EDU014 Achievement of institutional success rate targets: the Diploma in Accountancy learning programme at the Nelson Mandela Metropolitan University

Fourie, H., Barnard, J., Bester, L & Christian, J
Nelson Mandela Metropolitan University

Abstract
Transformation in the Republic of South Africa (RSA) as well as the low success rates in academic learning programmes remain unsolved matters of concern for the RSA Government and thus University Management. As part of a larger research project, this paper aims to conceptualise different teaching approaches; describes the current teaching practice model at the Nelson Mandela Metropolitan University's Diploma in Accountancy learning programme; and gauges the success rates achieved with this current teaching practice model with the NMMU's constitutional target success rate.

In order to achieve these objectives a comprehensive literature review was performed, primary data on the current teaching practice model was collected by means of research instruments and an analysis of the NMMU's success rates for the Diploma in Accountancy accounting modules was performed. The results of the paper reveal that a *teacher-centred* teaching approach is largely followed and that the institutional success rate of 75% is not achieved through the use of the current teaching practice model.

Key words: Blended learning, success rates, students-centered approach, teacher-centered approach, teaching approach.

1 BACKGROUND

A key strategic objective for the transformation of higher education in South Africa that remains unfulfilled, is to enable academic success for more graduates with the skills and competencies that meet the needs of the country (CHE 2013a:27; CHE 2013b:4). The lack of academic transformation could be attributed to the under-preparedness of school-leavers (articulation gap) to fulfil in the academic demands of higher education (CHE 2013a:28; Ogude, Kilfoil & Du Plessis 2012:22). In addition, a study by Scott, Yeld and Hendry (2007:2) referred to the under-preparedness of staff at higher education institutions as a potential reason for the dearth in competent graduates.

A number of exogenous and endogenous factors, for example language, status of residential area and access to technology, are identified in published literature as possible reasons for the national problem stated above (Du Plessis, Müller & Prinsloo 2005; Müller, Pretorius, Prinsloo & Uys 2007; Roos 2009; Strydom, Basson & Mentz, 2012). The challenge of poor student success is complex and multi-layered (Scott *et al.* 2007). In South African higher education institutions student success rates are regarded as an area of concern that should be

addressed, amongst others, through innovative teaching methods (Steenkamp, Baard & Frick 2009). The Council of Higher Education (CHE) believes that the key to a higher success rate in higher education, and thus in improving throughput rates, lies in strengthening teaching and learning – placing a burden on the providers of higher education in South Africa (Strydom, Basson & Mentz, 2012:i).

According to Strydom *et al*. (2012:i) headcount enrolments at South African higher education institutions during the 2005-2009 academic years increased by 14%, while student success rates only increased by 2%. Furthermore, Letseka and Maile (2008:1) stated that in 2001 the Republic of South Africa (RSA) had a graduation rate of 15% – one of the lowest in the world. The South African Department of Higher Education and Training's 2013 annual statistical report on 2011 data, confirmed the graduation rate of 15%, even though the University of Cape Town warns of a lack of understanding of how this rate is being calculated (Mtshali, 2013). This paper uses the term *success rate*, which is defined as the percentage of passed credits divided by enrolled credits. The question that remains unanswered is: how do we change our structures, cultures and practices to ensure improved success rates?

A requirement of the Higher Education Qualifications Sub-Framework (HEQSF) (RSA 2013:43) is that all tertiary programmes need to conform to the requirements of the HEQSF. The HEQSF requires redesigning of some academic programmes. This provides tertiary institutions with an opportunity to reassess their current teaching approaches and explore relevant and innovate teaching methods through which learning can be enhanced to negate poor student success. In its quest to enhance the quality of higher education, the Government has identified "teaching and learning" as the core function of higher education that is in great need of immediate attention and improvement (CHE 2013b:4).

This paper forms part of a research project initiated to address the possible shortcomings of current teaching approaches in the Diploma in Accountancy learning programme at the Nelson Mandela Metropolitan University (NMMU).University of Technology (TUT

The NMMU's accounting diploma learning programmes are all located at its Port Elizabeth Second Avenue Campus. The majority of the students enrolled in these learning programmes offered are from previously disadvantaged communities or can be classified as first-generation students. The improvement of success rates is especially important in the context of the NMMU's *Vision 2020* (NMMU 2015b). One of the strategic objectives of the NMMU, based on *Vision 2020, is to* (NMMU 2015b) "… create and sustain a responsive learning environment conducive to excellence in teaching and learning and fostering holistic student success."

