FACEBOOK MEDIATED INTERACTION AND LEARNING IN DISTANCE LEARNING AT MAKERERE UNIVERSITY

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ABSTRACT

This paper reports on an investigation of the use of Facebook as a tool to mediate learning amongst distance learners at Makerere University, a dual-mode institution offering both conventional and distance learning programs. While conventional courses take 17 weeks in a semester, the distance learners come in for two residential sessions, each lasting for two weeks. The study focused on Bachelor of Commerce (External) students doing an Introduction to Information and Communication Technology course. This course was run through face-to-face sessions and the use of Facebook to increase interaction among learners. Out of the 650 students on the course, 621 joined the Facebook class page. In this paper we report on the students' perceptions about using Facebook for teaching and learning, and specifically if it mediated interactive learning. The Facebook class page was used as a discussion board. The questionnaire on which this evaluation was based was uploaded two months after the course ended. Interactive feedback through posts, 'likes' and comments were received from students. Results show that learners appreciated the use of Facebook for interactive learning, hence fostering meaningful learning. We also tried to match the affordances of Facebook for modeling, contingency management, feedback, instructing and questioning. Feedback and questioning were well received on Facebook during the course, indicating that Facebook mediated interaction and learning. We contend that if Facebook is to be used for meaningful teaching and learning, then there must be an appropriate and systematic mechanism for integrating educational activities in the platform.

KEYWORDS

Facebook, Distance Learning, Mediation, Interactive Learning

1. INTRODUCTION

World over Distance Learning has been presented as a viable alternative to traditional methods of teaching and learning for addressing the massive demand for higher education (Mayende, Divitini & Haugalokken, 2006). Uganda introduced free universal primary and secondary education in 1997 and 2007 respectively. This has led to increased demand for university education (Aguti, 2002). According to Aguti and Fraser (2006), in distance learning, the learner spends most of his/her time away from the university studying on their own using learning materials which are either print, electronic or both. Makerere University distance learners come to the University for residential sessions twice a semester. Most of the remaining time, they are at their work places or homes. Distance learning at Makerere University is still in the first generation, relying on print materials and occasional face-to face sessions. Students are distributed across the country in places where access to electricity and Internet is a problem (Aguti & Fraser, 2006). The distance learning materials are designed to be interactive; that is, they act as the teacher to the learner, thus enhancing independent learning (Oliver & Herrington, 2003). However, even if distance learners have well developed learning materials, they require additional support away from the University. Various distance education practitioners have advocated for the use of ICTs in the teaching and learning (Aguti & Fraser, 2006; Muyinda et al, 2010; Kajumbula, 2006). They have for instance advocated for and undertaken research in the use of mobile phones for teaching and learning on distance learning programs (Muyinda et al, 2010).

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Facebook is a social networking site that allows students to interact with one another informally (Rambe & Ng'ambi, 2011). However, little research has been done to find out if Facebook can be used as a tool to mediate learning. This paper investigates how Facebook mediated learning amongst distance learners at Makerere University. Mediation, according to Vygotsky (1978), is the guidance given to the learner to acquire unique human knowledge or moving a learner from their current knowledge level to the point of knowing.

2. LITERATURE REVIEW

2.1 Inter and Intra-Psychology and Facebook

This paper explores the use of Facebook for interactive learning. Continuous interaction among learners breeds inter- and intra-psychological learning (Vygotsky, 1978). Inter-psychology begins as a social interaction between individuals and, as this interaction goes on, it is internalized hence intra-psychology (ibid). When knowledge is internalized as a result of continuous interaction, it becomes part of us. In order to get to intra-psychology one must be guided/assisted (Vygotsky, 1978). Since intra-psychology arises from inter-psychology, which begins with social interaction, therefore, social networking sites like Facebook can afford or mediate inter- and intra-psychology.

