

“M-Learning Education”

Prof. Gayatri Rakesh Jagtap¹, Prof. Kiran R. Borade²,

¹ HOD, Department of Computer Engineering, ² Lecturer, Guru Gobind Singh Polytechnic, Nashik, Maharashtra.

ABSTRACT

M-learning online or network education uses mobile devices, such as tablets and Smartphone's to access learning materials through mobile applications, social networking and online learning sites. Alan Kay first coined the term mobile learning concepts in the 1970s. It is flexible, allowing student's access to education anywhere, anytime. Mobile learning, also called M-learning or mLearning, is any type of content that is made or used on mobile devices, such as smartphones and tablets, and that includes anything from podcasts to full eLearning courses. The role of theoretically, perhaps, is a controversial topic in society that incorporates affiliate philosophies from empiricists to post-structuralists, each with distinct and broader aspirations of theories in their work. The mobile learning community however may require the authority and credibility of a particular concept base. Such a foundation will provide first place for assessment methods based on the different qualifications of mobile learning.

Keywords- m-learning, e-learning, distance education, podcast.

I. INTRODUCTION

It is described as a way to simplify education on devices such as Smartphones and tablets. Mobile reading can provide learning materials including texts, videos, and audio. It allows each person to eat. There is no communication between teachers and students which makes it an informal learning approach.

At the time, m-learning research was marked by three phases: the first phase focusing on devices; secondly to focus on extracurricular learning; The third stage is to focus on student mobility.

ELearning is mainly distributed on computers and laptops. Students using eLearning platforms are often confined to their desks. According to mLearning, information is provided to students via their smartphones and / or tablets. Reading instruction can be sent via text message or through a specific reading app.

One of the great things about mobile learning is its flexibility. Teachers and students can learn on the go and at their own pace. Different types of teaching methods and powerful tools can be used extensively.

All of this flexibility means that mobile reading is ready for personalized learning.

Mobile devices can be used in online settings to enhance learning experience.

- Mobile (via SMS text notifications) can be used primarily for teaching grades or for students with courses that require them to travel a lot and especially to communicate information about the availability of shared results, location changes and cancellation, etc.

- Mobile devices facilitate online communication between teacher and student, student to student. Mobile devices make it easy to make real-time communication, allowing readers to get instant feedback. Teachers can also test students' comprehension using mobile devices, which provide real-time updates on student progress, enabling teachers to adapt and customize their teaching.

- It can also be useful for entrepreneurs, e.g. representatives of vendors who do not want to waste time leaving their busy schedules to attend official training events.

A form of reading grades, m-students use mobile education technology in their spare time. M-learning has the added advantage of efficiency, as the price of digital content on

tablets is significantly lower compared to traditional media (books, CD and DVD, etc.).

Podcast contains audio recording of speeches. It can be used to review live talks and provide opportunities for students to practice oral presentations. Podcasts can also provide additional information for the development of traditional expressions.

Psychological research suggests that students who download podcast lectures get significantly higher test results than those who go to the lecture in person (in cases where students are writing).

II. LITERATURE SURVEY

M-learning is currently a well-established approach. It has been in use for almost 20 years and its use provides a way to learn anytime anywhere [1]. Almost all university students in developed countries have some form of cell phone [2] and 50% of them carry more than one [2]. The most popular mobile devices for young people are seen as smartphones. The largest group in terms of use and ownership by young people between the ages of 18 and 29 [3]. This fact has also been confirmed by other research studies conducted among university students [4,5]. In fact, higher education students are the focus group on this research project. The rapid proliferation of mobile devices,

especially mobile phones, has led to their educational use, leading to the creation of a new field, called Mobile Assisted Language Learning (MALL) [6]. MALL is distinguished between Computer Assisted Language Learning (CALL) [7], but MALL differs from CALL in the use of portable devices that allow automatic access to information and communication across a variety of applications [8]. Oz [9] summarizes key features of the MALL, including the opportunity to study without time and space, in both formal and informal settings, portability of mobile devices, and the opportunity for interaction between students and between students and their teachers. However, the key feature of any mobile reading environment is the ubiquitous nature of mobile devices. Research on the use of cell phones and mobile applications (applications) used in the teaching of English language shows that the implementation of mobile applications contributes to the development of all four language skills (reading, listening, speaking and writing). Following the study shows the use of ML in a variety of different domains:

