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MOBILE ASSISTED LANGUAGE LEARNING

Abstract: In the 21st century mobile devices are growing increasingly popular among people of all ages especially university students around the world. The article discusses the possibilities of mobile devices in EFL learning and teaching as well as presents the examples of particular applications and programs that seem to be useful for a teacher of English as a foreign language. The article reports on the workshop conducted during the Conference "Innowacyjność w dydaktyce języków obcych" (Innovativeness in the didactics of foreign languages) at the Centre of Polish Language and Culture, Jagiellonian University held on 19–20 September, 2014.

Keywords: mobile technologies, mobile devices, English language teaching and learning, applications, mobile learning environment

1. Introduction

Mobile assisted language learning (MALL) – is a subarea of the growing field of mobile learning and deals with the use of mobile technology in language learning. In MALL there is no need for learners to sit in a classroom or at a computer to get learning materials. MALL can be considered an ideal solution to language learning barriers in terms of time and place. The first use of MALL took place in 1980's when Twarog and Pereszlenyi used telephones to provide distant language learners with feedback and assistance.

According to Colpaert (2004) mobile learning environment might be:
- face-to-face;
- distance;
- online;
- self-paced;
- calendar-based.

Colpaert (2004) emphasizes the importance of developing the language learning environment before deciding on the role of mobile technologies and further emphasizes focusing on the learner ahead of the technology. On the opposite side is Salaberry (2001) who definitely argues against "technology-driven pedagogy, suggesting that despite their revolutionary status, is it not clear that any modern technology such as: television, radio, computer, has offered the same pedagogical

benefits as traditional second language instructions." (Salaberry, 2001, p. 48) However, it is not possible to deny the fact that technologies, mobile or otherwise, can be instrumental in language instruction and learning.

MALL can be any type of language learning using portable devices. The ones that are taken into account in this paper and the following: PDAs, phones, smartphones, pads, pods and other handheld devices which are used for: voice calling, making short messages, video chat, listening to audio MP3, MP4, Mpeg, web surfing, shopping, electronic dictionaries etc. (Kukulska-Hulme & Shield, 2008). Trifanova et al. (2003) defined mobile devices as "…any devices that are small, autonomous and unobtrusive enough to accompany us in every moment (cited in Kukulska-Hulme & Shield, 2008). Mobile phones/smartphones mean the same as wireless, nomadic and are now social staples. Laptop computers are today typically not considered mobile in this context, even though they obviously are to some extent. That is why they are not taken into consideration in this paper as they are more like PCs and although being portable, they cannot be carried around, kept in a handbag or a pocket. They are still too big to serve the same purpose as mobile phones in m-learning process.

Mobile phones with high capabilities extend into all areas of human life, so wireless communication technology is growing rapidly. Consequently, mobile learning can be considered as the next generation of e-learning. So, mobile devices are not substitute for existing learning devices, but they serve as extension for learning in a new environment having new capabilities, though, not all learning content and activities are appropriate for mobile devices.

Mobile learning can be characterized by its potential for learning to be: spontaneous, informal, personalized, ubiquitous.

Such learning can be used when people/learners encounter shortage of time:
• as the result of working longer hours;
• working and studying (in case of university or secondary school students).

In such a situation a busy learner may tend to use portable devices to learn new material rather than taking time for traditional classroom-based courses.

Physical characteristics of mobile phones play a key role in making them useful and desirable in the learning process. These factors are: keypad vs. touchpad, screen size, audio functions. Another important factor in mobile learning is present on the side of the learner, these being:
• learner skills;
• learner's prior knowledge and experience with mobile devices for learning;
• learner's attitude towards the learning through a mobile phone.

These factors are crucial in the output quality of such mobile-based tasks. In effective mobile-learning there is a shift from teacher-led learning to student-led learning via m-learning. Student-led learning allows for a greater degree of choice about the way in which the same information can be accessed on a handheld device than on a desktop. It is more like personal or self-learning for students who are accustomed to take independent decisions concerning their learning process

and who are aware that it is possible to take responsibility for one's own learning and progress in learning.

