Mobile learning: Usability of mobile device app to support learning in ODL with special reference to KKHSOU

Indrani Kalita and Binod Deka

Abstract
The use of new technology for educational purposes is always been in the forefront of Open and distance learning in India. And in this context, we can say that in the 21st century mobile learning plays a significant role to develop the field of higher education. It seems to be a new trend of learning among the learners. Distance education is passing by the fifth generation of learning where we should apply the Intelligent Flexible Learning Model for our learners. It will include the delivery model like internet sources, interactive multimedia model and also mobile learning. This paper is an attempt to reflect the usability of the Krishna Kanta Handiqui State Open University mobile app to support learning. It will try to reflect the percentage of mobile app user and their way of acceptance towards this app. Moreover, this paper will also try to reflect on the adaptability of the learners of KKHSOU towards this new mode of learning.

Keywords: Mobile learning, KKHSOU mobile app, usability of mobile app

Introduction
The use of new technology for educational purposes has always been in the forefront of most cutting-edge open distance learning (ODL) systems. Technology-supported teaching and learning has helped enormously in overcoming the physical distances between teachers and students, enabling the flexible delivery of education at a distance, anyplace, anytime. Mobile learning is a kind of learning that takes place via a portable handheld electronic device. It also refers to learning through other mobile devices such as tablet computers, net-books and digital readers. It is the ability to obtain or provide educational content on personal pocket devices. Most researchers and educators probably view mobile learning as the immediate descendant of e-learning. For example, defines e-learning as ‘learning supported by digital “electronic” tools and media’, and by analogy, mobile learning as ‘e-learning that uses mobile devices and wireless transmission’. Mobile technology actually offers the appropriate educational environment to assist learning activities both inside and outside the classroom.

According to Attewell (2005), there are several advantages inherent in mobile learning:
- helps learners to improve literacy and numeric skills
- helps learners to recognize their existing abilities
- can be used for independent and collaborative learning experiences
- helps learners to identify where they need assistance and support
- helps to overcome the digital divide
- helps to make learning informal
- helps learners to be more focused for longer periods
- helps to raise self-esteem and self-confidence
For mobile learning, there are three different kinds of awareness and understandings currently.

1. Take the mobile learning as a form of distance learning. For an example, distance educator Desmond Keegan put up with the view that distance learning, digital learning and mobile learning are the three development stages of distance education.

2. Believe that mobile learning is the expansion of digital learning. Its learning content is the same with that of digital learning. The only difference is that the way of acquiring information and knowledge is through mobile communication networks and mobile communication devices. For an example, a special research program of mobile learning called "MOB ILearn Action", conducted by the EU "Action and Research Program of Digital European", has made a definition for mobile learning.

3. Conduct research from the perspective of cognition and learning. It thinks that from the perspective of content and form, mobile learning has no essential difference with digital learning and e-learning, but the features of mobility and context-related has made mobile learning become a new learning technology and way completely different from digital learning and internet learning, like the perspectives of research group of mobile learning in University of Birmingham, UK.

Objectives of the Study

1. To get the demographic profile of the learners of KKHSOU
2. To identify the access and usage of mobile technologies for learning by the learners of KKHSOU

Methodology

A mixed quantitative and qualitative designed was employed. Through quantitative data analysis, information regarding frequency and purpose of mobile device use was obtained. Qualitative data were collected to obtain information that will aide professors in developing strategies to support and enhance classroom learning through mobile devices. The authors designed a mobile application as an intervention tool, to help increase interaction in a socialized environment amongst physically dispersed distance students.

Research Tool

Researchers here used an online self developed questionnaire. It consists of two sections- Learners demography and usage of mobile device to support learning.

KKHSOU Mobile Application Activities

The KKHSOU mobile Application’s aim is to mediate learning by increasing collaboration and interaction among KKHSOU students, faculties and the administrators. KKHSOU mobile application has opened the horizon for distance learners- teachers by enabling them to collaborate through the discussion forums and other activities. This diminishes distance as a barrier to distance learner teachers learning, by offering real time learning. With the help of Mobile Application, a learner can avail the latest information including notices, routines, results etc, and can download assignments, previous year questions papers other important files etc. They can read e-materials and listen to KKHSOU internet, radio, audio lectures etc. There is also a provision for watching video lectures from the application. Learner can directly contact to study centres by clicking on the specific link. They can also send mail or call to the respective department of KKHSOU which are automatically forwarded to the respective departments of KKHSOU. This application can be downloaded from KKHSOU.

Survey Participants

For the Survey total numbers of participants were 313 which include both male and female participants from undergraduate and post graduate levels.

Findings

Objective (i) To get the demographic profile of the learners of KKHSOU

From the Survey it has been found that total 313 learners participated in the online survey. Out of which 58.5% (183) are undergraduates’ learners and 41.5% (130) were postgraduate learners. The sample consisted 61 female participants and 252 male and the age range of students was between 20 years to 50 years and above. Furthermore, among 313 learners 128 are employed and 185 are unemployed learners.
Objective (ii) To identify the access and usage of mobile technologies for learning by the learners of KKHSOU

From the study it can be anlaysed that only a very small proportion of students do not own or have access to a smartphone (<5% i.e., 4.15%) and most students have more than one mobile device. While identifying the access and usage here the researchers put forwarded certain questions and the analysis of it with graphical representation are presented below as such:

1) Do you use or own a smart phone for your study purpose?
The respondents replied to this question in yes/no form. And after receiving responses it has been observed that 95.8% learners responded positively. It means 300 learners out of 313 possess smart phones and use it for their study purpose.

