Mobile Learning (BYOD- Bring Your Own Device)

M.ED – 4th SEM., S.C.5, UNIT - V, 6th bullet

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Definition of Mobile Learning

- Mobile learning (m- learning) is defined as the provision of education and training on mobile devices, such as Personal Digital Assistants (PDAs), smart phones and mobile phones
- Lan and Sie (2010) "Mobile learning (m-learning) is a kind of learning model allowing learners to obtain learning materials anywhere and anytime using mobile technologies and the internet".

- "Mobile technology refers to devices that are both transportable and offer instantaneous access to information". - Coates et al., (2009)
- Mobile learning is the ability to obtain or provide educational content on personal pocket devices such as PDAs, smartphones and mobile phones. Mara Robinson (2010)
- Quinn (2000) defined it as simply learning that takes place with the help of mobile devices, or the intersection of mobile computing (the application of small, portable, and wireless computing and communication devices) and elearning (learning facilitated and supported through the use of information and communications technology).

MOBILE LEARNING DEVICES

- <u>CELL PHONES</u> The simplest of them all but still fairly powerful. They can be used for group discussions via text messaging, and since so many cell phones have cameras, they are useful for photography-based projects as well. Students can also record themselves reading stories aloud for writers' workshops or practicing speeches.
- **E-BOOK READERS** Their fundamental function, of course, is for reading books and storing entire libraries. They also provide easy access to dictionaries. Many students also use their e-book readers as a replacement for the daily paper, since they can read various editions and magazines on it. Well-known brands include Amazon's Kindle and Barnes & Noble's Nook.

- TABLETS Apple's iPad, the Kindle Fire, and the Galaxy are just a few models of tablets, and they can do anything e-book readers can do and then some. Downloadable apps, many educational, make these machines nearly comparable to computers; you can surf the Web, play games, watch (and even make) movies, as well as take photographs.
- **SMARTPHONES** The older the students, the more likely they are to be wielding one of these. Like tablets, smartphones have many computer-like functions. (They're also phones, of course.) They can run apps and software, record audio and video, send and receive email and texts functionalities that can easily be channeled into classroom inquiry.

SOME MOBILE LEARNING APPS

- <u>EVERNOTE</u> Students can keep notes and gather sources for their projects, all of which can be shared with their teachers and classmates.
- **TWITTER** Allow users share their thoughts, questions, links, photos, and videos. Students can tweet in journalism classes, posting reports online in real time, for instance, or on field trips, sharing what they're discovering on their trips.
- <u>SAT PREP APPS</u> Students can get quizzed on the SAT's different sections via subject-organized practice questions; they can take tests (timed and untimed), which are scored immediately to provide them with feedback on potential problem areas and how to correct them.

- **SOCRATIVE** This Web-based student-response system enables you to assess in real time via multiple-choice, short-answer, and true-false questions how much of the material your students understand. Students enter their answers on their own devices, allowing them the privacy to answer candidly, and results are tabulated immediately. Instant feedback!
- THE CHEMICAL TOUCH The periodic table comes alive with an app that provides detailed info on the elements, standard amino acids, and nucleus bases

CONCEPTS OF MOBILE LEARNING

- Mobility of Technology
- Mobility of Learning
- Mobility of Learner

Mobility of Technology

- The mobile technology referred to mainly more advanced cellular telephones. But there are other forms of technology such as "smart" phones, digital cameras, flash-discs, iPods and personal digital assistance devices (PDAs). Mobile devices used to deliver higher education content and instruction can also function as audio- players, media-players and digital cameras.
- Advanced mobile devices are furnished with Wireless Application Protocol (WAP) and Wireless Fidelity (Wi- Fi) capacities so that a user can connect to the Internet. The mobile cellular devices mentioned above have the capacity to link to the Internet and deliver content and instruction that can enable learners to learn at anytime and anywhere in a format that is culturally prestigious among people in the same age group.
- Most of the more advanced models can support a portable, digital and wireless lifestyle and mode of teaching and learning. It is precisely the mobility of these devices that makes them highly prestigious and therefore desirable as instruments of learning among learners in the same age group.

Mobility of Learning

- Walker (2007) points out that the advantages of mobile learning are not dependent solely upon the ability to use a portable and wireless communication device successfully. He argues that the kind of learning experienced by mobile owners is unique because it is received and processed within the context in which the learner is situated. The context is utterly individual – completely different from the rigid outlay of the traditional classroom or lecture room, and the computer laboratory.
- The international conference on mobile learning entitled MLearn 2004 adopted as its guiding statement the desire to provide "learning anytime and everywhere.
- Mobile learning devices have also enriched the theory and practice
 of e-learning. Sophisticated mobile devices are currently capable of
 delivering a comprehensive range of e-learning materials by means
 of web connections, infrared and Bluetooth transmissions.