2. M-learning – advantages and disadvantages

By means of mobile learning devices the learner is able to control the learning process and progress in his/her own pace based on his/her cognitive state in a non-classroom environment being:

- in front of their personal computers online or offline;
- in the bus/tram/train;
- outside or at work;
- every time and everywhere (Geddes, 2004).

Taking the above into consideration, two main characteristics of mobile phones are: portability and connectivity. Portability enables the users to move mobile phones and bring learning materials, whereas connectivity means that the device must have capability of being connected and communicated with the learning website by means of wireless network of the device to access learning material including short message service and mobile e-mail to transfer information between instructors and learners. There are, as well, other advantages provided by mobile phones such as: flexibility low cost, small size, user-friendliness.

Klopfer et al. (2002) suggests the following classification of mobile phones:

- Portability – device is taken to different places due to small size and weight.
- Social interactivity – exchanging data and collaboration with other learners.
- Context sensitivity – the data on the mobile phone/device can be gathered and responded uniquely to the current location and time.
- Connectivity – mobile devices can be connected to other device, data collection devices or a common network by creating a shared network.
- Individuality – activity platforms can be customized for individual learners.

Comparing to other wireless devices such as laptop computers, mobile phones are rather inexpensive, having functions as the Internet browser. Thus, they can be accessible to poor areas or users.

However, there are also obvious disadvantages of mobile devices such as:

- small screen/keypad;
- reading difficulty on such a screen;
- data storage;
- multimedia and graphics limitations;
- the cost of the Internet access on the mobile phone;
- some mobile phones are not designed for educational purposes, thus teachers should be aware of what kind of tools learners have and set or adapt resources compatible to such tools;
- dependence on networks that may not provide very high transmission capacity and may be subject to disturbances of many kinds. Teachers and

instructors should make students acquainted with learning possibilities that mobile devices have to offer. It is the role of the teacher to gather information about students' computer and mobile literacy and adjust the learning process and types of applications to be used to students' abilities as well as their educational needs.

3. Examples of mobile assisted language learning

Before discussing and presenting possible examples as well as specific activities that can be designed for and used on mobile phones I would like to ponder on some questions related to the issue of m-learning. These questions may help teachers to find out what difference m-learning might make to their teaching. The issue of m-learning may induce curiosity, scepticism or excitement. The typical questions that I asked my audience were the following:
   a. Is it really possible to learn/learn a foreign language with such small devices?
   b. What sort of people use mobile devices for teaching and learning/learning a foreign language?
   c. What sort of subjects and situations are appropriate for mobile learning?
   d. Are our students already using handheld computers for learning?
   (The participants of the workshop discussed the questions in groups of three for 3–4 minutes)
   Questions like these evoke issues that are familiar to anyone who has used technology in educational context: concerns about whether technology is fit for the purpose of learning, what kind of learners will benefit from using it, and whether learners are already ahead of the game in comparison with the technology ownership and expertise of their instructors.
   According to Oberg et al. (2012) as well as many other researchers, mobile learning can be used within or outside classroom, but is most effective in collaborative learning among small groups as it offers the opportunity of close interactions, conversations, decision-making, recording tasks/speech etc. while being physically on the move or in different places which is not possible in case of using desktop/laptop computers. Learners can be more directly connected with real world experiments/tasks, exploit their free time better and improve their language skills when being on the move.

Examples of mobile learning and mobile learning situations can be the following:
   a. SMS-based learning – receiving wanted text messages supports learning outside classroom.
   b. GAME-based learning – in which learning materials are so designed to be integrated with aspects of physical environment, they serve as a link between the real world of knowledge and the visual world of the game, e.g. *Timelab* is a game about climate change and its effects. Players get

information about possible new environmental changes and laws as they progress in the game. The results of the game can be later discussed in the classroom.

c. M-learning can be used to teach such skills as: vocabulary, pronunciation, grammar, listening, reading comprehension, speaking and spelling. Variety of activities related to language learning can be supported by mobile devices:
   - SMS – vocabulary, reading, writing;
   - Internet access – reading comprehension, listening, speaking;
   - camera – speaking when e.g. describing a picture or a scene;
   - audio/video recording – listening, speaking, understanding and listening to other speakers;
   - video messaging – MMS – sending recorded scenes, role-play situations, recorded speaking tasks.

