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# Mobile Learning Education has Become More Accessible

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## Abstract

In the information age all in a race to the technology to keep up with the emerging technological innovations make it more luxury and easy life. Since this era of educational reform, it has become many educational institutions are striving to digitize education, e-learning, distance learning, mobile learning afternoon light or the so-called (Mobile Learning), a technology that allows knowledge anytime, anywhere.

Technological development of cellular phones and the applications that prove it day after day, as a result of the increased ownership by young people, and large cost to equip schools with computers advanced, make the introduction of cellular phones to school, learn a technological tools as desirable, viable and feasible.

Mobile phones have evolved considerably over the past three decades, where it has passed the stages of many evolution added each stage to its predecessor a lot even appeared in the form that we see now, where Motorola «Free Motorola» company began manufacturing mobile phones early eighties of the twentieth century, and then Nokia came «nokia» in the second half of the eighties, and with the development in the mobile phone industry, and their small size and weight, and lower prices and prices of telephone calls, increased the proportion of sales of manufacturers have almost a decade ago.

Is a mobile education a new form of distance education systems, which is characterized by the separation lecturer for students spatially and temporally and mobile learning a new language is a term that refers to the use of portable devices in the education process. This term focuses on the use of available technology with wireless communications to deliver information outside of the classroom, where he found this method to fit changing circumstances incident education process affected by the phenomenon of globalization. This can be achieved by using mobile and portable devices such as mobile phones Cell Phones digital assistants PDA) are computers Handheld) phones and computers Portable Computers personal computers and small Tablet PCs on all be equipped with technologies connect various wireless and wired alike which provides ease of information exchange between the students

themselves on the one hand, and between students and lecturer on the other.

**Keywords:** WAP; PDAs; E-learning; M-learning

## First, the Definition of Mobile Learning

Word mobile in language dictionaries means (moving any negotiable movement or to move or moving object), and here we can translate the term mobile learning to the following: learning mobile-learning mobile learning altrk-learning-learning through mobile devices (mobile), or hand-held mobile nigeriawap word means mostly objects or mobile devices or mobile devices. Since a few years ago and specifically at the beginning of the twentieth century and atheist, was used in western countries, a new term in the field of education dubbed in english or mobile learning mlearning or m-learning, and the french-language lemoblelearning or lem-learning.

Mobile learning can be defined as the use of hand-small and portable wireless devices such as mobile phones mobile phones, personal digital assistants pdas, smartphones and smart phones, personal computers and small tablet PCs, to achieve the flexibility and interactivity [1].

Mobile learning, which is sometimes called m-learning, is learning that is using small portable devices small/portable computing devices these include computing devices: smartphones smart phones, personal digital assistants (pdas), and handheld devices.

The researcher believes that learning mobile, is a novelty depends on the use of wireless devices in the communication between teachers and learners, websites, and through its services, of both: msm (text messaging), mms (multimedia), wap (wap), smn (messages msn-hotmail-msn-messenger), gprs (instant firmly radio), blth (Bluetooth).

## Second, Aspects of Mobile Learning, According to Some Theories

The use of mobile devices in education led to the creation of some researchers to develop theories of learning appropriate to

learn the modern mobile phone, for example, he offered a theory sharples «efficiency» which stands out as a conversation and mobile learning kfalah, even suit mobile learning, in four aspects:

Mobile learning is learning happens when technological tools mediates between the learner and knowledge.

Mobile learning using mobile technology.

Mobile learning e-learning as a continuation of e-learning.

Mobile learning as learning about the learner-centered: where the learner is mobile and not necessarily technology.

### Third, Some of the Approved Experiments on Learning Mobile Services

#### Department of education New Zealand experience

At the initiative of the New Zealand department of education to activate the use of mobile learning (mobile learning) the administrator has enabled learning property *via* short text messages *via* the site launched it ([www.studytxt.com](http://www.studytxt.com)) so that the student sends a message to a mobile number location service asking some basic information about a specific piece of information, that service has been wildly popular among schools and students in new zealand, and proven to be effective in a number of educational scenarios [2].

Examples of the New Zealand experience

**First example:** Teachers do a job is a summary of the most important ten words studied by students during the week in the article, to the student after sending a text message to bring those words and review.

**Second example:** Carried out by a teacher of science to sharpen mettle requested in the search and investigation through the game, where the teacher at the beginning of each lesson by asking students, and asked them to send their answers *via* mobile messages to site service, and then respond to the student a text message showing the validity of his answer, the teacher had promised students valuable prizes for the first to send the correct answer.

#### Hand power project

This project is trying to make mobile learning a potential reality, where the course is content using a pda, including movement and sound the high quality and browsing in the machine, it also allows learners to test their abilities also of global projects inseed/nokia/icus project, formed three companies form an Asian union in order to launch a mobile education, and the result of this endeavour is the development and production of electronic curriculum is presented through nokia devices that rely on wireless application (wap protocol).

