

Take Care of Mobile Learning!

Anca Colibaba^{1,2}, Ovidiu Ursa³, Cristian Arhip¹, Irina Gheorghiu⁴, Stefan Colibaba^{5,2}

GR.T.Popa University¹, EuroED Foundation², Iuliu Hațieganu University of Medicine and Pharmacy³,
Albert Ludwigs Freiburg University of Germany⁴, Al.I. Cuza University⁵
(Romania)

acolib@euroed.ro, ovidiu.ursa@gmail.com, cristianarhip@hotmail.com,
irina_gheorghiu16@yahoo.com, stefan_colibaba@yahoo.com

Abstract

Mobile computing/communication devices have been flourishing for the last ten years bringing about changes in all sectors of our life: communication, employment, mobility, art, knowledge or learning. A new form of learning was born: mobile learning defined as the intersection of mobile computing and e-learning. Mobile technologies have challenged traditional education by supporting learning experiences that are collaborative, accessible, and connected with the world beyond the classroom. Both teachers and students in different kinds of educational environments can benefit from the flexibility and freedom afforded by these devices. Mobile devices enable mobile learning by providing material wherever and whenever students need it. Teachers can interact with their students while on the move. Mobile learning is learning across space, time or topic, making use of new pedagogies and new approaches to delivering and facilitating instruction. The European project Take Care - A Healthcare Language Guide for Migrants (www.takecareproject.eu) provides relevant learning materials and opportunities for multilingual and multicultural healthcare communication in 17 world languages (both widely used and less widely used, including Romanian, Arabic, Chinese etc.). The paper outlines the relevant features of the project, focusing on how the University of Medicine and Pharmacy in Iasi, Romania has integrated computing/communication devices into teaching Romanian to international medical students.

1. Introduction

The mobility of the people either in search for work or study is a growing phenomenon bringing about unexpected changes which require prompt adjustment and flexibility. People's comfortable insertion into the new environment often depends on their competence of the language spoken there so that they can function according to their qualifications. One example of such a case is the Romanian city of Iasi, particularly the "Grigore T. Popa" University of Medicine and Pharmacy, where hundreds of students from all over the world have recently come to study medicine, dentistry, pharmacy, nursing and bioengineering [1]. Although the language of their tuition is English or French, knowing Romanian is a must. They need Romanian at an independent level so that they can carry out effective healthcare conversations with Romanian patients as well as interact professionally with their colleagues. The existing curriculum does not provide enough Romanian classes to meet their linguistic needs [1].

The European project "Take Care - A Healthcare Language Guide for Migrants" [5] has put forth a solution. The project blended learning methodology, its healthcare learning materials for 17 world languages (both widely and less widely used, such as Romanian, Arabic, Chinese etc.) as well as the university e-learning platform, where these materials can be freely downloaded, bridge the gap and successfully encourage the learning of Romanian. The international students studying medicine, nursing, dentistry and pharmacy in Iasi experiment a premiere in learning Romanian in a mobile way.

2. Theoretical views on mobile learning

The advance of technology has not only created a society on the move but also induced new ways of learning. The interactions between learning and technology are complex and varied. The new technology with its characteristics (personal, user centred, mobile, ubiquitous, durable and networking-encouraging) has promoted a new type of learning (personalized, situated, collaborative ubiquitous and lifelong) [3]. Mobile learning, a debatable topic, has been recently blooming all over Europe. Mobile learning starts from the assumption that learners are continually on the move. Mobile learning is not just about learning using portable devices, but learning across time, space and contexts [4]. Severable characteristics have been underlined [3]:

- considerable learning occurs outside classrooms;
- it combines formal and informal education;



- it is interwoven with other activities as part of everyday life;
- learning is initiated by both external goals (curriculum) and learner's needs; the learner can add new goals which may then be explored through formal or informal study;
- the control and management of learning can be distributed across learners, guides, teachers, technologies and resources;
- context is constructed by learners through a very complex network of interaction.

Its success is based on contemporary accounts of practices that enable successful learning [4]:

- learner centred: It builds on the skills and knowledge of students, enabling them to reason from their own experience;
- knowledge centred: The curriculum is built on the sound foundation of validated knowledge, taught efficiently and with ingenious use of concepts and methods;
- assessment centred: Assessment is matched to the ability of the learners, offering diagnosis and formative guidance that builds on success;
- community centred: Successful learners form a supportive community, sharing knowledge and supporting each other.

3. "TAKE CARE" project materials overview

The most important learning material created by the eight Take Care project partners from Bulgaria, Cyprus, Germany, Lithuania, The Netherlands, Portugal, Romania and Spain is the Healthcare Language Guide, which is made up of several items [2]:

