

# MOBILE LEARNING : CHANGING FACE OF EDUCATION IN ODL SYSTEM

**Kaushal Sharma, B C Mahapatra & Belay Hagos**

Keeping the objectives of the national goal ,ICT has adopted the technology based education system from elementary level to higher education system .The concept of globalization with a wide coverage area , teczhnology based education is the real media which can fulfil the need of globalization and National Goal . For quite some time now ,ICT has been a critical component of the educational experience ,creating opportunities for students .

With the present infrastructure ,class size ,availability of teachers ,training of teachers ,etc . it, is difficult to achieve all objectives of higher education .Further ,most of the teachers use lecture method ,which does not have potentiality of achieving majority of the objectives of education .The objectives are multi -dimensional in nature ,so for their achievement ,multiple methods are used in an integrated fashion .It is a well -known fact that ,not a single teacher is capable of giving up to date and complete information in his own subject .The ICT can fill this important gap because it can provide access to different sources of information .

UNESCO considered Information and Communication Technology (ICT) as "scientific ,technological and engineering disciplines and the management techniques used in information handling and processing ,their application ,computers and their interaction with men and machines and associated social ,economical and cultural matters " Due to explosion of population ,information and more demand of higher education ,the traditional colleges and universities are not in a position to provide admission to all those who wanted ICT compelled planners and administrators (Sharma & Mahapatra 2 0 0 9) Due to the restrictions up to some extend of the correspondence courses earlier ,Distance Education and Open Learning Concepts were floated and different traditional universities have converted the Correspondence Departments into Distance Education Departments .

The utility of any system depends to a great extent on its quality .Users as well as beneficiaries are not happy with the quality of higher education at this point of time .It points out to the fact that there is a need to bring desirable changes in the higher education system namely

- a )Input ,
- b )Process ,
- c )Output and
- d )Feedback

The various inputs of higher education are :the students ,teachers ,curriculum ,infrastructure facilities ,etc . The Ministry of Human Resource Development (MHRD ) Government of India is planning to conduct one common entrance examination for selecting students for admission into various engineering colleges situated in different states of India .This is probably to maintain the quality of input component of the system .

## **Shifting Role of Teacher Educators in present scenario**

From considering teacher educators as bearers of knowledge to be communicated to seeing them as stimulators of knowledge to be constructed and developed by pupils through the learning experience; from being believers that pupils ,though different ,should be homogeneous to believers that pupils will remain different; from being executors of teaching procedures recommended by others to designers and or adapters of such procedures; and from being isolated individuals in their classrooms to being coworkers collaborating in the improvement of teaching and learning ,the teacher educators 'role will be shifted from teachers to knowledge workers ,consultants and councillors .The time may come when students may come to teachers very rarely ,which may create a downfall of face -to -face teacher education programme (Sharma & Mahapatra 2 0 0 9 ) .

### **Roadblocks in ODL system and mobile learning**

Blackboards, desks, chalks and dusters, slates and registers remain *modus operandi* (modes of operation) for imparting education in most institutes. The main reasons stopping them from going high tech tools remain to be monetary. Another roadblock remains the scarcity of employee training (Sharma & Mahapatra 2009). Many schools and colleges would first require the faculty and other staff to learn how these technologies work. Therefore new solutions should be easy to grasp and should require minimal training. The immediate responsiveness of computer based programs can help in increasing motivation and inspiring students to connect with others with whom they share similar interests. Another major roadblock remains infrastructure. Apart from bandwidths, something as basic as electricity is hard to get as you move further from the urban areas. Institutes in such areas need solutions which together with the above reasons should consume as low power as possible in order to be run by tiny generators when required. Technology has changed the face of education in the country. Innovative techniques such as Live class room transmission for conducting multiple live telecasts and Live telecast over Internet have not only cut the costs of physical communication but also led us to an era where ICT is taking the entire education system into unending possibilities. The lectures may be recorded and archived for future references.