In the context of the background provided above, the objectives of this paper are to, conceptualise different teaching approaches; describe the current teaching practice model applied at the NMMU Second Avenue Campus; and discuss the success rates obtained

through the current teaching practice model for the financial accounting modules at the Second Avenue Campus of the NMMU.

2 LIMITATIONS AND RESEARCH METHODOLOGY

The research of this paper is limited to students who are registered for the accounting modules on the Second Avenue Campus of the NMMU; the workload level and success rates of the accounting modules are not compared to the workload level and success rates of other modules in the Diploma in Accountancy learning programme; and the reasons why lower than expected success rates are currently achieved are not investigated.

The objectives of this paper were effected by using various research methods such as literature review and data analysis. In order to gather primary data, research instruments such as an information sheet and e-survey questionnaire (available on request). The research methodology of the paper will be described in the sections that follow.

Literature review

A comprehensive review of published literature on teaching methods relevant to accounting programmes was performed. The literature reviewed informed the design and development of the research instruments used for collecting the primary data.

Analysis of success rates

Secondary data on the pass rates of accounting modules for four academic years (2011 to 2014) were obtained from the NMMU Management Information Systems Unit. An analysis of these pass rate data is presented in Table 2.

Primary data collection

Primary data were collected by means of information sheets and questionnaires populated by lecturing staff of identified modules. All lecturing staff (13 staff members) provided information in respect of the particular module/s they are involved with. The current teaching approach and lecturer profiles were described based on this data.

3 TEACHING APPROACHES

Several studies that were done world-wide, as well as in South Africa, found that employer expectations with regard to capabilities of university graduates are not met (Griesel & Parker 2009; Kavanagh & Drennan n.d.). A lack of problem solving skills, real life experiences of the business world and basic accounting skills are capabilities that university graduates lack when entering the workplace (Polyacskó 2009).

Laurillard (2012) and Nordin, Embi and Yunus (2010:131-132) states that the effectiveness of learning is achieved through a combination of the following components: *student-centred*, *knowledge-centred*, *assessment-centred* and *community-centred*. Finding alternative teaching approaches [blended learning] are recognised as important as a result of technology changes and modernisation of the educational science (Brown, Collins, & Duguid 1989; Collins 1990; Brown, Ash, Rutherford, Nakagawa, Gordon & Campione 1993; Cobb 1994; Duffy &

Cunningham 1996). These are inculcated into the different teaching approaches addressed in the discussions below.

A modern teaching approach which is "meaningful and purposeful" should consist of learning theory, learning activities, student/lecturer interaction, assessment and student support (Bonk & Cunningham1998). The three teaching approaches that this paper focusses on are *teacher-centred*, *student-centred* and *technology-based* (as a form of blended learning) and are described below.

Teacher-centred teaching approach

The teacher-centred teaching approach is the most commonly used approach for transferring knowledge from teacher to student (Cuban 1983:162; Shaw 2013; Smit, de Brabander & Martens 2013:3). The student has to listen and follow the instructions given by the teacher. This teaching approach has proven to have a negative learning outcome that leads to low success rates (Slabbert, De Kock & Hattingh 2011). Student involvement is non-existent, potentially resulting in the student losing interest. The teacher-centred approach stresses that the teacher mainly conveys the knowledge or expertise ("talk and ask questions") to the group of students and there is little interaction ("talk or questions being asked") coming from the student (Scuh 2004:835).

Advantages of the teacher-centred approach includes lecturers providing unpublished or not readily available material available; and determines the aims, content, organisation, pace and direction of the teaching. In addition, the teacher clarifies [explains] the material, complements and highlights learning preferences, arouses interest in a subject and facilitates large-class communication (Ylänne, Trigwell, Nevgi & Ashwin 2006:294).

Disadvantages of this approach are that students are placed in a passive rather than an active role (Cuban 1983:162; Smit, *et al.* 2013:3); encourages one-way communication and requires a considerable amount of unguided student study time outside of the classroom to enable understanding and long-term retention of content (Slabbert, *et al.* 2011) and; the teacher has to master effective communication skills.

Differing substantially form the teacher-centred approach is the student-centred approach through which student engagement [participation] is encouraged as an important component. The student-centred teaching approach is discussed in the following section.

Student-centred teaching approach

Several authors (Harden and Crosby 2000:335; Kember 1997; Lea, Stephenson & Troy 2003; Rogers & Allender 1983:188) define the student-centred approach as placing emphasis on student engagement [participation] in the teaching process. The main focus of this approach is on the needs, skills and interest of the student (McCombs & Whisler 1997). Therefore, the learning process scale places more responsibility on the student than on the teacher. O'Neil & Mc Mahon (2005:31) highlights that the student is allowed to learn by practicing, making them more aware of what they are busy with and the motivation behind it. Students feel

comfortable to communicate with the teacher, which helps with the transferring and retention of knowledge and skills.

