The Use of Messaging Services Application as an Educational Support Tool: A Focus on Vaal University of Technology Kempton Park Campus

Walter Matli¹, Pieter Conradie² and Pat Sibiya³

¹Vaal University of Technology,Ekurhuleni campus 24 Plane road Spartan, Kempton Park, South Africa

²Vaal University of Technology, Vanderbijlparkcampus Andries Potgieter Blvd, Vanderbijlpark, South Africa

³Gauteng Growth and Development Agency 124 Main Street, Marshalltown, Johannesburg, South Africa

ABSTRACT - The recent years has shown an increasing interest in using messaging services applications as a tool for most sectors globally and this has made messaging services to play a major role in influencing higher education. It is therefore imperative for student guide developers, University faculties and academic management to be on the lookout for any dynamic technology development, applications for social interaction and evolving user preferences. The development of messaging services applications requires some experimentation from research and also for facilitators to find ways to make use of the technology, as this will benefit students in higher education institutions.

The purpose of this research was to evaluate the types of messaging services application students use, perception of students on using messaging services application, and evaluate the benefits for using those messaging services applicationsfor educational support by Vaal University of Technology (VUT) Kempton Park campus students. Countless studies have shown increasing interest in the concept of electronic learning (e-learning) been conducted, but most of them focus on Online distance education and Online learning management systems. The significance of this study is that it creates a much greater awareness relating to the influence that messaging services applications can play in supporting teaching and learning in higher education.

The research was conducted at VUT Kempton Park campuslocated in the economic hub of South Africa, the Gauteng province. The researcher conducted an experimental research with unsystematic sample of 212 students selected from a population of less than 1500 students registered students at VUT. This paper also gives an indication to academic leader at VUT Kempton Park campus that more needs to be done to support undergraduate students.

Keywords: University, Messaging Services, Students, Educational support

1. INTRODUCTION

Messaging services applications rapidly expanding the universe of technology that includes everything from social network applications to oodles of blogging sites. As this applications and services grow in popularity, there is a lot of speculation about who uses them, how frequently, and for what purposes (Reich *et al*, 2012). Communication has vastly improved by the advances of social media technologies (Tutty & Klein, 2008). As a result family, friends and strangers as well are connected in an instant and news is transportable faster.

In the past, universities teaching required a lecturer to be a master of the context in the prescribed book, importantly the theory. But now lecturers find themselves at situations where they have to adapt to the language that the current generation understands more and use technology to support students learning. Students will succeed the University learning environment only if they are taught to learn for the future and with technologies that makes sense of the new technological knowledge and furthermore that is forever growing now than ever (Robert, 2005).

Higher education is a highly competitive environment in South Africa, more especially as a developing country. University of technologies have the potential to reposition itself. Utilization of technological instructional tools such as messaging services applications is highly recommended more especially as a University of technology; these tools can assist higher education institutions to cope with extra workload of teaching. Technology devices such as mobile can offer support to students in the process of learning (Upadhyay, 2006).

In today's educational environment technology is rapidly changing in the era we living in. innovation and the willingness of a higher education institution to incorporate technology tools is one of the important factors that will make the higher education institution competitive. Universities and University of technologies across the country are implementing some sort of practices in order to enhance and support the academic excellence of students. These practices are aimed at intervening to improve the learning and outcome of students.

Group work is increasingly being used mostly for face-to-face full-time students or on the learning management system (LMS) such as Sakai and Blackboard. Academic staff must come up with ways which will engage student to want to part take in what they are being taught (Halic *et al*, 2010). Group work has the potential to work furthermore for students learning more especially if using the tools of messaging services applications. Messaging services applications can help eradicate the sense of isolation that is mostly common for students.

