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The challenges of the mobile technology in the young adult education

Ciprian Ceobanu^{a*}, Ștefan Boncu^b^a*Teacher's Training Department, "Al. I. Cuza" University, 3 Toma Cozma Street, Iași, Romania*^b*Department of Psychology, "Al. I. Cuza" University, 3 Toma Cozma Street, Iași, Romania*

Abstract

For several years, we have seen how technological advances have introduced different devices that handle digital information and, at the same time, facilitate the user's mobility. Also, the astonishing advance in communication and technology changed our day-to-day life. While some can underestimate the benefits of this new technology, there is no doubt that an increasing number of people have fully adopted it. The present paper investigates in a theoretical manner the challenges related to the use of mobile technology in adult education. Also it focuses on the characteristics of using the mobile phone in education.

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1. Introduction

It is obvious that, nowadays, for youths and young adults, adopting the new technology is a natural and easy process. Developing new social learning strategies and the abilities to "survive" in this new technological reality seems to be among the most important characteristics of this new generation (Junco & Mastrodicasa, 2007). The social personality of today's young adults is significantly dominated by the Internet, computers and mobile technology. Coomes and DeBard (2004) described members of this generation as people who value authority, want to get involved and prefer to work in teams. These young adults are unique precisely because they feel extremely comfortable with technology, due to early familiarity with it. Members of this generation spend a lot of time using

*Corresponding author. Tel.: +4-0745-622-592

E-mail address: ciprian@uaic.ro

new technologies, in ways that members of other generations can only imagine. With the evolution of wireless networks, it is easy to understand how the mobile devices have gained importance in day-to-day life and in education, too.

2. Pedagogical issues concerning the use of mobile phones in educational context

Technological development has diversified the options that are offered by the phones. The event that raised the cell phones to a whole new dimension has been the launching of smart phones. In relation with this technological development, new apps that offer multiple business structure, productivity, entertainment and communication, are constantly being developed and made available to the public. The handset is much more than a phone, both in technically and social terms. For adolescents and young adults, the mobile phone is an important part of everyday life.

Mobile phone is an effective mean of communication. Cellular system allowed coverage of large areas such as open communication with family and friends (Chen, Katz, 2009; Srivastava, 2005) is a widely appreciated feature. In an extended view, its' significance lies in the fact that the mobile phone enables people to engage in a „communication without physical constraints and spatial immobility” (Gesser, 2005: 236). The most popular forms of communication for young people and adults via mobile phone are in order: text messages, direct calls, instant messaging. The cell phone is considered to be a private mean of communication.

The place and role of mobile phones in school is quite controversial and opinions regarding its use in educational settings are divided, many voices claiming that it interferes negatively with the school and leads to unwanted behavior from students. Certainly are also disadvantages, however, the pedagogical advantages are obvious.

According to some authors who have studied the field (Averianova, 2012), two important reasons lead to banning phone in school: educational reasons and linguistic reasons.

From the pedagogical point of view there is more than a single perspective regarding the use of the mobile phone in the educational context. On the one hand, there is a well-known orientation that tries to adapt instructional approach to learning styles and educational needs of students. In this regard, mobile technologies offer new ways of creating and disseminating knowledge, which can solve some of these requirements. Of no less importance, among many positive aspects, is the ecological tests: the online “paperless” test is an example. On the other hand, another point of view claims the inappropriate use of the devices in schools. Phone calls during class are disruptive to the classroom atmosphere, as suggested by an experiment conducted in this regard. Thus, disruption of teaching lecture several times because of the ringing of a mobile phone affects quite seriously the learning atmosphere in the classroom and leads to a significant decrease in academic performance of students (End et al., 2010).

Text messaging during class tasks involves focusing attention away from educational issues, or at best, leads to the multitasking element that affects primary task performance. Educational practice is also full of reports of fraud by using mobile phones; also, numerous cases of harassment (cyberbullying) are reported, bullying, gossip and other antisocial activities conducted by phone. From the linguistic point of view, the problems are related to how pupils write the text messages (alternate language development) and to difficulties in acquiring handwriting skills (Averianova, 2012).

Of all the functions provided by mobile phones, the young people give priority to short messages (SMS). Thus, it is wrong to assume that for many young adults, texting is one of the main forms of writing and the mobile phone is the main platform for writing. Texting is characterized by extensive use of abbreviations, of emoticons, an approximate syntax. Colloquial language is used, accompanied by an unconventional spelling, replete with grammatical errors, the use slang expressions. Considering all these features, but also the linguistic perspective, this language cannot be classified strictly in the category of oral communication or written communication. It is a variety of hybrid language (Link & Wagner, 2006) called by some authors textspeak (Crystal, 2008).

