

A HOLISTIC VIEW OF TECHNOLOGY DEPENDENT LANGUAGE LEARNING: A MOBILE BASED APPROACH FOR LEARNERS AND TEACHERS

MUHAMMAD MOONEEB ALI¹ AND TAYYABA YASMIN²

¹*Department of English Government College of Science Wahdat Road, Lahore, Pakistan*

²*Department of English, University of Education Lahore, Pakistan*

Abstract: Now days, the modernizations in the technologies are significantly contributing to the excellence in every discipline of the world including education. Despite limitations technologies related to every discipline the technology is swiftly fascinating fresh consumers, providing growing volume, and permitting more cultured use. Mobile technology is one of the innovations in this world of technology. Since the mobile technology is becoming quite available for every individual as well as society all around the world, it is also helping and playing a pivotal role in informal and formal context. All these features motivated the technicians to develop different technological applications related to Mobile and then the process of learning through mobile was initiated which is known as (ML) Mobile Learning. When we talk about Language learning through the use of mobile phone technology it is called Mobile Assisted Language Learning (MALL) which is trend and phenomenon in western society. The purpose of this study is to find out the principles, nature, pros and cons, and the upcoming challenges and prospects related to Mobile assisted language learning. This study will also focus upon the pedagogic implications with their applications and implications on Second language context of learning with special reference to Pakistani context.

Keywords: Technology, Mobile Technology, Mobile phones, Language learning, Pakistan.

Introduction

Contemporary era can be taken as an era of machines, systems, gadgets and latest technologies in every walk of life. Technology has conquered the world in every field and it is a living part of everyone's life. Before we discuss about importance of technology let us view some definitions of technology.

Dugger (1988) is of the view that technology is a discipline which can be taken as formal as well as academic Tihanyi and Roath (2002) propose that technology can include information that is not easily reproducible and transferable. Based on this Argument technology is seen as "tacit knowledge (Polanyi, 1967) or firm-specific,

secrets or knowledge known by one Organization" (Nonaka, 1994).

Mobile Learning Concept

Earlier the use of internet supported technological devices or computers were most common in learning like the cell phones and (PDAs) personal digital assistants which were used for emails and web surfing for language learning purpose (Chinnery, 2006). There are scholars who explain mobile as a method of acquiring knowledge by the process of conversation in different contexts amongst pupils and also for individual usage through different technological application (Sharples et al., 2007). The technology to support in this method involves any type of portable and handled gadgets like the cell phones, Android

Phones, personal digital assistants (PDAs), smart phones, I-Pads, I-Pods, etc. There are some scholars who are of the view that these Technologies can help in language learning as well due to their portability and mobility (Kukulska-Hulme, 2013). Mobile technologies includes Smart phones, E books, I -pads, I-pods, tablets etc. One can say that the mobile assisted technologies are making an interactive environment for learning both inside and outside the classrooms.

Results and Discussions

Mobile learning concepts and Pakistani class rooms

Mobile Language Learning and its Nature

Mobile assisted language learning is an area which has become a discipline now and it is growing by leaps and bounds. A lot of research has been conducted on Mobile assisted language learning which shows multiple aspects and paths of the use of mobile technologies with respect to students, teachers and class room. Technology in class room was once confined to the use of multimedia but with the induction of Mobile now the use of technology has been changed.

Lunsford (2010) is of the view that mobile technologies provide endless opportunities for connecting, learner productivity and useful educational applications.

The main components of ML are its portability, quality of being accessible cheaply, instructiveness and situational activities (Ogata & Yano, 2005). Accessibility helps the learners to connect locally and internationally which provides them with an opportunity to learn, earn and discuss.

Mobile Dependent Language Learning

There are numerous researches conducted on mobile technology and their assistances to learning of language. Furthermore, different researchers shared their opinions related to the benefits of Mobile technology for language skill development. One orthodox application involves the content delivery in language learning in which the scholars focused upon text messages for giving practice of vocabulary for puzzles and quizzes (Levy & Kennedy, 2005; Norbrook & Scott, 2003), as well as for short lessons (Thornton & Houser, 2005). There was a survey conducted in Japan related to their native learners which shows that the participants gave preference to Mobile technology as compared to computers and laptops for email exchange. Emails through Mobile technology has been used for learning idioms, vocabulary items as well as sentence structure (Thornton & Houser, 2005). Further, in Taiwan the native learners found out that the learning through mobile is fun and can be managed easily (Chen, Hsieh & Kinshuk, 2008). Apart from the delivery of the content, there are some other researches which explain the importance of Mobile learning. Dias (2002) proposed a web-board accessible via mobile phone so that the Mobile learners can share asynchronous exchanges which are text based. A hypothetically important component of mobile based devices depends up on the situation learning potential (Kukulska-Hulme & Traxler, 2005). Language can be learnt both inside and outside the class room so the context dominant learning is encouraged by the use of mobile technology helping to minimize the in class and out of class difference (Reinders & Lewis, 2009). If we look at the components of knowledge and skills linguistically, majority of the scholars examined acquisition of vocabulary, speaking and listening and reading and writing skills.

