The effects of Assistive technology learning in a language course

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ABSTRACT

Technology assisted learning is a phenomenon that has greatly changed the way learning is undertaken in the 21st century. Developments in information and communication technologies have led to the emergence of smart phones such as Blackberries and iPhones. The concept of mobile assisted learning, which is a subset of technology assisted learning, has emerged as a result of these technological developments. This paper is going to examine how technology assisted learning influence the effectiveness of the learning process. The following is a qualitative research where 20 male and 20 female university language instructor were interviewed, the results of the study show that mobile-assisted learning can improve grammar skills among students studying English, that Mobile-assisted learning is one of the best alternatives that can be used to compliment or replace face to face learning, that use of iPhone and Blackberry assisted learning has a potential of distracting students. Future research should be done on ways of improving mobile assisted learning so that this phenomenon can be adopted and replicated globally. Research should also focus on content and curriculum development. Future research should also be conducted to investigate whether the potential negative effects of mobile aided learning are valid.

Keywords: **technology, assisted learning, I-phones**

INTRODUCTION

The advancements made in communication technologies have availed useful opportunities that can bring revolutionary changes in the education system. Educators have increasingly adopted emerging technologies in order to improve the learning experiences for their students. Technology assisted learning has enabled the creation of interactive, vivid and playful learning environments, which can support virtual discussion, multimedia presentations, and online exercises. The internet and other communication gadgets have played a significant role in enabling technology assisted learning, because the internet has provided a platform that enables effective learning and the dissemination of information.

In the recent past, technology assisted learning has attracted the attention of researchers. This is because technology assisted learning has a significant and long term effect on education. In addition, many institutions of learning are increasingly adopting information and communication technologies in their curriculum. The long-term effects of technology assisted learning are not clearly known. Hence, technology assisted learning is an issue that requires further studies.

Smart phones such as Blackberry and iPhones are increasingly being used in learning. Currently, Blackberries and iPhones are being used to support different types of learning, ranging from classroom learning, to learning of languages. These smart phones are increasingly being preferred as tools of learning due to their portability. The purpose of this research is to examine how Blackberry and iPhone technology assisted learning has enhanced the effectiveness of education.to do the final formatting of your paper.

LITERATURE REVIEW

The history of technology assisted learning can be traced to 1960s, when Richard Atkinson and Patrick Suppes, who were both psychology professors at Stanford University, conducted an experiment whereby computers were used to teach reading and mathematics to elementary school children [2]. The early computer based technology assisted learning was meant to mimic the traditional classroom teaching styles. Later, technology assisted learning that encouraged developing and sharing of knowledge was established. The development of technology assisted learning saw some universities start offering online courses in 1970s and 1980s [1].

Research has been conducted to compare the effectiveness of learning offered through technologies such as Blackberry and iPhones, to the conventional learning that is normally conducted using face to face communication. Several studies that have assessed the effectiveness of technology assisted learning have concluded that it has a positive impact on the learning process. Studies have indicated that students who are taught through technologies such as Blackboard mobile, offered by Blackberries, normally develop a positive attitude toward their instructor [8]. These students are also likely to rate the quality of their course much higher as opposed to other learners who are taught through the traditional face to face method. Using portable technological gadgets of learning such as smart phones encourages students to provide feedback about their learning experiences. However, there are studies which have found that technology assisted learning does not necessarily yield better results compared to face to face education conducted in the classrooms [5].

Other studies have found that the success in education through mobile technologies assisted learning, and classroom teaching are the same. Therefore, these researchers hold that using mobile technologies in learning does not significantly impact the learning process. The available literatures on how Blackberries and iPhones affect the effectiveness of learning give an equivocal opinion [3]. Other researchers have found that Blackberry and iPhone teaching technologies have the potential of facilitating certain types of instruction methods as opposed to others. Research has also indicated that learning through technologies such as those provided through iPhones and Blackberry, normally brings about learning satisfaction among students. However, there are other researchers who have associated smart phone technology assisted education with high rates of school dropout [10].

Some scholars have tested learning through iPhones and Blackberry phones using experimental learning models. Experimental learning model makes assumptions that learning occurs through experiences, which are reflected upon and conceptualized to result into actions. Based on this model, some scholars argue that the learning offered through Blackberries and iPhones can be less effective when applied in certain areas of learning, especially in languages [7]. For example, when students are learning a language, which has speaking sessions or that provides for various playing roles, they can be easily able to identify their weaknesses. In addition, this process can help students reflect on the methods of improving their language skills. Scholars who view technology assisted learning as inadequate in teaching certain subjects, have held their opinions on the grounds that it lacks concrete experience [4].

Technology assisted learning disseminated through Blackberries and iPhones, can effectively support other aspects of learning. This is because technology assisted learning enables various learning materials to be adequately accessed. Moreover, technology assisted learning conducted through iPhones and Blackberries enables students to access reading material at their preferred pace and time. Students can access these learning materials repetitively; all these factors enhance the learning process. Therefore, through the use of iPhone and Blackberry technology assisted learning, students can study at their pace. These technologies are also advantageous because they can be easily utilized in and outside classroom. Through the use of these phones, students can practice and study information on various topics at their own convenient time and place [4].

