

## Fitting learning into life: Language students' perspectives on benefits of using mobile apps

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For university students, the availability, convenience and low cost of mobile applications (apps) present new opportunities to fit learning into their busy lives outside class. Studies of teacher-led mobile learning in universities abound while few studies explore students' own use of mobile apps and their perspectives on how these apps can benefit their learning. As we consider learning for the future, it is crucial to partner with students to build a picture of emergent technology practices beyond our classrooms and institutions. However, discipline-specific studies are required to gain an understanding of the ways apps are used to acquire specific disciplinary knowledge and skills. This paper reports on how 134 language learners used mobile apps to profit from their available learning time outside of class. It provides insights into student perspectives on the benefits of using mobile apps for foreign language learning.

Keywords: mobile language learning, MALL, language learning, student perspectives, university

### Introduction

Pockets of time available at certain times of day can become profitable moments of learning, and places that were previously dedicated to one purpose can assume a different role.

Kukulska-Hulme, 2012

Beyond formal institutional settings, university students make their own choices about how they fit learning into their busy lives. Some five years ago, James, Bexley, Devlin and Marginson (2007) reported that 70.6% of full-time Australian undergraduate students worked an average of 14.8 hours per week with nearly 20% working 16 to 20 hours per week during semester. Recent surveys (Coates, 2011) have shown similar trends. On top of university studies and work, students need to juggle other aspects of their lives including friends, family, social and other commitments. Our busy students need to find ways to 'fit' learning into their lives. For students, mobile devices are obvious tools that can help maximise their time-on-task wherever and whenever there is time and opportunity to learn. Pricing and mobile connectivity for these devices is rapidly becoming more accessible to students. Smartphones now outnumber laptops and ownership is exceeding saturation (Traxler, 2011). In Australia, smartphone ownership increased by 36% from 2010 to 2011 and is predicted it to grow to 60% of the Australian mobile population by 2012 (Telstra, 2011). Simultaneously, mobile applications (apps) are proliferating exponentially and experiencing extremely high take-up with predictions that they will soon eclipse desktop computing (Perez, 2010, Godwin-Jones, 2011).

For our busy university students, mobile apps offer a wide range of learning tools they can be downloaded to their mobile devices and used productively at opportune times in a variety of settings and on-the-go. Yet few studies have investigated students' personal use of mobile apps for learning and the learning benefits students perceive for their university studies. Indeed most studies of mobile learning in university settings have tended to focus on teacher-led mobile initiatives. Disciplinary context is also often overlooked. The discipline is important here as learning is experienced differently in different fields of study. This paper reports undergraduate students' use of mobile apps for foreign language learning. It describes how students use their apps to maximise the effectiveness of their out-of-class learning time and how students perceive these apps benefit their foreign language acquisition.