2. OBJECTIVES OF THE STUDY

The purpose of this research was to evaluate the types of messaging services applications students use, evaluate the frequency of use, and evaluate the reasons for using messaging services applications by VUT Kempton Park campus students. In order to achieve this, the following objectives were formulated for this research project:

- which messaging services applications do students use
- students perception on incorporate messaging services applications to teaching and learning
- Possibilities of discussing educational topics through messaging services applications

3. METHODS OF COLLECTING DATA

Research design is viewed as a master of plan which lay down the methods and procedures been used to gather and analyse the material needed (Zikmund & Babin, 2010). In addition states that the benefit of the research design is the framework of the action plan for the research. Research provides a more extensive assumption of what the researcher desire to accomplish (Mouton, 1996).

Questionnaire is referred to as process that seeks to written or verbal replies from student to on paper set of questions (Parahoo, 1997). The questionnaire was distributed to registered students at VUT Kempton Park in the year 2012.

Research method implies that the result of the key section of the research conducted can be described (Zikmund et al, 2010). Objective can be measured by using a questionnaire (Creswell, 1994). Creswell (2003) describe the research methodology as a specific method of data collection and analysis.

A contextual design represents the environment in which the researcher intended at describing and understands the elements that are relevant to the research (Burns & Grove, 2005). The researcher selected VUT Kempton Park in the Gauteng province including students who are studying in the University.Descriptive research is centred on both open and closed ended questions that must be collected with the determination of describing the frequency of which the central phenomena occur (Creswell, 2009). The researcher designed a questionnaire with both open-ended and close-ended questions; the questionnaire was completed by an unsystematic sample of 212 students from VUT Kempton Park campus.

4. DISCUSSION OF FINDINGS

4.1 Introduction

The findings to the questionnaire and data was analysed through the use of Microsoft Excel. Primarily biographical information of participants such as gender, age, and race will be analysed, secondly further descriptive statistics will be examined. This enabled the researcher to make conclusions and recommendations regarding the use of messaging services applications among University students at VUT Kempton Park campus. The significant and non-significant findings of the descriptive data analysis on the messaging services applications and Universities will be discussed. The researcher will explain of the parametric statistical procedures used to test evidence, significance and non-significant variances among and between the selected variables.

4.2 Findings

The findings are presented and interpreted as well as summative discussions thereof are provided. The total sample of respondents (N=212) resulting in an84.8% response rate of the 250 questionnaires distributed.

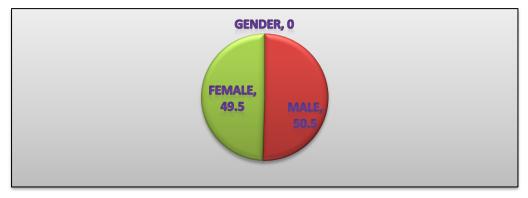


Figure 1: Gender Distribution

Male =107; Female=105 and N total=212

Figure 1 indicates the gender distribution in the sample which reports that out of 212students, 105 were females (49.5 %) and 107 were males (50.5%). The pie chart indicates that the majority of respondents were Male.

Age	Frequency	Percentage
Below 18 years	0	0
Between 18-20 years	87	41
Between 21-23 years	110	51.9
Between 24-26 years	11	5.2
Older than 26 years	4	1.9
Total	212	100
Missing	0	0

Table	1:	Age	Categories
-------	----	-----	------------

Table1the age group 21-23 years comprised the highest percentage (51.9 %), followed by the age group 18-20 years (41%), age group 24-26 years (5.2%) is higher than age group older than 26 years (1.9%) respectively. This result indicates that there was a statistical difference between the percentage of young students (18-23 years) and the percentage of matured students (24 years or older). The results gave an impression that most of the matured students have somewhere in their education history epeated a module in University or repeated a grade in secondary school. More especially that at the age group 18-19 student must be first year students in higher education if they completed their primary and secondary schooling successfully without repeating a grade.

