UNIVERSITY STUDENT ACCESS TO AND USE OF ELECTRONIC DEVICES: A LATENT ENGLISH LANGUAGE LEARNING POTENTIAL

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Abstract

This study investigates the potential, in relation to learning and using English, which exists in the current access to and use of new technological devices by university students who are not native speakers of English. As an example case, the availability of a range of devices to 138 Saudi English and Business students at a Saudi university was ascertained through a survey, along with their current use both in general, and specifically involving English, both on and off campus. Students and teachers were also interviewed in order to illuminate the further enhancement of student use of their devices for English improvement. The findings indicate that a range of electronic devices, especially smart phones and laptops, are owned by, or to a lesser extent accessible in other ways to, students. English majors however far outstrip Business majors in access to and use of devices. A considerable proportion of use of devices, especially by English majors, is already English-related. On two measures, it is the smart phone which has the greatest potential for further exploitation in relation to English, followed by the laptop and tablet, and for English majors the TV. Based on teacher and student comments, recommendations are made for such English as a foreign language contexts as to how best to move forward to exploit this potential for both groups of students.

Keywords: technology; CALL; MALL; smart phone; English Language Learning; ESOL; EFL

1. Introduction

The field of English as a Foreign Language (EFL) learning and teaching everywhere struggles to keep pace with the rapid development of new digital media and devices. Students may be taking up such resources and using them in ways which impact on their learning of English while their teachers barely know they exist. There is a shortage even of basic research concerning the extent of student access to and use of such devices in ways which involve English. Yet knowing about this is a prerequisite for teachers to harness such resources to assist English language teaching (ELT) (Muslem et al., 2018). Without this knowledge, the teacher's ELT classroom may become irrelevant and/or undermined by the students' own activities, or at best fail to exploit them (Oliver and Goerke, 2007). This study therefore

focuses on student access to, and use of, digital devices in an EFL context, taking as an example the case of English and Business majors in a Saudi university.

Many claims are made about the benefits worldwide of the use of all kinds of technology in connection with learning foreign languages. Technological devices and new ways in which the internet works are not merely claimed to make the process of learning a second language easier and faster, but also to enhance motivation (Granito and Chernobilsky, 2015). New learning theories of a more social and constructivist nature have now become dominant in Computer-Assisted Language Learning (CALL), replacing the older idea of the computer just as a surrogate teacher (Beatty, 2010; Dashtestani, 2018).

The extensive empirical research conducted to support the claimed benefits of CALL (e.g., Stockwell, 2010; Zhang et al., 2011; Kiernan and Aizawa, 2004; Hung and Young, 2013; Cabrera et al., 2018) often relies on introducing learners to some new device, software or internet site for learning or practising a foreign language. Hence it is often hard to separate novelty effects from genuine benefits of the use of technology. Furthermore, while learner attitudes to new technology are often very positive, it has not been always possible to demonstrate genuine advantages in the actual learning achieved. In a meta-analysis of studies in many countries, Grgurović et al. (2013) concluded only that results "favored the technology-supported pedagogy, with a small, but positive and statistically significant effect size" (p. 1). Furthermore, there now exist many types of devices and kinds of software or websites which could contribute to learning a foreign language such as English. Most studies, however, focus just on the use of one specific device or application so it is very difficult to obtain a realistic overview.

An important related issue here is that of sustainability, which has recently emerged as crucial in CALL and mobile assisted language learning (MALL) (Kennedy & Levy, 2009). This concept concerns the extent to which uses of technology can be applied to many types of learners and maintained for long periods of time. It recognises the limited value of initiatives which, for example, apply only to a specific type of learner, require expensive equipment not already widely available, or software that will need constant updating to run on future platforms, and perhaps entail the involvement of a teacher with special training or unusual enthusiasm. Many conventional experimental interventions suffer from these problems of lack of sustainability. By contrast, sustainable CALL/MALL would use devices and software which students and teachers already possess or have ready access to, and use, and which do not require specialist knowledge to exploit, and hence are more sustainable.