### The nature of foreign language learning outside class

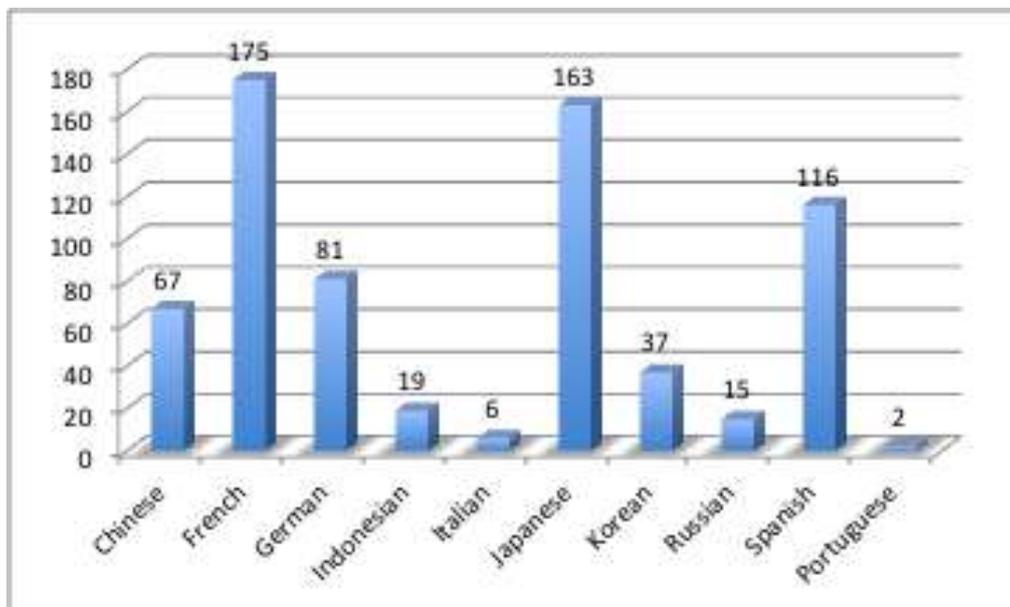
Learning in different disciplines is dependent not just on how students learn but also on what they learn. Whilst more generalist educational theories such as Social Constructivism have broad applicability for language learners, the ways in which students acquire languages has demanded language specific learning theories (Chapelle, 1997, 2005). More recent examples of these theories include Second Language Acquisition Theories (SLA), Communicative Language Teaching (CLT), Content and Language Integrated Learning (CLIL) and Intercultural Language Teaching and Learning (ILT) (for an overview of these theories see Lo Bianco with Slaughter, 2009). Such theories highlight a range of pedagogical approaches that were created specifically for

the discipline of language learning with a view to language acquisition.

Extending language learning outside of classroom time, especially where in-class language practice time is limited, is essential to language acquisition (Kennedy and Levy, 2009). Foreign language mastery requires frequent informal practice (Kukulska-Hulme, 2012). In non-language-immersive environments this means trying to maintain a more continuous connection with the target language by locating time and opportunities for self-regulation and practice. In this context, mobile devices and their applications hold potential affordances for language learners (Kukulska-Hulme & Shield, 2008). In relation to these affordances it is useful to consider major language areas and skills that are central to language acquisition. Levy (2009), discussing computer assisted language learning, categorises these areas and skills as grammar, vocabulary, reading, writing, pronunciation, listening, speaking, and culture. This study considers these areas and skills in terms of students' reported use of mobile apps and the learning benefits they perceive. The types of apps that are used by language learners are described in the student quotes in the results and findings section.

## Methodology

A mixed methods research project called 'The beliefs and experiences of language students in their early years of transition to university-level study' was conducted at an Australian university from May to August 2011. Employing an online survey, 2,114 language students were invited to participate and a 28% response rate (N=590) was achieved. Ten foreign languages were represented across the sample with highest representation from students studying French (175), Japanese (163) and Spanish (116) (see Figure 1).



**Figure 1: Languages studied across the sample**

In one section of the survey, students were asked to identify the technologies they used to support their language learning (inside and outside of class) and then rank the top three technologies they perceived as most beneficial to their language learning when used outside their formal class settings. Students were then further prompted to type qualitative comments explaining the learning benefits they perceived from their top three technologies.

Whilst 331 (56%) students reported using mobile apps to support their university learning, 134 (23%) students ranked mobile applications in their top three technologies. Qualitative analysis was conducted inductively on student comments to find out how students use mobile apps to profit from learning time available outside of class and the benefits they perceived from using mobile apps for language learning. Data was handled interpretively through different levels of coding, categorisation and reduction until clear themes emerged. This analysis is ongoing and preliminary results form the basis of the discussion below. The themes reported describe: (a) the ways students used mobile apps to maximise time, location and opportunity to fit language learning into their daily lives, and b) the specific learning benefits students perceived through their use of mobile apps for language learning.