- double-spread sheets similar to a hospital admission form, which present common questions such as "Have you got a temperature?" or "Do you suffer from diabetes?" to which the patient may tick the answer (yes/no). The content of the sheets is based on the Medical Basic Language Emergency Kit, which can help the medical team obtain critical information about the patient. The sheets are available in 17 languages: English, Arabic, Bulgarian, Chinese, Croatian, Dutch, French, German, Greek, Lithuanian, Polish, Portuguese, Romanian, Russian, Spanish, Turkish and Ukrainian.
- the medical glossary. The glossary is organized around 12 topics: insurance, healthy lifestyle and prevention, accidents/emergencies/injuries, at the GP, at the hospital, chronic diseases, at the dentist, pregnancy and child health, mental and neurological health, geriatrics, physiotherapy, at the pharmacy, human body parts, and common symptoms. Thirty typical words and expressions in each of the 17 languages are featured for each topic.
- the Phrase Book presents the health related story of an imaginary migrant family made up of the father, the pregnant mother, the daughter, the son and the grandmother. They are confronted with several situations: signing a health insurance contract, registering with a General Practitioner, going to the dentist, getting a prescription filled etc. The subsequent dialogues showcase useful language for communication in support of a healthy life and efficient pain relief.
- the Medical Route posters map out the healthcare systems in the project countries. The posters follow the same layout but the language of the text and the text itself differ due to cultural differences existing in each partner country: how insurance works and how to register with a GP, what to do in case of emergencies, how to approach hospital admissions, what range of products local pharmacies provide, child birth and vaccination schemes, provision for the elderly etc. An example of differences across countries is with giving birth: where it can take place, who may attend, the role of midwives, pain relief practices etc. Such posters can be made visible in airports and public spaces, hospital reception areas and waiting rooms, migrant organizations and community centres etc. [1].
- cultural tips are very important and therefore they accompany the guide and are available on the project website in all languages. Faith and religious beliefs often interact with healthcare needs and practices and the medical team, the patient and the patient's family must reach a common understanding of how illness, treatment and recovery are perceived and encoded in both verbal and non-verbal behaviour [1].

4. International medical students learning Romanian through mobile means

Modern technologies have been used to enhance the potential of the project deliverables. The glossary and the dialogues covering the topics were recorded and made available online. The Guide and the project website as a whole are made compatible with smart phones, tables, iPads etc. The partners are currently working to develop a database of interactive language exercises on the project website.



The Medical University e-learning platform allows for a much wider use of the “Take Care” outputs in order to address the language and communication needs of international medical students [2]:

- the video conferencing system can be used to invite external experts and/or students from other countries to participate in our discussions.
- the wiki interface can be used to engage students in interactive exercises.
- forum threads may be set up to invite faculty members from other disciplines (e.g. clinical) to share some of their experiences with the students.
- students, too, may volunteer links or produce content. They can work individually or in groups to solve library, Internet or real world research tasks related to medical communication in multilingual and multicultural settings (the Glossary may be further developed to include more languages native to our international students).

The platform allows students to share their ideas and materials in a variety of media and formats (text, PPT, links, pictures, graphs/stats, audio or video material) [1].

The students’ successful use of the online outputs has prompted the university to go a step further and implement mobile learning in their online/ traditional courses.

A survey was carried out on a number of 50 international medical students who were asked to evaluate (1 = not relevant and useful as described, 5 = entirely relevant and useful) the learning materials created, the availability of the materials on the university site as well as their own readiness to engage themselves in learning Romanian through mobile means. One of the questions asked students to suggest reasons why mobile learning would increase their motivation.

Most students considered that the materials are entirely relevant and useful. They also appreciated the online version of the materials as enabling them to study them outside class at their own pace. As far as mobile learning is concerned, most of the respondents considered themselves to be digital natives. Being raised with and accustomed to modern technology, they thought this would definitely maximize their learning and access to learning. Most of them affirmed that they felt ready for mobile learning and they would benefit a lot from integrating mobile computing into their learning. Most students said that they had positive experiences in using technology and, therefore, found mobile devices to be particularly attractive and were motivated to use them. The following reasons why mobile learning might be motivating were suggested:

- it is in fashion (all their peers use them);
- it provides information in an informal way and makes it interesting;
- students are in control (over their learning process and learning goals);
- students can integrate it (mobile learning) into their activities;
- students can share it;
- it is fun;
- it is accessible.

Considering the results of the survey the university took further steps towards mobile learning and embarked on making the existing content and information available to students in formats easily accessible by mobile phone or laptop computer and integrating them into the whole process. Podcasts with animated videos illustrating the topics, glossary and linguistic exercises were created for each topic. Students can use them outside classrooms to revise and consolidate what they have learnt during their seminars while still being connected to their community. This leads to sharing and commenting on the materials but also expanding the knowledge provided by podcasts. In creating the podcasts the following guidelines have been taken into consideration:

- complex material is avoided. This is because most students listen to podcasts as they perform other tasks (i.e. exercising, walking to class, etc.);
- the focus of a podcast is narrowed to what is most important;
- most of the podcasts last about three to five minutes.

5. Conclusions

Mobile learning applications are mediating tools in the learning process. They are not ends in themselves and should be related to other learning tools. Mobile learning is part of a greater whole. The print materials for classroom instruction alongside the online activities on the e-learning platform allow for a blended solution which we are in the process of piloting. We believe that mobile learning will contribute to changing the nature of learners so that they will become more independent.



References

- [1] Colibaba, Anca, Ioana Crețu and Claudia Dinu. Take Care Project – Developing a Healthcare Language Guide for Migrants. International Conference "Improving Standards of Quality in Language Education and Research," March 2013, Bucharest, Romania. Unpublished conference paper, 2013.
- [2] Crețu Ioana, Colibaba Anca, Dinu Claudia. TAKE CARE PROJECT – online collaboration developing the transversal competences of international medical students. The 10th International Scientific Conference eLearning and software for Education Bucharest, April 24-25, 2014.
- [3] Jones, A., Issroff, K., Scanlon, E., Clough, G. and McAndrew, P. Using mobile devices for learning in Informal Settings: Is it Motivating? IADIS International conference Mobile Learning. Dublin, 14-16 July 2006.
- [4] Mike Sharples. Towards a Theory of Mobile Learning. 2005, retrieved from <http://www.mlearn.org/mlearn2005/CD/papers/Sharples-%20Theory%20of%20Mobile.pdf>
- [5] Take Care Project – Health Care Language Guide for Migrants. Grundtvig project proposal submitted to the European Commission in Brussels and approved for financing in 2012, retrieved from www.takecareproject.eu