2.2 Mediation of Inter- and Intra-psychology

Mediation is a fundamental concept of human development. Mediation can be defined as a process of supporting a learner to learn new concepts by the tutor or by more capable peers. Facebook comes in handy in mediating the interaction and learning among distance learners, hence potentially leading to inter- and intra-psychology. Mediation can guide the learner to acquire his/her accessible knowledge, which we refer to as the zone of proximal development (ZPD). Vygotsky (1978) believes that language is the primary mediator. However, Gallimore and Tharp (2002) have argued that, it is not only language that develops the mental cognition. They proposed five means of assistance to learning: modeling, contingency management, feedback, instructing, and questioning. Our analysis of the affordances of Facebook as a teaching tool is based on this framework.

Modeling is a process of assisting through imitation. Usually learners (most especially young learners) learn by imitating. Although it is clear that modeling can assist learning, Facebook does not fully support modeling as a mode of assisting learning. However, in circumstance where pictures and videos are uploaded on the Facebook class page, learners can learn through imitation.

Contingency management "is the means of assisting performance by which rewards and punishments are arranged to follow behavior, depending on whether the behavior is desired or not." (Gallimore & Tharp, 2002: 179). Gallimore and Tharp (2002) further assert that effective teaching and learning depends more on positive rather than negative rewards. That is why we are encouraged to use only positive rewards. However, since contingency management does not introduce new behavior, a teacher who is interested in introducing new behavior should use other methods of assistance. Contingency management on Facebook can be supported by positive comments and by using the 'like' functionality. Teachers or students can 'like' each other's comment or post, thus giving positive feedback. Likewise, they may share positive and constructive comments.

Feedback is the process of responding to what someone else has done. To Gallimore and Tharp (2002: 180), "[s]imply providing performance information is not feedback; there will be no performance assistance unless the information provided is compared to some standard". In distance learning, instructors are encouraged to give feedback on assignments to help learners improve their learning. When using Facebook, teachers should avoid giving performance information that does not assist the learner.

Instructing is the process of assisting the learner through telling him/her what is supposed to be done. Instructing is a behaviorist approach to learning (Saul and Patti, 2008). Instructing is still a common practice with tutors who deal with large classes like those on the distance learning programs at Makerere University. For instruction to be effective, it must be blended with other methods of assisting learning, like contingency

management and feedback, where applicable. Although Facebook does afford for instructing, we did not use it much for instructing on this project.

Questioning is a very important method that assists performance although many teachers confuse assessment questions with assisting questions. It should be noted that not all questions assist performance. Assessment questions are aimed at finding out the ability of the learner to perform without assistance while assistance questions are used to provoke the thinking of the learner to the level the learner would not have attained by himself/ herself. If the tutor understands how to question, then Facebook offers that possibility.

The discussion above has elucidated that learning can be teacher or fellow learner or technology mediated. The rest of this paper zeroes in on technology (Facebook) mediated learning.

2.3 Technology Mediated Learning

Technology mediated learning refers to using technology to assist learning (Oliver & Herrington, 2003). Recently, there has been increased use of new technologies in teaching and learning (Daina Laurillard, 2006). Collis (1977) cited in Oliver and Herrington (2003) argues that when using technology for learning, there is need to re-engineer the entire learning design rather than just re-packaging content electronically. Usually, we design learning environments that mimic the teacher in a traditional class (Oliver & Herrington, (2003). This is common in the distance learning classes because of the large class sizes. Oliver and Herrington (2003) have suggested three important components for improving online learning design, namely: tasks to engage and direct the learner, supports for the online learner, and the learning resources. They also believe that we should have authentic tasks which help learners to learn so that the learner mimics the real working environment. They indicate that "flexible and online learning environments need learning supports to be designed as integral parts of the learning process" (p. 14). They further contend that when dealing with a learning support component, there is need to work carefully on the supportive tutor role which should provide learners with feedback and guidance on requests and most especially at critical points in the learning process. These are affordances inherent in Facebook since it can be ported on multiple platforms, including mobile phones.

