Editorial

M-learning: learning on the move

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Introduction

Mobile devices such as cell phones, tablet computers, personal digital assistants (PDAs), iPods, iPads and laptops are now a part of every body`s life in the modern world.[1] The scenario is not much different in Pakistan. The only difference is that while such devices are used for communication, learning and entertainment in the rest of the world, in Pakistan their chief utilization is entertainment followed by communication (including social networking). Use of mobile devices as learning tools is a new concept in Pakistan so far. There is a need to create awareness about this missed opportunity; we have a tool but not utilizing it for learning purpose.

What is meant by M-learning?

Till last century mankind was dependent on printed material in the form of books, journals, magazines, newspapers etc. and guidance of teachers or facilitators in the class rooms for learning purpose. However, the invention of small handy mobile devices connected to internet changed the whole scenario. Now anyone can have access to millions of textbooks, encyclopedias, reference books, dictionaries, atlases and most importantly real life

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demonstration videos of most experienced teachers from all around the globe.[2] Any person desirous of knowing about any thing can click on net and access useful information about the quest.[3] He can do it while sitting at home, in the office, holiday resort, lying in bed, in wash room or even during travelling. This whole opportunity is mobile or M-learning.[2]

How to do it?

There are only three requirements:

1. A mobile device (cell phone, tablet computers, PDAs, iPods or laptops)
2. Access to internet
3. Knowledge and *will* to use it for learning purpose

Majority of professionals have first two but the problem lies in 3rd requirement.

Advantages of M-learning

M-learning offers a number of advantages as summarized in **Box 1**.

Portability of infinite information You can access any book, journal, note, dictionary, atlas, podcast or any resource any where even while travelling.[4] Nowadays a citizen living in a big city spends a significant amount of his time while travelling. Portability of all the information and learning resources is a concept with endless possibilities. Time, the most

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Box 1 *Advantages of M learning*

1. Time saving
2. Colorful pictures and learning from movies and animations to clarify concepts
3. Multiple books consultation simultaneously
4. Dictionary, atlases and other reference books readily available
5. Study while traveling
6. Easy notes with less effort which can be shared easily and are safe for ever
7. Quick retrieval of a forgotten concept
8. Amend notes while keeping old copy intact
9. No space required to keep books or notes
10. Enjoyment & Sense of achievement
11. No environment damage
12. No garbage
13. No disturbance in continuity even in case of power breakdown
14. Ability to study in context of clinical case at the bedside

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important resource given to man can be managed effectively using this technology.

Retrievable information There is no fear of losing your books or notes if they are properly saved in your laptop. Even if something goes wrong they are retrievable (especially if you have a back up). Files in your mail box are safe even if your laptop gets stolen.

Collaborative learning Information can be shared with peers by a single button click; discussions with peers and teachers via messaging, chat, blogs or live through sources such as skype strongly support collaborative learning.[2]

Making learning a pleasant experience Colorful pictures, movie clips and animation graphics have made learning an enjoyable and entertaining experience. You can switch to different topics of your choice without any effort of changing and manipulating books.[2,5]

Immense flexibility M-learning is for everyone.[6]

Anyone with a mobile device and an internet access can make use of this concept. A large variety of learning resources can be downloaded including text (such as textbooks, journals) or audiovisual (podcasts).[7] A student can keep all his books (millions of pages) along with his notes all the time.

Think of a *general practitioner* sitting in a remote village of our country attending a grand round in one of the most advanced hospitals in the world. As they go, the world is in your palm; the only thing that you should know is how to access it.[3] The high mobility and low cost technology of these devices makes them especially useful for rural health care workers.[1]

Researchers can use this technology from gathering epidemiological data to accessing latest articles from prestigious research journals.[1]

Patients can access their lab reports, consult their health care provider or contact an emergency service.[3]

The specialty of dermatology is well known for the use of technology. Mobile devices can be effectively used in *teledermatology.*[8]

A small text message may effectively communicate a clinical update, latest guidelines or drug information to a practitioner or pass on a public service message for the whole community.[9]

Use of M-learning in medical education:

M-learning is being widely used throughout the world in both undergraduate and postgraduate medical education.[1,3]

It is not only an effective instructional strategy for distance learning but also provides the learner with an interactive and creative learning environment providing the learners an opportunity to contribute and interact.[10] M-learning provides a wonderful opportunity for the developing countries to bridge the gap of information, technology and research with the developed world.[1,9] *"We now have the opportunity to design learning differently: to create extended learning communities, to link people in real and virtual worlds, to provide expertise on demand, and to support a lifetime of learning"*. Sharples 2007.[1]

Conclusion

New generation is growing up in a multimedia world. Blogs and social network sites are a part of life of most of the young people. This is a trend that is likely to stay. The educators should take it as an opportunity and design educational activities making use of them.[2]

We have the gadgets in our hands; all we have to do is to use them for learning in addition to communication and entertainment.

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