Mobile-assisted language learning community and culture in French-speaking Belgium: the teachers' perspective

Julie Van de Vyver[1]

Abstract. This paper focuses on the perceptions and uses of mobile technologies by 118 Belgian teachers in foreign language teaching and learning in secondary education. The purpose of the study is to analyze the teachers' attitudes towards the use of mobile technologies in- and outside the classroom via an online questionnaire. The preliminary findings presented in this paper establish that the concept of a 'Mobile-Assisted Language Learning (MALL) community' does not yet exist in our context as the use of mobile devices is still limited. Nevertheless, it can also be stated that teachers' attitudes and behavioral intention towards the use of tablets are slightly more positive than towards the use of smartphones, and that a vast majority of the teachers are interested in being trained to MALL.

Keywords: MALL, teacher education, attitudes, usage patterns.

1.   Introduction

The Computer-Assisted Language Learning (CALL) culture has been developing for several decades thanks to individual initiatives, scientific research and reflective practices from CALL practitioners. New teaching designs have subsequently emerged – such as Puentedura's (2013) SAMR model or Liu et al.'s (2014) TPACK model – and new tools have been created (e.g. interactive whiteboards, educational apps). Mobile learning in general, and MALL in particular, are more recent manifestations of CALL and before integrating the technology in Belgium, there is a need to observe and discuss the current situation (Davie, 2015) and the readiness to adopt these tools in education as was done in other contexts (Fujimoto, 2012 for the Australian

context and Pieri & Diamantini, 2014 for the Italian one). Several projects have been implemented in the Federation Wallonia-Brussels (FWB), which is, in short, the French-speaking part of Belgium. They include the Plan Cyberécole in 1999, Plan Cyberclasse in 2005, Ecole Numérique in 2011, and Plan du Numérique in 2015 (see www.ecolenumerique.be for more details) and were meant to equip educational environments with, among others, computers and tablets. Surveys have then been regularly conducted to evaluate the access to technologies in our secondary schools (Agence wallonne des télécommunications, 2013). However, mobile technologies per se and their use have not yet been much investigated in this context.

2. Method

2.1. Design and distribution of the study

This present study concentrates on the perceptions and uses of mobile technologies by teachers in language learning in the FWB. Data was collected through an online survey conducted in 2016 and distributed in schools via e-mail lists and social networks. 87 male teachers and 31 female teachers, who teach the last three years of secondary education, completed the 15-minute questionnaire in French. The survey, which is part of a wider project on the acceptance of technologies for language learning, sought to answer the following research questions:

- When and how (often) do these teachers use their computer, tablet and smartphone for educational purposes?

- What are the teachers' attitudes towards the use of the tablet and the smartphone in foreign language learning?

- What is the teachers' behavioral intention of use of these mobile devices in their teaching?

The questionnaire mainly consisted in closed questions with items based on Davis's (1989) Technology Acceptance Model (TAM) and extended TAM categories (Davis, Bagozzi, & Warshaw, 1992) and used a Likert-scale response format. They addressed teachers' perception of ease of use, usefulness and enjoyment of mobile technologies, viz. tablets and computers in language learning. Another set of questions included teachers' behavioral intention to use these technologies in the classroom and their actual use of the system.

2.2. Participants' profile

Out of the 118 respondents, the vast majority teach English (n=101) and/or Dutch (n=80) while some others are German (n=11), Italian (n=11) or French (n=1) teachers. As illustrated in Table 1, they are aged between 21 and 59 with nearly two-thirds (64%) of them above 40, 24% aged between 31 and 40 and 12% aged between 21 and 30.

Table 1.   Age of the respondents

Age range	Frequency	%
21-30	14	12
31-40	28	24
41-50	44	37
51-60	32	27
Total	118	100

The subjects come from nearly 60 schools throughout the federation. We collected 4 to 35 answers per province, mainly from rather experienced teachers, which correlates with the participants' age groups. Although all the respondents possess a computer, only 70% of them own a smartphone and 43% report having a tablet. Besides, 38% possess two devices out of the three aforementioned, and 37% own the three devices.

3.   Results

3.1.   Teachers' educational uses of mobile technologies

The teachers were asked to select their different types of use of the computer, tablet and smartphone. Illustrated in Table 2 are their educational uses of each device. We can see that these uses are quite limited on mobile technologies. Indeed, whereas 82% of the computer users consult a translation dictionary on their computer, only 34% of the tablet users use one on a tablet and 27% of the smartphone users check words on a translation dictionary on their phone. Similarly, most teachers use websites for language learning and teaching on their computer. Although the use of a school platform or Open Educational Resources (OERs) is not so common among teachers, it is more common on a computer than on mobile devices. Regarding the use of educational applications, which are only available on mobile devices, we can see that only 4 smartphone users report using them.

Table 2.   Educational uses of the three devices

	Computer	Tablet	Smartphone
Translation dictionaries	82%	34%	27,50%
Websites for language teachers	76%	2,50%	10%
Websites for language learning	76%	2,50%	8%
Use of school platform	38%	6%	6%
Use of OERs	23%	0%	4%
Use of educational apps	N/A	0%	5%
Total users	118	82	51

3.2.   Teachers' use of technology in the classroom

The following set of questions dealt with the use of the three devices for language learning. According to the subjects, 83 teachers (70%) use the computer with their pupils during languages classes, among which 39 (33%) use it *rarely*, 33 (28%) use it *sometimes* and the remaining 11 (9%) from *often* to *all the time*.

Regarding the use of mobile devices in the classroom, 18 teachers (15%) report using a tablet, among which 11 (9%) of them use it *rarely*. 20 teachers (16%) use a smartphone in the language classroom.