The advantages associated with this approach is that students gain academic knowledge and skills; grow emotionally and spiritually (Quinlan 2014:33); develop experimental learning and problem-solving skills (Ormrod 1999:412); learn how to engage with and co-construct knowledge (Schweisfurth 2001:425); and students feel respectful, excited and interested in the learning process (Lea *et al*. 2003).

Disadvantages include inadequately prepared teachers that are theory-orientated (Westbrook, Shah, Durrani, Tikly, Khan & Dunne 2009; Altinyelken 2010); inadequate availability of content and time (Tatto 1991; Vavrus 2009); and new teachers do not have a model to base their practice on (Haser & Star 2009).

Other factors that affect the implementation of this approach are the high student-teacher ratios and availability of resources and infrastructure. O'Neill, Moore and McMullin (2005:33) found that the belief systems of staff and students and the fear that independent learning may take away the social aspect of the learning process are further critiques of the approach.

The more modern and technology based approach is referred to as blended learning – blending traditional teaching approaches such as the teacher-centred and student-centred approaches with the use of technology. The following section discusses the technology based teaching approach as an alternative.

Technology based teaching approach

Technology and the use thereof in education is becoming increasingly important globally. Students are familiar with the use of Information Communication Technology (ICT), such as cellular telephones (cell phones), tablets and laptop computers, which creates the possibility that e-learning could replace the traditional teaching approach (Attewell 2005:7; Favell 2014). Cell phones, in particular, are owned by 96% of the world population (International Telecommunications Union (ITU) 2013). According to Statistics South Africa (2012: 65), 89% of the South African population have access to cell-phones [technology].

Several authors (Berkowitz, Kung & Eisenberg 2013:1; El-Mowafy, Kuhn & Snow 2013:1; Herrington, Schrape & Singh 2012: iii; Smirnova 2008; Traxler 2010) emphasise the importance of incorporating technology in teaching approaches. Technology provides additional support to the teaching environment for both teachers and students. The students' technical skills, productivity and success rates could increase as access to technology is available on a 24/7 (24 hours per day, seven days per week) basis.

Technology could be incorporated (blended) with the conventional teaching approaches. Successful blended learning technologies such as the Virtual Learning Environment (Andergassen, Behringer, Finlay, Gorra & Moore 2009; Bark & Kush 2009), Web 2

Technologies (Ward, Moule & Lockyer 2009), social media platforms like Twitter ® and Facebook ® (Andrade, Castro & Ferreira 2012; Lam 2012) and the Internet (Hain & Back 2008) are available for use in alternative teaching techniques.

Blended learning have been implemented successfully by several universities, such as Stanford University, University of Tennessee, London Metropolitan University, the Bolton Institute State and public university campuses in the USA (Bowen, Chingos, Lack & Nygren 2012; Boyle, Bradley, Chalk, Jones, & Pickard 2003:176; Singh & Reed 2001).

Advantages of blended learning include knowledge provision; social interaction; and access to self-directed and relevant experiential learning (Dzakiria, Don & Abdul Rahman 2012; Singh & Reed 2001). In addition Dziuban, Hartman and Moskal (2004) assert that blended learning increases students' information literacy, improves student flexibility and learning outcomes. Furthermore students participate actively, increase responsibility, learn more effectively, have easy access to learning material and are in control of their own learning (Gecer & Dag 2012:440-441).

According to Köse (2010:2796) blended learning improves the academic achievements of students. Vincini (2006) and Duncan (2005:78,87) defines clickers as an electronic device that looks similar to a remote control and is often refer to as classroom response systems (CRS). The hand-held device is used by the students to respond on multiple-choice or polling questions in the classroom. The teacher poses a question, where by the students react by choosing an option. All the answers are then tallied by the CRS and the results are projected back. In several studies (Duncan 2005:78, 87; Patterson, Kilpatrick & Woebkenberg 2010; Zhu 2007) the use of clickers have been proven to increase student involvement, participation and class attendance. According to Horn (n.d.) blended learning can increase student control over the time, place, path, and/or pace of learning; increased communication between student and teacher; improved life skills regarding Information Technology; and prepare learners for the work environment and independent learning (self-study and self-revision).

