Small Talk Versus Smart Talk: Providing Accounting Content and Emotional Support in a Distance Education Course

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Abstract. Integrating mobile phones into higher education, and more specifically in the distance education context, is no longer regarded a strange phenomenon. Mobile devices are widely used by distance education institutions to make learning available and accessible to increasingly more students. Although mobile learning provides more mobility and convenience to these students than online learning, students may still experience the distance gap if communication and guidance are not incorporated into the presentation of a course. Börje Holmberg refers to this guidance of the student by the facilitator as 'didactic conversation'. His theory postulates conversation as essential in a distance education course to explain content, and to correct and redirect the student. By creating a sense of emotional involvement, students will feel more connected to the course than before, which will inevitably increase study pleasure and motivate students to learn.

This paper reports on a case study of a selected group of students' perceptions and experiences of the use of mobile phones in an accounting module at the University of South Africa to bring about more didactic conversation. Making use of short message service (SMS) and instant messaging software on mobile phones, regular communication between the facilitator and the students was increased. The qualitative data provided insight into how participating students perceived the use of these tools to assist them in their studies. Based on the evidence provided, it was evident that mobile phone intervention increased communication and exchanging of views. Creating a feeling of empathy and belonging, students enjoyed their studies and felt motivated to persist throughout the semester.

Keywords: Accounting · Didactic conversation · Emotional support · Mobile phones

1 Introduction and Background

Research conducted by the South African Institute of Chartered Accountants (SAICA) reveals a current shortage of approximately 17 000 accountants and more specifically 5 000 chartered accountants (CAs) in South Africa (Marshall 2014;

PricewaterhouseCoopers 2012; SAICA 2012). Institutions of higher education play a pivotal role in reducing the shortage of this scarce skill that appears twelfth on the official list of top 100 scarce skills (Republic of South Africa 2014:17). Attempts are made to reduce this shortage by way of undergraduate and postgraduate qualifications offered by 14 SAICA-accredited residential universities in South Africa as well as the University of South Africa (Unisa), the largest open distance learning (ODL) university in the country (SAICA 2014; Van der Post 2010). The bulk of accounting students (60 %) in South Africa complete their undergraduate qualification on a full-time basis at residential universities (Olivier and Bulman 2009).

Students who want to pursue their CA career on a part-time basis (as most BCompt students at Unisa do), are required by SAICA to enter into a five-year training contract with a registered training office and obtain their undergraduate degree within five years (SAICA 2012). Research conducted by SAICA reveals that the throughput rates of both undergraduate and post-graduate accounting students studying at the various distance learning institutions in South Africa is considerably lower compared to that of students studying at residential universities (Olivier and Bulman 2009). While Unisa has a major market share in accounting education in South Africa (around 40 %) (College of Accounting Sciences 2014), its throughput rates (of about 20 %) compared to national figures are considerably lower than those of residential universities (see Table 1).

Table 1. Accounting students' enrolment: comparison between South Africa and Unisa

Year	National			Unisa			Total market	Percentage graduates produced for the sector
	Head-counts	Graduates	Through-put rate	Head-counts	Graduates	Through-put rate		
2005	88 062	12 267	14 %	34 516	2 099	6 %	39 %	17 %
2006	94 530	14 019	15 %	39 070	1 773	5 %	41 %	13 %
2007	95 125	14 465	15 %	41 618	2 087	5 %	44 %	14 %
2008	95 410	14 341	15 %	44 375	2 185	5 %	47 %	15 %
2009	97 613	14 591	15 %	44 284	2 060	5 %	45 %	14 %
2010	93 753	14 196	15 %	42 841	3 153	7 %	46 %	22 %
2011	95 925	14 408	15 %	45 422	3 043	7 %	47 %	21 %
2012	81 306	14 635	18 %	33 446	2 895	9 %	41 %	20 %

(College of Accounting Sciences 2014:online)

Being employed full-time as trainee accountants while studying part-time at Unisa unavoidably places many challenges on the successful completion of these tough qualifications (Olivier and Bulman 2009), resulting in low retention and throughput rates of these students. Furthermore, distance education (DE) students are required to have sufficient discipline to work through course material and assignments on their own and at their own pace. They have no or limited contact time with facilitators as well as other students and may struggle to stay focused and motivated in their studies (Holmberg 2005; Olivier and Bulman 2009; Simonson, Smaldino, Albright and Zvacek 2012).