An advantage of m-learning is that it is collaborative and thus encouraging for learners due to the possibility of exchanging knowledge, skills, attitudes, experience through interaction. Collaborative learning can help develop learner's autonomy by helping the learners to support, motivate and evaluate each other. A good collaborative approach can be gained by using a mobile device as an environment for learning, where such devices act as pencils or rulers being the basic equipment in the learning process. The most important here is the communication between the learners, the interaction in the target language. Consequently, mobile devices are developing towards becoming tools for education and language learning. Both teachers/instructors and learners are getting used to this mobile equipment to make education as ubiquitous as possible. This is the future of education. Furthermore, the Internet makes it possible to receive education from all parts of the world, it is called "distance learning."

4.1. Examples of possible mall activities/tasks for mobile devices together with language skills which are practised in a given task

The following tables contain the examples of possible tasks and activities that students can do using mobile devices with the access to the internet. Each exercise and activity is matched with particular language skills that can be practiced together with the explanation concerning expected results of a given task.

Table 1. Examples of learning systems or interfaces that can be used on mobile devices

LEARNER CAN/TYPE OF ACTIVITY	COMMENT	PARTICIPANTS
Keeping an audio record of their studies in a timely manner.	An audio log allows for just-in-time entries that can be made and later incorporated into a reflective diary.	The learner himself/herself.
Making an audio video and pictorial recordings of activities that require to interview native speakers, for instance.	Such recordings can give learners access to a set of personally meaningful recordings that might be more motivating than course materials. They can also serve as a record of their own development in using EFL.	The learner and other users of English/native speakers.
Recording native speakers to native speakers reactions to listen to and ponder on at a later stage, possibly incorporating these recordings into their own reflective logs or assignment outputs.	Such recordings would give learners access to a set of personally meaningful recordings that might be more motivating than course materials.	The learner and other language users.
Uploading recordings/photographs/video clips to an individual reflective blog.	In order not to use expensive mobile phone network connections, learners may use USB port or a wireless connection to transfer data to the blog. Learners could be given an information gap to fill or a problem to solve and would use the mobile device to collect information that could be used to construct the knowledge to fill the gap or solve the problem.	Learner, group of learners tutor.
Keeping a record of new vocabulary items, including pronunciation.	Learners could build up personalized multimedia vocabulary list, including specific issues such as regional accents and so on.	The learner
Downloading English language MP3 files.	Use the device voice recording facilities in order to listen to content in a variety of locations.	The learner

Source: Sharples, 2000.

4.2. MALL activities on different mobile devices

Table 2. Examples of learning systems or interfaces that can be used on mobile devices

DEVICE	ACTIVITY	MEDIUM	TYPE OF WORK	ROUTE
Mobile phone	SMS Administration SMS vocabulary SMS quiz Email Video clips Coaching Media board	Text Text Text Text Text Video Spoken material Text/graphics/ spoken material	Individual and collaborative	Tutor–learner Learner–tutor
Mobile phone and interactive TV	Informal language learning through SMS/WAP/iTV	iTV Text	Individual	iTV–learner
Handheld computer	Grammar drills Synchronous chat Reading poems Listening to poems	Text Text Text Listening material	Individual and collaborative	Web–learner Tutor–learner Learner–tutor Web–learner
MP3 player	Listening to songs Listening to podcasts Listening to native speakers of English Listening to feedback on work Recording work	Listening material Listening material Listening material Spoken material	Individual and collaborative	Web–learner Learner–web-learner
Any	User-created content	Audio/video/text/ graphics/voice		

Source: Sharples, 2000.

