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# Mobile Learning: Detrimental or Beneficial?

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***Abstract*: Mobile Learning also known as mLearning, is a new generation of learning where content which users wants to learn is accessible and available on mobile devices like smart phone and tablets. With the evolution of "world in the pocket" learning becomes much easier and one can start learning on the go. This paper illustrates how mLearning could be a better new way to learn and to interact with the learning content provided and how mLearning is proving to be a better alternative to traditional learning. Learning through traditional methods is not helping students to learn and gain new knowledge wherever and whenever they want and also it's not that effective. It is also researched that not all mLearning applications are helpful for the students or learners to learn whatever they want, only apps with interactive and user-friendly user interface were found helpful. That's why mobile learning applications are made with user-friendly user interface. Some practical strategies and methods of implementation of mLearning approach despite of its limitations and challenges were recommended in this paper as well.***

***Keywords* : Mobile Learning, affect, interaction, research, traditional learning.**

## I. INTRODUCTION

This is generation where skills and knowledge is everything. Technological transition or evolution from desktop systems to mobile devices like laptops and smartphones for knowledge sharing medium is gaining a cutting edge in today's era of technological boom. Nowadays everyone is having world of knowledge i.e. smartphone

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in his/her pocket, any knowledge can be obtained easily and flexibly provided the internet connectivity and a working smartphone with web browsers installed. As of today's era's smartphones comes with a vast variety of pre-installed applications and features in it like – browsers for browsing web, video players, integrated camera, integrated music player and speakers, microphone, radio & FM, Global Positioning System (GPS), you can also play games, and may more features are already embedded in your smartphone. With all these features, smartphones easily wave out use of desktops and laptops. In the Nielsen report, 2014, smartphone pricking in Asia Pacific continued to show rapid growth, and outdo the percentage in the United States and European countries. Smartphone pricking in the Asia Pacific region is highest in Hong Kong and Singapore with 87 percent, followed by Malaysia at 80%, Australia with 75% and China with 71%. In Southeast Asia alone, smartphone users spend an average of more than 4 hours per day on their mobile device. A lot of time committed to activities such as chatting, social networking and entertainment activities like playing games and surfing led to a higher level of engagement.

Furthermore, the field of study and research in mobile computing and mobile devices are making headway at a rapid pace, this have changed the lives of many including students outside their colleges and schools. We all know how important and crucial role a mobile device plays in an individual's life. These mobile devices have become an important part of their daily routine which includes connecting to their friends and family, interacting with people all over the globe via social media and also to entertain themselves by watching videos or listening to music. As mobile devices have become a daily habit of mobile user, hence they could have a tremendously bright future as a tool for learning or gaining knowledge. In the meantime, mobile learning too has been recognized as one of the most booming technologies in education.

Hence, the determining power of mobile learning in education towards juvenile is absolutely encouraging. Accordingly, this paper explores and discusses on the definition of mLearning with its suitable learning environment, opportunities and potential of this approach with its limitations. In addition, some real approach and methods of implementations of mLearning despite of its limitations and bottle-necks was recommended as well.

## II. DEFINITION

Mobile Learning is a paradigm that creates new learning environment. Learning style in mLearning is unique because it allows the learners to access content they want to learn whenever and wherever they want, Mobile learning or mLearning can be understood as the intersection of two paradigms: mobile computing and eLearning, that integrates multiple technologies software and hardware to the application of multimedia which helps learning through a variety of mobile devices wirelessly by using a series of wireless and internet (Wi-Fi) or broadband services without limit in terms of location or time. From this definition, it is very clear that mLearning or mobile learning is covering a very large scope which includes laptops, mobile phones, netbooks, smartphones, tablets and so on, which has the function of wireless technology (Wi-FI) and is portable.