Overall, then, while traditional CALL/MALL experiments show some benefit of technology for language learning, there are signs of a need to exploit devices and applications which students already use for other purposes, rather than just impose researcher or teacher decisions on what devices and software to use top down. As Dahlstrom et al. (2012) concluded, "students are ready to use *their* mobile devices more for academics, and they look to institutions and instructors for opportunities and encouragement to do so" (p. 41; emphasis ours).

We, therefore, propose to provide foundation information about what devices university level English learners normally use, within the constraints of what is available to them, but unconstrained by researcher imposition of use of anything for the study. From that we move to what they use the devices for, and especially what uses they already make of them with any EFL element. This we present as essential information from which we can see where there exists potential for learners to be encouraged to use their existing resources more effectively for learning English.

2. Review of studies of access to, and use of, devices

A number of extensive survey studies of access to and/or use of new technology have been conducted either in the US (Nagel, 2013; Chen and Denoyelles, 2013; Johri et al., 2013), or in Australia (Oliver and Goerke, 2007; Murphy et al., 2014), which, however, did not address EFL contexts. Furthermore, while some did separately report ownership of devices and their use, and/or separated general use from academic use, and even detailed the locations where students reported using devices, none separated use involving a foreign language from other uses.

In EFL contexts worldwide, while surveys of students are common, they tend to be far from comprehensive and often more interested in recording attitudes to, rather than ownership, availability and actual use of, ICT tools (e.g., Tafazoli, 2018). They also tend to focus solely on the classroom (Solano, 2017; Zinan & Sai, 2017). A study closer to ours, in Poland, is Turula's (2016), which, however, limited itself to how 'good' learners used digital resources outside of class (regardless of device and availability). In particular it makes use (p. 58) of the notion of the 'online potential', something which we take up and indeed hope to measure.

Comprehensive surveys such as ours do not seem to have been conducted in EFL contexts such as the Arab world either, although there do exist some studies which are indirectly informative. For instance, the Arab Spring of 2011 generated some research on the

role of social media in those events which, in turn, sheds light on ownership and use patterns of mobile devices such as smart phones, though not of course on use of those involving English (Melki, 2015). Furthermore, there are relevant studies in contexts very close to Saudi Arabia, such as Awwad and Ayesh (2013), who revealed that at UAE University 53% of students claim to use their laptop for academic purposes only.

In Saudi Arabia, a number of studies in Saudi schools have revealed concerns commonly found also in other contexts such as South America and the Far East: lack of availability of relevant devices, lack of teacher training and time (Almaghlouth, 2008; Al-Rashed, 2002; Alamri, 2011). Such studies, however, make only passing mention of the technological resources that students themselves own or have access to outside class and which could be exploited, with the exception of Alzahrani (2014), which accessed Saudi students a year below ours.

Following the argument for sustainable CALL/MALL which we advanced in section 1, we therefore feel that there exists an urgent need to obtain comprehensive survey information about many EFL contexts, such as Saudi Arabia, including specifically information about existing English related use of devices by different kinds of students. We would further argue that, in order to assist EFL teachers, there needs to be more careful attention paid to the argumentation used when making suggestions about teaching/learning potential based on survey findings. In those studies which draw implications for teachers from their findings, such as Oliver and Goerke (2007), often quite a loose argument is advanced relating the facts about ownership or use with suggestions for where the teaching potential lies and what teachers should do. We propose rather to make the following assumptions: EFL potential is greater for devices which are most available to students, especially those which they own; EFL potential is greater for devices which are most used by students, especially where existing use involving English is low relative to overall use.

3. The study

3.1. Aims and research questions
The present research seeks to address the above gaps by answering these research questions:

1. What patterns of availability, general use, and English language-related use, of devices do we find in different locations among Saudi English and Business majors?

2. Which devices exhibit the greatest gap between Saudi English and Business majors' general use, and use involving English language?

3.   What views do teachers and students have on the greater exploitation for English of technology which students already use?

