A New Method of Learning: M-Learning (Mobile Learning)

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ABSTRACT— With the change of time and technology in 21st century, the teaching and learning processes are also changed. New portable and electronic devices take place of old text books. In this paper we introduced an emerging paradigm "Mobile Learning" also called "M-Learning" that has yet to be clearly defined. Mobile learning is relatively new, so we are only beginning to see the potential of mobile devices in training and performance support. We start with the introduction of different learning their advantages, disadvantages and in the last, we talk about the impact of Mobile learning on college students. For our research we take data of 500 hundred students from different colleges of urban as well as rural areas.

Index terms - EBook, PC-OS, ISTE, COSN

I. INTRODUCTION

Education is the backbone of any society and country. The traditional system of learning in India is making notes and reading text book(Hard books). But the students from the middle class and from rural areas, who's parent income are very low are unable to buy good text books and Laptops because they are too costly.

Some time students use 5 or 6 books for one subject, so it's very difficult for the student to always take these books along with him. To solve these problems technology and new electronic devices are very helpful for the student. Laptops, palmtops, tablets, mobile phones , e-books etc. are changing the traditional learning system. All electronic devices are very help full but in they are too costly. But the mobiles which are the part of every family of 21st century is a very helpful tool in education and its cheaper than other electronic devices. So in this paper we are only talk on mobile devices because these are portable, easy to carry, cheaper as compare to laptops, palmtops and tablets.

The widespread use of mobile technologies around the world represents a significant opportunity in education. While mobile learning – learning with mobile technologies

and devices – is still in the early stages of development, many teachers and students in North America are beginning to realize its potential for enhancing teaching and learning. Mobile learning involves more than merely incorporating new technology into current pedagogical strategies; it requires an instructional paradigm shift that promises to fundamentally change the way students learn. The move toward mobile learning is driven by increasingly high demands for student achievement and an understanding of the digital skills students need to compete in the twenty-first century global economy.

In 2001 M-learning was one of a very small number of mobile learning projects worldwide and most other projects were focused on the use of palmtop computers for learning rather than mobile phones. Widespread use of mobile phones was still a relatively new phenomenon.

Telephony introduced in India in 1882. The total number of telephones in the country stands at 960.9 million, while the overall teledensity has increased to 79.28% as of May 31, 2012^{[1][2]} and the total numbers of mobile phone subscribers have reached 929.37 million as of May 2012.^[1] The mobile tele-density has increased to 76.68% in May 2012.^[1] In the wireless segment, 8.35 million subscribers were added in May 2012.^[1]

With the increase tremendous growth of mobile users new mobile companies are entered in the market with new technologies, mobile prices are going down. With the entrance of smart phones and android operating system the mobile usage is totally change instead of calling these are used for teaching, learning, entertainment, business, gaming etc. The open offices, pdf readers, clip and sound recorder, simulators, learning games totally change the learning process.

The increasing pervasiveness of mobile phones does not automatically translate to their adoption in education, but many educators are beginning to recognize the potential of mobile learning. The New Media Consortium's 2011 Horizon Report^[4], based on input from forty-five education leaders worldwide and published in collaboration with the Consortium for School Networking (CoSN) and the International Society for Technology in Education (ISTE),identifies emerging technology that will have a significant impact on teaching, learning, research and creative expression in education around the world. The report describes mobile devices as an emerging technology with a 'likelihood of entry into the mainstream of schools in the next twelve months' (Johnson et al., 2011).

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Table I Number of Mobiles per moth