While some researchers and practitioners take into account the positive aspects of this phenomenon, such as the seizure of the virtual environment as part of the necessary digital literacy for all citizens of the new millennium, others perceive the approximate non-standard new variety of language, spelling and grammar as a threat to traditional literacy and classic handwriting. The concern of the opponents of text messages is supported by extensive evidence that the hybrid variety of language penetrates into many areas, including education and academic written communication, which proves the absence of written communication skills and increased preference for non-

standard language (Averianova, 2012).

There is, on the other hand, a significant current regarding the acceptance of mobile phones in schools. Let us note first that mobile phones are the most affordable electronic devices for communication and many teachers and students have such a device. Even the economically disadvantaged students are more likely to own a mobile phone than a computer. In addition, technological advances in recent years have transformed the mobile phone into a real minicomputer with identical functions to those of traditional computers. Also, the digital telephony subscription price is relatively affordable so the mobile phone can be seen as part of the softening the phenomenon of the „digital divide”.

With mobile phones deeply embedded in their lifestyle, and with the familiarity in terms of using the applications for the phone, adolescents and young adults demonstrate that they can overcome their teachers regarding the abilities to exploit the potential of mobile technology. Of no less importance is the fact that the thorough assimilation of mobile technology students develops their communication skills. Such communication engaged in educational purposes can increase the relevance of learning and increase student motivation (Kukulska - Hulme, 2009).

A teaching practice derived from everyday experience supports the use of mobile phones in the classroom. This takes into account two perfectly rational perspectives. Based on the reality of the presence of mobile phones in the classroom, some teachers suggest their use during teaching hours under control and not banning them. On the other hand, taking into account the characteristics of computer-assisted instruction, the educational practice validated a number of ways to use mobile phones in the classroom: short quizzes, answers to questionnaires, surveys about school life, access to podcasts and educational blogs, accessing electronic books and electronic dictionaries, educational games etc. (Averianova, 2012) .

The evolution of portable devices (including mobile phones) and wireless technology, has led to radical changes in the lifestyle of people including the learning. Hence the mobile learning or mLearning, a version of eLearning, involves the use of mobile technologies (tablets, mobile phones etc.). As outlined by Peters (2007), mobile technologies can significantly reduce people's dependence on fixed locations, and thus have the potential to revolutionize the way people work and learn. Mobile learning is relatively immature both in technological and pedagogical terms, but it evolves rapidly. This form of learning is based on the theory and practice of technologically enriched learning (Traxler, 2009).

Mobile devices are “interesting” in terms of education because they provide more communication channels in a single device, these devices are cheaper, have comparable functionality to desktops or laptops, and provide wireless access to educational contents. Mobile learning is an educational method that gives students and trainees the opportunity to have the learning content at their “fingertips”. The feature of ubiquity distinguishes the mobile devices from other electronic devices and has made mLearning an increasingly recognized and accepted form in educational institutions. The mobility and speed of accessing learning content offered by mLearning has opened new communication opportunities for students and has changed their attitude to learning (Ismail, Azizan, & Azman , 2013).

As to the mobile technologies for education, a number of factors can be identified that influence the availability of users for mLearning: demographics (gender, age, education level) and computer literacy. There are also a number of technological issues (provision of mobile devices, their characteristics, the existence and the speed of the mobile networks) that influence this model. On the other hand, mLearning offers an interesting set of opportunities such as affordability of mobile terminals, multiple options on the creation and delivery of learning content and multimedia content, learning support and ongoing support provided by the mobile nature of the model (Elias, 2011).

A major problem in mLearning focuses on the functionality of this model. The results of studies on the subject have shown that students both young and adult conceive mLearning as a complementary mechanism to support face-to-face learning. In addition to this, the limitations of ordinary mobile phones (small size of the screen, low bandwidth) have made it difficult to use this method exclusively for training. Therefore, mLearning can be considered to be more suitable for supporting face-to-face learning than as an independent method (Gedik et al., 2012). In this type of learning have to be involved subjects who have a sufficiently high level of knowledge in terms of technology and computer training. Also, the delivery of the learning contents can often be accomplished by other means, and therefore mobile learning should especially provide learning tools and means that lead to deep reflection,

communication and cooperation (Frohberg et al., 2009).

3. Mobile Learning and eLearning in adult education

Mobile learning can be placed at the intersection of eLearning and mobile computing, which is characterized by the ability to access learning resources anywhere, anytime, with high capabilities of search, high interaction, high support for effective learning and ongoing assessment based on performance. Mobile learning is considered to be an extension of eLearning, but characterized by its independence from a location in space and time. Mobile Learning constitutes the use of “mobile technology” in the service of the processes associated with teaching and learning. The mLearning can be seen as the point where mobile computing and eLearning intersect to produce a learning experience that can be undertaken anytime and anywhere.

eLearning has some general characteristics that can be expanded to mLearning as follows.