A. Mobile Learning about Student Results:

Today, mobile learning is a well-established approach because of its innumerable benefits such as access to reading content anytime and anywhere, tailoring content and

student needs, and timely feedback. The purpose of this pilot study is to show that learning another language supported by a customized smartphone app can work to improve the performance of university students by using a smartphone app for continuous testing. How to conduct case studies of student needs, by analyzing statistical data collected. The results reveal that learning a foreign language, especially studying and updating English vocabulary and vocabulary with smartphones, is effective in improving the performance of university students. However, such learning should be tailored to the needs of the students and further developed by the teachers. Only then can it contribute to good learning outcomes. In addition, the results also confirm that mobile learning can serve as an appropriate way to recommend alternative courses of study delivery. Additional research should extend the mobile app to Apple and iOS platforms.

B. Promoting the use of ML in organizations:

Many organizations promote flexibility in the workplace, and mobile learning is part of that. Smartphones have completely transformed the space of training companies by becoming one of the most technologically advanced professionals in existence. A study conducted by the

Brandon Hall Group found that the provision of mobile education is one of the top three areas for business training. They use mobile learning because it gives employees a better learning experience. Many of the barriers associated with traditional classroom training, such as lack of time, overload of information, low student engagement, and limited access, can be prevented through mobile learning. Here are six reasons why your employees should be able to access mobile learning:

- **Provides a flexible learning experience**

Before the advent of mobile education, workers had to assemble in a prominent place to conduct training courses. Not all employees will be comfortable with this set because not everyone learns at the same speed. With cellular learning, staff training is not limited to four walls. It allows your employees to learn at their own pace from where they are comfortable, which means your remote employees can participate with their office-based peers. With a stable Internet connection, your employees can access reading content such as videos, documents, podcasts, URLs, and more for convenience. This allows them to select the type of content that is best for them.

- **Save a lot of time**

Several factors including the time, location, and availability of staff must be considered when planning classroom training for staff.

These features do not affect cell phone learning in the same way, so even more employees can be trained at the same time. A study by Merrill Lynch also found that mobile learning allowed employees to complete 45% of their studies faster, giving them more time for their normal activities. With mobile learning, more employees can be trained in less time without sacrificing data retention.

- **Teaches relevant skills to employees**

Unlike classroom training, your staff can take any course they feel is needed to improve their skills. This empowers them to manage their career advancement and motivates them to achieve their learning goals. Also, as technology is highly regarded in the workplace, your employees can learn how to use it easily with moving lessons. Having guides on how to use their mobile devices allows your employees to refer to them whenever they have doubts.

- **It leads to better business results**

Mobile learning is one of the most powerful new ways to grow your business. As it is easily accessible, your organization can respond well to changing market conditions. Qualified employees are efficient and tend to make better use of organizational resources. Also, as mobile learning gives employees more opportunities to improve their work, employee retention is growing.

So, this is a win-win situation for your organization and your employees.

• Improves employee engagement

Unlike the right size, every mobile learning model can provide customized training information to your employees, and this goes a long way in keeping them engaged. It allows them to access course content whenever they need it most. Mobile learning also supports fast, real-time feedback, improves student engagement and academic performance. It's perfect for thousands of years with Gen Z, who grew up technically.

• Improves staff performance

One of the most important aspects of mobile education is that it does not interfere with the normal work of your employee. Also, mobile learning content is interesting and engaging, allowing your employees to store information better. They can use this information very effectively in the workplace. When they need clarification, they can always find their mobile content and devices. Often, when employees realize that their organization is investing in new learning strategies to improve their performance, they tend to work harder to achieve organizational goals.