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual Additions (in millions)	Average Monthly Additions (in millions)
2002	0.28	0.35	0.41	0.28	0.29	0.35	0.36	0.49	0.37	0.53	0.72	0.8	5.23	0.44
2003	0.64	0.6	0.96	0.64	2.26	1.42	2.31	1.79	1.61	1.67	1.9	1.69	17.49	1.46
2004	1.58	1.6	1.91	1.37	1.33	1.43	1.74	1.67	1.84	1.51	1.56	1.95	19.49	1.62
2005	1.76	1.67	0.73	1.46	1.72	1.98	2.45	2.74	2.48	2.9	3.51	4.46	27.86	2.32
2006	4.69	4.28	5.03	3.88	4.25	4.78	5.28	5.9	6.07	6.71	6.79	6.48	64.14	5.35
2007	6.81	6.21	3.53	6.11	6.57	7.34	8.06	8.31	7.79	8.05	8.32	8.17	85.27	7.11
2008	8.77	8.53	10.16	8.21	8.62	8.94	9.22	9.16	10.07	10.42	10.35	10.81	113.26	9.44
2009	15.41	13.82	15.64	11.90	11.58	12.04	14.38	15.08	14.98	16.67	17.65	19.10	178.25	14.85
2010	19.90	18.76	20.59	16.9	16.31	17.98	16.92	18.18	17.1	18.98	22.88	22.62	227.12	18.93
2011	18.99	20.20	20.21	15.34	13.35	11.41	6.67	7.34	7.90	7.79	2.97	9.47	148.32	11.80
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While mobile technologies are a primary component of mobile learning initiatives, the survey respondents and the education experts interviewed for this paper do not describe the programmes as technology initiatives but rather as educational or instructional programmes that involve a paradigm shift for teachers and students. Proponents of mobile learning emphasize that their intent is not to use mobile technologies to replace educational interactions or learning experiences but rather to enhance them (SIIA, 2010). Indeed, several recent studies have noted increased in student achievement outcomes from the integration of mobile technologies into teaching and learning (Gray, 2011; McFarlane et al., 2008; Wallace, 2011)^[8].

Also Mobile learning change the online learning methodology. In online learning system student takes notes online daily from their tutor and also submit their assignments online for that they need laptop or desktop with internet connection but what happen if he is away from their home without laptop or computer in state mobile is very helpful. If you have mobile with internet connection you can access internet anywhere and done your all work without sitting at one place.

II. ADVANTAGES OF MOBILE LEARNING

- 1. Mobiles are cheaper as compare to laptop and tablets.
- 2. More learning material is available, instead of buying too much costly text book use eBooks and learning games.
- 3. Portable, Mobile are easy to carry.
- 4. No bounding, you can access your data on mobile anywhere without sitting at one place.
- 5. Larger battery life as compare to laptop and tablets.

III. DISADVANTAGES OF MOBILE LEARNING

- 1. Mobile screen size are small maximum size is GALAXY Note II's 5.5.
- 2. Not too much software's are available which are specially designed for learning.
- 3. Access of offensive content over the mobile phone.

IV KEY FINDINGS

For our research work we collect data from 500 students of different graduate and engineering colleges of Punjab which are situated in both urban as well as rural areas. The data are collected with the help of questioner and interview the students.

The students are mostly enthusiastic about mobile learning and 62% reported that they felt more keen to take part in future learning after trying mobile learning. Of this 62% some expressed a future preference for learning:

- With laptops (91%)
- On a PC (82%)
- Using mobile devices (80%)
- With friends/people of their own age (76%)
- At college (54%).

82% of respondents felt the mobile learning games could help them to improve their reading or spelling, and 78% felt these could help them improve their math's.

V. CONCLUSION

Analysis of the evidence collected during our research suggests that mobile learning can make a useful contribution to attracting students to learning, maintaining their interest and supporting their learning and development. Mobile learning is unique in that it allows truly anywhere, anytime, personalized learning. It can also be used to enrich, enliven or add variety to conventional lessons or courses. Analysis of the evidence collected during our research suggests that the use of mobile learning may have a positive contribution to make in the following areas:

- Mobile learning helps learners to improve their literacy and numeracy skills and to recognize their existing abilities.
- Mobile learning can be used to encourage both independent and collaborative learning experiences.
- Mobile learning helps learners to identify areas where they need assistance and support.
- Mobile learning helps to combat resistance to the use of ICT and can help bridge the gap between mobile phone literacy and ICT literacy.
- Mobile learning helps to remove some of the formality from the learning experience and engages reluctant learners.
- Mobile learning helps learners to remain more focused for longer periods.
- Mobile learning helps to raise self-esteem.
- Mobile learning helps to raise self-confidence.

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