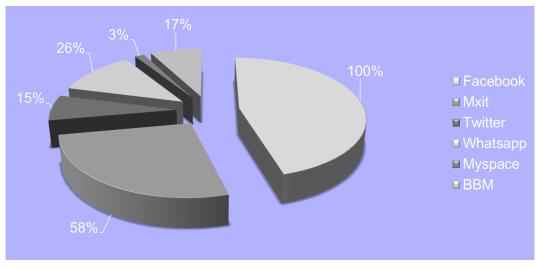


Figure 2:% Usage of Messaging Application per Student.

Figure 2 illustrates categories of the respondent number of messaging services applications used. Most of the respondents (n=212; 100%) are usingFacebook, followed by Mxit (n=123; 58%). The smallest number of the respondents (n=7; 3%) represented MySpace. This indicates that students are using Facebook and other messaging applications.

The following positive aspects were commented by one of the respondent, when asked how they feel about the incorporation. Here are some of the responses received:

How do you feel about teaching and learning being incorporated on messaging services applications platform?

Response34: "able to share valuable information and create a friendly environment for l learning"

Response30: "broadens teaching methods and resources"

Response 29: "applications can be used for further assistance to students from the lecturer even outside the classroom"

Response13: "it can be used to pass information across from students to lecturer vice – versa"

5. ETHICAL REQUIREMENTS

The findings of the study are reported anonymously and the study is not intended to harm any participant in any way. The researcher respected the students right to privacy and respect in the sense research that students were informed of their rights to refuse to participate in study and to withdraw their participation at any time.

An explanation of the purpose of the study was made and anonymity was guaranteed for the students. In addition, the respondents were informed that the information gathered is only for research purpose and cannot be used against them.

6. CASE STUDY: VAAL UNIVERSITY OF TECHNOLOGY (VUT) KEMPTON PARK CAMPUS

VUT Kempton Park Campus is located in the Ekurhuleni Metropolitan municipality which is home to 3 178 470 million people and with the area of 1.975 kilometres squared, the metropolitan has a population growth of 2.47% per annum and 28.8 % of unemployment rate (<u>www.ekurhuleni.gov.za</u>). VUT Kempton Park Campus is one of the four campuses of VUT, VUT Kempton Park is the only campus located in the Metropolitan Municipality. VUT Ekurhuleni offers 5 full time diploma courses, namely, Information Technology (IT), Tourism, Auditing, Cost management and

Marketing, and also offers Baccalaureus Technologiae (B-Tech) in IT only so far which is offered part-time on Saturdays. We are living in the world where technology is influencing almost everything of our lives.

VUT Kempton park has given if not all then most of their Diploma students the opportunity to further their studies because technology is forever changing, students need to forever learn the latest Information Technology. B-tech students are full time employed; this is no surprise because I.T is one of the skills in demand in the market place currently. VUT students do not only access their messaging services applications on computers, they also access it directly on their smart mobile phone.

7. POPULATION AND SAMPLING

Population is regarded as any complete group of people and communities where they share mutual characteristics (Zikmund, 2010). Furthermore is understood as a recognisable crowd of elements such as (people, organisations), interested and relevant to the problem statement of the research. For this research, the researcher targeted the population of students at VUT Kempton Park. In order to meet the objectives of the study, the researcher distributed questionnaires to get insights of the phenomena being researched.

To compile a sampling frame, the researcher purposefully selected VUT Kempton Park. This University was intentionally chosen by the researcher because of easy access to information without pointless red tapes. The researcher distributed the questionnaire himself to the students. Students from VUT Ekurhuleni campus in Gauteng were sampled and non-probability sampling through purposive sampling was applied. The choice of VUT Ekurhuleni campus is to include in the sample an application of judgmental sampling.

The researcher chose to focus on VUT Kempton Park because of financial limits. Due to finances and time the researcher did not conduct same research in other campuses of VUT or other Universities to do the comparison of the findings. This implies that this research was done only in VUT Kempton Park. Sampling is explained as a subset of a larger population (Zikmund et al, 2010). The preferred number of students was then selected according to the characteristics that the researcher wants from the questionnaire. The study endeavoured to explore and answer some questions pertaining to how the higher education is addressing the usage of technologies

In this case conclusion was drawn from the position of students at VUT Kempton Park who completed the questionnaire and returned back to the researcher. A sampling unit is understood to be elements considered for selection in some stage sampling (Babbie et al., 2010). Non-probability sampling methods are frequently the most suitable (Babbie et al., 2010).