Mobility of Learner

- With mobile learning, learning can occur at any place and at any time. The
 ordinary (non-mobile) personal computer with landline connections to the
 Internet is constrained by the places in which they are located and their
 availability. Non- portable personal computers are too heavy to move
 easily and so learners are compelled to work in the same place and during
 the time slots allocated to them by university authorities.
- Ting (2005) makes the following remarks about the advantages of mobile learning: "The overall advantages provided by the mobile learning are [t more flexible, accessible and personalized learning activities. Such advantages; keep the learners engaged in the ongoing learning activities and enhance their productivity and effectiveness".
- Guralnich (2008) suggests that the designer would be better served if he/she considered the entire context in which learners will use particular m-learning programme. Mobile learning devices also have the capacity to enhance a learner's sense of individuality and community as well as his or her motivation to learn through participation in collaborative learning.

Types Of Mobile Learning

 Park (2011) discuses a pedagogical framework for mobile learning by categorizing educational application of mobile technologies into four types generated in the context of distance education. Park (2011) created a pedagogical framework for mobile learning

Type1: High Transactional Distance and Socialized Mobile Learning Activity

A mobile learning activity is classified as this type when

- 1) the learners have more psychological and communication space with their instructor or institutional support;
- 2) the learners are involved in group learning or projects where they communicate, negotiate, and collaborate with each other;
- 3) learning materials or the rules of activity are delivered from the predetermined program through mobile devices; and
- 4) transactions mainly occur among learners, and the instructor or teacher has minimal involvement in facilitating the group activity. This type might replace the traditional technology-mediated classroom group activity where students in a group or pair conduct given tasks or assignments.

Type2: High Transactional Distance and Individualized Mobile Learning Activity

Mobile learning activities are classified as type 2 when

- the individual learners have more psychological and communication space with the instructor or instructional support;
- the individual learners receive tightly structured and well organized content and resources (e.g., recorded lectures, readings) through mobile devices;
- 3) the individual learners receive the content and control their learning process in order to master it; and
- 4) the interactions mainly occur between the individual learner and the content. This type demonstrates an extension of e-learning which allows greater flexibility and portability. This type is mostly influenced by the context regarding when and where to learn.

Type3: Low Transactional Distance and Socialized Mobile Learning Activity

 In this type, individual learners interact both with the instructor and other learners as they use mobile devices.

Type4: Low Transactional Distance and Individualized Mobile Learning Activity

This last type of mobile activity refers to

- 1) less psychological and communication space between instructor and learner and
- loosely structured and undefined learning content.
 On this basis,
- individual learners can interact directly with the instructor, and
- 4) the instructor leads and controls the learning in an effort to meet individual learners' needs while maintaining their independence. This type shows characteristics unique to mobile learning that support blended or hybrid learning

Bring Your Own Device (BYOD)

MEANING

- Bring your own device (BYOD)also called bring your own technology (BYOT), bring your own phone (BYOP), and bring your own personal computer (BYOPC)—refers to being allowed to use one's personally owned device, rather than being required to use an officially provided device.
- Bring your own device (BYOD) refers to the trend of employees using personal devices to connect to their organizational networks and access work-related systems and potentially sensitive or confidential data.
 Personal devices could include smartphones, personal computers, tablets, or USB drives.

Advantages of BYOD in Education

- Reduces institutional cost
- Promotes students participation
- Innovative teaching
- Students are more connected to their personal devices

Disadvantages of BYOD in Education

- will increase the divide between students from high- and lower-income families.
- Less control by teachers
- Students are more exposed to harmful websites
- Security of school network (loss of data)

FURTHER READING

- http://oasis.col.org/bitstream/handle/11599/558/pub_Mobile%20Learning_web.pdf#page=130
- https://books.google.co.in/books?hl=en&lr=&id= MnfABgAAQBAJ&oi=fnd&pg=PA311&dq=mob ile+learning+byod&ots=JiWb2J-NKf&sig=zr2Sr5eEkkytr290HUz1LC9Mcmk#v= onepage&q=mobile%20learning%20byod&f=fals e
- http://www.eun.org/documents/411753/817341/B YOD_Technical_guide_full_v7.pdf/

Evaluation

- 1. Differentiate between mobile leaning and e Learning.
- 2. Which model of mobile learning will be suitable for your classroom?
- 3. List some more mobile learning app which are not described in the lecture.
- 4. Prepare a plan to introduce BYOD in your Institution considering the background and sources available to the students.