As the use of smartphones has grown exponentially, it is very important to recognize the importance of mobile learning and to build an effective learning system for your organization. It is one of the most

effective e-learning extensions, which can enhance the training and development of your organization. With a good Management System (LMS), making a mobile learning program easy. Zoho People's LMS can deliver training throughout your organization and provide a better e-learning experience for your employees. As part of the Zoho people's efforts to help organizations develop better learning programs, we are pleased to announce that our LMS module will now be available on our android and iOS mobile apps. Learning materials including videos, e-books, exams, test forms, and more are available on the go, skipping time constraints and location limits. The addition of features such as wireless internet access and other complex functions has transformed today's mobile phone for smart devices with many applications. One of these areas is the education sector, where a number of cell phone features are useful. The diagram shows mobile reading or special reading features. There are many defined features of m-Learning, such as (i) ubiquitous / automatic, (ii) mobile-sized mobile devices, (iii) confidential, (iv) integrated, (v) interactive and interactive, and (vi) details fast.

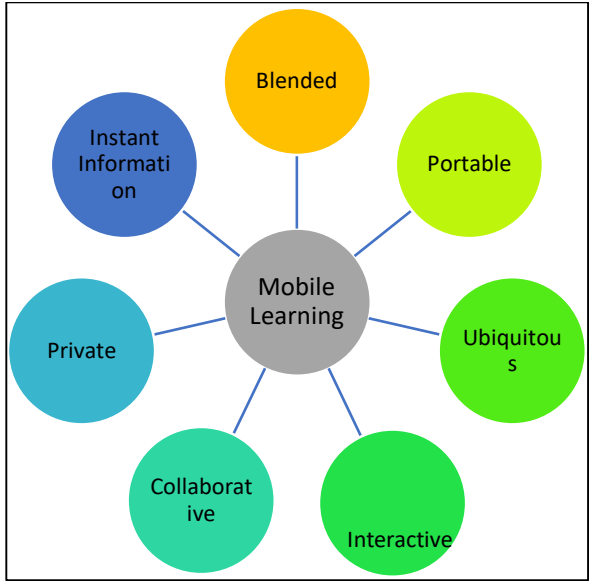


Figure: Mobile Learning or m-Learning special characteristics:

The e-learning domain today speaks more often about responsive designs and the latest authoring tools of today that claims to develop the best responsive e-learning module for an improved mobile learning experience. Following are the various factors that contribute to an improved mobile learning experience. Following are the 5 handpicked tips to improve the mobile learning experience.

A. Configure multiple devices

With the large number of mobile devices flooding the market, there is an increased risk of various screen sizes. For example, the iPad Pro version is 2048 x 2732 pixels, while the iPhone SE is 640 x 1136 pixels mobile. While the responsive design method helps to create an amazing reading experience on your device screens (to know more about responsive construction, read my

blog here) I recommend using the original mobile design method i.e. creating mobile content first before desktop.

B. Social Cohesion

Humans are social animals and therefore an organization can use this natural quality in humans to ensure an effective learning experience. For example, developers can install chat rooms, forums and other platforms where students can work with peers to share and share information. Developers should be very careful to ensure that the process is smooth for students and ensure a good environment for participation.

C. Microlearning

If you want to enhance your mobile learning experience, you need to make sure the modules are supermarkets, shorter and more functional. The limited time spent with students becomes increasingly difficult for various organizations. If the findings of the Microsoft study are to be believed, the human attention span (8 seconds) is less than that of a goldfish (9 seconds). While today’s organizations are still working to find the right strategy to engage and train students effectively, microlearning can be a viable solution here.

Microlearning is built on content that can be delivered in more than 3-5 minutes which ensures that reading comprehension is

improved. Short term is best suited for mobile.

D. Send reminders to your readers

Your beep and screen indicate that you have a message, technically called app notifications; organizations can effectively use these functions to send practical reminders to help students stay connected to study topics. Practical practical learning experience will not be available if there are continuous and unlimited breaks in the learning process. Practical reminders are therefore an effective way to bring back students and to help them finish their studies on time.

E. Feedback is important

The consistent response received by students is the most important information used by the organization and developers to improve reading knowledge. While designing a mobile learning experience, engineers should allow students to submit feedback. Personally I recommend collecting feedback that allows students to be anonymous. Anonymity can bring real comment and reduction.

F. Fix cyber security loopholes

It is the responsibility of the organization and the developers to ensure that cyber security measures are maintained and that

security measures are regularly updated. With increasing cyber security threats emerging daily, engineers should ensure that no spaces are left unattended. The organization should ensure that they have a good IT maintenance team to handle such threats if they exist.