- The distance becomes superfluous: students don't have to go to class; they can take the course from home or when they are on the move.
- The Internet offers many methods and resources which facilitate learning (multimedia, hypertext-hypermedia).
- The students are at the centre of the learning process and participate in the construction of their own knowledge.
- Teachers are not only transmitters of knowledge, but they are a guide that should help students in their learning process.
- Immediate update featuring Internet and the ease of posting information allows the students always to get an updated education.
- The constant communication between the participants of this process; teacher-student interaction could be separated or related in space and time by using different communication tools both synchronous and asynchronous.
- TCP/IP and HTTP protocols facilitate communication between students and learning materials or resources.
- Learning is computer-mediated and is very flexible; the learning is highly supported in tutorials.
- Learning is very interactive and can come in individual or collaborative form.
- The learning contents and materials are digitalized; the storage, the maintenance and the management of the materials is supported by a web server.

At the same time, mLearning offers new and enhanced characteristics for the adult education:

- A higher freedom and flexibility of learning; the learner is not linked to a fixed location anymore;
- The mobile phone is a 24 hours a day ally offering through the Internet access to a wide range of learning resources; this really means learning anytime anywhere.
- The use of different learning methods to support the training process;
- Technological independence of content: a lesson is not made for a specific device; mLearning means a great variety of devices: netbooks, iPads, tablets, cell phones, iPods, e-readers;
- mLearning offers what the students want, when the students want it;
- All online activities that belong to the training space are available for mobile devices;
- Easy navigation and content adaptation considering navigability, processor and connection speed of these devices;
- Instant access to data and communication: users can quickly access messages, emails, reminders and news generated in real time;
- Using headphones, the eLearning contents are more absorbent than a book or video;
- Immediate contact with peers and colleagues;
- The mobile equipment is more easily customizable than a computer.

3.1 Functional and pedagogical advantages of mLearning in adult education

- Learning anytime and anywhere means that the learner no longer needs to be in a particular place of learning at a specific period of time.

- The mobile device can be used anywhere and at any time, including home, during transportation or during leisure time, so the process of learning is personalized and adapted to each student's individual requirements and availabilities.
- Mobile devices allow instant interaction between student and trainer or between peers.
- Mobile devices, especially mobile phones, offer a bigger penetration; the mobile phone is available to almost everyone. Today almost all the adult learners have an intelligent mobile phone, while the number of those who have a notebook or a PC is considerably lower.
- Cheapest Technology; the acquisition cost of a mobile device is significantly lower than that of a PC; this situation can also contribute to reducing the digital gap.
- Greater accessibility: all these mobile devices may be connected to networks and Internet services.
- Greater portability and functionality: the learner can take notes directly on the device during outdoor lessons.
- The development of new types of learning such as collaborative learning. Mobile technology helps students to share their work and to learn together with their partners, to create learning groups, etc. Mobile devices facilitate exploratory learning, environmental learning, exploring, experimenting and applying the knowledge.
- Mobile learning helps adult students to recognize their existing abilities; also it helps to identify the areas where students need help and support
- Using mobile devices helps combat the resistance to the use of ICT and can help bridge the disparities due to digital divide, through the use of mobile phones and ICT.
- Mobile learning helps remove some of the formality of the learning experience and involves reluctant students who are familiar with technology in order to keep their interest levels.
- This method helps students to raise self-esteem and provides a sense of confidence to the extent that the students are given the responsibility of their own formation.
- The use of mobile devices enriches and encourages the learning and provides a large variety of lessons or courses.
- Mobile learning often provides the possibility of developing cross-curricular activities.

3.2. *Disadvantages of mLearning*

Of course, a set of disadvantages regarding the mLearning can be pointed at. One of the weaknesses of mobile learning is that the mobile devices presents computing problems generally associated with screens and reduced usability. Generally speaking, this is the main disadvantage of these devices, particularly in that some mobile phones are hard to read a text on due to their size. Also, the amount of visible information is limited and it makes the reader have to be moving through the text to read it. This disadvantage makes navigation difficult and limited. In addition, some mobile phones tend to be too compact, which results in difficulties in interaction. An immediate consequence of this disadvantage is that the design of interfaces and data entry should be clearer, shorter and more concise. Moreover, the costs of network access are high and despite the offers, sometimes the permanent on-line access comes with significant costs. Also, today there is a limited number of educational applications for these devices; the software industry has identified an interesting niche to be filled but there also are costs to be covered.

4. **Conclusions**

Educational institutions should play a more dynamic and active part in defining the role of mobile technology. If the school prepares students for a successful life and career, it should give more importance to the technological perspective. An appetite for new technologies (in this case mobile technology) should be encouraged, not prohibited, and the educational system should take advantage of it. In times when educational institutions are facing tight budgets, mobile resource should be better exploited. The technological depreciation of the computers is very rapid, over a short period of time they became obsolete and, a partial solution at least could be the use of mobile technology which could be found free in the pockets of the students. Mobile devices are great for teaching and learning the skills needed for the 21st century. If we want students and adults to learn and to work together, mobile phones and mobile devices can be very useful tools.

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