They found out and proposed multiple suggestions related to the benefits and positives of mobile technology usage in the class room so that the environment of fun learning can be created on contrary there are researches which analyzed that the applications of mobile technology in general aspect (Rosell-Aguilar, 2007; Hsu, 2012), they are of the view that some positive perceptions related to mobile phones and mobile technology is there are related to its usage application. As it becomes very helpful in learning language through technology which is indeed a new phenomenon

Pakistan's situation

Keeping in view all the above researches the researchers tried to find out the mobile technology usage in Pakistani context. They found out that there is no major research there which can discuss about the utility of mobile phone. One study by Ali, Malik & Rehman (2016) shows that the perceptions of the students in Lahore related to mobile technology's utility is quite. The study reflects that the mobile technology is peeping into the culture of Pakistan thus making it a regular feature of Pakistani class room but it also shows that there are only few glimpses of Mobile learning induction in Pakistani class rooms because of so many logistic problems. The study reflects that in big cities there are some reflections related to the use of mobile technology but it is totally absent in the rural areas and villages. The problem of load shading, administrative support and focusing to the same orthodox methods are depriving Pakistani teachers to use mobile technology in language learning

Mobile based Language Learning: Merits & Demerits

It is a usual aspect that the technology and latest innovations play important roles in language learning promotion multiple contexts. Learning language by devices not only helps the users to be candid and comfortable but also make them mentally free as they can learn in both formal and informal way. The latest mobile technology supports the user to develop numerous learning spots like when travelling through bus, sitting in a restaurant, on their jobs, in part etc. Rather the learners are not bound to learn in some specific timing, they are free to learn anywhere every time.

The importance of technology based Mobile language learning depends upon two important aspects that are connectivity and portability. Talking about connectivity, the technology of Mobile must be having the potential and capability to provide features like SMS, MMS, and other mobile applications. Presently keeping view this feature the android phones are introduced in the market which help to download application while being connected with internet and these applications once downloaded can be used without internet. On the other side the term portability depends upon two things one the size of the mobile device and secondly the durability. The small size of mobile helps the user to take it anywhere and durability also helps portability in a way that being durable the mobile device helps the user to be less anxious about carrying mobile everywhere with him or her. Lastly the term portability also helps to connect socially by data exchange and also the chance to learn language through mobile technology. The cheaper use of connecting and working like a mini computer is chief feature of mobile technology.

There are many demerits of mobile technology. There are many mobile phones which do not support educational application, hence cannot be used for the purpose of education. This is because of the structure and design of these devices which does not allow heavy educational applications which can help learners to learn language. This aspect sometimes makes the mobile phones slowly in process and also affects their performance. Sometimes these device which can support heavy educational applications are quite expensive and can't be used without proper training. It is the responsibility of the teacher to handle such tools which can be less heavy and easy understood by the learners. The rising of smart phones as latest technology bringing new mobile applications into use has turned the concept of learning in recent times now the use of those activities which are web based are growing day by day (Nah et al, 2008)

Thus, teachers must be alert and known to use different tools which can grasp the attention of the language learners. But one major demerit might be the small screen limited screen resolution and poor graphics (Albers & Kim, 2001)

MALL: some important reflections

In distributing Mobile technology based language learning let us look at from a framework perspective by segmenting the mobile technology into three layers that are pedagogical physical and psycho physical. These categories are inter-connected with each other and are pertinent with each other as well. If we talk about the nature of mobile learning technology we can view that they are portable and small thus making an eminent effect on the learners for new ways of reading and how every there are some physical aspects that are