2.4 Facebook as a Mediator of Learning

Vygotsky (1978) argues that social interactions are seen to play a critical role in the processes of learning and cognition. We also realize that learning support can help mediate learning through providing guidance and feedback to the learners (Oliver & Herrington, 2003). Facebook can ensure that guidance and feedback is achieved. Rambe and Ng'ambi (2011) believe that the use of Facebook reinforces the rights to inform and be informed and such interaction leads to rich knowledge resources based on multiple voices. Vygotsky (1978) says that development can be achieved through the collective nature of human consciousness manifested through social interaction. Rambe and Ng'ambi (2011) identified the need for the active presence of the learners and tutors on social media for the learners to have someone to interact with at any time. This can then help reduce the feeling of isolation characteristic of distance learning.

There are also challenges involved when using Facebook. It is estimated that online teachers spend 90% of their planning and development time creating content and online learning resources (Oliver & Herrington, 2003). Mediation is the guidance that goes beyond online content. Rambe and Ng'ambi (2011) identified challenges of using social networking sites as redundant postings, limitations of collective responsibility, subtle negotiations of power between educators and learners, and confusion of roles among novice learners. They observed that some of the challenges of using Facebook as a pedagogical tool are both the educator gaining access to Facebook spaces of all learners and ensuring that every member of the class is a friend of everyone. They argue that Facebook violates personal privacy, and some students may be skeptical about participating in academic activities that invade their personal lives and "comfort zones".

Different scholars have suggested the use of different activities in online learning design. Online learning mainly supports activities designed to involve peer cooperation and collaboration (Oliver & Herrington, 2003). This is eminent in social networking sites like Facebook. Anderson (2003) argued that if any of the interactions, namely, teacher-to-learner, learner-to-learner and learner-to-content are increased, then meaningful learning can take place. Rambe and Ng'ambi (2011) found out that Facebook could be accessed anywhere, anytime by students using mobile phones. This is also evident in the research done by Muyinda and Mayende (2013), which showed that the majority comments and posts on the class Facebook page were from mobile phones.

3. MATERIALS AND METHODS

Facebook was used in conducting the Introduction to ICT course taught to third year Bachelor of Commerce (External) students at Makerere University. This course was run in the second semester of academic year 2012/2013. The class capacity was 650 students but only 621 joined the Facebook page. The course ended in May 2013 with the students sitting end-of-semester examinations. Two month later, we posted a qualitative questionnaire on the Facebook class page to find out how students felt about Facebook as a tool to mediate interactive learning. The questionnaire and the comments were read by every member who visited the page. This provided interactive feedback and verification of the students' comments. We also interviewed two students to get a better insight into how students used Facebook and how it could mediate learning. These students were randomly chosen from the students who had responded to the questionnaire.

4. FINDINGS

Most of the posts on the page vividly indicated that Facebook as tool for mediating learning could not replace the teacher. One of the comments read, "Seeing a teacher in class is more important, practical and effective. The explanations were better understood than on Facebook." Students provided various reasons to support their stance. For instance, some students felt that it was difficult to explain complex concepts using Facebook. Other students felt more confident listening to a human teacher than reading Facebook text and most especially when the majority of text was coming from their peers. Student's numbers were very big as mentioned earlier. It was therefore difficult for the course facilitators to read the different posts and comment on each one of them. Also Facebook has no affordance of enabling teachers and learners see each other's facial expressions. Facial expressions sometimes help the learners to comprehend complex concepts. It can also help the teacher to read from learners' faces whether or not they are confused. In support of this imperative, one of the students said, "Seeing a teacher in class is more important, practical and effective". Explanations were better understood in the physical classroom than on Facebook. This also relates to another post which indicated that the gestures made by the teacher during the face-to-face sessions, caused the students to understand better than on Facebook. Students preferred discussing their minds with their teacher face-to-face than on Facebook. Some students felt that their Facebook page had too much text and required them to read all the time. Ideally, this means that despite the affordances Facebook offers, students did not enjoy reading too much and, sometimes, repeated text from multiple learners.

With the above negativity, one would be left to wonder whether Facebook mediated learning at all. The negativity was attributed to the newness of this mode of support. It was the first time learners were using Facebook for learning support. It is hoped that as time goes by, learners' perceptions could change. Already, numerous positive perceptions were registered.