The main task of any ODL provider is to design and offer distance educational experience that encourages learning. As such, DE providers need to understand that its educational products and services are to service the DLs and provide an encouraging educational experience for the learners (Sharma & Mahapatra 2009). doing so, many factors need to be considered in developing and delivering DE courses to achieve effective and efficient implementation of distance education courses and programmes.

The term Mobile Learning, has different meanings for different communities. Although related to e-learning and distance education, it is distinct in its focus on learning across contexts and learning with mobile devices. One definition of mobile learning is: Any sort of learning that happens when the learner is not at a fixed, predetermined location, or learning that happens when the learner takes advantage of the learning opportunities offered by mobile technologies. In other words, mobile learning decreases limitation of learning location with the mobility of general portable devices.

The term covers learning with portable technologies, where the focus is on the technology (which could be in a fixed location, such as a classroom) learning across contexts, where the focus is on the mobility of the learner, interacting with portable or fixed technology; and learning in a mobile society, with a focus on how society and its institutions can accommodate and support the learning of an increasingly mobile population that is not satisfied with existing learning methodologies.

Mobile learning is convenient in the sense that it is accessible from virtually anywhere, which provides access to all the different learning materials available. It is also collaborative; sharing is almost instantaneous among everyone using the same content, which leads to the reception of instant feedback and tips. Mobile learning also brings strong portability by replacing books and notes with small RAMs, filled with tailored learning contents. In addition, this kind of learning is engaging and fun. Therefore, it is simple to utilize mobile learning for a more effective and entertaining experience.

### **Value of mobile learning**

The value of mobile learning may be as follows.

- It is important to bring new technology into the classroom.
- Mobile learning could be utilised as part of a learning approach which uses different types of activities (or a blended learning approach).
- Mobile learning supports the learning process rather than being integral to it.
- Mobile learning needs to be used appropriately according to the groups of students involved.
- Mobile learning can be a useful add-on tool for students with special needs.
- However, for SMS and MMS this might be dependent on the students' disabilities or difficulties involved.
- Good ICT support is needed.

- Mobile learning can be used as a 'hook'
- It is necessary to have enough devices for classroom use .
- But along with the value of mobile learning ,there are some of the challenges for mobile learning .  
Technical challenges include
- Connectivity and battery life
- Screen size and key size .
- Ability for authors to visualize mobile phones for delivery
- Multiple standards ,multiple screen sizes ,multiple operating systems
- Repurposing existing e -Learning materials for mobile platforms Social and educational challenges include -
- Accessibility and cost barriers for end users .
- How to assess learning outside the classroom
- How to support learning across many contexts
- Developing an appropriate theory of learning for the mobile age
- Conceptual differences between e - and mobile learning
- Design of technology to support a lifetime of learning .
- Tracking of results and proper use of this information
- No restriction on learning timetable
- Personal and private information and content
- No demographic boundary
- Disruption of students 'personal and academic lives
- Access to and use of the technology in developing countries .

Over the past ten years mobile learning has grown from a minor research interest to a set of significant projects in schools ,workplaces ,museums ,cities and rural areas around the world .The mobile learning community is still fragmented ,with different national perspectives ,differences between academia and industry and between the school ,higher education and lifelong learning sectors .

### **The Learning through Mobile learning**

Individually ,these activity classifications tend to support Constructivist ,Instructivist ,Social Constructivist and Connectivist learning theories respectively .However ,in real life ,activities can be selected and remixed to create a myriad of potential learning experiences .Stephen Downes has commented in his blog that this model really just sounds like learning ,with a slightly mobile 'flavouring' , and we agree; Mobile learning is really..... just learning .

Most of our teachers worried that the present technological skeleton is inappropriate due to the lack and in -continuous power supply especially in remote areas .They viewed ICT as a 'necessary Evil' teachers are unaware ,parents are illiterate and the students are ignorant to adopt the technology in classroom and learning (Sharma & Mahapatra 2 0 0 9 ) .