BENEFITS OF MOBILE LEARNING

Following are Advantages of Mobile Learning:

1. **Convenience:** Information is readily available and is not limited to one location or time
2. **Involvement:** Content interactions can be personalized to facilitate motivation and engagement
3. **Collaboration:** Students can connect with online communities, such as forums and discussions
4. **Bite size:** Small content and buttocks content can be used to prevent overloading
5. **Accessible:** Classroom is ubiquitous and modern staff is scattered, allowing for wider access
6. **Costs apply:** Existing content can be used and reused.

CONCLUSION

The use of mLearning in the educational environment will have a positive impact on literacy. It seems that the next generation is

going to be very receptive to the use of new technology and in fact, they seem to be embracing it. Mobile reading has many educational benefits that simplify the learning process, and most importantly it is cheap, easy to find and the opportunity to read anywhere and anytime, as well as the speed of access to information, whether text or files. It is important to meet learning needs. Through a mobile phone we can provide educational experiences and things that meet each student's needs and circumstances. Mobile learning offers a wide range of educational services, messaging and multimedia messaging, WAP, Instant Service radio signals, and MSN service. The use of mobile devices in education has led to the establishment of some researchers in the field of appropriate learning in the appropriate modern ocean. Education is a new mobile approach to grade learning programs and is characterized by a teacher of geographical and instantaneous classification. Increasing learner ownership, making mobile phone delivery in schools a desirable, useful and viable technology learning tool. Finally, the researcher recommends: The need for tertiary education in Palestinian universities which calls for a clear impact on the educational system of the learning resource, and not just on the use of advertisements and general instructions and guidelines. The

need to study science to get positive results in the educational process of learning to progress at school or university level.

REFERENCES

1. Crompton, H (2013) A historical overview of mobile learning: Toward learner-centered education. In Z L Berge & L Y Muilenburg (Eds.), Handbook of mobile learning, Florence, KY Routledge, Italy, pp: 3–14.
2. Crescente, Louise M, Lee, Doris (2011) Critical issues of m-learning: design models, adoption processes, and future trends, J Chinese I IndEng 28: 111–123.
3. Trentin G, Repetto M (2013) Using Network and Mobile Technology to Bridge Formal and Informal Learning, Woodhead/Chandos Publishing Limited, Cambridge, UK.
4. Saylor, Michael (2012) The Mobile Wave: How Mobile Intelligence Will Change Everything. Perseus Books/Vanguard Press, p:176.
5. Rick Oller (2012) The Future of Mobile Learning (Research Bulletin). Louisville, CO: EDUCAUSE Center for Analysis and Research.
6. Hosmer C, Jeffcoat C, Matthew D, McGibbon T (2011) Use of Mobile Technology for Information Collection and Dissemination, Data & Analysis Center for Software.
7. Robinson R, Reinhart J (2014) Digital Thinking and Mobile Teaching: Communicating, Collaborating, and Constructing in an Access Age, Denmark.
8. Pachler N, Pimmer C, Seipold J (2011) Work-Based Mobile Learning. Concepts and Cases. Oxford, Bern, Berlin, Bruxelles, Frankfurt am Main, New York.
9. Klimova, B., 2019. Impact of mobile learning on students' achievement results. *Education Sciences*, 9(2), p.90.
10. Grant, M.M., 2019. Difficulties in defining mobile learning: Analysis, design characteristics, and implications. *Educational Technology Research and Development*, 67(2), pp.361-388.

11. Buabeng-Andoh, C., 2020. Exploring University students' intention to use mobile learning: A research model approach. *Education and information technologies*, pp.1-16.
12. Alshurideh, M.T., Salloum, S.A., Al Kurdi, B., Monem, A.A. and Shaalan, K., 2019. Understanding the quality determinants that influence the intention to use the mobile learning platforms: a practical study. *International Journal of Interactive Mobile Technologies (IJIM)*, 13(11), pp.157-183.
13. Suartama, I.K., Setyosari, P., Sulthoni, S. and Ulfa, S., 2019. Development of an instructional design model for mobile blended learning in higher education. *International Journal of Emerging Technologies in Learning (iJET)*, 14(16), pp.4-22.