STUDENT EXPERIENCES OF TECHNOLOGY INTEGRATION IN AN ACCOUNTING COURSE

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ABSTRACT

Technology, when used appropriately, can assist with high-quality learning and teaching. However, using technology in the context of a developing country like South Africa often remains unexploited owing to lack of access, lack of bandwidth and its prohibitive cost to students. As one of the largest open distance learning (ODL) institutions in the world, facilitators at the University of South Africa (Unisa) are constantly being challenged to lessen the negative impact of the distance between students and the providing institution. However, it is often argued that decisions about the use of various technologies are driven without considering students' perceptions and/or preferences on the use of these technologies.

This paper investigates students' views and experiences on the integration of social network sites (SNS), mobile messaging applications (MMA) and podcasts into their second-year Accounting course at Unisa between 2007 and 2010. The results reveal students' enthusiasm for some technologies and limited interest in others. On the basis of the evidence provided, it is clear that the use of technologies in South Africa is unique when compared to developed countries. This needs to be considered by facilitators if the potential benefits of technologies in South Africa are to be used effectively.

KEYWORDS: Accounting, Mobile Messaging Applications (MMA), Open Distance Learning (ODL), Podcasts, Social Network Sites (SNS), South Africa

1.   INTRODUCTION

SNS such as Facebook, Twitter and MySpace as well as MMA WhatsApp, BlackBerry Messenger and MXit (a well-known instant messaging application in South Africa) are applications where the millennial generation (those born after 1982) (Hanson, Drumheller, Mallard, McKee & Schlegel 2010:23) meet to communicate, share photos and discuss ideas. In most ODL environments, interactive technology-mediated education creates a richer atmosphere for learning by focusing on connection, interaction, exploration and discovery compared to the previous one-way transmission of information (Oliver & Goerke 2007:171; Waddoups & Howell 2002:1).

Technologies of the 21st century bring different challenges for higher education institutions and many are responding by experimenting and implementing these new applications (Uğur, Akkoyunlu & Kurbanoğlu 2011:5). At Unisa, facilitators are also

considering the possibilities of including various technologies into courses to lessen the transactional distance. For some students living in a developing country, SNS and MMA are often unfamiliar concepts and applications. Even though some elite group of students (as proposed by Czerniewicz & Brown 2011) comes with these technology proficiencies to an ODL institution, students' expectations may differ on how, where and when technology should be used within their courses.

As part of a case study, SNS, MMA and podcasts were incorporated into a second-year Accounting course (FAC2602) at Unisa over a period of four years. Since limited research has previously been done on the use of technologies in Accounting courses at Unisa, this paper reports on how students perceive the integration of these applications into the FAC2602 course. The results may assist in planning more effective interventions in other courses, which might have a positive impact on students' distance learning experience.

2.   LITERATURE REVIEW

SNS can benefit students as they are now able to access content from leading facilitators and researchers around the world through wikis, online videos and podcasts (Siemens & Weller 2011). As the millennial students have grown up in a technologically rich world using mobile phones, e-mails and computer games frequently, they are focused on interaction and connectedness (Hanson *et al.* 2010:23). This has caused universities to rethink not simply isolated features but their entire mission and how they go about it (Moreno & Mayer 2007:309). Seeing that literature is largely univocal about the importance of interaction in ODL courses (Bates 2000; 2005; Garrison & Vaughan 2008; Moore 1989:1), universities are investing heavily in learning technologies to facilitate improvements with respect to the quality of learning (Concannon, Flynn & Campbell 2005:501). An interactive technology-mediated ODL course may also reduce the isolation that some distance learning students experience (Birch & Volkov 2007:291; Waddoups & Howell 2002:1).

The advances of technologies over the years offered new paradigms for university teaching and learning. However, SNS are not explicit learning environments as users of Facebook who attend university do not make much use of them for direct educational purposes (Siemens & Weller 2011). Selwyn (2007) analysed over 68 000 Facebook wall postings by students, and found that education- and university-related exchanges accounted for only a small portion of the traffic. Students use SNS primarily for social conversations. There is a strong resistance from students when universities and facilitators make use of SNS as this is seen as an invasion of their social space (Madge, Meek, Wellens & Hooley 2009:141).

Most of the available research on the use of SNS was carried out in developed countries. In South Africa, the situation is different as most of the students are not familiar with these new digital media. Czerniewicz and Brown (2011:860) thus classify South African students as "digital strangers", but noticed, however, that these students all have access to and experience of mobile phones. The fact that mobile phone networks extend to rural areas in South Africa (Barker, Krull &

Mallinson 2005; Brown 2004; Sharples, Taylor & Vavoula 2005) allow people in rural communities not only to make phone calls, but also to make use of the advantages of mobile services such as text and multimedia messaging. Although students may still have limited access to the internet via their mobile phones because of the associated costs, ODL in South Africa can be more effective and can benefit a larger number of students if basic mobile phone technology is used effectively in distance learning courses.

3. BACKGROUND TO THE STUDY

The main mode of teaching delivery at Unisa is printed study material. Contact between facilitators and students is limited and consists mainly of telephone calls and e-mails. FAC2602 is a semester course, presented to second-year Accounting students in the Department of Financial Accounting in the College of Economic and Management Sciences. Students from the FAC2602 course were chosen for the study because the researcher was the primary lecturer on the course and could thus assist students with the different topics covered in the study material, which made it suitable for purposes of the study. In 2010, the content of the FAC2602 course consisted of two topics, namely group financial statements and statements of cash flows.

