from any place), use of authentic resources (which always trigger cultural awareness) for various language skills, the fact that they provide fun and interactive progression over a wide range of topics in a limited period of time, offer immediate feedback and several opportunities to personalise authentic language practice (for example setting goals in line with their own interests and ideas, creating quizzes on students' own resources, beating game scores, etc.).

Future research

Overall, our survey revealed that, although there is evidence of the use of mobile apps by Higher Education students for independent language practice, students and, undoubtedly, tutors still could benefit from further guidance and support to ensure effective educational use inside and outside the language class. In this respect, listening to students' needs and preferences, together with a close collaboration between language tutor communities and educational technologists can help in the search of innovative, meaningful and appropriate tasks that involve the use of mobile apps and can be successfully integrated into the language curriculum.

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