Blackberry and iPhone technology assisted learning can either be conducted through face to face, online, or through distant learning methods. The pioneering project mobile assisted learning was established by Stanford University where the university used mobile phones to teach Spanish. Smart phones have been increasingly used in language learning through MALL (mobile assisted language learning), which is a subdivision of the broader mobile learning (m-learning). Researchers have observed that teaching through iPhones and Blackberry technologies requires the development of an effective curriculum and a comfortable teaching platform that incorporates pragmatic teaching practices. The current mobile assisted learning technologies only enable students to access learning materials, but the technology does not allow them to interact with their instructors. This has been cited as one of the reasons that may make mobile assisted learning less effective [4].

Blackberries and iPhones assisted learning technologies can effectively support individualized learning. Due to other special features found in these gadgets such as cameras, smart phones can be used to induce various innovations in classroom learning. However, use of mobile assisted learning has also posed certain challenges to the educators, a factor that may serve to reduce the effectiveness of these technologies in teaching. For example, some scholars have observed that mobile assisted learning can interfere with literacy among students because it may encourage texting. In most cases, mobile phone texting is normally done using abbreviations, a factor that can further interfere with literacy development in the students [4].

The mobile technology has also changed the relationship between students and teachers. Studies have revealed that most students are technologically savvy especially when it comes to using smart phones. When teachers fail to incorporate these technologies in their classes, they are sometimes faced with a lot of resentment from students. It is the popularity of iPhones and Blackberries among students that has created the demand for integrating these gadgets in the education system through mobile assisted learning. Some researchers have noted that prior to the incorporation of mobile assisted learning in schools; teachers had to literally compete for students' attention with these devices. Therefore, incorporating mobile assisted learning in the education system has enhanced the effectiveness of the learning process. This has seen various schools in the United States invest millions of dollars in technology assisted learning in order to attract the attention of the students [6].

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However, some researchers have warned against the incorporation of mobile assisted technologies in the education system. These researchers have argued that the technology can reduce the effectiveness of the learning process. Smart phones like Blackberries and iPhones bombard the minds of students with different information. Some scholars have argued that this is unhealthy to young minds because it interferes with the ability to concentrate on one task, which is an essential requirement in classroom learning. Concisely, these scholars argue that incorporating smart phones in the education system has the potential of making students to develop attention deficit disorder. Incorporating Blackberries and iPhones in technology assisted learning can also make students find the conventional face to face mode of instruction as boring and less stimulating. This may prevent students from reading print sources such as books, which are still important in teaching [6].

Despite the above potential negative impacts of mobile assisted learning on the effectiveness of the learning process, progressive research continues to indicate that Blackberry and iPhone technology assisted learning, have a positive impact on the effectiveness of learning. This is because mobile assisted learning avails opportunities that were not available through e-learning. Blackberries and iPhones have enhanced the effectiveness of learning by eliminating the barriers to learning caused by time and place. Research has indicated that young learners find mobile assisted learning highly effective, and forty-five percent of young learners in the United States and other western countries prefer the use of Blackberries, iPhones and other mobile gadgets, as the only method of instruction. Mobile assisted learning also enhances the effectiveness of education by motivating students, given that motivation is one of the key elements in this sector [9].

The technology makes the subjects and courses pursued by students amusing. The multi-media aspects incorporated into learning through this technology such as animation, videos, and audios, increase the level of students' curiosity to learn, which enables faster learning and retention of the information learnt. Basically, Blackberry and iPhone technology assisted learning may enhance the effectiveness of the learning process in three different ways. These include: enabling access of learning materials at anytime and place, motivating students to learn by making the learning process interesting, and increasing the interaction between teachers and students by availing timely feedback [9].

METHODOLGY

The purpose of this research is to determine whether Blackberry and iPhone technology assisted learning enhance the teaching process. Research in this field has been influenced by the increase in the use of mobile assisted technologies toward learning. This has been mainly observed in the learning languages, where universities and other institutions of learning have adopted mobile assisted learning in teaching these dialects. In addition, various opinions have emerged in relation to the use of mobile technologies in education. Therefore, it is a worthy exercise to try and determine how Blackberry and iPhone technologies assisted learning enhances the entire learning process. The methodology utilized in this research is a qualitative approach through interviews with university language instructors at a university located in the Eastern Province of Saudi Arabia. The sample of instructors interviewed were that of 20 Male and 20 female English language instructors. The analysis of the qualitative data gathered resulted in following.

The results of the interviews indicate that mobile-assisted learning can improve grammar skills among students studying English. This shows that mobile-assisted learning has the potential of improving the performance of students in a wide range of subjects. Mobile-assisted learning according to this survey was found to be useful especially in improving those subjects that do not require intensive human interaction.

These results also showed that Mobile-assisted learning is one of the best alternatives that can be used to compliment or replace face to face learning. This is because mobile assisted learning is cost effective as compared to other technology based modes of instruction. However, the analysis of data also found that mobile-assisted learning may be less effective in certain aspects of learning especially the type of learning that require concrete experience. This was evident in the analysis whereby it was noted that mobile assisted learning positively impacted on the ability of students to acquire vocabulary, but did not assist students when it came to comprehension and listening.