In order to enhance the reliability and validity of the study we gathered both quantitative data from closed questionnaire items and qualitative information from open response questionnaire items and interviews.

3.2. Participants

106 English majors and 32 Business majors at a typical Saudi Arabian university participated in the survey. We targeted the entire first year intake of these disciplines in order to be fully representative and allow for attrition due to unwillingness to participate or spoilt protocols. The sample was aged 18 to 22 years, mean 21.25, and included both genders although gender differences were not explored due to the time constraint and word limit for this paper.

These students had normally studied English for six years at school and taken further English courses at university (mean 7.4 years of English study). The English majors continue to study English and receive instruction through the medium of English during their undergraduate years. The Business majors study their subject primarily through the medium of Arabic, but take two English courses, and there is some use of English in lectures for terminology and in some instances more widely depending on the lecturer. The student participants would be regarded as beginner or low intermediate in international terms.

For the interviews, we selected randomly eight representative male teachers holding M.A.'s and Ph.D.'s and twelve students, including both high and low users of technology. We were unable to include female teacher interviewees due to their busy schedules.

3.3. Instrumentation and procedure

Data for the project were collected through an online questionnaire delivered by *Smart Survey*, with follow-up interviews. Validity of the questionnaire was assured by its design, based on a wide range of previous published studies (section 2), and submission of the final version of the questionnaire to an expert in the field. It was also piloted with 15 students and a few minor revisions were made. The questionnaire elicited:

1) student demographics;
2) ownership of, and access by other means to, devices (yes/no response);
3) general use of devices for any purpose, in four possible locations (hours per week);
4) use of devices in ways involving English, in four possible locations (hours per week);

5) respondents' free views on the kinds of uses they made of devices in relation to English.

The interviews lasted 20-25 minutes and were audio-recorded in a college office. They were semi-structured, conducted in Arabic and designed to follow up on the questionnaire, covering the same questions, but exploring respondents' use of technology in greater depth.

3.4. Results and findings

The quantitative data was exported from *Smart Survey* to *Excel* and then into *SPSS* Version 20 to obtain the necessary statistics. Open response qualitative data were transcribed and translated into English by the researcher, then read repeatedly and coded thematically with input from a second expert to increase reliability and validity.

3.4.1 Pattern of access to, and use of, devices

Tables 1-4 show respectively students' reported device availability, general use time, English related use time, and English related activities on devices. Overall, out of 56 possible forms of device access (14 devices each with four access types, see Table 1), students on average claimed to have 10 available (range 2-25). For all students access was mainly through ownership (similar to Alzahrani, 2014), and was highest for smart phones and laptops, followed by electronic dictionaries and tablets. English majors also reported high access to TVs and games consoles. These devices, therefore, present the greatest potential for English teachers to exploit in our context on the criterion of 'hardware availability'.

Table 1. Percentages of students claiming different kinds of access to devices

TYPE of ACCESS	Owned		Friend or family		Internet café		Campus	
DEVICE	English	Business	English	Business	English	Business	English	Business
Desktop computer	50.9	18.8	15.1	0.0	11.3	0.0	35.8	12.5
Laptop computer / Notebook / Netbook	81.1	68.8	24.5	0.0	3.8	0.0	0.0	0.0
Mobile phone with internet access / Smart Phone	88.7	81.3	9.4	0.0	5.7	6.3	3.8	0.0
Mobile phone without internet access	66.0	6.3	20.8	0.0	1.9	6.3	1.9	0.0
Tablet / iPad	49.1	50.0	39.6	0.0	5.7	6.3	1.9	0.0
e-Reader / Kindle	7.5	0.0	17.0	0.0	9.4	0.0	18.9	0.0

