

MOBILE LEARNING: ACCESSIBLE 'LEARNING' TOOL FOR RURAL INDIA**Ms.REKHA****ASSISTANT PROFESSOR****PG DEPT. OF COMP. SC. & APPLICATIONS****APEEJAY COLLEGE OF FINE ARTS****JALANDHAR, INDIA****ABSTRACT**

The Indian economic scenario is changing and so is Education. Ensuring quality and availability of knowledge at large happens to be a major determinant of national competitiveness. The changing educational scenario in urban India is far rosier than the rural India. An extensive qualitative approach is required towards education in rural India. With widespread usage of mobile phones and easy accessibility of internet, m-learning can be a helpful tool to change the present disheartening landscape of education in rural India. Although, e-learning methods have gained popularity in the past, but m-learning can help teachers and students in taking education to another level.

KEY WORDS - m-learning, mobile learning, rural India, e-learning, education.

INTRODUCTION

Mobile Learning or M-learning or 'Portable Learning' is a subset of e-learning in which a person can learn through mobile devices like Ipads, Tablets, Notebooks, Laptops, Smartphone or other handheld devices. Mobile learning has many different definitions and is known by different names, like M-Learning, U-Learning, Personalized learning, learning while mobile, anytime/anywhere learning and hand held learning.[1].

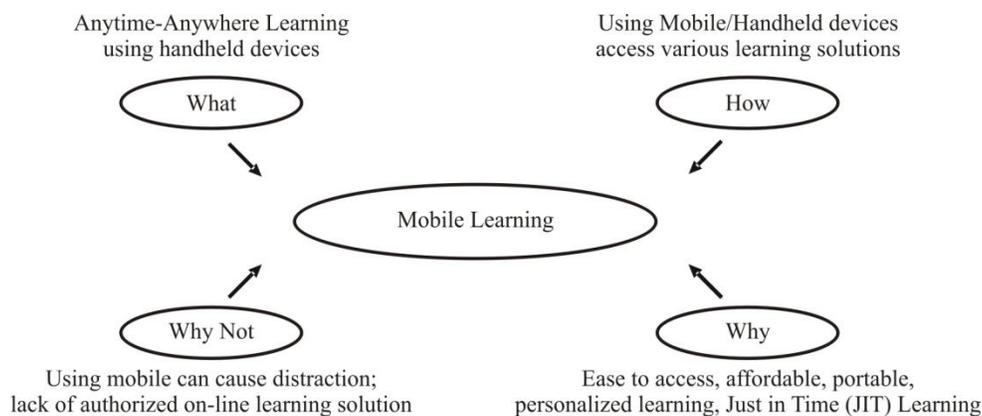
DEFINITION:

Figure 1: Mobile Learning

Although, these mobile technologies, when developed were never meant for learning purposes. They were meant to be various tools of communication, networking and of course, entertainment. However, features like ease of access, cost effectiveness have caught imagination of learners and developers thereby creating "mobile E-Learning".

EDUCATION SCENARIO IN RURAL INDIA

In the 21st century when India is talking about 'Digital India' or 'Empowering India' the scenario of education in Rural India is facing many challenges. As 70 percent of Indian population resides in rural areas, it is the need of the hour that special attention should be given to the overall quality of life in rural India.

To achieve the basic quality of life, a very sharp focus is required in the field of education. Even though a plethora of government initiatives to provide access to education are going on or are underway but issues of quality and accessibility in education in rural India is still an area of major concern. Both primary and higher education are facing numerous challenges. Lack of teaching staff, poor quality of education, improper infrastructure, unavailability of transport facilities, untrained teachers etc. are few basic problems. To top up these problems, India also faces caste, gender, regional and sectional disparities. The effect of these problems can be clearly understood from the statistics that India is currently amongst the lowest GER (Gross Enrolment Ratio), which is 12 %, not only compared with the developed nations but even with the major developing nations.

With changing times, suitable efforts are being put in to improve the degrading educational scenario of rural India. But to improve it at significantly faster pace, Mobile education can be helpful. Even though the computer education has reached rural India but either there is no access or shortage of instructor.

Education can be improved, promoted and made to reach every nook and corner of rural India with the use of mobile phones. Cheap handsets, network access and ease of use can help people to use mobile devices to access educational resources, connect with others, learn and understand basics- both audio and visually- inside and outside the classrooms.

M Learning provides basic platform to support broad education goals such as improved class room teaching, effective administration of school systems and easily accessible communication environment for both teacher and student. This in turn can easily strengthen traditional educational system.

According to Valk et.al(March 2010)[1],the impact of mobile phones on educational outcomes that are identified in the M-Learning literature can be classified into two broad categories. On the one hand, mobiles supposedly impact educational outcomes by improving access to education while maintaining the quality of education delivered. On the other hand, mobiles purportedly impact educational outcomes by facilitating alternative learning processes and instructional methods (collectively known as new-learning).

WHY MOBILE LEARNING IN INDIAN SCENARIO

E-Learning solutions had been introduced over a decade ago. But these solutions couldn't provide a suitable learning platform in Rural India.