The disadvantages of blended learning include the fact that no access to the internet [connection] results in no access to material (Gecer & Dag 2012:440). Further, as stated by Staker and Horn 2012, online communication is complex and therefore teachers need training to successfully apply it in the teaching process. Finally, Kenney and Newcombe (2011) conclude that lecturers need to re-design modules which is time consuming and that teachers have a lack of motivation and skills to use technology optimally (blended learning) for education purposes.

4 THE ACCOUNTING TEACHING APPROACH APPLIED ON THE DIPLOMA ACCOUNTANCY PROGRAMME AT THE NMMU

The approach followed when teaching accounting to diploma students are outlined based on data information sheets that were completed by the lecturers involved and responsible for the modules. In addition to the module information sheets, official timetables, module outlines and the Faculty of Business and Economic Sciences' Prospectus (NMMU 2015a) were

consulted to ensure that accurate and complete information are used to describe the current teaching practice model. The information sheets were distributed to lecturers and coordinators of the specific first, second and third year accountancy modules and each respondent was asked to complete the information sheet according to current teaching practice models.

The information sheet requested the number of students in class; time spent [duration] on instruction (formal classroom lecturing, number of sessions per week, length of time of sessions, tutorial sessions, supplemental instruction and blended learning); formative and summative assessment methods; study and lecturing material; and further teaching activities and/or interventions used.

Formal Instruction

In respect of Financial Accounting I, students receive approximately three hours' formal instruction (two sessions of 80 minutes each and one session of 35 minutes) per week. The students are divided into groups of approximately 60 students. According to Kandya (2013) a maximum number of students that should be in a class is 40 – a student to lecturer ratio of 40:1. As a result and for the purposes of this paper, a class size of more than 50 students is regarded as a *large class*. The first session takes the form of a classroom lecture in which the syllabus content is explained. The lecturer provides class examples and students attempt a few exercises and allocated homework to be discussed during the next session. The additional two sessions are utilised as tutorial sessions where the lecturer assists students with marking of homework assignments, discusses examination techniques and facilitates informal group discussions. Feedback is provided to students after each assessment. A similar teaching approach is followed for the second and third year accounting modules. In these years, formal instruction consists of two contact sessions totalling 2.67 hours (80 minutes per session) per week. Again, the cohort of students is divided into groups not exceeding 60 students.

Lecturer consultation times range between two and three hours per week. First and second year accounting students may also attend supplementary instruction (SI) sessions facilitated by senior students. Attendance of the SI sessions is not compulsory.

Assessment Activities

First year accounting students are not assessed by means of class tests (formative assessment), however, their class attendance and submission of homework assignments contribute towards their admission [to examination] mark. The admission mark forms part of the final mark. First year accounting students are required to complete at least two summative assessments (semester tests) that comprise the largest proportion of their admission mark.

The second and third year groups are provided with two formative assessments (class tests). These assessments are designed to allow the students the opportunity to assess their understanding of the content and does not carry any weighting towards the admission mark.

The students are required to complete at least two summative assessments (semester tests) that comprise the admission mark.

For all three years a three hour examination paper with total marks of 100 is written. The final mark for the module consists of the admission mark (40%) plus the examination mark (60%). Table 1 provides a summary of the combination of assessment marks towards the final mark for the accounting modules of the three academic years.

Table 1: Calculation of admission and final mark

Activity	Year 1 (%)	Year 2 (%)	Year 3 (%)
Homework and Attendance	1.6	0	0
Semester Test 1	19.2	20	20
Semester Test 2	19.2	20	20
Admission Mark	40	40	40
Examination Mark	60	60	60
Final Mark	100	100	100

Textbooks and lecturing material

Students are required to purchase a hard copy textbook which is also available at the library. When asked how often the textbook is used in class, on a Likert-type scale ranging from 1 to 5 (1 = never; 5 = always) the first year lecturers perceived a mean score of 2 while second and third year lecturers reported a mean score of 3. Hard copy lecture notes are given to all the students and the notes are made available electronically via SharePoint (the NMMU's intranet site).

In the context of the objectives of the paper, the following section provides a discussion of the success rates for the accounting modules that form part of the curriculum of the Diploma in Accounting at the NMMU.

The current teaching approach followed by the lecturers encompasses elements of all three approaches in the previous section. Limited use of blended learning takes place through electronic distribution of lecture materials. Students that make use of SI session could experience a student-centred approach as it stimulates student engagement. Due to the large class sizes and relative under-preparedness of students a teacher-centred approach is followed in teaching these groups.