8. ACKNOWLEDGEMENT

I would like to acknowledge VUT Kempton Park campus students that took part in the research, and the institution for allowing the researcher to conduct my research.

In addition I would like to thank Mrs Pat Sibiya for assisting in language and proofreading of my work.

9. CONCLUDING REMARKS

Online learning creates an environment where students themselves or with lecturers can exchange communication and learn out of the class contact session. The significance of this study is that it creates a much greater awareness relating to the influence that messaging services applications can play in supporting teaching and learning. Further to this, the results also give an indication that incorporating messaging services applications will play a major role in supporting learning for students.

This paper also gives an indication to academic leader at VUT Kempton Park campus that more needs to be done to support students. For messaging services applications to contributes to higher standards of education, there needs to be strong leadership around this to planning the implementation of using messaging services applications as another tool of support students.

Based on the finding, it is clear that messaging services applications are frequently used by University students and that they use the applications for different reasons. With messaging services applications learning will not be bound to the class session.

Although messaging services applications can be used successfully as a supporting tool for teaching and learning, making use of messaging services applications requires uploading of notes and managing the social media platform. This implies that academic staff needs to make time for using this tool, if they want to see the positive results of using messaging services applications.

The researcher's assumption is that, VUT students have access to internet accessing from gadgets they use to connect to social media. With messaging services applications academic staff can post and attach notes for students which they can receive instantly and read anytime; while in pubs or from their comfort of their homes. Future research could investigate if lecturers in higher education institutionsblend technology when teaching their subject and to what extent.

10. REFERENCES

- 1. Babbie, E., Mouton, J., Vorster, P.,&Prozesky, B.The Practice of Social Research. New York: Oxford University Press. 2010
- 2. Burns, N. & Grove, S.K.The practice of nursing research: conduct, critique, and utilisation, 5th edition. New York: WB Saunders. 2005
- 3. Creswell, J.W.Research design. Qualitative and quantitative approachesLondon: Sage. 1994
- 4. Creswell, J.W. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Second Edition. SAGE Publications Ltd. 2003
- 5. Creswell, J.W. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Third Edition. SAGE Publications Ltd. 2009
- Halic, O., Lee, D., Paulus, T., and Spence, M. "To blog or not to blog: student perceptions of blog effectiveness for learning in college-level course". The Internet and Higher Education. [Online], <u>http://dx.doi.org/1-/1016/j.iheduc.2010.04.001</u>. Retrieved on 19 August 2012. 2010
- 7. Mouton J.C. Understanding social research. JL Van Schaik, Academic.1996
- 8. U padhyay, N. "M-Learning: A new paradigm in education". International journal of instructional technology and distance learning. Vol. 3, no2, pp. 31-34. 2006
- 9. Parahoo, K. Nursing Research, Principles, Process and Issues. Published by Palgrave Macmillan. 1997
- Reich, J., Murnane, R., and Willet, J. "The state of Wiki Usage in U.S K-12 schools". Educational Researcher. [online]<u>http://dx.doi.org/10.3102/0013189x11427083</u>. Retrieved 04 January 2013. Vol. 41, no.1, pp.7-15.2012
- Roberts, T.S. Computer-supported collaborative learning in higher education: An introduction. In T.S Roberts (Edu). Computer –supported collaborative learning in higher education. Published by Hershey, PA: Idea group publication. 2005
- 12. Tutty, J.I., & Klein, J.D. "Computer-mediated instruction: a comparison of online and face-to-face collaboration". Educational technology research and development, Vol. 56, pp. 101-124. 2008
- 13. Zikmund, W.G. & Barry, B.J. Exploring Marketing Research. 10th International Edition. South –Western Cengage Learning. 2010