Audio player connected to internet / iPod	41.5	0.0	24.5	0.0	3.8	0.0	11.3	0.0
Audio player not connected to internet / mp3 / CD player	47.2	6.3	17.0	0.0	3.8	0.0	13.2	0.0
DVD player not connected to internet	43.4	0.0	30.2	0.0	0.0	0.0	11.3	0.0
Electronic Dictionary	56.6	56.3	17.0	0.0	11.3	6.3	7.5	0.0
Electronic organizer	30.2	6.3	17.0	0.0	3.8	0.0	15.1	0.0
Games console / Xbox / Play station	64.2	18.8	13.3	0.0	5.7	0.0	1.9	0.0
Smart TV connected to internet	45.3	50.0	22.6	0.0	1.9	0.0	7.5	0.0
Regular TV not connected to internet	62.3	6.3	13.2	0.0	7.5	0.0	9.4	0.0
Average	**52.4**	**26.4**	**20.1**	**0.0**	**5.4**	**1.8**	**10.0**	**0.9**

Surprisingly, a significantly higher percentage of the English majors than Business majors claimed to have access to devices, almost without exception regardless of the means of access or the device (Wilcoxon test, p<.02).

As seen in Table 2, consistent with the reported availability of access, reported rates of time spent in general use of devices by English majors were everywhere higher than those by Business majors, regardless of device or location of use, with the sole exception of use of laptops at home (Wilcoxon z=3.30, p=.001).

Correlations supported the considerable parallelism between general use and ownership. Devices more frequently used by English majors at home were also more often frequently owned by them (Spearman rho=.802, p=.001). Greater general use of devices by Business majors at home was also positively related to ownership (rho=.870, p<.001).

Table 2. Mean reported general use of devices (hours per week)

LOCATION	Home		Off campus, not home		On campus without teacher		On campus with teacher		Totals	
DEVICE	English	Business	English	Business	English	Business	English	Business	English	Business
Desktop computer	2.59	0.06	0.26	0.0	0.24	0.0	.68	0.0	3.77	0.06
Laptop computer / Notebook / Netbook	1.15	1.62	0.88	0.0	0.15	0.0	0.24	0.0	2.42	1.62
Mobile phone with internet access / Smart Phone	8.00	3.69	1.59	0.19	0.65	0.06	0.21	0.0	10.5	3.94
Mobile phone without internet access	3.68	0.0	0.53	0.0	0.18	0.0	0.06	0.0	4.45	0
Tablet / iPad	1.24	0.25	0.38	0.0	0.03	0.0	0.03	0.0	1.68	0.25

Device	English	Business	English	Business	English	Business	English	Business	English	Business
e-Reader / Kindle	0.62	0.0	0.41	0.0	0.18	0.0	0.12	0.0	1.33	0
Audio player connected to internet / iPod	0.88	0.0	0.24	0.0	0.15	0.0	0.12	0.0	1.39	0
Audio player not connected to internet / mp3 / CD player	1.38	0.0	0.38	0.0	0.15	0.0	0.12	0.0	2.03	0
DVD player not connected to internet	0.71	0.0	0.21	0.0	0.09	0.0	0.15	0.06	1.16	0.06
Electronic Dictionary	1.32	0.44	0.5	0.0	0.18	0.0	0.32	0.0	2.32	0.44
Electronic organizer	0.85	0.0	0.29	0.0	0.18	0.0	0.09	0.0	1.41	0
Games console / Xbox / Play station	4.09	0.0	0.62	0.0	0.18	0.0	0.09	0.0	4.98	0
Smart TV connected to internet	1.18	0.5	0.56	0.19	0.06	0.0	0.12	0.0	1.92	0.69
Regular TV not connected to internet	2.88	0.13	0.18	0.0	0.29	0.0	0.12	0.0	3.47	0.13
TOTAL hours per week	**30.6**	**6.63**	**7.03**	**0.38**	**2.71**	**0.06**	**2.47**	**0.06**	**42.8**	**7.19**

The same general pattern emerges for English related use (Table 3) as for general use (Table 2), albeit involving smaller amounts of time, in that English majors reported significantly more use of each device at each location than Business majors did (Wilcoxon z=3.30, p=.001). In this instance this is of course entirely explicable due to the fact that English majors are more focused on English than Business majors, who receive most of their instruction in Arabic. Furthermore, while English majors used devices on campus only to a limited extent for English, the Business majors reported never using devices on campus for English, or indeed much else.

