USE OF MOBILE TECHNOLOGY IN FACILITATING M-ASSESSMENT A CASE STUDY

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Abstract

The power of mobile device has increased dramatically in the few years. These devices are becoming more sophisticated and allow users to accomplish a wide verity of tasks while on the move. The ease with which mobile apps can be created and distributed has resulted in a number of usability issues becoming more prevalent. This paper describes the use of mobile in the special purpose of Assessment. The new concept is in use for evaluation purpose. **M-Assessment** *is the concept discussed in this paper in detail. The applicability, need, purpose, process and outcomes of M-Assessment describe in the article.*

Keywords- M- *Evaluation, M- Assessment, E-exam, Context-awareness.*

1. Introduction-

Despite improvements in educational indicators, such as enrolment, significant challenges remain with regard to the delivery of quality education in developing countries, particularly in rural and remote regions. In the attempt to find viable solutions to these challenges, much hope has been placed in new information and communication technologies (ICTs), mobile phones being one example. Now a day's educational system develops in all the aspects. The advanced technology covers educational field to develop all essential areas. Mobile is the device of communication as well as assessment. Because of the wide possession of the handheld mobile devices, the application of the mobile technologies in enhancing learning activities attracts much research interest. This investigation aims at implementing students faced mobile technologies into test and exam to simplify the exam management and performance assessment.

The research work focuses on the aspects of mobile device and platform oriented design, light-weight and efficient application, fast and convenient question navigation, and performance assessment, etc. In order to conduct an appropriate information service to the

heterogeneous resource limited devices, the context-aware service notion is introduce d to the system design. The user profile and device information are mode led and managed efficiently according to the data characteristics and their interrelationships for information adaptation.

The assessment module can provide statistical results for learning performance analysis. A prototype system named Mobile Exam System (MES) is implemented on Samsung Galaxy and Google Android OS in the current stage. Based on the work finished, some mobile oriented functions based on promising mobile technologies are suggested for next stages. The test and analysis demonstrate that the implementation of latest mobile technologies into exam is a successful attempt toward pervasive mobile learning and assessment.

This paper presents a study in which we examined aspects of user interaction with mobile apps during various steps in the assessment on the mobile applications: application identification, installation, usage, and removal. To illustrate the range of interactions that a user may have with a mobile app we also present a mobile app process which shows the typical life cycle of a mobile app.

This paper describes the importance of mobile in education system. The mobile is useful in Assessment & Evaluation in various ways. It has been studied in this paper at teacher education level. The procedure of Assessment is simple and with the help of android mobile phone. The study focuses on various opinions of the students about M- Assessment.

2. Review of related literature-

Fadzleen Sa'don Halina, Mohamad Dahlan, Abdelrahman Ibrahim University of Teknologi Malaysia in their aricle,"Usage of Mobile Learning in Malaysian Secondary Education: Stakeholders' view" published in asian journal of education September 2008 has studies impetus to the exponential growth of mobile learning. It fosters engaging personalized learning where students can optimize their understanding and learning gratification via wireless mobile devices. Nonetheless, in the context of Malaysian schools, mobile learning is not yet fully explored due to policy constraints towards mobile learning utilization in primary and secondary education. Yet, Connectivity Scorecard in 2013 reported how Malaysia is in second place behind Russia for digital connectivity among the resource and efficiency-driven economies worldwide. This indicates a vast potential for the usage of mobile apps and mobile devices amongst the students and teachers who are the stakeholders. Hence, this paper discusses myriads of perspectives on mobile learning from educational researches that later leads to stakeholders' analysis on the mobile learning in Malaysian secondary education. In order to verify and validate these perspectives, a survey on stakeholders' views and usage of

mobile learning and mobile devices are carried out from September to November 2013. Data were collected randomly from 130 respondents comprise teacher trainers in university, teachers and students from secondary schools (rural and urban). The result indicated that almost all teachers and students in Malaysian secondary schools own smart phones and mobile devices. The findings will propagate future studies on development of prototypes on suitable mobile apps for secondary education that caters to the needs of the stakeholders.