The findings of this study imply that designers of mobile application used in mobile learning and educators should ensure that the content delivered through these gadgets can be easily comprehended by students.

However, the data also noted some of the potential negative consequences other researchers had previously noted. For example, this research found that use of iPhone and Blackberry assisted learning has a potential of distracting students. This can occur especially when some students during lessons offered through these mobile phones engage in other activities such as charting in social networks. Another potential problem of using mobile phone in learning is that these gadgets can interfere with concentration among students. This has made some

researchers to recommend that mobile-assisted learning should only be used to compliment face to face learning and not substitute it. Other have held the opinion that mobile-assisted learning should be blinded by the traditional face to face mode of instruction for maximum benefit to be realized.

DISCUSSION

The hypothesis of this study is whether Blackberry and iPhone technology assisted learning is likely to influence the learning process. Therefore, the study anticipates that the data collected and analyzed in this research will support the hypothesis. It is expected that these groups will report that the period they will spend under mobile assisted learning, will be more pleasant, fun and effective in aiding their understanding of English as a language. Going by the results of studies conducted in this area, it is expected that at least fifty nine percent of all the subjects taking part in assisted technology learning will report that Blackberry and iPhone technologies assisted learning was effective in enhancing their learning experience. It is also expected that students who will be subjected to mobile assisted learning, will perform slightly better than their counterparts who will not have been instructed using technology assisted learning.

The findings of this research imply that mobile assisted learning has a positive effect on the learning process, and therefore should be adopted in learning together with the conventional face to face instruction. However, more research still needs to be conducted on how to construct comprehensive mobile assisted learning that can take care of all the students' needs. Additionally, the research should also concentrate on finding solutions to some of the challenges faced by the teachers and the students as a result of using the current mobile technology.

CONCLUSION

From the literature review, it is evident that mobile assisted learning offered through Blackberries and iPhones can enhance the effectiveness of the learning process. This is achieved in three different ways. Firstly, mobile assisted learning technology enhances the effectiveness of learning and due to the availability of learning materials, students can access the materials from any place or at any time. Secondly, mobile assisted learning enhances the effectiveness of learning by motivating students. This is brought about by the fact that this mode of teaching makes the entire process of learning to be interesting and fun, hence enabling retention. Finally, mobile assisted learning increases interaction between the teachers and the students, a factor that enhances teaching.

Future research should be done on ways of improving mobile assisted learning so that this phenomenon can be adopted and replicated globally. Research should also focus on content and curriculum development. Future research should also be conducted to investigate whether the potential negative effects of mobile aided learning are valid. In order to improve the research, a larger sample size that ensures adequate representativeness and generalization, should have been used. However, this requires a large amount of resources and time, which are not currently available.

There is concrete evidence which indicates that mobile assisted learning conducted through iPhones and Blackberries has the potential of enhancing the effectiveness of the learning process. This brilliant idea will, if implemented at the global level, help in ensuring that knowledge and information is available at a reasonably priced cost, and this could make education affordable to everyone. The idea of mobile assisted learning can also be useful in improving access and education standards in the developing countries [9].

.REFERENCES

[1] Allen, M. W. (2003). *Michael Allen's guide to E-Learning: Building interactive, fun, and effective learning programs for any company.* Hoboken, NJ: Wiley.

[2] Broadbent, B. (2002). *ABCs of E-Learning: Reaping the benefits and avoiding the pitfalls*. San Francisco, CA: Jossey-Bass/Pfeiffer.

[3] Buckingham, D. (2007). *Beyond technology: Children's learning in the age of digital culture*. Cambridge, MA: Polity.

[4] End, C. M., Worthman, S., Mathews, M. B., & Wetterau, K. (2010). Costly cell phones: The impact of cell phone rings on academic performance. *Teaching of Psychology*, *37*(1), 55-57.

[5] Haq, I., & Dacre, J. (2002). Computer assisted learning in undergraduate and postgraduate rheumatology education. *Oxford Journals, 42*(2), 367-370.

[6] Heo, J., Ham, D. H., Park, S., Song, C., & Yoon, W. C. (2009). A framework for evaluating the usability of mobile phones based on multi-level, hierarchical model of usability factors. *Interacting with Computers*, *21*(4), 263-275.

[7] Hui, W., Hu, P. J., Clark, T. H., Tam, K. Y., & Milton, J. (2008). Technology-assisted learning: A longitudinal field study of knowledge category, learning effectiveness and satisfaction in language learning. *Journal of Computer Assisted Learning*, *24*, 245–259.

[8] Kidd, T. T., & Song, H. (2008). *Handbook of research on instructional systems and technology.* Hershey: Information Science Reference.

[9] Koszalka, T. A., & Ntloedibe-Kuswani, G. S. (2010). Literature on the safe and disruptive learning potential of mobile technologies. *Distance Education*, *31*(2), 139-157. (Times New Roman ,10 font)