Table 3. Mean reported use of devices involving English (hours per week)

LOCATION	Home		Off campus, not home		On campus without teacher		On campus with teacher		Totals	
DEVICE	English	Business	English	Business	English	Business	English	Business	English	Business
Desktop computer	2.59	0.06	0.26	0.0	0.09	0.0	0.35	0.0	3.29	0.06
Laptop computer / Notebook / Netbook	0.88	0.63	0.53	0.0	0.06	0.0	0.24	0.0	1.71	0.63
Mobile phone with internet access / Smart Phone	2.12	0.69	0.32	0.19	0.18	0.0	0.6	0.0	3.22	0.88
Mobile phone without internet access	0.76	0.0	0.41	0.0	0.03	0.0	0.03	0.0	1.23	0
Tablet / iPad	0.59	0.06	0.15	0.0	0.0	0.0	0.0	0.0	0.74	0.06
e-Reader / Kindle	0.32	0.0	0.18	0.0	0.15	0.0	0.03	0.0	0.68	0

Audio player connected to internet / iPod	0.47	0.0	0.09	0.0	0.03	0.0	0.03	0.0	0.62	0
Audio player not connected to internet / mp3 / CD player	0.62	0.0	0.29	0.0	0.15	0.0	0.0	0.0	1.06	0
DVD player not connected to internet	0.68	0.0	0.0	0.0	0.0	0.0	0.15	0.0	0.83	0
Electronic Dictionary	0.76	0.19	0.41	0.0	0.09	0.0	0.12	0.0	1.38	0.19
Electronic organizer	0.41	0.0	0.29	0.0	0.18	0.0	0.06	0.0	0.94	0
Games console / Xbox / Play station	4.09	0.0	0.32	0.0	0.0	0.0	0.09	0.0	4.5	0
Smart TV connected to internet	0.94	0.31	0.35	0.19	0.0	0.0	0.0	0.0	1.29	0.5
Regular TV not connected to internet	0.94	0.13	0.18	0.0	0.0	0.0	0.12	0.0	1.24	0.13
TOTAL hours per week	**16.2**	**2.07**	**3.78**	**0.38**	**0.96**	**0**	**1.82**	**0**	**22.73**	**2.45**

With respect to different kinds of English related use (Table 4), six devices were reported with 5 or more different uses: the most versatile are clearly laptops and smart phones. The most popular uses were vocabulary/dictionary activities, which constitute a study related function, where English language is the focus, and watching movies, where English is presumably incidental to the main focus on understanding and enjoying the narrative of the film.

Table 4. Uses made of each device which involve English

(E = English majors, B = Business majors; numbers reflect multiple responses)

DEVICE / TYPE of USE	Smart phone	Laptop etc.	Desktop PC	Tablet / iPad	Not named	TV	e-Dictionary	XBox / PS	iPod	Total
Movies	E3	E3 B3			E8	E				18
Vocabulary / dictionary	E2 B	E		E	E		E9 B2			17
Writing	E	E	E	E			E3 B			8
Music / songs	E3 B	B		B	E				E	8
Games	E3	E	E	B				E2		8
Internet	E4 B				E					6
Study/learn major subject		E2	E2					E		5
Grammar	E	E3					E			5
Translating	E			B	B		E			4
Homework		E		E	E					3
Reading	E		E				E			3

Listening		B				E2				3
Socials/Skype	E3									3
Hobby/interest	E		E							2
Speaking						E				1
Language skill video		B								1
Share lang. with peers	E									1
Youtube			E							1
News						E				1
eBook		B								1
Shows						E				1
Longer task			E							1
Total	**12**	**11**	**6**	**6**	**6**	**5**	**5**	**2**	**1**	

3.4.2. The potential for use-time exploitation

In order to answer RQ2, we calculated the amount of time per week of general use of each device that was not already English-related, and the percentage of total use time (Table 5). Larger percentage indicates greater 'use time availability' for greater additional use in relation to English of already used technology.