As compared to e-learning (where lectures are to be attended in classrooms or labs), m-learning offers anytime-anywhere learning. This gives increased access (to learning) for those who are mobile or cannot physically attend learning institutes. M-learning is flexible as there are no geographic boundaries. This can be considered as huge benefit to those who belong to rural areas. These people can learn even while working in farms or sitting at home.

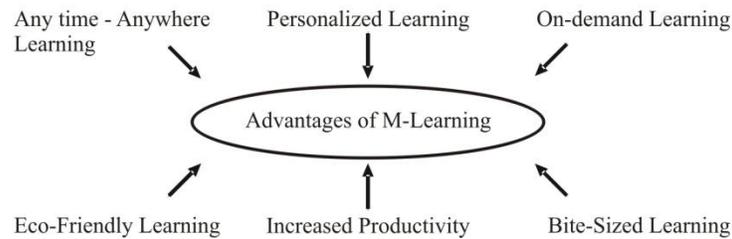


Figure 2: Advantages of Mobile Learning

Delivery of learning material is possible anytime-anywhere in these mobile devices which has been lacking in traditional e-learning system. Moreover, this instant delivery can be in form of voice, graphics, text, animation based videos etc. in case of m-learning where as it was limited to text and graphics based material in e-learning.

Apart from no geographic limitations, M-learning provides flexible timings (on 24/7 basis) with rich interaction due to one-to-one communication. But in case of e-learning, dedicated timings are to be given for learning and is normally a group based learning.

Another benefit of m-learning over e-learning is that learning is eco-friendly. M-learning is paper less learning where as e-learning is paper-based learning.

The electronic base of m-learning provides an advantage of e-delivery or e-submission of tests/assignments to the instructor/students. But in case of e-learning it is normally a paper based and fixed time submission.

With Census of India (2011) declaring that nearly 70% of India's population lives in rural areas, it becomes necessary to develop and practice advanced learning and educating methods.

India's rapid growth in technological space can be well imagined from TRAI Report (March 2014) which stated that number of telephone subscription in India, increased from 931.95 million at the end of February, 2014 to 933.00 million at the end of March, 2014 thereby showing a monthly growth of 0.11%. Yet another report of TRAI stated that out of 1.25 billion people in India, one-fifth of the people use internet. This growing rate of internet users can help us in horizontal expansion of the mobile space which in turn can provide a healthy platform for advancement in social, behavioural and development objectives.

Latest technology, cheap smart phones, better battery life, improved network infrastructure and low price data charges can help in improving the learning scenario in rural India. These factors have already increased mobile penetration tremendously. Out of the total 70% of the users, 12% use mobile phones to access internet basically for entertainment, online services, social networking & e-commerce. The majority of users use internet for listening songs or watching videos. If technology has reached for entertainment/Online shopping, why can't it be used for learning? This lays a huge emphasis on developing mobile-compatible learning solutions.

Internet Use in Rural India	
Purpose	Use Percentage (2009)
Email	85%
Music and video	67%
Educational information search	48%
General information search	42%
Text chat	40%
Online news	16%
Booking railway tickets	16%
Online banking	15%
Financial information search	15%
Internet telephone and video	14%
Latest farming techniques	13%
Online land records	13%
Information of fertilizers and pesticides	8%
Other	7%

Source: Research jointly conducted by Internet and Mobile Association of India and Indian market Research Bureau

Although m-learning is considered to be a subset of e-learning, but the above discussed advantages of m-learning over the latter can help rural India to “learn” in a cheap and convenient way. Even the remotest areas in the country have efficient mobile networking and this makes m-learning one of most effective way to reach out to that 70% rural population of India.

Smart phones have the potential to provide M-Learning solutions to rural population of India. Rural area learners use mobile phones daily and access internet for an average of not less than three hours .Although mobile devices like PDA’s, Tablets, Laptops etc can also be used for M-Learning, but ready-for-use mobile devices like Smartphone are best known technology to implement m-learning. Authors in [5] have stated that cell phones are perfect vehicles for making educational opportunities accessible to rural children.

Academicians and application developers have already started working into this direction. M-learning compatible software’s or applications are being developed. MGurujee is an example of m-learning and productivity application. It provides a platform to learn conversational English. It is an interactive voice response system. Another such example is MILLEE (Mobile and Immersive Learning for Literacy and Emerging Economies) which is focussed on providing English training to children in a game like environment.

CONCLUSION

With India moving towards ‘Digital India’ and ‘Make in India’ goals, it has become vital necessity to digitize and improve education in rural India. Exponential growth in mobile users indicates increased penetration of mobile in rural India. Thus, M Learning may be helpful in taking up the various challenges being faced in the path of quality education. Many countries like Brazil, Qatar, South Korea etc are already moving towards M Learning. In India, m-learning applications and software’s are coming up but channelized and authorized development in this area is required. Furthermore, challenges like validity and availability of data, accessibility of network, language barriers, and result oriented application development are to be taken care of. Finally it is important to use a collaborative approach to capture and standardize M Learning and use it in developing and sharing education in Rural India.

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