They forget about Mr .Dhirubhai Ambani who had a dream to provide Mobile phones in each Indian hand . Today most of the students are having mobile phones with them .Most of the mobile users are having multimedia phone sets with large internal memory ,external memory cards and numerous applications .Most of the phones are loaded with music ,videos and SMS MMS in bulk and the students spend their leisure time to listen and watch it .

Remote user also came to the shop for download music and videos in their memory cards .Why not these gazettes are used for academic purpose? Students can give home assignments which facilitates the use of mobile phones .The institution /colleges should establish an ICT corner which can provide the free download facility of the lectures in memory cards of the student's mobile .Remember ,the longevity of the e -content

should not be more. So it is better to download small lectures in the form of audio/video clips which may help the students to recall what have taught in the classroom. Institutions should prepare a tight schedule to revise the lectures and activities to promote the student's learning.

This translates into education opportunities that have previously never been possible rather than premade resources, which must be collected and carried by a learner prior to "going mobile", record information from wherever they are in a number of formats; communicate with other people such as other learners or teachers; and use the processing power in their pockets to achieve tasks they could not otherwise accomplish unassisted. The Mobile phone can also be used as a learning material if the school administration and teachers wants to do so and committed for that. Here are some suggestions

1. The students may given permission to bring their phones with them rather than to restrict them using in schools. They may provide restrictions to make calls in school time by using call Jammers.
2. The school/college/learning centre should establish e-Learning kiosk in the campus that provide the necessary information regarding the learning issues to the students.
3. Libraries should contain the list/catalogue of the e-content which is available with the institute and the e-address from where the students can collect the content.
4. The students will be provided the e-content download facilities in each campus from where the students can download the learning material in their phones so that they can use it in their leisure time and at home.
5. The home task and home work should needs to re-design which facilitates the elearning dependency and using mobile techniques in learning environment.
6. Institutes and university must have to develop the knowledge pool and e-learning consortium to share the e-learning content and websites with downloadable econtents.
7. EMPRCs should be encouraged to develop e-contents and the conversion of traditional learning content to e-content. Audio MP3 and Video lessons should be developing for the mobile learners in appropriate format.

#### **Future of mobile learning :**

Technologies currently being researched for mobile learning include :

- Location aware learning
- Point-and-shoot learning with camera phones
- Near Field Communications (NFC) secure transactions
- Sensors and accelerometers in mobile devices in behavioural based learning
- Mobile content creation (including user generated content)
- Games and simulation for learning on mobile devices
- Context-aware ubiquitous learning
- Augmented reality on mobile devices

While many think of mobile learning as delivering e-Learning on small form factor devices, or often referred to as e-Learning "lite", it has the potential to do much more than deliver courses, or parts of courses. It includes the use of mobile handheld devices to perform any of the following :

- Deliver Education Learning
- Foster Communications Collaboration
- Conduct Assessments Evaluations
- Provide Access to Performance Support Knowledge

Today, any number of portable devices can quickly and easily deliver and support these functions. Cell or smart phones, multi-game devices, Personal Media Players (PMPs), Personal Digital Assistants (PDAs) or wireless single-purpose devices can help deliver coaching and mentoring, conduct assessments and

evaluations ( e.g . quizzes; tests; surveys polls; and certifications ) provide on -the -job support and access to information ,education and references ,and deliver podcasts ,update alerts ,forms and checklists .In these ways ,mobile learning can enhance and support more traditional learning modes ,making it more portable and accessible .Mobile devices can also serve as powerful data collection tools and facilitate the capture of user created content .The use of mobile learning in the military is becoming increasingly common due to low cost and high portability .

### **Mobile learning in the classroom**

- Children and students using handheld computers ,PDAs or handheld voting systems (such as clickers )in a classroom or lecture room .
- Students using mobile devices in the classroom to enhance group collaboration among students and instructors using a Pocket PC .