Some students felt that Facebook was very important and they explained how it mediated learning. "Facebook gave me access to lecture notes through the upload functionality on the Facebook group page," said one of the students. Another said, "Facebook gave me the opportunity to access the class from anywhere and anytime via my mobile phone". Another said, "Facebook gave me opportunity to learn while out of class and in a more convenient way".

Some students suggested that both face-to-face and Facebook are vital and can complement each other. The teachers were able to find out areas where students were finding problems so as to give further explanation during residential sessions. So Facebook helped teachers to know the ZPD of their learners. The students also said that Facebook was good for interaction. This interaction is what Vygotsky (1978) says begins as inter-psychology and leads to intra-psychology when it is internalized. Anderson (2003) argues that if there is increased interaction either between learners and learners or between teachers and learners, meaningful learning occurs. This shows that Facebook as a tool can mediate learning since it afforded students the possibility to interact. Students shared and discussed ideas with teachers and with their peers. Students also said that Facebook helped them to be guided on how to do certain things in the right way by asking their peers or the teacher. This suggests that guiding learners caused them to learn, hence Facebook mediated learning.

Students also reported that the teacher was able to ask them questions on Facebook and the learners responded, which created interaction. Gallimore and Tharp (2002) say that questioning is one way of assisting learning. Students felt that prompt answers made by the teacher made the learners learn better. Feedback is a key aspect in assisting learning. However the type of feedback matters as mentioned earlier. Students felt that Facebook helped them do revision. This means that they found content which could be discussed on the class page. Content is vital to the learning process. By providing access to content, Facebook mediated learning. Students said that some of the content discussed on Facebook appeared in the final examinations, meaning that the content was relevant and the students learnt it. Students said that Facebook enabled them to read widely; whenever they found new concepts of Facebook, they researched further into them. Therefore, it is clear that Facebook mediated learning through questioning that made the students look for more information. Students also felt that Facebook was vital for the students who did not attend face-to-face sessions. Students felt that Facebook enabled them to receive frequent updates about the course. This administrative support is equally important for learning. Students also appreciated the experience of using Facebook in the class room environment. They also gained confidence in using computers during the course unit since some of them had never used computers for learning before.

In using Facebook for mediating learning, several challenges were registered. Some students indicated that they failed to download the notes which were uploaded on Facebook. This was common because the majority of students were using mobile phones some of which did not support the download function. Also some students did not know how to download content from Facebook, which calls for basic training of the learners in using Facebook before the course starts. Another challenge related to limited access to Internet-ready computers, hence limited access to Facebook. Some of the students had access to the computers at the main campus; but these too were too many for the few computers at their disposal. Students said that Internet access was a problem and hindered their usage of Facebook. Given that there is a cost attached to accessing Internet both through mobile and computers, students found a problem accessing Facebook. Some students also said that they found problems with mobile network coverage when they travelled. Also, some students did not have Facebook accounts and others had mobile phones which did not have capability to access Facebook. Such learners were thus disadvantaged.

Students' suggestions for improving Facebook usage in teaching included: providing constant feedback from the teacher so that the students continue to be engaged and guided in the process of their learning, and increasing participation of the student peers so as to increase interaction.

5. CONCLUSION

The possibility accessing Facebook on mobile phones gave distance learners an opportunity to access the class. Given that the majority of the distance learners have no access to computers and Internet from their places of aboard, mobile phone access to Facebook offers the best alternative. The use of Facebook in the teaching and learning helped to support modeling, contingency management, feedback, instructing and questioning. Modeling and instructing could be supported through videos uploaded on the class page. For contingency management, students felt that they were not sufficiently rewarded with positive comments. Facebook allowed students to easily give feedback to each other through 'liking' peers' comments. Facilitators were called upon to increase interaction and give timely feedback to comments. Students also said that Facebook helped them to get guidance. Facebook supported feedback as mentioned in the results. Therefore, Facebook mediated learning through feedback and questioning. It was established that questioning was possible through Facebook but teachers were cautioned to be careful not to confuse assessment questions with assisting questions. There is need to systematically integrate the activities in the teaching and learning using Facebook in order to achieve meaningful mediated learning.

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