#### The Dutch experience

Used mobile phones to enrich the museum education experiences, despite that the Netherlands is a relatively small

state, the out many of the museum and cultural institutions the very near each other, but in spite of that, the dutch are rarely aware of the proximity of these museums of them, where are crossing those museums without any note or contemplating benefit from culturally or educationally, so was the idea of using mobile phones, which aims to send information and topics of museum associated with the museum for each group of individuals present in the vicinity of the sender museum information, it has been that experience by relying on sending different messages and multimedia directly through the internet and mobile phones, through the web site, which was prepared for that project.

### Fourth, the Services Provided by Mobile Learning to Serve the Educational Process

#### Short message service (sms)

The text messages from more services service used by mobile phone users, and written by a panel of mobile phone buttons are sent across networks, and allows users to exchange short text messages with each other so that a single letter lettering does not exceed 160 characters, sms text messaging service and the advantage of being economical and entertaining and a means easy to connect to another person on his mobile phone anywhere without causing any inconvenience to others. Sms text messaging is also characterized as being up to the other person, even when calls would be transferred to another number, or if their phone is busy, or even if the mobile phone, which sends him sms text message closed [3].

#### Multimedia service MMS

It is a service to send and receive picture messages or audio files or video files, as well as text messages and the content of greater than it is in the SMS, it is an extension or evolution of technology in general messages a year, and what sets it apart from regular SMS it allows the client the ability to send content size up to 100 KB per message, while not exceeding the short message size of 140 bytes only, with the service (MMS) is not possible to send multimedia messages from phone to phone only, but also from the phone to email and vice versa, I changed the multimedia messages from the usual pattern mobile communication so that made them more privacy and more expressive.

#### WAP Wireless Application Protocol

Program that converts designed web pages of computer small to make it more suitable for mobile screens» phones, Vivid user phone from roaming, and the Internet has provided services and information, which facilitates the exchange of data and take advantage of the rest of its various services such as e-mail and the World Wide Web and newsgroups transfer process the services of various information and means of entertainment, culture and business banks, stocks, trade, purchase online and find out weather, etc [4]. and differs from the WAP for Web (Web); the former is a special mobile devices operate as mobile

phones and pocket computers and smart devices to access the Internet, the second is a special computer and Internet devices.

### MSN Mobile service

Through this service to receive MSN Hotmail and MSN Messenger messages directly to your mobile phone and receive an alert in the form of SMS messages to poetry about the arrival of e-mail messages on their Hotmail address, in addition to that they can messages from their friends covered by the receipt of the service. MSN Messenger

### Instant public service packet radio (GPRS)

The word GPRS What is not an abbreviation for (General Packet Radio Services) means Instant General Packet Radio, one of the innovative technologies for the transfer of data across networks (GSM), it is an innovative new technology that allows mobile access to the Internet at high speed and the possibility of data and files, storage, retrieval and exchange receiver wirelessly at speeds in the range of (171.2) kilobits per second, access to a greater range of information available from the WAP service at a lower cost and with less effort [5]. This service differs from the WAP service, where the subscriber can in GPRS technology to take advantage of the application or WAP service but the WAP service through the technology of GPRS will bring to the joint where the top speed to browse information quickly compare the current service provided *via* the mobile network, which does not exceed the data transfer from which (speed 9.6 KB)

### Bluetooth service «the Bluetooth

Wireless Bluetooth Wireless Technology is one of the communication technologies across the radio waves and the Protocol on Communications, designed to connect the different devices in a manner new method relies on wireless rather than wired connectivity, and covers Bluetooth geographical area stretching from one meter to the cent meters, and it depends on the nature of the sender and the receiver device, where Bluetooth devices on the system under cover band from each other contact, so it does not require the presence of devices in a single row or a single line, but can the hardware be found in different rooms, but must be Bluetooth signal strong to cover this space.

Bluetooth is used in several applications, including the creation of a small computer network between computers in a small geographical area, and as a means of introduction of a computer such as a mouse or the keyboard where it is dispensed with wire, and a means output of the computer such as printers where they are dispensing with wiring, as well as a way to transfer files and information between devices *via* the transfer elements system.

## Fifth, the Educational Benefits of Employing Mobile Learning in Teaching and Learning

- Facilitate the tasks of teachers, it is a help learning tools learning for students.
- Students can interact with each other and with the teacher rather than hide behind the big screens, Large Monitors.
- Learner can get through which the information is easier and faster than telephone or e-mail conversations, such as lectures appointments or tests tables.
- can communicate freely with the teacher at any time, ask questions and receive answers easily, and the exchange of letters between the learners themselves, and between them and the teacher both on educational or social matters.
- used at anytime and anywhere in the home or on the train or in hotels.
- attracting educated: Young people who have dropped out of education they can enjoy the use of mobile phones, and gaming devices such as Games Devices Gameboys in learning.
- Mobile phones may lead to bridging the digital divide because those devices are less expensive than desktop PCs.
- You can use the Short Message Services SMS to obtain information more easily and faster than telephone or e-mail conversations, such as lectures appointments or tests tables, especially with an emergency amendment to these tables.
- used as a technique to help learners who have difficulties learning Learning difficulties.

