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 metareviews 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.

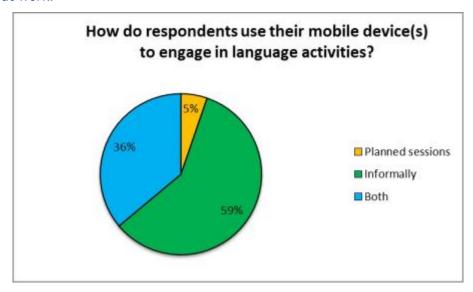


Figure 1. Percentage of answers to the Question: 'How do you use your mobile device(s) to engage in language activities?'

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 beginner's 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 Babbel, [...] 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://llt.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, *Computer Assisted Language Learning*, 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.

Sharples, M. (2006) Big Issues in Mobile Learning. Report of a workshop by the Kaleidoscope, Network of Excellence Mobile Learning Initiative. 2006. https://doi.org/10.1016/j.com/

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 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.