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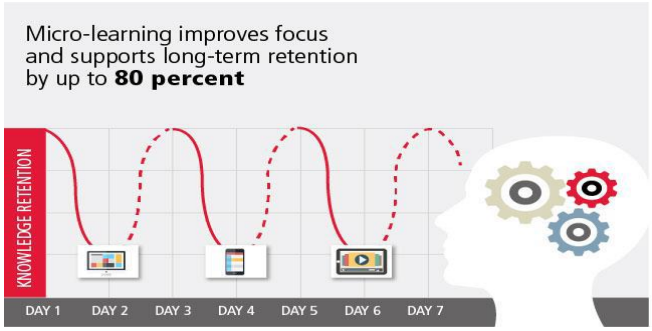



Nevertheless, Smartphone is the most noteworthy gadget among consumers of today in several countries based on Annual Consumer Barometer by Google in 2016. For an instance, 71% of internet users in Malaysia are more often uses smartphone devices rather than computer/tablet and it is observed that 99% of under 25 age group uses smartphone. Therefore, the potential of this smartphone may be best in its usage, especially in the field of education.

According to the Organization de Cooperation et de Development Economics (OECD), the concept of formal, non-formal and informal learning briefly outlined as:

• Formal learning - Intentional, planned and structured. Usually arranged by the institution. Usually based on modules or other types of formal programs.

• Non-formal learning - May or may not be intended or arranged by the institution, but it is usually held in a number of ways, although it is slackly organized.

• Informal learning – Never endorsed. Instead conducted by rigid modules, it is often considered to be based on circumstance.

## III. AFFORDANCES AND POTENTIALS

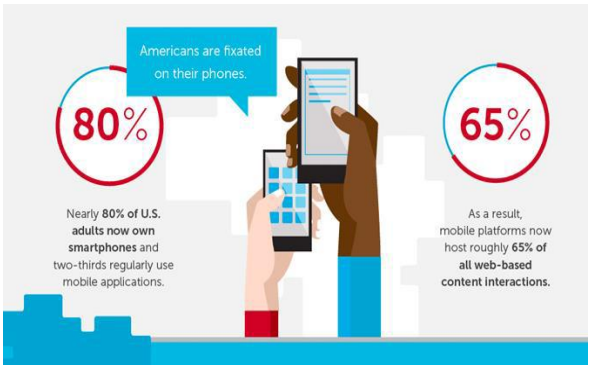
Mobile learning surpasses many noteworthy features like portability. As the learning will be taken on mobile devices so learner can take it to any place of his/her choice keeping his/her comfort in point. This feature of mobile devices can be embraced regardless of locality, social interactivity as it can support communal activities, context sensitivity as it can be executed according to a specific task and situation, connectivity as it can be connected to a broad internet network connection wirelessly either via broadband or Wi-Fi and individuality as it can be personalized based on one's need.

Furthermore, the hardware used with M-learning such as smartphones and tablet is lightweight. Features such as lightweight and durability of the battery allow students to use these gadgets portably in a longer time across a variety of situations.

In other words, M-learning allows students to assess computer-based learning collaboratively and interactively in anywhere at any time by using wireless internet connection as to suit to their own need. It has overcome a poor internet connection, battery power disturbances, and unavailability and lack of computer facility support, especially in rural and remote areas, with a strong and wide mobile phone network.

All these features make our lives easier to engage in learning anywhere, anytime and any mobile devices without any obstacles which bring about to a protruding and trending paradigm namely mobile learning.

## IV. WHY USE M-LEARNING?

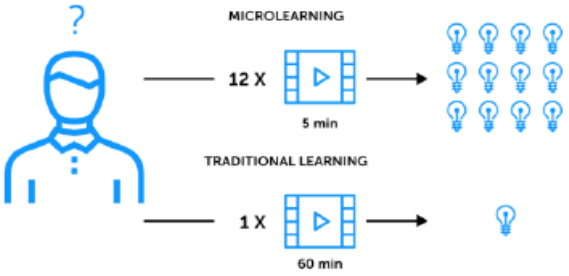



Generally, most of the mobile devices are useful for many purpose especially it can be very practical in education, organization and teaching assistance for trainees, and also as learning aid tools for those who are willing to learn. Here are some of the benefits:

1. Interaction between learners is possible.
2. Requires much lesser space than lodging computers in any classroom.
3. Can store data files which is present in thousands of books.
4. Sharing assignments and work collectively is much easier; learners can e-mail, cut, copy and paste text.
5. Mobile devices can be used anywhere, anytime, i.e. portability.
6. These devices engage young learner' s interest in education.
7. This device is generally much cheaper than computers usually found in a traditional digital classroom.

