The Reception of Satellite Broadcast in Public Administration Teaching at the University of South Africa

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Abstract

The University of South Africa (UNISA) is an open learning distance education institution with approximately 220 000 registered students for 2012. Open distance learning (ODL) aims to bridge the time, geographical, and educational distances between the students and the institution by removing barriers to access learning. UNISA currently uses non print interaction, such as face-to-face contact sessions, to promote student success and motivation. Interaction is a crucial element of the UNISA student support conceptual framework, as students engage with their material, their lecturers and with their fellow students to attain success in their studies. UNISA students do not attend regular classes. The average current UNISA student encounters difficulty in mastering the content of material in an isolated learning environment. This led to the need to consider alternative methods of academic support. Satellite broadcast is a live or pre-recorded presentation of lectures or tutorials to students via a television screen at remote venues across the country. The use of satellite broadcast is especially relevant to students in South Africa studying at UNISA, as a large number of students live in rural and remote areas, and do not have contact with their lecturers or their peers. The researcher has been using this method of teaching for the past two years and has found that this teaching method assists the students with their learning processes. The researcher conducted a pilot exploratory study on a small group of students who represent the Public Administration diploma students who attended the satellite broadcast classes. All students who attended the satellite broadcast class were requested to complete the evaluation questionnaire. The perceptions and experiences of the students were ascertained through the use of the evaluation questionnaire. With the questionnaire, the researcher wanted to ascertain the perceptions and experiences of the students of the satellite broadcast class. The researcher found that the students experienced this mode of teaching as generally beneficial to their overall learning experience. This study will serve as a premise for further investigation on the effectiveness of the ODL method of teaching Public Administration subjects so as to improve the throughput of the students.

Keywords: Satellite broadcast, Public Administration, teaching, UNISA, open distance learning, distance education.

1. Introduction

As lecturers in a technologically changing environment, to remain relevant and adapt to changes taking place is a requirement of a lecturer. In previous years, teaching at UNISA required study material posted to the student and the student would learn on their own, at their own location, pace and time, which was known as correspondence teaching. With the advent of computers and changes in education policies over the years, teaching practices at UNISA have also been affected and have changed.

Lecturers are faced with a steep learning curve to stay relevant, and how effective lecturers are, depends on their ability to adapt and learn. For some lecturers it is a welcomed challenge, and for others it is a burden placed on already heavy workloads. Experimenting with innovation in teaching methodologies at UNISA is increasing. Satellite broadcast is one of these teaching methodologies. The researcher's primary goal is to enhance the students' learning experiences at UNISA, which has been the driving force behind the use of satellite broadcast as a teaching method. In this article the researcher would like to explore the views of the students on satellite broadcast as a mode of tuition in Public Administration and how the students experience this tuition mode. The aim of this article is to explore the use of satellite broadcast as it influences the tripartite relationship between teaching, learning and open distance education.

2. An Overview of Open Distance Teaching at Unisa

Pityana (2009:2), the previous Principal and Vice Chancellor of UNISA, stated that higher education all over the world is in a state of flux which is exacerbated by the increasing demand for access, decreasing levels of funding, technology which is constantly evolving and the global recession which affects higher education. Education is a driver of change and socio-economic development and Pityana goes further and suggests that education should be re-examined to guarantee its continued relevance, impact and value as education has become a tradable commodity. He is of the opinion that nations in the South, the have-nots, have to adjust to the changing circumstances taking place in the rest of the world or face educational redundancy.

Prinsloo (2012:online) questioned whether higher education is going through an education revolution since higher education is at the cusp of a major upheaval, as universities are preparing students for a future which cannot be clearly described. This uncertainty can be attributed to the rapid technological changes which are taking place, the mobile and social networking which has become the norm, as well as the global knowledge which is freely available on the internet.

UNISA is the largest dedicated open distance learning (ODL) organisation in South Africa and is committed to providing quality education with the vision of connecting the student and the lecturer. UNISA is a mega university and has approximately

220,000 registered students which are dispersed throughout the world with different locations, needs and expectations. UNISA started out in the early 1900s as a correspondence institution and after merging in 2004 with Technikon SA and Vista, the university changed the focus to being learner-centred and a flexible provider of education. UNISA specialises in ODL and different teaching methods are experimented with in order to enhance the experience of the students' learning. Since so many residential universities are also entering the distance education arena offering distance education courses as well, UNISA has to remain at the forefront of distance education and ensure that as a known and respected provider in the market, UNISA has to remain relevant and in touch with the needs and expectations of the students.¹

UNISA is the only dedicated ODL institution in South Africa and as the largest ODL provider on the Continent, UNISA's successes and failures will have a direct impact on higher education in South Africa (Pityana 2009:5-6). Section 1 of the Open Distance Learning Policy (2008) states that UNISA dedicates itself to becoming the African university in the service of humanity and that UNISA is the only comprehensive dedicated distance education university in South Africa. The Policy (2008) goes further and in section 3 defines ODL as a '... multi-dimensional concept aimed at bridging the time, geographical, economic, social, educational and communication distance between student and institution, student and lecturer, student and courseware and student and peers. ODL focuses on removing barriers to access learning, flexibility of learning provision, student-centered, supporting students and constructing learning programmes with the expectation that students can succeed'. Student support is therefore of vital importance to UNISA as the student is at the centre of the learning experience and the student should be taken into account when implementing the policies of the university.