5 PASS RATES

A pass rate (success rate) is defined as the percentage of enrolled students that pass their courses (number of students that pass the course divided by the number of students that

enrolled for the course) (Barnard 2015). Table 2 depicts the pass rate averages for the first, second and third year diploma accountancy modules at the NMMU from 2011 to 2014.

Table 2: The Nelson Mandela Metropolitan University's Diploma in Accountancy accounting module success rates: 2011 to 2014

Academic Year	Four year average	2011	2012	2013	2014
1st Year	67.6%	70.0%	66.0%	67.5%	66.9%
2nd Year	58%	50.9%	51.9%	67.7%	63.7%
3rd Year	71.8%	72.5%	76.8%	67.3%	70.7%
Three year average	66.0%	64.5%	64.9%	67.5%	67.1%

The average success rates for the three academic years of study (first, second and third year) range from 64.5% to 67.5% revealing an average of 66.0% for the three years combined. The average pass rate for the second year accounting module is the lowest at 58.6% and the third year success rate is the highest at 71.8%, mainly as a result of a substantial increase in 2012 to an annual success rate of 76.8%. These averages are consistently and substantially lower than the NMMU's (institutional) target success rate of 75% (Minne, 2013).

A number of reasons could exist for variations in the success rates in respect of the annual success rates per module as well as in the different academic years of accounting modules. One possible reason that specifically relates to the Diploma in Accountancy at the NMMU, could be the difficulty experienced by students to adapt to higher volumes of work in the second year accounting module – students might find it hard to manage higher work volumes resulting in lower success rates. As a result, second year students that are successful stand a better chance of being successful in the third year accounting module.

Many factors influencing the success of students at higher education institutions have been identified in published literature, for example poor schooling, lack of fluency in the language of instruction, inadequate access to financial support and student support services (Strydom *et al.*, 2012:i). Investigating the reasons for specific success rates achieved falls outside of the scope of this paper.

7. CONCLUSION

The objectives of this paper were firstly to conceptualise different teaching approaches; secondly, to describe the current teaching practice model; and thirdly to discuss the success rates obtained through the current teaching practice model for the diploma learning programme financial accounting modules at the NMMU. From the literature consulted during the literature review and from the discussions of the primary data collected in previous sections of this paper, it can be concluded that the accounting modules in the diploma in accountancy of the NMMU are taught largely according to the *teacher-centred teaching*

approach – high student to lecturer ratios; transfer of knowledge from lecturer to students in a formal environment. It is only in exceptional instances that characteristics of the student-centred teaching approach are found to be present.

This limited use of the student-centred approach could be as a result of inadequately prepared school leavers entering the diploma learning programmes, or due to a lack of knowledge of lecturing staff in respect of the application and implementation of such an approach. The use of technology [blended learning] does also not form a material part of the current teaching approach used in accounting modules. The use of blended learning could alleviate challenges faced by students who cannot afford to buy text books or are not able to regularly attend classes.

The discussion of the literature and data gathered reveal that the current teaching practice model of the NMMU for the first to third year Diploma in Accountancy accounting modules, does not sufficiently equip students to meet their institutional target success rate of 75%.

In light of the discussions of the findings and the conclusion above, further research should be conducted on the possibility of an inclusive teaching practice model In order to improve the success rates of students at the NMMU, research should be conducted on the profile of the students that typically enrol for diploma learning programmes in order to tailor make a teaching practice model for students with a particular profile. The use of blended learning as an additional teaching approach should also be subjected to research.

REFERENCES

Altinyelken, H. 2010 Curriculum change in Uganda: teacher perspectives on the new thematic curriculum. *International Journal of Educational Development*, 30:151-161.

Andergassen, M., Behringer, R., Finlay, J., Gorra, A. & Moore, D. 2009. Weblogs in Higher Education – why do Students (not) Blog? *Electronic Journal of e-Learning*, 7(3): 203-215.

Andrade, A., Castro, C. & Ferreira, S. A. 2012. Cognitive communication 2.0 in Higher Education: to tweet or not to tweet? *Electronic Journal of e-Learning*, 10(3):293-305.

Attewell, J. 2005. *Mobile technologies and learning.* [Online]. Available: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.124.7027&rep=rep1&type=pdf. [Accessed 17 October 2009].

Bark, J. & Kush, J. 2009. GEARS a 3D Virtual Learning Environment and Virtual Social and Educational World Used in Online Secondary Schools. *Electronic Journal of e-Learning*, 7(3):215-224.

Barnard, A. 2015. (annemarie@mbat.biz), "NMMU Report on students life and campus learning community 2009", E-mailed to: jaco.barnard@nmmu.ac.za, 17 February 2015.