However, you must also need to know about the following potential drawbacks:

1. Due to insignificant size mobile and tablet screens, information that can be screened is limited.
2. Storage of these devices is nothing as compared to computer systems.
3. Battery drains out within no time and needed to be charged regularly.
4. They can be less vigorous than desktops.
5. It's market is moving at fast pace, especially for mobile phones, so devices and its configuration can become outdated very soon.
6. Bandwidth may get reduced with more number of users while using wireless networks.



## V. TECHNOLOGY OF MOBILE LEARNING

1. SMS: It stands for Short Message Service. It allows users to send and receive messages up to 160 characters between mobile phones.
2. MMS: It stands for Multimedia Messaging Service. It provides the same motive as SMS but allows the inclusion of graphics with text.
3. GPRS: An always functioning internet connection for mobile devices like smart phones, tablets, etc., that provides greater speed of connection.
4. Bluetooth: It is a short range wireless connection which allows PDAs (Personal Digital Assistants) to send and receive messages to and from other mobile devices.
5. MP3s: MP3s are audio file format that effectively compresses audio files and allows them to be shared through various mobile devices.
6. CAMs: Video CAMs now pre-embedded into mobile devices like smart phones, PDAs, etc. can be proved to be a good mode of transferring information.

## VI. LIMITATIONS AND CHALLENGES

Limitation and challenges are the most concern issue. Small screen sizes of the mLearning tools are the most common issue amongst all that cause difficulty in learning activities such as slow text input. These problems can be further justified by Albers and Kim (2001) who declared that small screen causes more difficulty in reading if compared to paper, just can fit with limited graphical information and bottle-necks interactive activities when inserting text input. Apart from that, there are still many mobile that are equipped with limited internal memory storage capacity. Furthermore, coverage of connectivity in some remote areas are still weak. Some of the challenges faced by the learners while learning are as follows:

1. Small screens of mobile devices like smart phones and tablets.
2. Limited and lower storage capacities
3. Fast battery brain and redundantly charging the device.
4. Unavailability of common operating system make it strenuous to develop content for all.
5. Devices can become outdated quickly
6. Wireless bandwidth is constrained and may reduce with increasing number of users

## VII. RESULT

This research paper have proven that the future is of e-learning which is more convenient, more fun, more engaging and which delivers more content in less time. A way of learning which is accessible on their fingertips, which is portable and is not constrained on time i.e. user can learn whenever he wants. With all these benefits mobile learning or mLearning is booming day by day. Also this research paper proves that mobile learning is far better than traditional learning methodologies which were unable to give up to mark results.

## VIII. CONCLUSION

Mobile learning or mLearning is at present the most used tool for learning. It is assumed that mobile learning could be a major factor in involving young learners in learning, where many of the traditional methods have failed to do so. As mobile phones combined PDAs functions with cameras, video players and MP3 players, the meaning of learning would become more mobile, more flexible and more exciting for the learners. What makes mobile learning technology so fascinating is that it has an empathy with movement across formal and informal settings, allowing learners of mobile learning, to lead at least some of the way that mobile technologies have a vary major role to play in realizing such an scheme. This technology took learning out from the boundation of classroom, sometimes beyond the reach of the instructor. This can be acknowledged as a menace, so the challenge is to design and develop solutions that clearly identify what is best learnt in the classroom and what should be learnt outside and the ways in which connections between these settings should be made.

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