Overall 47% of English majors' use of technology reportedly did not involve English, while 66% of Business students' did not (although the latter constitutes fewer hours than the former). In other words, the majority of English majors' use time is already English-related while, unsurprisingly, the majority of Business majors' (lesser) time is not. Furthermore, given that two thirds or more of use time for both groups was at home, any exploitation of this potential surely needs to take place there.

Considering devices separately, the greatest potential exists for both groups in the smart phone, in terms of hours per week (Table 5). However, having given time in hours greater weight than percentage of time, the pattern differs by majors. For English majors the next device with greatest potential is the regular phone then the regular TV, audio player, electronic dictionary and tablet. For Business majors however the second largest potential is with the laptop and then the electronic dictionary and tablet, but by that point only fractions of an hour per week are available. Notably for English majors the laptop and desktop do not present much potential as their use is already largely dominated by English, in contrast with the tablet.

Table 5. Non English- related use of devices

DEVICE	Use of devices not claimed to be English related (hours per week)		Non-English use as percent of total use	
	English	Business	English	Business
Desktop computer	0.48	0.00	12.73	0.00
Laptop computer / Notebook / Netbook	0.71	0.99	29.34	61.11
Mobile phone with internet access / Smart Phone	7.28	3.06	69.33	77.66
Mobile phone without internet access	3.22	0.00	72.36	-
Tablet / iPad	0.94	0.19	55.95	76.00
e-Reader / Kindle	0.65	0.00	48.87	-
Audio player connected to internet / iPod	0.77	0.00	55.40	-
Audio player not connected to internet / mp3 / CD player	0.97	0.00	47.78	-
DVD player not connected to internet	0.33	0.06	28.45	100.00
Electronic Dictionary	0.94	0.25	40.52	56.82
Electronic organizer	0.47	0.00	33.33	-
Games console / Xbox / Play station	0.48	0.00	9.64	-
Smart TV connected to internet	0.63	0.19	32.81	27.54
Regular TV not connected to internet	2.23	0.00	64.27	0.00
TOTAL	**20.07**	**4.74**	**46.89**	**65.92**

3.4.3. Student and teacher perspectives on greater use of devices in relation to English

RQ3 is concerned with the views of the stakeholders on how to facilitate a more optimum exploitation for English of the available technological device potential. The teacher was often seen as the key. For example, S6, a low user, referring to his tablet, said: "Yes, the teacher can help me by suggesting new applications or guiding me on using complicated applications. So I believe that teachers play an important role in helping me". S1 (a high user) offered a specific suggestion for teachers: "I think English language teachers can ask me and my classmate to search the internet to find extra information related to the lesson, it's a good activity." S3, a high user, even suggested:

> every English language teacher should have his/her own E-portfolio and also encourage their students to have this kind of tool. I have seen on the internet some e-portfolios designed by English language teachers from different countries and I think it's very useful and also very easy to use….students can use this kind of technology to share and to exchange information and knowledge related to language learning.

On the other hand, when S4 (a low user) was asked if the English teacher could usefully get more involved in his use of technology, the student admitted: "It's very difficult to answer this question, but I think it's not easy because the teacher himself doesn't use technology devices during the English language lesson."

S1 (a high user) by contrast pointed to how the learner could autonomously use the TV for English: "Television can be a good way of learning English language because there are

many good English language programs and lessons that are available on some educational channels." However, when asked why he did not watch it more he said "Because of time, I don't have much time to spend on watching the TV". S2 gave a different reason for disuse of TV. Although he had access to a family TV at home, it was not often actually available to him: "I don't have my own TV at house, there is only one TV at my home so all the family members use it to watch."

The teachers themselves were generally in favour of enhanced use of technology and evidenced some ability in using it themselves, either for their own benefit or in class. They also showed some awareness of the student situation, e.g. T1 claimed:

> Students are faced with computers both at home, at school and at university. You know I always encourage my students to use technology, because every single student in my classroom I am quite sure that he has an iPad, or computer or smart phone at home. I am sure that students' experience with technology can vary greatly from one student to the next. I am aware most of the students are using technology devices at home because when I ask students to complete their homework at home then submit it,….they type it on computer. I always encourage them to make use of these tools for their own benefit.