## Sixth: Learning the Characteristics of Mobile

1. The mobile learning all the time and everywhere:

Mobile education M-Learning will take the education process away from any fixed points, respected the wishes of the learner to interact with the various parties to the educational process without having to sit in the classrooms or in front of computer screens, and achieve the participation and cooperation transgressor geographical spacing, physical between the students themselves, and between them and their teachers [6].

2. Mobile learning allows the learner to communicate rapidly with the international information network:

The Internet connection in the learning mobile phone wirelessly (*via* infrared), through WAP Wireless Application Protocol service (WAP), and this is anywhere without the obligation to exist in specific places, which makes it easier to access the Internet and browse at any time and any place, and allow GPRS technology for mobile access to the Internet at high speed and the possibility of data and files, storage, retrieval and exchange receiver wirelessly at speeds in the range of 171.2 kilobits per second, access to a greater range of information available from the WAP service at a lower cost and less effort,

and easy to surf the Internet Web Browsing sites so that you can click directly on the links pen instead of using a mouse.

3. Exchange files and messages between the learners themselves, and between them and the teacher:

Via SMS messages are text messages exchanged As for MMS through, are the files and e-books among the educated exchange, where it can be done via Bluetooth technology or using infrared, and this is not available in the other e-learning styles.

4. The cost of mobile learning is relatively low which is cheap and in circulation:

The majority of mobile digital devices enjoy a reduction in cost compared to purchasing desktop PCs desktop computers [7]. Has Saylor, Michael study reported that students in higher education in the United States nearly 82% of them have mobile phones, and in a similar study reported that about 12% of them have a personal digital devices, even in cases that have been the acquisition of a variety of mobile devices it remained below the cost of standard equipment such as personal computers.

5. Small size of the technology making it easier to navigate the process:

Most portable devices as a general rule, such as personal digital devices PDAs or PCs mini mechanism Tablet PC desktops desktop PCs-and mobile phones in particular, bearing the memos and e-books are lighter, smaller and easier to load bags filled with files and books or notebooks as well.

6. Get access to information and educational experience faster than other media:

Through the available services in mobile phones especially modern ones, and get access to information and educational experience faster than other media, whether it comes to online services or even an exchange of letters between the learners themselves or between them and the teacher [8].

Justifications for using a mobile phone (mobile learning) in the educational process:

- Mobile learning is essential to meet the learning needs. Through mobile phone we can provide educational experiences and materials that meet the needs of each learner and circumstances.

- Initiative to acquire knowledge, the existence of the phone in the hands of the learner can have a key role in the speed of his initiative to get that knowledge and information.

- Flexibility to support a large number of important activities in learning through mobility and mobility in learning and application settings.

- Interactive in the learning process, where the teacher can students received their questions and inquiries by phone.

- Access to individuals in any place and at any time, to open the horizons of education for large segments of society may be necessary that the educational system up to it.

- commensurate with educational activities, multiplicity of services that can be obtained through the mobile phones had to submit articles and educational activities in ways and means adapted to the nature of those activities.

- The increasing growth of the use of interactive devices and phones generally transferred on the degree of respect in the world.

- can offer many benefits to the educational process, and give new opportunities for traditional learning in the classroom as well as in the pattern lifelong learning outside the classroom.

- Multiplicity of services that can be provided by Interactive phones in education.

- Prevalence of the spread of learning styles and remote needed in the educational side.

- Contribute to overcome the suffering of traditional education problems.

## Conclusion

The current study findings to a group of the following results:

- Mobile learning has many educational benefits that facilitate the learning process, and most importantly it is cheap, easy to obtain and the possibility of learning anywhere and anytime, and the speed of access to information, whether text or files.

- Essential to meet the learning needs. Through mobile phone we can provide educational experiences and materials that meet the needs of each learner and circumstances.

- Mobile learning offers many educational services, to serve the text messages and multimedia messages, WAP, and Instant Service radio signals, and service MSN.

- The use of mobile devices in education has led to the development of some researchers to theories of learning appropriate mobile modern ocean.

- Education is a mobile new form of distance education systems and which is characterized by the separation lecturer for students spatially and temporally.

- growing ownership by the students, make the introduction of cellular phones to schools as tools for learning technological desirable, viable and feasible.

In the end, the researcher recommends:

- the need for mobile learning in the Palestinian universities applying to have a clear impact in the educational process of learning service, and not only in the use of the ads and the general instructions and directives.

- The need to conduct scientific studies to detect constructive results in the educational process of learning to develop both at the school level or university.

However, mLearning does not come without its limitations.

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