## Results and findings

Student comments on mobile apps highlighted some of the key overall advantages often associated with being able to learn on-the-go as well as learning benefits that enabled the development of specific language learning areas. The more general benefits are discussed first as they emphasise the ways that students fit learning into their busy schedules and utilise ‘pockets of time’ to connect with, and learn languages. The more language-specific benefits are then examined with reference to language learning areas and skills that students reported mobile apps helped address.

### Fitting learning into life

The ability to practice language anywhere and anytime was a strong theme in the student data on mobile apps in this study. Students appreciated the flexibility and convenience of using their apps to meet their personal learning needs at times and in places that suited their lifestyles.

Students often mentioned the convenience of using their apps to gain time efficiencies thus exemplifying how students can utilise pockets of time profitably: *‘I downloaded various dictionary apps for the language that I am learning so I can check and refer to it whenever and wherever I am. It is very convenient’*. Learners could embrace opportune moments in varied locations without a lot of forethought and preparation:

Allowed me to build custom decks of kanji & vocab cards, which I can review nearly anywhere - on the bus, on a break from work or in-between classes. It's turned my transit time into 80% study time - a huge reclamation

Students often referred to the fact that they tended to carry a mobile device like a phone with them anyway which increased their access to their apps. *‘I always have my phone with me so my phone apps for my language learning are with me as well’*. This kind of portability extended to their workplaces and enabled students to revise and review their in-class learning. *‘It is accessible to me during brief breaks in my work schedule and allows me to revise points quickly.’*

Overall, students found mobile apps *‘easy-to-use and understand’* and *‘accessible anywhere anytime’*. Students commented that apps were generally free or low cost and *‘are often many things in one: dictionary, text-book type exercises, flash cards, audio, writing practice devices etc.’* Additionally, students expected apps to continue to improve and to offer more opportunities for learning. As one student said *‘there are so many apps out there that help assist me in my language learning, and there are always new apps being released.’*

Convenience, portability, and being able to learn-on-the go were important factors for students who ranked mobile apps as beneficial to their language learning. These features are not new to mobile learning and their benefits have been espoused for some time (e.g. Alexander, 2004). However, recent changes in the ownership patterns of smartphones, and the availability of a large range of mobile applications that cater to a wide range of languages has meant that this potential can now be realised by more university students studying foreign languages. Students in this study also realised the potential of being able to personalise their learning to achieve learning tasks quickly and easily, spontaneously and habitually, so that time could be used profitably for language acquisition. For learners in this study, being able to use one small and portable device anywhere and anytime meant that learning languages could be less compartmentalised and less tethered to time and place. This also meant that students could more readily immerse themselves in their target language.

### Language specific learning benefits

Of the language areas and skills discussed earlier in this paper, mobile apps reportedly benefited most with vocabulary (particularly for memorization, accessing meaning and contexts for use) and with reading, writing, grammar and translation tasks. Specifically, apps that offered mobile versions of language dictionaries, translators and verb conjugators were indispensable when available via one highly portable device.

Phone apps can be used as dictionaries, help with verb conjugation, hanja help (chinese characters) ... It's language tools whenever I need them, wherever I need them and that makes it really useful to have.

These kinds of apps enabled students to quickly and easily check the meaning of vocabulary whenever they needed to: *‘if I hear a word that I don't know i can just easily look it up’*. And many students claimed that the

use of these apps had a positive influence on their vocabulary acquisition. *'I was able to use these apps on the bus to and from university which helped me cement some vocabulary and grammatical skills'*. Facilitating vocabulary acquisition, on-the-go, also meant that students had more opportunities to remember words in context:

When i want to know what a certain word may be for a situation and i am out and about i can look it up straight away. I find i remember it better because i can remember the situation as well, so i am constantly expanding my vocabulary.

Mobile apps for vocabulary acquisition (such as flashcards and games) were perceived as highly beneficial to students' learning. Many of the language apps offered flashcards and games that could be personalised to assist targeted vocabulary acquisition.

I have an app on my phone which works exactly like an electronic dictionary for Japanese, except better. I can store vocabulary lists on it and it will make an automatic flash card game to help me memorise new vocabulary.