Berkowitz, S. J., Kung, J. W. & Eisenberg, R. L. 2013. *Resident iPad Use: Has It Really Change the Game?* American College of Radiology, pp. 1-5.

Bonk, C., & Cunningham, D. 1998. *Searching for learner-centred, constructivist, and socio-cultural components of collaborative educational learning tools.* [Online]. Available: http://publicationshare.com/docs/Bon02.pdf [Accessed 23 December 2013].

Bowen, W. G., Chingos, M. M. & Lack, K.A. & Nygren, T.I. 2012. Interactive Learning Online at Public Universities: Evidence from Randomized Trials, s.l.: ITHAKA.

Boyle, T., Bradley, C., Chalk, P., Jones, R. & Pickard, P. 2003. Using Blended Learning to Improve Student Success Rates in Learning to Program. *Journal of Educational Media*, 28(2-3):165-178.

Brown, A. L., Ash, D., Rutherford, M., Nakagawa, K., Gordon, A., & Campione, J. C. 1993. *Distributed expertise in the classroom.* In G. Salomon (Ed.), Distributed cognitions: Psychological and educational considerations: 188–228. New York: Cambridge University Press.

Brown, J. S., Collins, A. & Duguid, P. 1989.Situated cognition and the culture of learnig. *Educational Researcher*, 18(1):32-42.

CHE see Council for Higher Education

Cobb, P. 1994. Where is mind? Constructivist and sociocultural perspectives and Training (DHET). 2013. Statistics on mathematical development. *Educational Researcher*, 23(7):13-20.

Collins, A. 1990. *Cognitive apprenticeship and instructional technology.* In L. Idol & B. F. Jones (Eds.), Educational values and cognitive instruction: Implications for reform: 119-136. Hillsdale, NJ: Lawrence Erlbaum Associates

Council for Higher Education (CHE). 2013a. A proposal for undergraduate curriculum reform in South Africa: The case for a flexible curriculum structure. Pretoria: CHE.

Council for Higher Post-School Education. 2013b. Framework for Institutional Quality Enhancement in the Second Period of Quality Assurance. Institutional Audits Directorate, December 2013. Pretoria: CHE.

Cuban, L. 1983. How did teachers teach? *Theory into Practice*, 22(3):160-165.

Du Plessis, A., Muller, H. & Prinsloo, P. 2005. Determining the Profile of the successful first year accounting student. *South African Journal of Higher Education* 19(4): 684-698.

Duffy, T. M., & Cunningham, D. 1996. *Constructivism: Implications for the design and delivery of instruction.* In D. H. Jonassen (Ed.), Handbook of research on educational communications and technology: 170-198. New York: Scholastic.

Duncan, D. 2005. Clickers: A New Teaching Aid with Exceptional Promise. *Astronomy Education Review*, 5(1):70-88.

Dzakiria, H., Don, M. S. & Abdul Rahman, H. D. 2012. Blended Learning (BL) as pedagogical alternative to teach business communication course: Case Study of UUM Executive diploma program. *Turkish Online Journal of Distance Education*, 13(3).

Dziuban, C. D., Hartman, J. L. & Moskal, P. D., 2004. Blended Learning. EDUCAUSE, 30 March, (7):1-12.

El-Mowafy, A., Khun, M. & Snow, T. 2013. *A blended learning approach in higher education: A case study from surveying education.* IN Proceedings of the 22nd Annual Teachning Learning Forum, Perth, pp. 1-11.

Favell, A. 2014. *MobiThinking*. [Online]. Available: http://mobithinking.com/mobile-marketing-tool/latest-mobile-stats/a [Accessed 25 April 2014].

Gecer, A. & Dag, F. 2012. A Blended Learning Experience. *Educational Sciences: Theory & Practice*, 12(1):438-442.

Griesel, H. & Parker, B. 2009. *Graduate Attributes: A baseline study on South African graduates from the perspective of employers*, Pretoria: Higher Education in South Africa and South African Qualifications Authority.

Hain, S. & Back, A. 2008. Personal Learning Journal – Course Design for Using Weblogs in Higher Education. *The Electronic Journal of E-learning*, 6(3):189-196.

Harden, R. M., & Crosby, J. R. 2000. The good teacher is more than a lecturer. *Medical Teacher*, *22*.

Haser, C., Star, J. 2009. Change in beliefs after first year of teaching: the case of Turkish national curriculum context. *International Journal of Educational Development*, 29:293-302.