Considering the high dropout and low throughput rates of accounting students at Unisa, the researchers have embarked on a research project to explore the possibilities of enhancing student support to accounting students enrolled at Unisa to increase their throughput rate, as this will inevitably help to alleviate the shortage of accountants and CAs in South Africa. The purpose of this paper is thus to report on a case study to understand the possible effect of mobile technology in improving the retention and throughput of a selected group of accounting students at Unisa by applying Holmberg's (1982) theory of didactical conversation. This paper commences by contextualising the case study within the current scholarly discourse, followed by a brief exposition of the research design and a description of the mobile intervention as case. The paper concludes with a summary of the main findings as well as a conclusive reflection on the study.

2   Literature Review

Research by a variety of scholars in the DE and ODL fields (refer Bates 2005; Birch and Volkov 2007; Garrison and Vaughan 2008) has established that students' success depends not only on the quality of the learning package, but also on the quality and scope of support given to these students. Studies have shown that motivation is important in DE courses (Rice 2006; Simonson *et al.* 2012; Simpson 2002; 2004) and, although literature confirms that motivation is an important factor in dropout rates of students in DE and ODL institutions (Berge 2001; Perraton 2000; Simonson *et al.* 2012), retention rates have always been lower in DE when compared to traditional face-to-face education (Simpson 2004). Some have criticised DE for its lack of personal contact (Frank, Reich and Humphreys 2003) and noted the sense of isolation students feel in DE courses (Abrami, Bernard, Bures, Borokhovski and Tamim 2011; Abrami and Bures 1996).

Research has shown that high dropout rates can be improved through blended instruction (Rowley et al. 2002), motivational messages (Visser et al. 2002) as well as other means of student support to improve performance and retention. Thayer, Newman and McClain (1994:910) explain that emotion is related to motivation as people tend to do things they hope will lead to happiness and satisfaction, or as Bradley (2000:602) describes it, "both emotion and motivation are fundamentally related to action". Sincero (2012:online) defines emotion as "the conscious and subjective experience that is characterised by mental states, biological reactions and psychological expressions". In addition, Sincero (2012:online) postulates three links between emotion and motivation, namely–

- both activate or energise behaviour;
- emotions often go together with motives; and
- basic emotions have motivational properties.

The theories of Maslow (1970) have shown to be still relevant to understand the role of motivation in the learning process, namely being a psychological process where behaviour is directed towards a goal based on an individual's needs. Bandura (1989:729) is of the opinion that self-efficacy is related to motivation in that if students believe they have the capability to perform a task and that performance would then lead

to a positive result, they would be motivated to perform. Additionally, Hurd (2000:61) claims that for DE students, the demanding nature of self-instruction together with the shift in the locus of control from facilitator to student implies that only those students who maintain their level of motivation are likely to succeed. Motivation is hence a major factor in a student's study efficiency, and its effect on students' success has been explored by various authors (Koen 2007; Pizzolato 2004; Robotham and Julian 2006; Yorke 2004).

Literature has also shown that various factors can influence the motivation of students. In this regard, Keller (1999:7) argues that, although motivation is personal, student motivation can also be affected by external factors. Hurd (2000:61) identifies difficulty in assessing personal progress and perceived inadequacy of feedback as examples of such factors related to the distance learning environment. In order to be successful, students need to be persistent. In research conducted by Morgan and Tam (1999:99), four categories of persistence barriers that may have an effect on a student's motivation were identified, namely:

- *situational barriers*, which arise from a student's particular life circumstances (such as a changed employment situation, changed marital status or having a baby);
- *institutional barriers* are difficulties students experience with the institution (such as admission requirements, course pacing and limited support services);
- *dispositional barriers* are personal problems that affect students' persistence behaviour (such as a student's attitude, confidence, learning style and motivation); and
- *epistemological barriers* are impediments that are caused by disciplinary content knowledge or the relative perceived difficulty of that content.

Considering that students are not passive receivers of education, but active participants who are positioned in specific socio-economic, capital, habitus, attribution, locus of control and self-efficacy circumstances which have an effect on their motivation (Prinsloo and Subotzky 2009; Subotzky and Prinsloo 2011), involving students emotionally in their studies is especially relevant in a DE module. Motivation is essential for learning and performance, especially in a technology-mediated environment where students must take an active role in their learning (Lee 2000) and motivation is optimised when students are exposed to a large number of motivating experiences on a regular basis (Debnath 2005; D'Souza and Maheshwari 2010; Palmer 2007). Communicating effectively and with ease with students via electronic means, independent of time and place, is perceived by many to be a real advantage (Ebersole and Vorndam 2003:15; McCorkle et al. 2001:16).