Many apps combined a number of features in one app which meant that students could use multiple functions in integrated and seamless ways. Reportedly, the availability of these functions helped their learning.

There are several apps which have flash card or select the right answer games on important vocab or grammar, as well as supporting a dictionary/translator. I find these help solidify what is learnt in class.

I have a mobile phone app that does everything. its a dictionary for both jap to english and then english to jap. it also shows examples of words in a sentences, you can look up kanjis, it shows functions and grammar formats. its just extremely helpful and i use it all the time

Students often related their use of apps to the content or the way they were learning in class. *'You can use them while travelling, makes revision slightly easier and can be fun.'* Sometimes, being able to work at their own pace rather than the class pace was perceived as beneficial *'it "teaches" me outside the classroom and at my own pace, as sometimes the lecturer moves too fast for me to understand.'*

Importantly, students valued the opportunity to intellectually connect with the language beyond the classroom. *'Sets me words to learn, quizzes me through flashcards and games on the words - gets me thinking in German outside the classroom'*.

Depending on the language under study, there are different linguistic characteristics and challenges. Being able to access apps that helped students directly with some of these known challenges was perceived a beneficial. For example, languages that were gendered or had character-based writing systems. *'I also have some language learning apps to help remember vocabulary and to help memorise gender of nouns - these are really helpful. Applications allow users to handwrite simplified or traditional characters on the screen as an input option for dictionaries, along with pin yin or English typing.'* Locating characters in traditional dictionaries can take a lot of time, so being able to quickly search for and identify Chinese and Japanese characters was very helpful and time efficient. *'... it also has an excellent Kanji search that can be text based, multi-radical, JLPT level and a number of other ways.'*

Many students had a variety of language apps on their mobile devices. *'I have approximately 6-8 apps on my phone relating to language learning. These are dictionaries, flashcards, conjugating apps, games, mp3 etc.'* However, apps that promoted vocabulary acquisition were frequently mentioned in the student data. A potential limitation of this study though, was that most students (just over 70%) were in the first or second year of their university study. While some of these students may have been taking more advanced language classes based on prior studies or experience, it is likely that a majority of students were closer to beginner to intermediate levels. This may account, at least in part, for students' focus on vocabulary acquisition over say more authentic or communicative language learning. Vocabulary acquisition through mobile devices has been emphasised in other studies of mobile language learning (e.g., Levy and Kennedy, 2005; Thornton and Houser, 2005, Stockwell, 2007). However, few studies, with the exception of Song and Fox (2008) have reported on students' personal use of mobile devices to acquire new vocabulary (Kukulka-Hulme, 2012).

While other language areas were addressed, such as reading, writing, grammar and translation tasks, it was

notable that few students mentioned using these devices that were originally intended for communication for phone calls and texting. Again, this could have been a constraint of the language levels surveyed. A further limitation may be the types of foreign language apps currently available to language learners and their pedagogical designs. Many apps are still designed using behaviourist algorithms.

## Conclusions and implications

Kukulska-Hulme (2012, p.1) suggests that 'by reviewing individual learner experiences in learner-determined contexts, researchers and the language teaching community can work together to build up a picture of emergent practices'. This study has contributed to understanding how foreign language students are currently using mobile apps to support their language learning. It highlights how these devices are making a difference to the ways that students fit learning into their busy lives as well as describing the dominant uses of these apps in the context of a specific discipline. For language learners and teachers the future holds great potential. As this student's comment underscores:

Mobile apps are beneficial because you can access them anywhere, meaning you are more effective with your time. Successful language learning occurs mainly in immersive type environments, so I think that mobile apps are most beneficial because they bring more exposure and engagement with the language than just the time spent in the classroom.

