ELEMENTS OF MOBILE LEARNING IN ENGLISH FOR SPECIFIC PURPOSES

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Abstract. Mobile learning is an important, fundamental and enriching shift that has been gaining currency in EFL for the last decades in an endeavor to motivate and make students actively involved in their learning.
The current paper hypothesizes that exploitation of mobile learning is likely to enhance English communication skills. We will reflect on challenges and progress outcomes of introducing elements of mobile learning with first year students of Medicine (ESP) in order to enrich content, facilitate access and create deeper, communicative learning experiences as well as higher levels of engagement.
Presented data are based on experimentation with mobile-based learning and direct observations gathered during class activities.

Keywords: mobile learning, Medical English, communicative learning, engagement.

1. Added Value of Mobile Technology

If they desire to stay relevant and effective in their profession, 21st century EFL teachers should consider at least two premises: the steady movement from individual to more collaborative, and from passive to more active learning on the one hand, and our living in a rapidly developing mobile world, on the other. Moreover, today's students belong to what was termed the tech-savvy "search generation", having grown up with mobile devices and enjoying creative freedom, multitasking, sharing and collaborating. In education, emerging technology- and mobile-based ways and tools for learning gain currency, focus being laid on differentiated instruction, cooperation and collaboration, but also autonomy and personalized learning.

The general educational attributes of mobile devices, i.e. keeping students engaged, connected, as well as functioning as continuous data-collection tools make them ideal candidates for language learning. Similarly important added values of mobile devices for language learning are: informality, portability, personal character, and characteristics such as: text, video, camera, radio and internet.

2. Mobile Technology in Medical Training

Flexible access to content anytime and anywhere makes mobile devices suitable for informal learning. If several decades ago, students' unique source of information used to be their teachers and the library books, nowadays, the Internet and mobile devices provide flexible access to specialized content:

"Lecture halls and teachers, are '*no longer the gatekeepers of knowledge and the personal expertise*' (Pachler, 2010).

Within this context, it is important to note that different American universities request students to have personal digital assistants for access to information resources but also in order prepare them for "practising medicine in the 21st century" (Masters, 2012). As such, mobile technology is gaining ground in medical education, supplementing traditional

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delivery methods, informal learning and facilitating access to Electronic Medical Records (Irby, 2011, Coulby et al., 2009).

However, although mobile technology is ubiquitous, many teachers restrict and ban rather than encourage it in learning, either because they are not aware or confident in its potential, or because they are afraid of outside distractions and unnecessary interruptions. Furthermore, according to literature, exploitation of mobile technology in formal learning seems to lag behind due to inappropriate infrastructure (Williams, 2010) and lack of media literacy (Khalid, 2009).

3. Elements of Mobile Learning in ESP

3.1 Hypothesis: elements of mobile learning introduced with first year students of General Medicine are likely to enhance communication skills, facilitate ad-hoc access to specific information, and generate higher levels of engagement.

3.2 Objectives:

1. to explore mobile-based methods and their potential advantages in ESP;
2. by placing students in the center of learning, to augment the ESP learning and performance.

Needs analysis questionnaires piloted at the beginning of the academic year with first year students in General Medicine (N= 103) revealed that about 70% of them had mobile devices with Internet access, recording and video attributes, adequate for mobile-based learning and communication. Likewise, class observation demonstrated that students used mobile phone-based Internet to search for information, clarify and translate, when they worked in groups.

Consequently, mobile devices were allowed and encouraged for ESP language practice in the following types of activities:

1. *Spontaneous search for information, peer learning and learning through discovery* - In an English mobile learning-based environment, reliance on Internet-connected smart phones or tablets connect the students with outside reference resources and dictionaries, in a way that they are likely to use in their future professional career. Similarly, mobile learning is a key element in developing student autonomy. Mobile devices were used in class activities for ad-hoc search for information on dedicated websites and videos or as reference for vocabulary items: e.g. online Medical Dictionaries. While working on individual or group tasks, students came across vocabulary elements they had not been previously taught. Instead of relying on the teacher as sole source of knowledge, students searched for themselves, discussed and negotiated contextual meaning, while the teacher's role shrank to that of a guide and facilitator. When debating, students searched for specific information on hospital and medical practice sites. This attitude towards language learning is in keeping with what Sugata Mitra considered a "less invasive learning [that] *generates an adequate level of motivation to induce learning"*, the students *looking out at the real world* as opposed to only what goes on inside and at the front of the classroom. Peer-learning and learning through discovery were thus encouraged.