Considering literature relating to students' emotional involvement and motivation, the present study set out to understand students' perceptions on and experiences of the use of mobile phones to involve them emotionally in their second-year Accounting module (FAC2602). The study made use of mobile phones to provide the students with motivational messages and by doing so to increase the didactic conversation necessary for emotional support. The didactic conversation theory, which was introduced by Börje Holmberg (1982), highlights the importance of dialogue between facilitator and student. Holmberg's theory (1982) implies the creation of a feeling of connectedness promoting study pleasure and motivation, particularly if two-way communication exists. Holmberg (1989:162) has this to say:

> Central to the learning and teaching in distance education are personal relations, study pleasure, and empathy between students and those representing the supporting organisation.

Holmberg's theory implies that by increasing the use of technologies in a DE student's study package, student support is improved as the didactic conversation is increased between facilitators and students (Kelsey and D'Souza 2004; Simonson *et al.* 2012). This was especially relevant to this research project which made use of mobile phones to support students. If the mobile phone could provide a motivating stimulus or incentive to generate a need or desire that causes a student to act (Williams and Williams, 2011:1), the participating FAC2602 students would hopefully react on the stimulus.

Mobile technologies enable people to communicate regardless of their location (Zawacki-Richter et al. 2007). As mobile phone networks extend to rural areas (especially in South Africa) (Barker et al. 2005; Brown 2004; Sharples et al. 2005), they allow people in rural communities not only to make phone calls but also to enjoy the benefits of mobile services, such as text and multimedia messaging. Not only does mobile support have the potential to improve students' throughput rates and enhance the quality of the learning experience, but research also confirms that students find mobile learning fun (Pieri and Diamantini 2009). Besides, students in mobile learning project trials have indicated that they not only enjoy the content, but they also love the collaboration (Colley and Stead 2004).

The research project reported on in this paper was part of a case study examining the effect of technologies on the retention and success rate of accounting students at Unisa. This paper reports on students' perceptions on the possibilities of using SMSes (short message service) and MXit (instant messaging software application developed in South Africa that runs on mobile phones) to assist with the transfer of accounting concepts and providing emotional support. By applying the framework of Holmberg (1982), this paper makes a contribution to the deepening understanding of the retention and throughput rates of accounting students in an ODL environment. The study has shown that retention and throughput rates can be improved through the lessening of the transactional distance between facilitator and student and by improving the quality and extent of the two-way didactic conversation in the learning process.

3   Research Design and Execution

The study participants were the 2 732 students registered during the second semester of 2012 for the second-year Financial Accounting module FAC2602. These students formed part of the mobile phone intervention project. Before the study commenced, these students received printed study material only. This project consisted of an introduction to the use mobile phone technology– such as SMSes and MXit– by the facilitator of the FAC2602 accounting module to communicate with students. These students were invited to make use of these applications to ask the facilitator questions and to communicate with other students. The interventions have been introduced and observed, and are discussed in the following subsection.

3.1   SMS Intervention

The first mobile phone intervention commenced by using SMSes to communicate with the FAC2602 students on a weekly basis. The SMS-to-student intervention was aimed at giving advice and making suggestions to students by providing information related to their studies. The FAC2602 module is a semester module, and a semester generally runs over 15 weeks (from close of registration to the start of the examination period). The SMSes were compiled by taking the total pages of the FAC2602 study guide (thus indirectly the course content) and dividing the total number of pages by 15. However, the difficulty level of the topics, the number of pages per topic and the assignment due dates were also considered when these SMSes were compiled, which resulted in a total of 12 SMSes per semester. Every SMS had a limitation on the number of characters; 160 characters or fewer. The SMSes were sent to students (always including the FAC2602 code) on a Monday morning to inform the students which section of the study material they had to cover during the particular week. Another objective was to incorporate a more personal conversation style between the lecturer and the students and to involve the students emotionally (to encourage and motivate them). Some of the SMSes sent to the FAC2602 students during the second semester of 2012 are included in Table 2. All SMSes are repeated here verbatim.