Technology, in various forms, has always held forth the promise of improving education (Wenger, 1998). This is true whether one speaks of scholastic education or its cousins, corporate and commercial training programs. Computer-Assisted Instruction (CAI), instructional television (ITV), and programmed instruction (PI) can be counted as early examples of the application of information technology to education. The most recent and perhaps most visible cases are Web-based training programs and degree-granting programs from fully accredited institutions offered via what is known as "distance learning." Technology succeeds, when it becomes commonplace. This is amply illustrated by such mundane and ubiquitous artifacts as chalkboards, training films and videos, overhead projectors and transparencies, software such as Microsoft's PowerPoint, and perhaps the most common of all, the textbook. Teaching and learning can both be defined as processes, that is, as bounded portions of larger streams of activity. The teacher does one and the learner does the other. Teaching might or might not lead to learning (Baer, 1999). The relationship between the two processes is neither fixed nor guaranteed. However, Wenger (1998) has observed that teaching and learning are not inherently linked. More importantly, teaching and instructional materials are resources for learning in ways that often differ from those embedded in pedagogical intentions. For example, reading assignments in a course on literature can result in learning on the part of students that has nothing whatsoever to do with the teacher's instructional objectives. In other words, what is taught and what is learned may differ.

3. Need of the Study-

The goal with assessment is to gain accurate predictive analytics on a candidate's behaviour or cognitive ability so you can match them to accurate analysis. We would argue that mobile assessment - on both phone and tablet - can successfully be used for many applications, such as for personality questionnaires, situational judgement questionnaires, 360-degree feedback, and realistic evaluation support. This study helps to encourage the researchers to find out the effectiveness of modern technology in the field of assessment &

Evaluation. The advanced age of learning is now become advanced so the study helps to encourage the students to take participate in evaluation with modern technology.

4. Principles of the study-

Standardisation:

In this assessment, the user experience is a deciding factor & a candidate engages with a potential qualities. There are so many variables, such as different sizes of screen, choices of orient action that affect the display of text and different ways to navigate and 'swipe' the screen. The implication here is that some tests may be unsuitable for Smartphone screens as they have too much information to display. For example, time -critical ability tests, such as verbal and numerical reasoning.

Comparison-

This study deals with mobile assessment with traditional assessment method. Comparison is held with this study. So the study focus on getting a feedback regarding M-Assessment.

5. Aims & Objectives of the Study-

The aim of this study was to determine the impacts mobile based assessment on the achievement of the students. A further investigation was also performed to find out perceptions of the students on the delivery mode of the assessment. The main objective of the study is to suggestions regarding using mobiles for assessment. The only one objective is decided to study – **to find out the perception regarding M-Assessment.**

Current study focuses for-

The world has moved on since the internet revolution. With 90% of all now browsing for new apps on their mobile or smart phones, it's clear that mobile technology opens up new possibilities for assessment. How do we help students to adapt their online assessment strategy to take advantage of these possibilities?

Mobile assessment has become part of the talent agenda. One in five respondents highlighted the importance of mobile capability in assessment. The fact that tools can be accessed and used on smart phones is important to more than 20% of respondents – not only when choosing a tool but also when choosing a supplier.

6. Method/ Program of evaluation-

The study focused on modern Assessment technique with the help of mobile. Mobile App can be used to develop for assessment purpose. The study deals with Undergraduate B.Ed. Teacher Trainees. Researcher randomly selects the sample. Students used **Pariksha**

App and solved questions. The responses used to analyse and final outcomes were declared. For this research Qualitative research is used.

Qualitative Research-

Survey Method was used in the study. Questionnaire was used for data collection. six questions were mainly asked to the responders. Percentage was used to analysis the data. On that basis final conclusion were made.

Sampling-

Thirty students were given responses for questionnaire. The findings of the study revealed that there was no significant difference between the achievement level of the students who took mobile based assessment and the students who took only paper based test. However, a significant difference was found between the scores of the test taken in the second week and those of the others. Finally, it was found that students had positive perceptions on mobile based test due to the ease of use, comprehensive and instant feedback. Besides, the most favoured test was mobile based test and the least favoured test was paper based test.

Population-

All the students of B.Ed. in the academic year 2015-16 of Savitribai Phule Pune University, were the population of the study. The outcomes of the research will deals with all this students of this university.

Tools –

Questionnaire is used to collect data analysis. There are only 6 questions in this Questionnaire. What the students should think about M-Assessment is decided with the help of this tool.

Scope & Limitations of the study-

This study deals with 30 B.Ed. First Year students studying in MIT, Saint Dnyaneshwar B.Ed. College, Alandi, Pune and Adarsh Comprehensive college of Education, Karve Road, Pune. This Teacher training colleges is affiliated to Savitribai Phule Pune University, Pune. The study is done in the period of 2015-16. **This study deals with those students who have smart phones.**

Procedure of the study-

This study deals with mobile Application. For B.Ed. First Year Hindi Method **Pariksha App** is very useful & used to assess B.Ed. students There are three aspects of this App. Demo Exam, Practices for user and actual exam. For actual exam time limit is given. For 20 marks 20 multiple questions will be solve within 10 minutes. After conclusion of the

topic for the Hindi Method, the assessment procedure had taken on Mobile with Pariksha App. After completion of the exam feedback has collected by each student.

