

THE EFFECT OF MOBILE LEARNING ON THE FUTURE OF LEARNING IN MOROCCO

Anas SOFI, Mohamed LAAFOU, Rachid JANATI-IDRISS, and Mourad MADRANE

Laboratoire Interdisciplinaire de Recherche en Ingénierie Pédagogique,
Ecole Normale Supérieure,
Université Abdelmalek Essaâdi, Tétouan,
Maroc

Copyright © 2017 ISSR Journals. This is an open access article distributed under the *Creative Commons Attribution License*, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT: The importance of this study comes by identifying the very modern technology looming on the near horizon, headed for the educational systems, with telecommunication and wireless technologies generally and mobile technologies specially. To show a new learning style, it is a mobile learning, on the grounds that some form of distance learning, and an extension of the e-learning, which took to taking over the world with its means of audio-visual, cognitive, interactive and participatory through smart digital electronic devices, in order to create an educational and learning environment, durable and dynamic, free and direct, it is not constrained by time and space, it eliminate the culture of tradition and routine classroom and allow the learner to move freely and access to educational materials and sources of knowledge wherever they may be and wherever they are.

Nevertheless, it should be considered to that success in mobile learning is depended not only in the application of techniques and abilities provided by these tools, but also needs the capacity of education and training related experts.

The mobile learning is one of the advanced sections in the e-learning that provides learners to access to educational contents and interact easily with other members.

And through this article, we will try to highlight the overall aspects of this type of learning, and the possibility of employing this technology and seeing its impact on the future of learning in Morocco and the efforts exerted in this field.

MOTS-CLEFS: Learning, Smartphone, ENS, M-Learning.

1 INTRODUCTION

Today, it appeared the so-called information technology that dealing access to information in its various forms, processing, storage, restore, distribution it and employed by devices operating electronically. It has been of this development a significant impact on the educational process, It is no longer conventional model of education, which depends on the memorization and indoctrination and rely on the teacher as the center of the educational process and the book as a primary source of knowledge with the teacher is a good model, but through this evolution, range of models have emerged across time as Distance Learning (Distance Learning "D-Learning"). And also, e-learning model appeared with the use of computers and communication networks in education (Electronic Learning "ELearning"). It helped make distance learning possible, and with the development of electronic and wireless has led to emergence of a new model like a portable learning or mobile learning (Mobile Learning "MLearning") which relies on the use of wireless technologies in distance learning such as mobile phone, personal digital assistant, and mini-computers resulting in a shift from wired to wireless learning environment.

Mobile learning is made up of e-learning and the teacher's guidance; the student would receive the educational materials available on the Internet, and the teacher guiding him toward the required information and tasks. Mobile learning is based on the structural model to learn, through discussions and building activities and listen to lectures via the communication means available, so the teacher and the learner needs to understand the nature of the relationships and interactions between them in this form. Also the teacher needs to understand the complex relationships, cognitive tasks, the emotional and social aspects of the learner, so that he could create an educational and social environment, it is reflected raised by the students.

According to several recent studies, mobile technologies in classroom have advantages such as ease of use, student motivation, student self-reliance, student-student and student-teacher collaboration, collective work, and Development of new technological skills. The emergence of new technological tools and new spaces for learning and training such as distance learning platforms and M-Learning: Learning by mobile will important changes on how to teach and train and impose challenges on tomorrow's education. [1].

In Morocco, several efforts are being made to integrate TICs and new technologies into education, like program genie (2006-2013) for the equipment of schools, and continuing education programs (2009-2012) of the Emergency Plan for Digital Resources, and INJAZ program (launched November 2010), which aims to set up programs dedicated to new technologies in Moroccan universities, and the LAWHATI program (2015) to facilitate students' access to digital services and to integrate the use of TICs and new technologies in university pedagogy.

We will deal in detail with the following topics: distance learning, the concept of e-learning, mobile learning, and the requirements of using portable devices, and the challenges of using portable devices, and the importance of the benefits of mobile learning.

2 M-LEARNING AND OTHERS NTIC

Training students through new technologies, such as distance education «d-Learning» or electronical-Learning «e-Learning». This educational methodology allows the teacher and the student to maintain a permanent possibility of contact at any time of day, encouraging individualized education and adaptation to the needs and profile of the student.

2.1 D-LEARNING

Distance education is the use of specific pedagogical techniques, resources and means of communication that facilitate learning and teaching involving learners and teachers separated in time and space. The techniques, resources and means of communication depend on a variety of factors, such as: discipline, student needs and context, teacher competencies and experience, pedagogical objectives, available technologies, and Institutional capacity.