Table 2. SMSes sent to FAC2602 students during second semester of 2012

Wording of SMS
Welcome to FAC2602! Lecturers will SMS every week with workload for that week. Start 20/7.No text book for this module
FAC2602. Let's do pages 1-36 of guide this week. Do all exercises-do not just read thru text.1st compulsory assignment due 10/8
FAC2602.Do revision. WORK thru Q1-Q14 in tut 102.Do not look at answer b4 Q completed. Mark. Must complete within time
Good luck with FAC2602 exam Tuesday. Do all questions! Show all calculations. U've come a long way-u can do it!!

3.2   MXIT Intervention

The second mobile intervention used during the research project was MXit, which is an inexpensive instant messaging software application developed in South Africa, and which runs on mobile phones. Founded in 2003 by Namibian-born software developer Herman Heunis, MXit has since attracted more than 15 million users in the developing world (Heunis 2009). Although MXit users in South Africa have decreased from 10 million in 2012 to 5 million in 2014 (Groupe Speciale Mobile Association [GSMA] 2014:16), MXit allows users to send and receive one-on-one text messages to and from other users. Currently, MXit is a free mobile social application (MXit Lifestyle 2014). As the MXit function on mobile phones allows for instant messaging or communication between people, the FAC2602 facilitator was hoping that the MXit intervention would help to increase the didactic conversation.

At the start of the present research, an SMS was sent to all registered FAC2602 students. The SMS included the MXit number, and invited the students to connect with the lecturer via MXit. The relevant weekly MXit times were included in the SMS and were mostly at night (between 19:00 and 23:00) as many of Unisa students work during the day and study at night. On average less than 10 % of the FAC2602 students per semester registered for MXit. Although the number of students who actually participated in the MXit intervention seem low, texting and communicating with on average 10 % of these students at a time was quite daunting as the two-way conversations are instantly and every participant expected the lecturer to answer as quickly as possible. For this reason, the lecturer decided to increase her available time for questions on MXit, to allow students to ask questions over a longer period of time (including during the day) and that resulted in fewer students being active on MXit at a given time.

MXit language is different from the traditional English language, and the participating FAC2602 students also made use of this language, which is similar to SMS language. The students often made use of emoticons or textual portrayals of their moods or facial expressions. In addition, MXit users mostly do not use their family name; they prefer to register with an alias. Table 3 gives a few examples of abbreviations and emoticons used in MXit messages as well as one lecturer–student conversation (verbatim).

The instant two-way communication MXit provides assisted the lecturer to provide students with the emotional support they so often need before sitting for an examination. Two lecturer–student conversations a day before an FAC2602 examination appear in Table 4 (verbatim).

3.3   Assessing These Interventions

In order to understand the possible effect of these interventions on the didactical conversations (Holmberg 1982) and subsequently on the retention and throughput rates of these students, the FAC2602 students were asked to share their perceptions and experiences on the use of mobile phones through a self-administrated questionnaire with 11 open-ended questions. This questionnaire was piloted in November 2012. Feedback was received from five students. On 22 November 2012, the questionnaire was made available on *my*Unisa (an on-line student academic portal) to all registered FAC2602 students. A total of 70 questionnaires were returned. Thus, by adding the five pilot studies, a total of 75 questionnaires were collected. Although a small percentage of students completed the questionnaire, rich data was received and the researchers were of the opinion that saturation had been reached. The qualitative data was analysed using Atlas.ti and various themes and codes were identified for interpretation. The interpretation of the themes and codes specifically related to the theory of didactic conversation is discussed in the next section.

Table 3. MXit language and MXit lecturer–student conversation during semester

MXit abbreviation	English word or phrase
Hw r u, hru	How are you
Gtg, g2g	Got to go
brb	Be right back
b4	Before
cos, coz, bcoz	Because
gr8	Great

zaksi (20:16)	Hell0..
zaksi (20:19)	In study guide..study unit 4..ques 1..page 53..why is pr0fit f0r the year in d inc0me statement and pr0fit f0r the year in the analysis tw0 different am0unts?
zaksi (20:20)	S0rry..page 51 and 52
Lecturer (20:21)	Which amounts? R538 000? And?
zaksi (20:20)	340 000 and 168 000..pr0fit after tax
Lecturer (20:23)	The R168 000 is the profit of the sub. Refer calc page 53. The R340 000 is the profit of the group (parent and sub 168 000).
zaksi (20:24)	0h yes! Thank y0u ☺
Lecturer (20:25)	Pleasure