Data Analysis –

Question 1 related to Students responses regarding experience of M-Assessment.
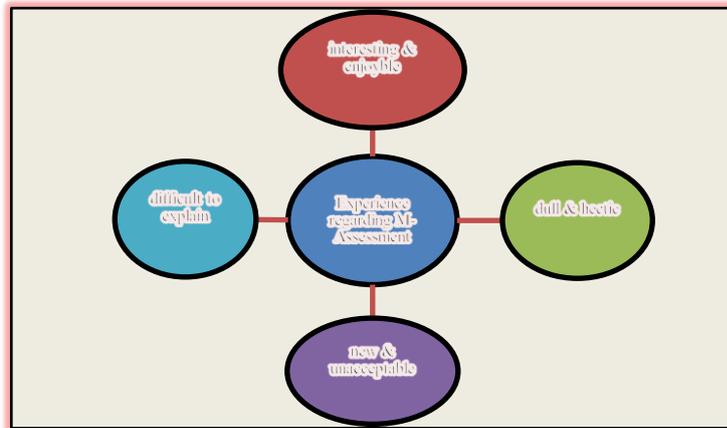
Figure-1. Experience regarding M- Assessment

Analysis- Most of the students think that this App is interesting & enjoyable for Assessment. Some of the students think this type of Assessment is new & Acceptable for use. Some thinks that this app is dull & hectic and some other remaining thinks that it is difficult to explain.

Question 2 related to opinion of the students to find out the differences of M-Assessment how it is different from traditional way.
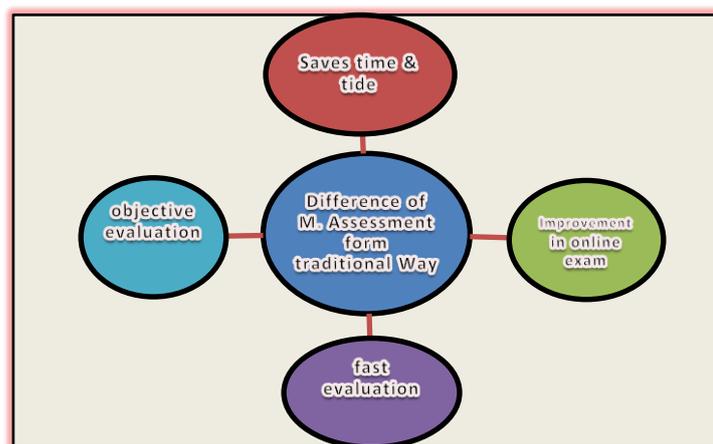
Figure-2 Difference of M-Assessment from traditional way

- **Analysis-** Most of the students think that this App saves time & tide for assessment. Some of the students think this type of assessment is used for **Improvement in online exam**. Some thinks that this app is useful for **objective evaluation** and some other remaining thinks that it is very **fast evaluation.**
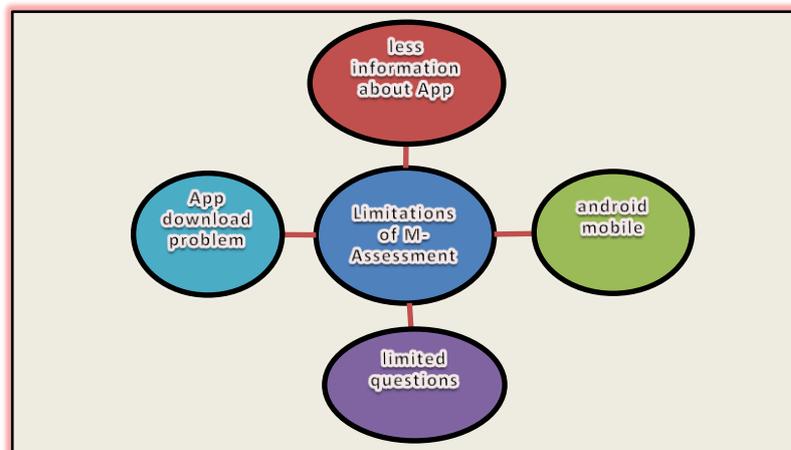
Question 3 - related to the opinions of the students about benefits of M-Assessment.
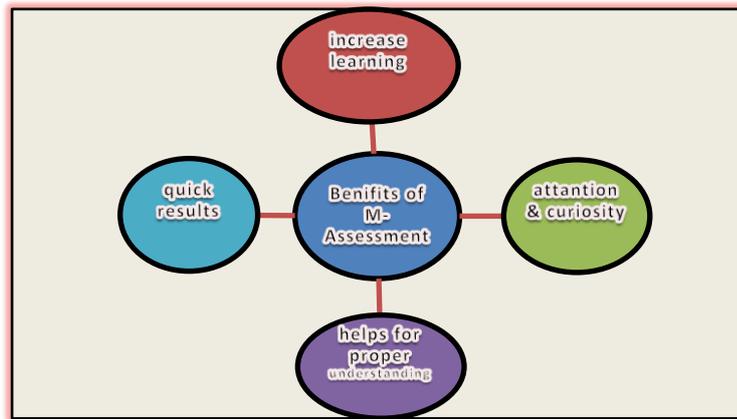
Figure-3 Benefits of M- Assessment