![Pie chart showing 95.6% Yes and 4.4% No for using a smart phone for study purpose.]

2) What type of operating system do you have on your smart phones?
Regarding operating system it has been found that 293 learners it means 94.5% learners are using android, 1.3% (4) learners using Apple, 0.3% (1) using iOS, 1.9% (6) are using Windows Phone and 3.9% (12) are using other operating systems.

![Bar chart showing the distribution of operating systems with Android having the highest share at 293 learners (94.5%).]

3) Do you use tablet computers?
While analyzing the statement it has been found that only 29.7% (93) learners use tablet computers but 70.3% (220) learners do not use tablet computers for their learning purpose.

![Pie chart showing 70.3% Yes and 29.7% No for using tablet computers.]

4) Have you ever experienced any of the activities through this app?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Total =313 learners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to course material using smart phones</td>
<td>183 (58.8%)</td>
</tr>
<tr>
<td>Access to course material using tablet computers</td>
<td>33 (10.6%)</td>
</tr>
<tr>
<td>Instant messaging</td>
<td>61(19.6%)</td>
</tr>
<tr>
<td>Getting notifications about current university activities</td>
<td>115(37%)</td>
</tr>
<tr>
<td>Watched pre-recorded videos through you-tubes</td>
<td>58 (18.6%)</td>
</tr>
<tr>
<td>Others</td>
<td>21(6.8%)</td>
</tr>
</tbody>
</table>
From the data it can be analysed that about 58.8% learners use smart phones to access course materials, 10.6% learners use tablet computers to access to their course material, again 19.6% learners use smart phones for instant messaging for learning purpose, 37% learners use their smart phones for getting notifications about current university activities. Moreover about 18.6% learners also use smart phones for watching recorded videos of the university through you-tubes and 6.8% learners use their smart phones for other purpose. Hence, it can be said that majority of the learners at present are using their smart phones for reading online course materials and receiving notifications about university activities. The graphical representations of the 3rd and 4th statements are as follows:

5) Do you think using mobile app it will be easier to access course content?

While analysing the above statement it has been seen that 62.9% (197) learners accepted the statement that access to course content is easier for learners through the mobile app provided by the University. Among them about 33.5% (105) learners are not sure whether it will be easier or not and rest 3.5% (11) learners are of the view that it will be not be easier for them to access their contents through this app. The graphical representation of the analysis is as such:

6) Do you agree communication with faculty members will be easy through the KKHSOU mobile app?

While analyzing the above question it has been found that 88.8% (278) learners out of total 313 respondents are of the view that this app can help them to communicate with faculty members very easily. Only few learners 11.2% (35) opined negatively. Hence, it can be said that majority of the learners are in support of using the app for communicating with the faculty members.

7) Do you think mobile learning will be enjoyable for your study?

In regard to this statement, we have analysed that almost every learners responded positively that they enjoyed a lot during their study through this app as it can easily accessed anywhere and anytime. 93.3% (293) learners responded positively that they enjoyed while learning through this app. Only 20 learners responded that they donot enjoy while learning through app.
8) Would you find it acceptable to study your course through mobile learning?

After analyzing about learners acceptability of the app for their learning purpose, it has been found that 87.5% (274) learners out of the total 313 respondents accepted our mobile app learning. They use it and feel very easy and enjoyable to learn through the app. Only 12.5% (39) learners responded negatively regarding acceptability of the mobile app of KKHSOU.

9) Do you think communication and feedback from faculty will be easier through mobile app?

After analyzing it we found that 89.5% (281) learners are in support of the view that they will get prompt feedback regarding their learning purposes from the university members through using this app. Majority of our learners accepted the app very positively for their learning purpose.

Suggestions

It has been found that majority of our learners are user friendly and they find it very interesting to use the app while studying. So, we want to put forward certain suggestions which can help to make the app more usable for even those learners who have not even opt for the KKHSOU app. These suggestions can help to increase the rate of increase of user of this app. The suggestions put forwarded are as follows:

- From our study we have revealed that learners are using variety of mobile devices with different operating systems so the files of course content uploaded through this app should be of different format so that every learners can easily access it such as in PDFs, Word file, PPT etc.
- Recorded lectures which are uploaded should be recorded as podcasts. It will help learners to access easily. Besides this podcasts should also be available in different formats thinking about the usability of the different operating systems.
• Besides user of mobile app will also increase when websites and learning management system will be user-friendly.

• We should encourage students to create feedback group for learning purpose. This will help them to gain more and more knowledge and will also help them to overcome their learning problems.

• Last but not the least; mobile app should be in multilingual form so that it can be easily accessed by learners from different regions with varied languages.

• There are lots of information available in the mobile application. The application can be modified in such a way that only the customized information required by the learner will be available.

• The application should have notification facility as per the required by the learners. For example during examination there should be facility for alerting learner regarding examination date, assignment submission last dates etc.

• There should have special kind of facility for differently abled learner.

**Conclusion**

From our study we can conclude that every learner perceived that using of mobile technologies in learning can enhance in communication and learning qualities of a learner. We know that this is the age of technology. We should transform our learners to the era of digitalization. So, introducing this type of app can bring flexibility and help to make every learner techno savvy. Indeed, we can say that mobile phones are one of the most accessible media among distance learners’ of all ages. Proper training with minimum cost can lead to better learning with the help of mobile learning or m-learning in mere future basically in the field of higher education.

**References**