However, more studies of students' personal use of mobile apps and devices are required for the discipline of language learning and for other disciplines too. For language learning, further studies could be conducted with more advanced language students to see whether there is more variation in their usage patterns and the skills and language areas that are targeted. Additionally, more studies need to examine the pedagogical premises that underpin the design of current mobile apps and to suggest improvements. For example, are language learning apps being developed based on narrow interpretations of language pedagogies and theories? Further, teachers need to be more aware of the language apps their students are using and how they are using them so they can provide some guidance and recommendations on how their learning benefits could be extended.

## References

- Alexander, B. (2004). Going Nomadic: Mobile Learning in Higher Education. *EDUCAUSE Review*, 39(5), 28-35.
- Coates, H. (2011). Working on a dream: Educational returns from off-campus paid work. *AUSSE Research Briefing*, v.8 March 2011.
- Chapelle, C. (1997). CALL in the year 2000: Still in search of research paradigms? *Language Learning & Technology*, 2(1), 22-34.
- Chapelle, C. (2005). Interactionist SLA theory in call research. In J. L. Egbert & G. M. Petrie (Eds.), *CALL Research Perspectives* (53-64). Mahwah, NJ: Lawrence Erlbaum.
- Godwin-Jones, R. (2011). Emerging technologies: Mobile apps for language learning. *Language Learning & Technology* 15(2), 2-11.
- James, R., Bexley, E., Devlin, M., & Marginson, S. (2007). *Australian university student finances 2006: A summary of findings from a national survey of students in public universities*. Canberra: Australian Vice-Chancellors' Committee
- Kennedy, C. & Levy, M. (2009). Sustainability and CALL: Factors for success in a context of change. *Computer-Assisted Language Learning* 22(5): 445-463.
- Kukulska-Hulme, A. (2012). Language learning defined by time and place: A framework for next generation designs. In Diaz-Vera, Javier, E. (eds.) *Left to my own device: Learner autonomy and mobile assisted language learning*. Innovation and Leadership in English Language Teaching, 6. Bingley, UK: Emerald Group Publishing Limited, 1-13.
- 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.
- Levy, M., & Kennedy, C. (2005). Learning Italian via mobile SMS. In A. Kukulska-Hulme, & J. Traxler (Eds.). *Mobile learning: A handbook for educators and trainers* (76-83). Wiltshire: The Cromwell Press.
- Levy, M. (2009). Technologies in use for second language learning. *The Modern Language Journal*, 93, 769-782.
- Lo Bianco, J., with Slaughter, Y. (2009). Language teaching and learning: Choice, pedagogy, rationale and goals. *Babel*, 44(1), 24-35.
- Perez, S. (2010, March 16). Mobile app marketplace: \$17.5 billion by 2012 (Blog post). [http://www.readwriteweb.com/archives/mobile\\_app\\_marketplace\\_175\\_billion\\_by\\_2012.php](http://www.readwriteweb.com/archives/mobile_app_marketplace_175_billion_by_2012.php)

- Song, Y., & Fox, R. (2008). Uses of the PDA for undergraduate students' incidental vocabulary learning of English. *ReCALL*, 20(3), 290-314.
- Telstra (2011). Fact sheet: Telstra smartphone index 2011 highlights.  
Accessed on 28 June 2012 from: <http://www.telstra.com.au/abouttelstra/download/document/fact-sheet-telstra-smartphone-index-2011.pdf>
- Stockwell, G. (2007). Vocabulary on the move: investigating an intelligent mobile phone-based vocabulary tutor. *Computer Assisted Language Learning*, 20(4), 365 – 383.
- Thornton, P., & Houser, C. (2002). M-learning in transit. In P. Lewis (Ed.), *The changing face of CALL* (229-243). The Netherlands: Swets and Zeitlinger.
- Traxler, J. (2011). Education and the Impact of Mobiles and Mobility. In B. Bachmair, *Medienbildung in neuen Kulturräumen* (trs. Media literacy in new cultural spaces), Weisbaden: VS-Verlag für Sozialwissenschaft, 103 – 113.

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