3.3.   Teachers' perception of ease of use, usefulness and enjoyment of mobile devices

In order to find out about teachers' perceptions of the use of the mobile devices in language learning, the participants were asked to answer the following question using a seven-point Likert scale with 12 opposite adjectives (e.g. useful vs useless): "Using the tablet (Q1)/the smartphone (Q2) to learn languages in secondary education is according to you…".

Illustrated in Table 3 are the means obtained for each category of adjectives. These scores establish that the teachers' Perceived Ease of Use (PEoU), Perceived Usefulness (PU) and Perceived Enjoyment (PE) are all slightly higher for the tablet than for the smartphone. However, the PU and PEoU results are quite close to the neutral position (4) and should therefore neither be considered as highly positive nor as highly negative perceptions. Furthermore, the only score below the neutral position (4) reflects the teachers' perception of usefulness of the smartphone.

Table 3.   PEoU, PE, and PU for mobile devices

T PEoU	4,32	S PEoU	4,28
T PE	5,1	S PE	4,88
T PU	4,29	S PU	3,86

3.4.   Teachers' behavioral intention of use of mobile devices

According to nearly all the participants (n=116), teachers should use mobile devices in language classes in secondary education. As shown in Figure 1, 56% (n=66) of them think that these devices should be used *occasionally* to *sometimes* and 42% (n=50) believe they should be used *regularly* to *very often*. Nevertheless, when asked about their wish to use a tablet or a smartphone in their classroom, about 50% of the respondents answer negatively. Still, 77% (n=91) of them are interested in some MALL training.

Figure 1.   Teachers' opinion on the use of mobile devices in the language classroom
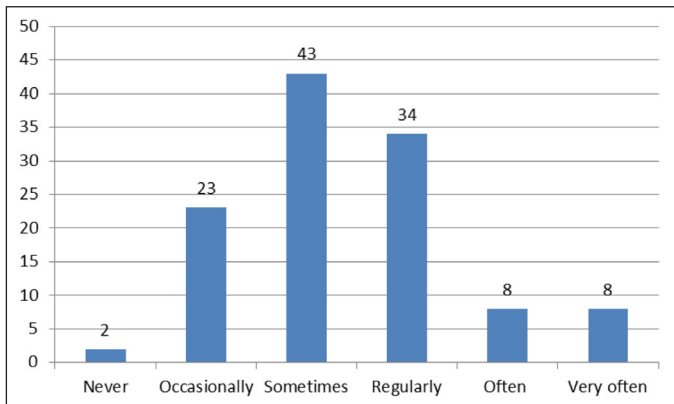
4.   Discussion and conclusions

The results regarding the use of technologies by the teachers for educational purposes show that most activities are performed on computers as opposed to mobile technologies, which are used by only a third of the population, mainly for looking up words in a dictionary. As for the use of mobile technologies in the language classroom, less than 20% of the respondents report using a tablet or a smartphone in this context. With regards to the teachers' attitudes towards the use of the tablet

and the smartphone in the classroom, the survey establishes that, although the perceptions of ease of use, usefulness and enjoyment of both devices are neither very positive nor very negative, the tablet receives slightly higher scores. According to the teachers, it is a more enjoyable, more useful and somewhat easier to use tool. Dealing with our last research question, the teachers show some inconsistency in their answers as the overwhelming majority stand for the use of mobile technologies in the language classroom and as, on the other hand, half of them do not wish to use tablets or smartphones in their classroom. Still, most of the subjects report being interested in knowing more about MALL.

In conclusion, it seems important to take these perceptions into consideration when implementing MALL in the context. Although deeper analyses will be needed to detect the most influential factors that lead to the usage of the technology, it can already be stated that the use of MALL in schools is at an early stage of development in French-speaking Belgium and that we should develop the field of MALL in teacher education, taking the cultural specificities of the context into account.

References

Agence wallonne des télécommunications. (2013). *Baromètre TIC 2013 : l'usage des technologies de l'information et de la communication en Wallonie*. Retrieved from: http://www.awt.be/contenu/tel/dem/AWT-Barom%C3%A8tre_g%C3%A9n%C3%A9ral.pdf

Davie, N. (2015). *Considerations before introducing mobile learning*. Technical report, South-Westphalia University of Applied Sciences, Meschede, Germany. https://www.researchgate.net/publication/271201264_Considerations_before_introducing_mobile_learning.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly, 13*(3), 319-340. https://doi.org/10.2307/249008

Davis, F. D., Bagozzi, R. P., &Warshaw, P. R. (1992). Extrinsic and intrinsic motivation to use computers in the workplace. *Journal of Applied Social Psychology, 22*(14), 1111-1132. https://doi.org/10.1111/j.1559-1816.1992.tb00945.x

Fujimoto, C. (2012). Perceptions of mobile language learning in Australia. How ready are learners to study on the move? *JALT CALL Journal, 8*(3), 165-195.

Liu, S., Liu, H., Yu, Y., Li, Y., & Wen, T. (2014). TPACK: a new dimension to EFL teachers' PCK. *Journal of Education and Human Development, 3*(2), 681-693.

Pieri, M., & Diamantini, D. (2014). A new Italian survey about university students' readiness for mobile learning. In P. Bonfils, P. Dumas & L. Massou (Eds), *Numérique et Education Dispositifs, jeux, enjeux et hors jeux*. Editions universitaires de Lorraine.

Puentedura, R. R. (2013, May 29). *SAMR: moving from enhancement to transformation* [Web log post]. http://www.hippasus.com/rrpweblog/archives/000095.html

CALL communities and culture – short papers from EUROCALL 2016
Edited by Salomi Papadima-Sophocleous, Linda Bradley, and Sylvie Thouësny