The following part of the articles contains the list and the descriptions of several interesting examples of learning systems or interfaces that can be used on mobile devices. It may serve as a guide for English language teachers who are willing to introduce mobile devices into their course both in class as well as out of the classroom in the form of homework.

1. MAWL – Mobile Assisted Word-Learning
    Word-learning is one of the basic steps in language learning. A general traditional approach for learning new words is to keep a dictionary and use it whenever one encounters a new word. Mobile Assisted Word-Learning – MAWL is

an augmented reality based on collaborative social-networking interface for learning new words using a smartphone. MAWL keeps track and saves all textual contexts during reading process along with providing augmented reality-based assistance such as images, translation into native language, synonyms, antonyms, sentence usage etc.

2. Rosetta Course / Rosetta Stone
   It is undoubtedly one of the most-recognized brand names in language learning software. The Rosetta Course uses picture and word matching as the primary focus of early lessons, as well as masculine or feminine article determination (where applicable). There is also speech recognition option which assures that the learner is pronouncing the words correctly by providing specific sound signal for correct and wrong pronunciation respectively. There is an extremely large language selection, and you can sample multiple languages from the same demo application.

3. www.educatorstechnology.com
   This website contains a handful of useful presentations, augmented reality games for all ages of students (kids, teenagers, university students, adults), useful tools and applications for teachers, iPad and Android applications for learners. All in all, it seems to be a very interesting and useful website for both learners and instructors of English as a second language.

4. http://www.podcastsinenglish.com
   It contains various listening situations, cartoons, dialogues etc. on many different topics and for different levels of learners. Recorded situations or role-plays offer native accents as well as show written forms of most important words used in them, for less advanced levels.

5. www.talkenglish.com
   Contains listening material for repeating or dialogues recorded by native speakers to listen to, such as: simple sentences and expressions, more complex sentences and dialogues, dialogues to download on one's mobile phone, dialogues with quiz questions and check answer system as well as showing the dialogue transcript, from the basic to advanced level, business, idioms and phrases, pronunciation. What is most useful, dialogues which are recorded by native speakers so that the learners can listen to original accents and acquire proper accent in their own speech.

5. Conclusions

In my paper I aimed at presenting both the theoretical background of MALL, which is still a growing and underestimated field as well as showing its practical side and the examples of specific activities, tasks, interfaces and systems that are already available to the public and which can be of help to EFL teachers and students.

Nowadays due to the growth of wireless technologies, MALL is available through numerous devices. They offer very short tutorials as well as full-courses. Such devices support the retention and utilization of newly acquired language skills. Predicted growth of MALL is reinforced by the overwhelming "lack of time" (decrease of free time). The need for traditional classroom-based or even online courses will decrease, however, nothing can substitute the dynamics of the traditional classroom. It will become, and in fact, is becoming, an ideal solution for students or professionals willing to acquire new languages. Advantages of MALL are clear: growing screen size, ability to record sound and video, portability.

6. Suggestions

What can be suggested for the further research is the area of empirical studies providing specific evidence on how the mobile technology use can enhance/encourage individual's learning results. For reliability longer studies and larger test groups are required. Moreover, to be able to make the language acquisition process more effective and to be able to influence EFL proficiency results it is necessary to investigate the possible changes in individual's learning strategies when using mobile devices in their language learning. It would be also interesting and beneficial to investigate and analyse the connection between individual's strategies, learning styles and use of mobile technology. The knowledge gained from such investigation would be profitable for educators, learners and also the systems developers.

From the pedagogical point of view, research on how the use of mobile technology affects individual's time management when learning a new language is needed to understand if this technology can open additional learning possibilities, for example, in terms of engaged time as well as in the development of student autonomy with the help of mobile devices.

Summing up, more research into developing mobile learning theory is necessary to distinguish this field from other kinds of technology-assisted learning such as CALL (Computer Assisted Language Learning), for instance.

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