Although FAC2602 facilitators conducted group discussion classes in the major centres in South Africa, less than 12% of the registered students attended these classes during the period 2007–2009. The reasons for non-attendance varied from lack of interest to logistical concerns and difficulty in getting time off from work (Prinsloo & Van Rooyen 2007:58). ODL in South Africa thus faces a challenge to redevelop a culture of interactive teaching and student support (Heydenrych 2009:22), and the FAC2602 facilitators were hoping that SNS, MMA and podcasts would assist them to reach more students. In 2007, the FAC2602 facilitators integrated short message systems (SMSes) into the course. In 2008, the MXit application, and in 2010, the Facebook and Twitter SNS as well as podcasts were implemented.

4. METHODOLOGY AND RESULTS

As mentioned previously, SMSes and MXit were integrated into the FAC2602 course as part of the MMA. Students registered for the course would receive an informational, academic or motivational SMS every week during a particular semester (Van Rooyen 2010a:47). MXit was used to communicate with the FAC2602 students during the day, at night and even over weekends (Van Rooyen 2010b:52). In 2010, accounts for the FAC2602 course were opened on both http://www.facebook.com and http://twitter.com and a notification was added on *my*Unisa (an online student academic portal) to inform students about the accounts.

Besides the aforementioned applications, the FAC2602 facilitators also recorded a total of 28 podcasts in 2010. These podcasts contained explanations with regard to the Accounting concepts embedded in the topics covered in the FAC2602 course. The podcasts were uploaded on *my*Unisa and were also copied onto three compact

discs (CDs) which were sent to every student registered for the course. The reason for this being that the FAC2602 facilitators were of the opinion that not all students have access to the internet (Prinsloo & Van Rooyen 2007:59) to download the podcasts from *my*Unisa. Students had to listen to the facilitator explaining concepts and steps to follow in various calculations on the CD tracks or podcasts while working through visual materials in an accompanying tutorial letter.

Throughout the research project, e-mail and MXit conversations between facilitators and online students as well as comments posted by students on the FAC2602 discussion forum on *my*Unisa were copied and saved. In addition, a short questionnaire was posted on *my*Unisa in April 2010 to determine how FAC2602 students perceive the use of various technologies in the course.

As only 279 (10.57%) of the 2 638 registered students answered the questionnaire, no generalised assumptions about the whole population could be made, but the data gathered provided some insight.

Results	Percentage of respondents
Have access to a computer	91.04%
Have easy access to the internet	70.20%
Have read the posts on the discussion forum on *my*Unisa	69.84%
Have downloaded study material from *my*Unisa	72.22%
Prefer not to receive study materials online only	69.89%
Have received the FAC2602 SMSes	97.57%
Have applied the SMS instructions in the study programme	78.37%
Are of the opinion that the SMSes have motivated them in their studies	86.94%
Are familiar with MXit	43.73%
Have found the CDs/podcasts intervention useful	83.47%
Have downloaded podcasts from *my*Unisa	9.87%
Have preferred group discussion classes to CDs/podcasts	25.32%
Are undecided on preference – discussion classes or CDs/podcasts	27.47%
Will like similar type of CDs/podcasts in other courses	71.49%

A very low percentage of the 2 638 students registered on Facebook and Twitter. In total, 35 (1.33%) FAC2602 students registered on Facebook and 3 (0.16%) students on the Twitter site. No students asked any academic questions during the semester on either of the two SNS applications.

A few extracts from comments students posted on *my*Unisa are provided below. The extracts are direct quotes and the grammar and spelling errors have not been corrected. The quotes are anonymous:

Distance learning is hard enough because of the lack of lecture contact. My hat goes off to the FAC2602 team. From the SMSes, Mxit and Facebook, I have been very impressed and appreciate the help tremendously! Please could you let the course co-ordinators and lecturers of other modules in on this concept of using technology to their advantage in communicating with the students.

I was rather surprised to receive my first SMS on the 30th of April, considering I live in Germany. Thank you for your continued efforts to improve the presentation of the subject matter and for involving us, your students, in the process.

Another great idea from the FAC2602 team. The CDs helped a lot, it was like having a lecturer ;-)

Thank you very much for the CD, it is also a great help in that one can't always attend the extra classes. Replacing the class with a CD is wonderful, I can use them at my own time and they have been a great help.

In general, the perceptions were positive with regard to the use of SMSes and CDs/podcasts. The author felt more connected to the students and was convinced that students were supported in a way most (if not all) could benefit from. The same applied to most of the students, as many positive messages were posted on the discussion forum.

5. CONCLUSIONS

Although SNS and MMA are used by international ODL institutions, these applications are not always accessible and familiar to students in South Africa. As most students in South Africa have mobile phones, it is possible to increase the effectiveness of teaching and learning through SMSes. It was also evident that South African students prefer the more familiar technologies and want to receive the CDs via post compared to international students who prefer to download the podcasts from *my*Unisa.

From an academic perspective, the findings of the research offer insight into the use of various applications to assist students in South Africa in their learning experience. As only a small number of FAC2602 students gave feedback, the findings of the research can however only provide some insight into the possibilities of reaching and assisting more students. Further research with larger samples is necessary to investigate the sustainability of using SNS and MMA for teaching and learning. Unisa facilitators will have to be ready to Face(book) their students in future when they WhatsApp them.

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