Despite the proliferation of technologies in education, in the developing countries, distance education still depends heavily on printed materials [2].

But attention should be given to infrastructure for educational institutions and provide the necessary equipment and link them to the Internet network continuously, and should also work on continuous training for the teacher and the learner to deal with the electronic devices and the Internet.

2.2 E-LEARNING

The use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services, as well as exchanges and collaboration at a distance. It offers many advantages to the student who no longer has to travel to attend classes but who can more easily assimilate knowledge through an interactive pedagogy based on illustrations, animations and other multimedia elements. The student can easily access a wide range of knowledge with only an internet connection [3].

2.3 M-LEARNING

Mobile learning uses mobile technology, alone or in combination with other information and communication technologies (TIC), in order to enable learning anywhere and at any time. Learning takes a variety of forms: portable devices can be used to access educational resources, connect to others, or create content, both inside and outside the classroom.

Mobile learning also applies to broader educational objectives, whether to better manage school systems or to improve communication between schools and families.

Mobiles technologies are constantly evolving: the diversity of devices currently available on the market is considerable and includes, overall, mobile phones, touch tablets, digital players, portable players and handheld game consoles. In order not to get bogged down in semantic subtleties, UNESCO adopted a broad definition of portable devices, recognizing simply that they are digital, easy to carry, more personal than institutional, that allow access to the Internet, are equipped with multimedia applications and can carry out a large number of tasks, especially in terms of communication [4].

So mobile learning is an e-learning system based on wireless communication so that learners' access to materials and training seminars at any time, everywhere and mobile learning refers to the use of portable devices in the teaching and learning process, where it emphasizes the use of technology available with wireless communications to provide information outside classroom.

3 INTEGRATION OF M-LEARNING IN HIGHER EDUCATION IN MOROCCO

3.1 EQUIPMENT STADIES AND USE OF TIC

The ANRT conducts an annual survey on the access and use of information and communication technologies (TIC). The objective is to collect information on the main indicators of equipment, access and use of TIC by households and individuals in Morocco.

The target is households living in urban and rural areas, with dwellings in electrified areas, and individuals aged 5 years and over.

Mobile telephony is generalized for almost all households with a rate of 99.6%. Mobile equipment experienced a near stagnation in 2015: 94.4% of individuals (12-65 years) is equipped with mobile telephony. This proportion is 97.1% in urban areas and 89.8% in rural areas.

In 2015, over half of individuals (12-65 years) equipped mobile phone has at least one smart phone. Thus, the estimated number of smartphones in circulation in Morocco relative to the population (12-65 years) is 14.7 million units in 2015, which represents an increase of 5.3 million compared to 2014 .

51.2% of individuals (12-65 years) equipped with mobile phones use it for Internet access. This proportion is somewhat higher in urban areas (59.1%) and is to 34.8% in rural areas.

Individuals who access the Internet from their mobile phone mainly do so to access websites and social networks (9/10), to download mobile applications (3/4), to exchange text messages (2/3), To view their mails (1/2), to share Internet access (1/3) and to use a geolocation application (1/4).

In 2015, Morocco has 17.8 million Internet users (individuals aged 5 years and over who have connected to the Internet). The proportion of Internet users increased by 57.1% in 2015. Almost three-quarters of Internet users accessed the Internet at least once a day, while 14.6% accessed the Internet at least once per week and 12.8% less than once a week. 77.2% of Internet users reported accessing the Internet at home and 52.4% accessed the Internet via a mobile phone, regardless of location.

The main uses of Internet users participating in social networks (82.1%), viewing and downloading of multimedia content (67.3%), downloading software and applications (58.9%) and use of e-mail (42.9%). (ANRT Annual Report 2015) [5].

4 METHODOLOGY

Despite the data cited above on the use of mobile and Internet in Morocco and the evolution of the number of users, Moroccan education is likely to evolve in the same direction.

In Morocco, despite the considerable efforts of the state, the majority of teachers and students still hesitate to introduce technology into their daily classroom practices.

The Ministry launched two programs: INJAZ (2010) who aims to set up programs dedicated to new technologies in Moroccan universities and the LAWHATI program (2015) used to facilitate student access to digital services and integrate the use of TIC And new technologies in pedagogy studied at university.

) INJAZ Program Objectives:

The INJAZ program is among the federating projects for development identified by Digital Morocco 2013, this program was designed for students of engineering, Master and PhD enrolled in public institutions which are partners in the government's initiative.

This program makes available to the target population, a service allowing access to and use of ICT and new technologies during their studies of the second university cycle. This should undoubtedly help to improve the quality of their training and, therefore, substantially improve their employability [6].