Table 4. MXit lecturer–student conversations one day before an examination

bianca (15:28)	thanks btw I wish every module had this help
bianca (15:29)	Enjoy ur day guna go thru more questions and if I got a prob il come online
bianca (15:29)	☺
Zaakir (14:41)	Thanx.. So nervous 4 tomoro
Lecturer (14:42)	Not to worry. U have worked during the semester and Im sure u r ready 4 the exam. Will do well!! Good luck!
Zaakir (14:43)	Thx mam ☺

4   Findings

The didactic conversation theory of Holmberg (1982) emphasises the imperative of a two-way conversation between the facilitator and the student. It furthermore postulates that when the conversation encompasses emotional aspects, this will enhance student retention and throughput. Codes used to describe the participating FAC2602 students' perceptions and experiences on the use of mobile phones to involve them emotionally are identified in Table 5. These codes have been classified as either negative or positive.

Table 5. Codes used to describe emotional involvement

Theme identified	Related codes
Involve emotionally	Negative – alone, depression, hopeless, introvert, lonely, stress, surprise
	Positive – belonging, boost, connected, contact, cool, encourage, enjoy, entertain, feeling, freedom, friend, happy, interesting, involve, looking forward, motivate, reassurance, recognition, relationship, surprise, team, wow

The negative codes relate to the participants' uneasy experience of a learning environment lacking didactic conversation, and are associated with failure, stress, depression and fighting a lonely battle. The positive codes relate to participants' encouraging experience of support, success, good morale and self-esteem, and confidence.

Regarding the language used in the SMSes and MXit conversations, participants were pleased. One participant explained the conversation "was easy going and I didn't feel the need to get my back up with someone telling me what to do" (P27)[1]. The regular interaction also motivated the students and changed their "negative attitude towards our studies" (P33), while one participant explained the emotional involvement by saying, "it feels like the lecturers actually cares about the students & you're just not another number that's on the registration file" (P63). Another participant described the involvement as "a sense of belonging, as you know there are many others also studying to pass this subject" (PS3)[2].

Concerning the use of the various mobile phone interventions, one participant indicated, "the sms's kept me motivated and felt more like a varsity with class schedules than studying on my own" (P63) and another participant was of the opinion that "all modules should be embracing the use of podcasts and sms's as for me it was having a friend on a journey where u really need a friend" (P21). One participant described his/her experience with the mobile technology intervention as:

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[1] P27 refers to feedback received from participant number 27.

[2] PS3 refers to feedback received from participant number three who was part of the pilot study.

> We need to feel like full time student by always receiving information from your lectures relating to that module. It makes one feel important that at least the lectures care about us making it to pass (P28).

The interventions assessed in this study undoubtedly comprised an emotional aspect as experienced by the participating FAC2602 students. Participants felt connected to the module and the lecturer, which was experienced as a decrease in the transactional distance. The analysis of the qualitative data provided adequate evidence that the application of mobile technologies in the teaching of the FAC2602 module at Unisa indeed contributed to the didactical conversation between students and the lecturer involved in the particular module.

5   Conclusion

The research reported on by this paper responded to the low retention and throughput rates of accounting students at Unisa. The researchers have consequently started to explore the possibilities of enhancing student support to increase their throughput rate. The subsequent case study to understand the possible effect of mobile technology in ultimately improving the retention and throughput rates of the selected group of accounting students was directed by Holmberg's (1982) theory of didactical conversation.

The research has shown that the use of mobile technologies for academic support kept the students on track, while it also motivated and encouraged them to persevere with their studies. As most of the participating students were working full-time and had limited time available for studies, these interventions have shown to be successful in enhancing didactic conversation as they provided quick and timeous connections between the student and the facilitator. Learning problems and queries were resolved almost instantly through these interventions as the participating students reported feeling like full-time students attending a face-to-face session. The contribution of this research is not the use of mobile phone interventions such as SMSes and MXit in supporting DE students, but the application of Holmberg's (1982) theory of didactic conversation in understanding student retention and throughput in a DE environment. This mobile intervention case study has shown that successful didactic conversation depends on the immediateness of the two-way communication technique used. Considering that Holmberg's (1982) theory of didactic conversation postulates a correlation between improved didactic conversation and student retention and throughput, this research has shown that a nearly insignificant intervention, such as the use of SMS communication between students and lecturers, may contribute to improved throughput and retention rates.

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