2. *E-materials and flexible m-access* – Mobile-based Internet was exploited in providing unrestricted full time access to the teacher-generated wiki-based e-materials. Even in class, many students preferred to work on the digital texts rather than printing and bringing to class

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their own materials, which is equally time and cost-saving. Informal revisions and reinforcements during free time or travelling, as part of new medical vocabulary consolidation and contact with the group, were also facilitated.

3. *Leveraging picture-based teaching moments – connecting personal culture with class activity* – is the ideal and most unsophisticated example of mobile application in a language learning context for ice-breaking and initial socializing. Students were asked to take a picture that represents them and share it with colleagues by mingling in a group speaking activity. Such methods take the students off their seats into a real life communicating position and generate higher levels of involvement and communication. Whereas in lock-step or group work only the most vocal students are heard, in such activities all the students communicate synchronously. Picture-based communicative activities can be taken a step further to include medical-related issues. E.g.: Take a picture about an interesting medical aspect you have seen, experienced during the week (news, fact, course content) and explain why you think it is important/what it has taught you. Then each student sends it to at least three colleagues and obtains comments (text/recorded or email messages). Mobile recording/emailing allows all students to participate with both speaking and writing, which would be otherwise impossible.

4. *Recording* – *consolidating and personalizing medical vocabulary*. Students are asked to develop on their experience as a patient and include specialized vocabulary learnt in class while describing a real or virtual condition. Students make at least two recordings, reflect on why they think the latter version is the better and illustrate with mistakes they discovered after listening to themselves. This type of activity encourages reflection and self-evaluation.

5. *Reflection* is part of any life-long learning process and progress. When students reflect on what they are doing (reflection in action) or retrospectively (reflection on action), they gain self awareness about preferred learning styles, effective strategies, and become more self confident and thus encouraged to take further responsibility for their learning. Specifically, students were asked to record their reflections on a peer-learning communicative activity entitled: “Interesting facts about the heart”. Each student read about an interesting fact about the heart, which in turn he had to teach to five more peers so that in the end, every student had learnt six facts about the heart and circulatory system. Students’ reflections were recorded on mobile phones and shared by email. Reflections pertained to the necessity of communicating information clearly and adapting it to the interlocutor’s level of understanding in a manner similar to what they will face in doctor-patient communication in the future.

6. *Further exploration* may include: interview with a colleague studying in the English Medicine programme (question formation skill) and exploration of free mobile language-learning applications.

3.3 Challenges:

- not all students have permanent unrestricted Internet access on their devices;
- keeping mobile technology in its place as a tool rather than an end in itself.

3.4 Strong points:

- language learning continues beyond classes;
- flexibility in terms of content delivery;
- learning autonomy;
- student-centered learning.

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4. Conclusion

Because our students are differently motivated to learn, it is useful to re-imagine our teaching/learning experiences so as to generate an adequate level of motivation likely to induce learning.

In functioning as aids, mobile devices support and promote student-based learning and encourage independence. Besides being ubiquitous, personal, and informal, mobile devices are equipped with texting, recording and Internet facilities which allow students to learn communicatively rather than working on texts and solving vocabulary exercises.

In our class exploration, student-centered mobile-based ESP communication included: spontaneous search for information, flexible m-access of m-materials, picture-based ice-breaking and socializing and recording as well as reflection. Students were thus helped to discover new knowledge, consolidate and personalize medical vocabulary and improve their speaking performance and reflection.

These language learning activities contributed to the formation of crucial skills necessary to 21st medical professionals such as: autonomy, ad-hoc search for information, knowledge discovery and collaboration.

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