The program "INJAZ" relies entirely on a service offer made up of a student pack including:

- Mobile broadband Internet service.
- A laptop or tablet.

) **LAWHATI Program Objectives**

The Lawhati Program consists of making available to students enrolled in higher education institutions and trainees enrolled in professional training establishments, as well as available to faculty members working in academic institutions and professional training of "2-in-1 tablets" at attractive prices.

The objective of the Lawhati Program is to:

- Encourage knowledge sharing and networking;
- Facilitate student access to digital services;
- Generalize TIC in the Moroccan University;
- Integrate the use of TIC in university pedagogy;
- Modernize pedagogical practices and upgrade training facilities;
- Promote interaction between students and teachers.

In order to determine the effectiveness and difficulties of using and mobile learning in higher education, we administered a questionnaire to the students of the ENS Tetouan licenses.

The investigation contains closed-ended questions with response choices and open-ended questions. In total, there were 15 questions. The first three questions deal with the characteristics of the students and the remaining questions about the use of mobile technology in the training process, and we also conducted interviews with professors.

The objective of this study is to determine the possibility of using this technology in higher education and seeing its impact on the future of learning in Morocco.

5 RESULTS & DISCUSSIONS

The socio-demographic characteristics of the students surveyed show that they are predominantly male and all respondents said they have a cell phone that would allow them to access the Internet. So the students are well equipped.

Respondents confirmed through our investigation that the use of mobile technology plays an important role in their academic courses such as:

- Mobile learning is widespread by all students whether it is to educate themselves, to store or to exchange educational resources. In addition, the lesson is accessible anywhere and at any time.
- Total students surveyed possess mobile devices, and are able to properly use its services in particular, audio and video player, Internet, Social networks, E-mail ...
- The survey shows us the important place of mobile learning in the process of student learning, such as the mobile has become like electronic briefcase and lessons support.
- The use of mobile devices in teaching serves to simplify learning for students who are looking for educational resources such as instructional, exercises and educational videos anytime and anywhere. The world of mobile technology offers a huge choice of applications dedicated to teaching in different fields.
- The main uses of mobile technology in the process of learning are: downloading lessons, downloading exercises and viewing informative videos that are an effective way of knowledge transfer.

The cost of smartphones and tablets, the price and the debit offered by the operators are challenges faced by the students.

But some students and teachers said that the mobile phone is not a good education and a successful means of education, as the portable devices can be used for activities other than teaching, and this adversely affects the learning process. And also the lack of attention to the infrastructure of educational institutions and the failure to provide the necessary equipment and linked to the Internet on an ongoing basis, and the absence of continuous training for the teacher and the learner to deal with the electronic devices and the Internet, are considered a barrier to the application and use of mobile learning.

6 CONCLUSION

M-learning offer educational opportunities that we may not have fluently with other learning tools. They enable teachers and students to access content anywhere, anytime, and to experience new learning situations in different settings, not only at school.

The use of mobile technology facilitates access to content and learning quickly that allows the user can learn new something in few minutes.

However, using mobile devices can become a source of problems and interfere with the smooth running of the lessons by encouraging inattention and distraction to the user or other students nearby Internet access in the classroom allows students to do activities that are not related to the lessons and impair the quality of learning. In addition, the integration of M-learning in education does not continue the evolution of mobile technologies.

In the latter and in order to get a good education that kept pace with the rapid development of modern technology and contribute to the efficiency of the educational system in Morocco must be concerted efforts by all interveners in the field (students, professors and the Ministry) and would working to integrate modern technology in these circumstances of the system. So that we can achieve development in the field of education.

REFERENCES

- [1] MY-Lhassan RIOUCH, " Utilisation des tablettes dans des activités mathématiques ", Actes EMF2015, Octobre 2015
- [2] Michel Ravassard, Apprentissage libre et apprentissage à distance : <http://www.unesco.org/new/fr/unesco/themes/icts/lifelong-learning/open-and-distance-learning/>
- [3] CNFDI, E-learning et classe virtuelle : apprentissage moderne à distance ! : <https://www.cnfdi.com/p-e-learning-et-classe-virtuelle-apprentissage-moderne-a-distance-18.html>
- [4] UNESCO, *Principes directeurs pour l'apprentissage mobile, 2013*
- [5] ANRT, Rapport annuel de 2015
- [6] Présentation du programme INJAZ : http://www.entreprendre.ma/Presentation-du-programme-INJAZ_a5007.html
- [7] PROGRAMME "LAWHATI", Ministère de l'Enseignement Supérieur, de la Recherche Scientifique et de la Formation des Cadres (2015).