Analysis- Most of the students think that this App **increased their learning**. Some of the students think that this type of Assessment is **helpful for proper understanding,** Some other thinks that this app gives **quick results** and some other remaining thinks that this app gives **attantion & curiosity.**
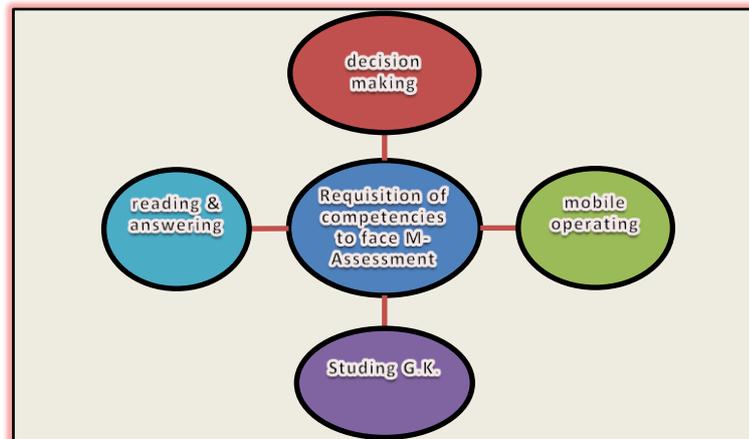
Question 4 related to the opinions of the students about the limitations of the M-Assessment.

Figure-4 Limitations of M-Assessment

Analysis- Most of the students think that for Assessment android mobile is necessary. Some of the students think that this **App have download problem**. Some students thinks that this app have **limited questions** and some other remaining students have **less information about App.**

Question 5 related to the opinions of the students about the requisition of competencies to face M-Assessment.

Figure-5 Competencies to face M-Assessment

Most of the students thinks that with the help this App decision making competency will develop in their life. Some of the students think that this **App has useful for Studying G.K.** Some students thinks that this app has useful for **mobile operating** and some other remaining students have **reading & answering the questions.**

Question 6 related to the opinion of the students about preparation & procedure of M-Assessment.
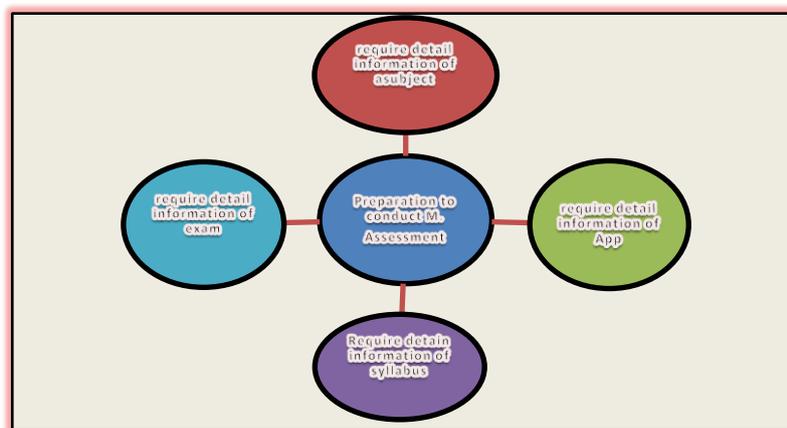
Figure-6 Preparation to conduct M. Assessment

Analysis- Most of the students think that for the Assessment detail information of App is required. Some of the students think this type of Assessment **Required detail information of syllabus.** Some thinks that this app is **required detail information of exam** and some other remaining thinks that tis app required **detail information of a subject.**

Conclusion-

In this paper, we describe how we collected data with the help of a mobile application from when it is released into the syllabus until it is removed from a mobile device. We used a survey to get a better understanding of the users' behaviour during searching, installing, using, and removing mobile applications. Results show this M-Assessment procedure is very useful for Evaluation purpose. We examined the use of a particular mobile app to discover that, although the survey did not point to any major usability issues reported by the participants. Based on these results and observations, the paper proposes a set of guidelines to improve the usability of mobile apps.

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