Herrington, A., Schrape, J. & Singh, K. 2012. *Engaging students with learning technologies,* s.l.: Curtin University.

Horn, M. B. n.d. *Blended Learning*. [Online]. Available: http://www.christenseninstitute.org/blended-learning/ [Accessed 10 February 2014].

ITU World telecommunication. 2013. The world in 2013: ICT Facts and Figurs, Geneva: International Telecommunication Union.

Kandya, R. 2013. *Ideal student-teacher ratio still a mirage.* Available from:

http://timesofindia.indiatimes.com/city/mangaluru/Ideal-student-teacher-ratio-still-a-mirage/articleshow/21968486.cms [Accessed: 28 february 2015]

Kavanagh, M. H. & Drennan, L. n.d. *What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations,* Queensland: s.n.

Kember, D. 1997. A reconceptualisation of the research into university academics' conceptions of teaching. *Learning and instruction*, *7*(3), 255-275.

Kenney, J. & Newcombe, E. 2011. Adopting a blended learning approach: Challenges encountered and lessons learned in an action research study. *Journal of asynchronous learning network* 51(1):45-57.

Köse, U. 2010. A blended learning model supported with Web 2.0 technologies. *Procedia Social and Behavioral Sciences*, 2:2794-2802.

Lam, L. 2012. An Innovative Research on the usage of Facebook in the Higher Education context of Hong Kong. *Electronic Journal of E-Learning*, 10(4):377-386.

Laurillard, D. 2012. *Teaching as a Design science: developing reliable knowledge of learning technology.* [Online]. Available: http://clt.lse.ac.uk/events/networked_diana_laurillard_101012.pdf [Accessed 30 April 2014].

Lea, S. J., Stephenson, D. & Troy, J. 2003. Higher Education Students' Attitudes to Student Centred Learning: Beyond 'educational bulimia'. *Studies in Higher Education*, 28(3):321-334.

Letseka, M. & Maile, S. 2008. *High university drop-out rates: a threat to South Africa's future*. HSRC Policy Brief. Human Sciences Research Council.

McCombs, B. L., & Whisler, J. S. 1997. *The Learner-Centered Classroom and School: Strategies for Increasing Student Motivation and Achievement. The Jossey-Bass Education Series*. Jossey-Bass Inc., Publishers, 350 Sansome St., San Francisco, CA 94104.
Minne, K. (2013) (Kelly.Minne2.@nmmu.ac.za), "2013 – 2015 Strategic Plan: Faculty Business and Economic Sciences", E-mailed to: jaco.barnard@nmmu.ac.za, 17 February 2015.
Mtshali, N. 2013. Maths, Science Teachers Not Up to Scratch. *IOL News*.

NMMU *see* Nelson Mandela Metropolitan University

Nelson Mandela Metropolitan University (2015a) Diploma in Accountancy. [Online]. Available: http://www.nmmu.ac.za/Courses-on-offer/Degrees,-diplomas---certificates/Details.aspx?appqual=YP&qual=3806&faculty=1400 (Accessed 23 February 2015).

Nelson Mandela Metropolitan University (2015b) Vision 2020. [Online]. Available: http://newmy.nmmu.ac.za/Pages/Vision2020.aspx (Accessed 23 February 2015).

Nordin, N., Embi, M. & Yunus, M. 2010. Mobile Learning framework for lifelong learning. *Procedia Social and Behavioural Sciences*, 7(C):130-138.

O'Neill, G., Moore, S., McMullin, B. (Eds). Dublin:AISHE. 2005. Student centred learning: What does it mean for students and lecturers? *Emerging Issues in the Practice of University Learning and Teaching*, 1:33.

Ogude, N., Kilfoil, W. & Du Plessis, G. 2012. An institutional model for improving student retention and success at the University of Pretoria. *The International Journal of the First Year in Higher Education*, 3(1):21-34.

Ormrod, J E (1999) *Human learning (3rd edition),* Sydney, New South Wales: Merrill, Prentice Hall Australia Pty Ltd.

Patterson, B., Kilpatrick, J. & Woebkenberg, E. 2010. Evidence for Teaching Practice: The impact of clickers in a large classroom environment. *Nurse Education Today*, 30:603-607.

Polyacskó, O. 2009. *European Working Conditions Observatory*. [Online]. Available: http://www.eurofound.europa.eu/ewco/2008/11/HU0811019I.htm [Accessed 29 April 2014].

Quinlan, K.M. 2014. Leadership of teaching for student learning in higher education: What is needed? *Higher Education Research & Development*, 33:1, 32-45.