Mobile learning can provide support in order to enhance training that has been provided in a corporate business or other classroom environment .

### **Class management**

The mobile phone (through text SMS notices )can be used especially for distance education or students whose course requires them to be highly mobile and in particular to communicate information regarding availability of assignment results ,venue changes and cancellations ,etc .

### **Podcasting**

Podcasting consists in listening to audio recordings of lectures ,and can be used for instance to reinforce lecture (Clark & Westcott ( 2 0 0 7 ) particular to give the possibility for the student to rehearsal .It may be considered to have some influence on the traditional lectures (McGarr 2 0 0 9 ,Geyen & Teasley 2 0 0 9 ) . Psychological research suggests that university students who download a podcast lecture achieve substantially higher exam results than those who attend the lecture in person ,but only in the case when students take notes (Callaway & Ewen 2 0 0 9 ) . Podcasts may be delivered using syndication ,although it should be noted that this method of delivery is not always easily adopted (Lee ,Miller & Newnham 2 0 0 9 ) .

### **Other mobile learning Technologies**

Mobile devices and personal technologies that can support mobile learning include :

- Personal Digital Assistant in the classroom and outdoors
- UMPC ,mobile phone ,camera phone and Smart Phone
- Tablet PC
- Personal audio player ,e.g .for listening to audio recordings of lectures (podcasting )
- Handheld audio and multimedia guides in museums and galleries
- E -book
- Handheld game console ,modern gaming consoles such as Sony PSP or Nintendo DS Technical and delivery support for mobile learning :
- 3GP For compression and delivery method of audio -visual content associated with Mobile Learning
- Wi -Fi gives access to instructors and resources via internet

GPRS mobile data service ,provides high speed connection and data transfer rate These links between the current age of digital mobile learning and older educational ideas hints at why things are still the same as they always have been .It is convenient to demonstrate all of the various opportunities provided by digital mobile learning by classifying all of the things a mobile learner can do into four categories -the "Four R s "of mobile learning ,namely :

Record ( learner can create or record information with their mobile device ,such as taking a photo ,video , audio recording or electronic notes ) .

Recall ( learner can look up previously stored data ,or connect with another information source such as the Internet to find some information ) .

Relate ( learner can use a mobile device to communicate with their peers teacher or others in a community ) .

Reinterpret ( learner can use their device to process data ) .

? Learning is the future of our present ODL system . Since many of the educationists opposed the ODL due to lack of infrastructure and power facilities especially in the rural area of the country .Mobile learning supports all the learners even in the odds due to infrastructure and the power shredding .But of course it needs , willingness and the commitment with sincere efforts' .

### References

- Callaway , Ewen ( 2 0 0 9 ) iTunes university ' better than the real thing " New Scientist . [http : www newscientist com / article / 1 6 6 2 1 6 6 - iTunes - university - betterthan - the - real - thing .html](http://www.newscientist.com/article/1662166-iTunes-university-betterthan-the-real-thing.html) .
- Lee , M J . W . Miller , C . Newnham , L . ( 2 0 0 7 ) Podcasting syndication services and university students :Why don t they subscribe? " The Internet and Higher Education 1 2( 1 5 3 - 5 9 ) .
- McGarr , Oliver ( 2 0 0 9 ) A review of podcasting in higher education :Its influence on the traditional lecture " Australasian Journal of Educational Technology 2 5( 3 3 0 9 - 3 3 2 1 ) [http: www ascilite org au /ajet /ajet 2 5 /mcgarr .htm](http://www.ascilite.org.au/ajet/ajet25/mcgarr.htm) .
- Sharma K . Mahapatra B C ( 2 0 0 9 ) Information Technology in Distance Education :shifting paradigm .Sarup Book Publishers ,New Delhi .
- Steven ,Lonn; Teasley ,Stephanie D . ( 2 0 0 7 ) Podcasting in higher education :What are the implications for teaching and learning? " Education 1 2( 2 8 8 - 9 2 ) .