This attitude, however, seemed to stop short of being able to make suggestions about how actually to involve students more with the devices that they have, in a way that would promote their English.

However, some teachers admitted their own limitations as far as technology is concerned, e.g. T1 reported: "Because of time, in fact I don't have enough time for that. I am a very busy person, a lot of work to do at the college and also at home." Further, some regarded student lack of motivation as an obstacle: for T4 "[t]he only obstacle is that students should be willing to do so." Hence T2 thought an incentive would be needed: "Initially, it may be given a deaf ear but there is every likelihood of its getting implemented to the benefit of students if it entails academic credit with it." In our experience it is definitely true that the students become more interested if they receive incentives and more credit.

4. Implications and conclusion

First, overall, it is clear that in our context, as probably in many other EFL contexts around the world, device ownership, and hence use at home, far outweighs access to devices by other means, and represents a huge largely untapped and sustainable resource for learning. The single device that is most owned and used and at the same time that has the largest potential for greater use in relation to English, especially out of class, is the smart phone (consistent

with Oliver & Goerke, 2007). There is also some additional potential for the laptop, electronic dictionary and tablet, and for English majors the TV and the games console.

The English-related activities that are most common, in contrast with those reported by Alzahrani (2014) only a few years ago in a similar context, are watching movies and looking up vocabulary, followed by listening to music, writing and playing games. The tendency for phones to overtake laptops and desktops in English-related uses is also in conflict with studies like Nagel (2013), who found phones lagged behind the laptop for study purposes. There is a clear message for all that this is a fast changing area and teachers/researchers around the world really need to continually update their knowledge of the current situation in their own contexts, perhaps employing an instrument such as ours.

Based on our admittedly small sample, students and teachers both seem open to the idea of their existing technology being exploited more for English. However, they both need more guidance, as has often been noted in other studies worldwide (e.g., Muslem et al., 2018, in Indonesia). We suggest this might start with MALL workshops for teachers, dedicated to how they can train students to get the most out of their devices in relation to English when using them autonomously, especially at home, and what English-related activities the teachers can themselves usefully engage them in through their phones or tablets (Kiernan and Aizawa, 2004). Teachers in all contexts should be encouraged to try informal action research projects, using ideas from the literature. One could be simply seeking out the best apps to recommend to the students to use autonomously, whether for dictionaries, or language skills practice exercises, or material to listen to or read that is at the right level and on relevant topics, e.g. on Voice of America special English, or Al Jazeera English, or YouTube. Another could be through exploiting existing social media uses, e.g. encouraging students to tweet each other and the teacher in English about whatever takes their interest, or share photos and record their spoken comments on them, or to maintain a class blog in English on a relevant theme. Additionally, the teacher could embed existing class work more in a MALL framework, e.g. communicating with students via texts or maybe a Facebook interest group for the class. These could be used to ask for and receive and share feedback on ongoing assignments, push little tasks at students, or engage them more at home in tasks such as 'business vocabulary of the week' to learn. There is no space to review such ideas fully here: they are presented individually in research articles such as Stockwell (2010) or Hung and Young (2015), but teachers with little time might better access idea-sharing sites like British Council (2017) or Sperling (2017) or review articles such as Reinders (2010) or Yang (2013). One thing is clear,

however: all ideas notably require the teacher him/herself to get immersed in what modern devices can do, and discuss with their students what uses they already make of them.

In conclusion, it must be admitted that this study was small scale in number of participants, and limited to one university. Nevertheless, apart from providing a valuable documentary snapshot of a neglected specific context, and some crucial implications for that context, the issues it has raised surely resonate in many other similar English as a foreign language contexts around the world which share many of the same general conditions. Furthermore, our implementation of a measure of potential for further English-related use of technology based on device use time separately from device availability/ownership constitutes an area of research which deserves further exploration.

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