hindrance in learning like size of the screen resolution of the screen and input method i.e. touch phone or buttons (Thornton & Houser, 2001; Stock well, 2008). Furthermore the problem of storing, uploading and processing any important information of the user is also a problem. In addition the battery time the battery life, charging issues i.e. through electricity or cell transferring exchanging and keeping a virus free data and device capability are some of the major concerns of the users and are the biggest hindrances in learning languages (Koole, 2009). Discussing pedagogical issues, some of the important concerns in mobile technological based learning is to make sure that all the tasks are pertinent to the device affordance. The early MALL researches there were tasks and activities which though were attractive but were not user or learner friendly. Sometimes the developers make applications which are computer friendly and based but are not pertinent and affective on mobile technology keeping in view their size storage capacity and specific technical features (Jones, 2011). Lastly, the issues related to psychology as well as society is also arouse mobile based learning. There are some features that prevent learners to learn rigorously. One can say that the inclusion of games, chat, Facebook, twitters and other social networking aspects have given learners an option to switch from learning any time. Secondly there are some observations that these applications hinder the primary aspect of the mobile technology used for learning purposes (Schroeder, 2011). So rather than concentrating all the time for learning the time span related to its use may be enhanced but time specifically used for learning is quite less. Because of these factors the results of learning language through technology may not be affective. Mok (2012) is of the view that having mobile device with multiple applications does not indicate that the learners will automatically choose only

applications that support learning. As mobile technology is a package of so many applications like social networking, weather update, temperature details, Google maps, GPS, and many others so by owing a device does not reflect that a user is ready to learn. The overall features are so many that it might be difficult for the teachers to concentrate learners only on learning applications.

Conclusion

A lot of generalities are found in the related literature of mobile assisted language learning. Herrington, Herrington, and Mantei (2009) presented a common principle design for mobile assisted learning. These comprised of delivering time for investigation of mobile technologies, blending the non- mobile and mobile technologies, using the mobile learning individually as well as collaboratively, and employing the learners' own mobile devices. Mobile dependent learning of language has some pros and cons. There lies a propensity in applying mobile solutions for learning, nationally as well as internationally keeping in view the merits of mobile technology for language learning. Amongst some important merits for mobile technology for language learning are accessibility, quality of being authentic where as there are some cons of this technology i.e. the quality of the device, the software used for learning purposes, the pertinent accent, style and pronunciation for language learners, sometimes ESL learners find difficulty in learning language in native style. Secondly sometimes accessibility and mobility becomes a demerit as learning is always done in a specific environment keeping in view the noise, ambiance, and other supporting features. Mobile language learners sometimes face noisy, disturbing, and uncomfortable environment for language learning which affect their performance. There must be a proper method in using mobile

technology for learning a language and if the chief aim is to learn language accurately the connection between these limitations and the ESL theory and research should be strong enough to find out easy and affective ways for language learning (Chapelle, 2001; Doughty & Long, 2003). Therefore some proper training is required to the teachers for using mobile technology in language class room. Similarly some specific sessions are required for the learners as well to understand the quality use and relevance of mobile technology for language learning. They must be given an in depth analysis by the trainer on what to use where to use and how to use mobile technology in their language learning endeavors Hubbard (2013) made a case for learner training in other aspects of Computerized assisted language learning and Mobile learning is not exempted from those challenges which the researchers has mentioned. No one can deny the importance of mobile technology in general but after all the use of mobile for learning purposes in general and for English language learning in specific is dependent upon the learners. They learners have to find out ways which can incorporate their learning processes. And mobile learning should also be viewed like other technology implications in accordance with their style of learning (Chun, 2001; Heift, 2002).

The overall aspects discussed are pre dominantly present in Pakistan as well where the use of mobile phones and mobile technology is usually done for the purpose of sending and receiving calls. SMS, MMS, and other modes of connectivity. With the inclusion of android phones in the market the users in Pakistan are now mainly using some other applications for connecting with each other like Viber, Whatsapp, LINE, IMO and others. Apart from that in Pakistan the mobile user is totally focusing some other features of technology like Google maps, GPS, some

recreational applications, games and other related applications. All the major features of mobile technology discussed in this article are also present in Pakistan.

The concept of using Mobile technology for educational learning and language learning is still a new component in Pakistani class room. Here the learners can indulge themselves in other activities rather than focusing on language learning applications. Secondly the teachers might face difficulty in controlling the class as it is difficult to teach through mobile without proper training. Lastly the accessibility of some useful western applications for language learning should be made possible so that Pakistani learners can learn language in a proper way.