RSA *see* Republic of South Africa

Republic of South Africa (RSA). 2013. The Higher Education Qualifications Sub-Framework (HEQSF). Government notice no. 36721, 2 August 2013. Pretoria: Government Printer.

Republic of South Africa (RSA). 1997. Higher Education Act, 1997 (Act 101 of 1997) [Online]. Available: http://www.acts.co.za/ed_higher_ed/index.htm [Accessed 25 May 2010].

Rogers, C. R., & Allender, J. A. 1983. *Freedom to learn for the 80's* (Vol. 40). Columbus, OH: Merrill.

Roos, S. 2009. Factors affecting Southern African students' success in CIMA examinations. *Meditary Accountancy Research,* 17(1):49-67.

Schweisfurth, M. 2001. Learner-centred education in Comparative study: Impact of family, school, and student factors on student achievements in reading in developed (Estonia) and developing country contexts: From solution to solution?(Azerbaijan) countries. *International Journal of Educational Development*, 31:425-432.

Scott, I., Yeld, N. & J. Hendry. 2007. *A Case for Improving Teaching and Learning in South African Higher Education*. Research paper prepared for the Council on Higher Education, October 2007. University of Cape Town: Centre for Higher Education Development.

Scuh, K.L. 2004. Learner-centred Principles in Teacher-centred Practices? *Teaching and Teacher Education*, 20:833-846.

Shaw, C. 2013. *Learning and Teaching hub.* [Online]. Available: www.theguardian.com/higher-education-network/2013/mar/12/new-teaching-models-higher-education [Accessed 27 April 2014].

Singh, H. & Reed, C. 2001. *A White Paper: Achieving Success with Blended Learning*, s.l.: American Society for Training & Development.

Slabbert, J. A., De Kock, D. M. & Hattingh, A. 2011. *The Brave 'New' World of Education: Creating a Unique professionalism*. Cape Town: Juta.

Smirnova, L., 2008. *Technology Enhanced Teaching and Learning for Student (and Teacher) Success.* [Online]. Available: http://www.nyu.edu/frn/publications/defining.success/Smirnova.html [Accessed 30 April 2014].

Smit, K., de Brabander, C.J. & Martens, R.L. 2013. Student-centred and teacher-centred learning environments in pre-vocational secondary education: Psychological needs and motivation. *Scandinavian Journal of Education Research*, 26:1-18.

Staker, H. & Horn, M. B. 2012. Classifying K–12, s.l.: Innosight Institute.

Statistics South Africa, 2012. Census 2011, Pretoria: Statistics South Africa.

Steenkamp, L. P., Baard, R. S. & Frick, B. L. 2009. Factors influencing success in first -year accounting at a South African university: A compromise comparison between lecturers' assumptions and students' perceptions. *South African Journal of Accounting Research* 23(1): 113-140.

Strydom, J. F., Basson, N. & Mentz, M. (2012) *Enhancing the quality of teaching and learning: using student engagement data to establish a culture of evidence*. South African Survey of *Student Engagement.* Pretoria: CHE.

Tatto, M.T. 1991. Reconstructing teacher education for disadvantaged communities. *International Journal of Educational Development*, 17(4):405–415.

Traxler, J. 2010. Students and Mobile devices. ALT-J, *Research in Learning Technology*, 18(2):149-160.

Vavrus, F. 2009. The cultural politics of constructivist pedagogies: teacher education reform in the United Republic of Tanzania. *International Journal of Educational Development*, 29:303–311.

Vincini,P.J. 2006. [Online]. Available: https://wikis.uit.tufts.edu/confluence/pages/viewpage.action?pageId=705 [Accessed 19 February 2015].

Ward, R., Moule, P. & Lockyer, L. 2009. Adoption of Web 2.0 Technologies in Education for Health Professionals in the UK: Where are we and why? *Electronic Journal of e-Learning*, 7(2):165-172.

Westbrook, J., Shah, N., Durrani, N., Tikly, C., Khan, W., Dunne, M. 2009. Becoming a teacher: transitions from training to the classroom in the NWFP, Pakistan. *International Journal of Educational Development*, 29:437-444.

Ylänne, S.L., Trigwell, K., Nevgi, A. & Ashwin, P. 2006. How approaches to teaching are affected by discipline and teaching context. *Studies in Higher Education*, 31(3): 285-298.

Zhu, E. 2007. *Teaching with Clickers*. [Online]. Available: http://tccl.rit.albany.edu/knilt/images/f/fe/Zhu_Teaching_with_Clickers.pdf [Accessed 3 February 2014].