References

- Albers, M., & Kim, L., 2001. Information design for the small-screen interface: an overview of web design issues for personal digital assistants. *Technical Communications*, 49 (1), 45-60.
- Chapelle, C., 2001. *Computer applications in second language acquisition: Foundations for teaching, testing and research*. Cambridge, United Kingdom: Cambridge University Press.
- Chinnery, G., 2006. Going to the MALL: Mobile Assisted. *Language Learning, Language Learning & Technology*, 10 (1), 9-16.
- Chen, N.-S., Hsieh, S.-W., Kinshuk., 2008. Effects on short-term memory and content representation type on mobile language learning. *Language Learning and Technology*, 12(3), 93-113.
- Chun, D., 2001. L2 reading on the web: Strategies for accessing information in hypermedia. *Computer Assisted Language Learning*, 14(5), 367-403.
- Dias, J., 2002. Cell phones in the classroom: Boon or bane? *C@lling Japan*, 10 (2), 16-21. *Journal of Second Language Teaching and Research* 1(1)
- Godwin-Jones, R., 2011. Emerging Technologies. Mobile Apps for Language Learning. *Language Learning and Technology*, 15(2), 2-11.
- Hubbard, P., 2013. Making a case for learner training in technology enhanced language learning environments. *CALICO Journal*, 30(2), 163-178.
- Herrington, A. Herrington, J. & Mantei, J., 2009. Design principles for mobile learning. In J. Herrington, A.
- Herrington, J. Mantei, I. Olney & B. Ferry (Eds.), *New technologies, new pedagogies: Mobile learning in higher education* (pp. 129-138). Wollongong: University of Wollongong. Retrieved from http://ro.uow.edu.au/my/jnusta/v2n3/v2n3p131_MokJ.pdf.
- Heift, T., 2002. Learner control and error correction in ICALL: Browsers, peekers, and adamant. *CALICO Journal*, 19(2), 295-313.
- Koole, M., 2009. A model for framing mobile learning. In M. Ally (Ed.), *Mobile learning: Transforming the delivery of education & training* (pp. 25-47). Athabasca: AU Press.
- Kukulka-Hulme, A., 2013. Mobile-assisted language learning. In C. Chapelle (Ed.),

- The encyclopedia of applied linguistics* (pp. 3701-3709). New York: Wiley
- Levy, M., & Kennedy, C., 2005. Learning Italian via mobile SMS. In A. Kukulska-Hulme & J. Traxler (Eds.) 76-83. *Mobile Learning: A Handbook for Educators and Trainers*. London: Taylor and Francis
- Lunsford, J., 2010. Using handheld technologies for student support: A model. *Journal of the Research Centre for Educational Technology*, 6 (1), 55-69
- Dugger, W.: 1988, 'Technology – The Discipline', *The Technology Teacher* 48(1), 3–6.
- Mok, J. C. H., 2012. Facebook and learning: Students' perspectives on a course. *Journal of the NUS Teaching Academy*, 2(3), 131-143. Retrieved July 15, 2013 from <http://www.nus.edu.sg/teachingacad>
- Nah, K. C., White, P., & Sussex, R., 2008. The potential of using a mobile phone to access the Internet for learning EFL listening skills within a Korean context. *ReCALL*, 20(03), 331-347.
- Norbrook, H., & Scott, P., 2003. Motivation in mobile modern foreign language learning. In J. Attewell, G. Da Bormida, M. Sharples, & C. Savill-Smith (Eds.), *MLEARN 2003: Learning with mobile devices* (pp.50-51). London: Learning and Skills Development Agency.
- Nonaka, I., 1994. A Dynamic Theory of Organizational Knowledge Creation. *Organization Science*, 5, 14–37. <http://dx.doi.org/10.1287/orsc.5.1.14>
- Ogata, H., & Yano, Y., 2005. Knowledge awareness for computer-assisted language learning using handhelds. *International Journal of Learning Technology*, 5(1), 435-449.
- Polanyi, M., 1967. *The Tacit Dimension*. NY: Anchor, Garden City.
- Rosell-Aguilar, F., 2007. Top of the pods-in search of a podcasting “podagogy” for language learning, *Computer Assisted Language Learning*, 20(5), 471-492.
- Reinders, H., & Lewis, M., 2009. Podquests: Language games on the go. In Andreade, M. (Ed.), *Language Games*. Alexandria: TESOL.
- Schroeder, S., 2011. Mobile games dominate smartphone app usage [STATS]. Retrieved July 22, 2013 from <http://mashable.com/2011/07/07/smartphone-mobile-games/>.
- Sharples, M., Taylor, J., & Vavoula, G., 2007. A theory of learning for the mobile age. In Andrews, R. & Haythornthwaite, C. (eds), *The Sage Handbook of E-learning Research*. London: Sage, 221-247.
- Thornton, P., & Houser, C., 2005. Using mobile phones in English Education in Japan. *Journal of Computer Assisted Learning*, 21, 217-228.
- Tihanyi, L., & Roath, A. S., 2002. Technology Transfer and Institutional Development in Central and Eastern Europe. *Journal of World Business*, 37, 188-198. [http://dx.doi.org/10.1016/S1090-9516\(02\)00077-9](http://dx.doi.org/10.1016/S1090-9516(02)00077-9)