Baijnath (in UNISA 2011:1), the Pro-Vice-Chancellor of UNISA, articulates in the publication entitled 'Celebrating Teaching and Learning at UNISA' the dramatic change UNISA is experiencing by placing the student at the centre of the teaching and learning process, as the student population has changed in recent years to a younger, full-time, diverse, educationally disadvantaged group. Tait (2003:2), in an article entitled 'Reflections on Student Support in Open and Distance Learning', used UNISA as an example of an ODL institution which offered distance education without providing the students with adequate student support. This practice has changed since then, as UNISA is now, according to Pityana (2009:10), regarded as possessing all the elements of a 4th generation ODL institution. A 4th generation ODL institution such as UNISA, provides student support, which was not always the case previously, and student support is now available in various forms such as the provision of a tutor system, podcasts, vodcasts, myUnisa which is web based, satellite broadcast, discussion classes conducted countywide and an e-tutor system. These methods of

¹ See the UNISA website at http://www.unisa.ac.za/default.asp?Cmd=ViewContent&ContentID=7

student support are implemented at the discretion of the lecturer who decides which teaching methods to employ.

Tait (2003:3) articulates that student support should be integrated in an ODL system as students want the support, and because of the competition in the higher education arena, UNISA offers the flexibility the students say they want. Feedback from students at the Open University in the UK indicates that 90% of the students want interaction with other students although they do not always take advantage of the contact due to demands on time and place that are customary to adult students. McDonald (2002:15) concurs with this view and claims that quality distance education factors which were considered to be important to all distance education technologies included knowing the students and supporting the needs of the students. Knowing and supporting the students can be regarded as standards in the ODL environment, and can assist with the process of defining quality distance education.

Tait (2003:4-5) adds that student support also provides the students with a sense of confidence, self-esteem and progress. Student support in an ODL environment assists students to learn successfully and also facilitates students with their feelings of confidence and self-esteem which will in turn encourage them to be successful in their studies. It is evident that student support therefore plays an integral part in the student's journey to success. At an international conference of the International Association of Schools and Institutes of Administration (IASIA), Wessels (2012) states that at UNISA, the students learn at their own pace and the learning experience of the student is dependent on sufficient interaction between the student and the lecturer as the central concern of distance education pedagogy is to bridge the distance between the students and the lecturers.

Baijnath (in UNISA 2011:1) refers to the lecturers at UNISA and states that the lecturers should be instilled with a 'new culture of learning' and become life-long learners of new pedagogies and technologies to cater to the changes in the student profile. UNISA has revealed its commitment to the teaching process by appointing a Vice-Principal Academic: Teaching and Learning who manages the portfolio of teaching and learning and all matters associated therewith. Wessels (2012) adds that the lecturer should be flexible and reinvent themselves. Teaching practices are evolving at UNISA as the traditional teaching methods are being supplemented with technology, and it is up to the lecturer to decide on the additional methods of tuition.

Brynard (2004:1) asserts that the traditional delivery of learning necessitated the lecturer, a textbook and additional support material and since the advent of the computer era and internet-based education and training, teaching practices have changed. The lecturers are faced with steep learning curves and the effectiveness of their teaching methods depends on how well they adapt to the computer age. Cant and Bothma (2010:56) refer to the increasingly important role played by technology in facilitating learning in higher education.

Blended teaching and learning is referred to in a UNISA ODL Communique number 2 (17 February 2010) as the teaching process whereby the lecturer supplements the

learning by the use of multimedia. The main teaching takes place through study guides, tutorial letters and feedback on assignments and in the researcher's case is supplemented with the use of satellite broadcast classes, which is the focus of the research. The Charles Darwin University (2011:online) defines learning as a voluntary activity which implies that the practice of teaching should be learner-centred, flexible and meaningful and the lecturer should provide opportunities for social learning and a supportive learning environment provides for dynamic engagement and deeper learning, which is the intention of the researcher.

The Department of Public Administration and Management at UNISA presents various diploma and degree courses and in 2012 has 23 000 students registered for the various diploma and degree courses. The students receive learning materials in the form of study guides and tutorial letters throughout the year or the semester, depending on how the course is presented. The study material is the required learning material which the student has to be familiar with for assignment preparation and compilation, and also which the student will be assessed on during the examination period. The tutorial letters contain all the information on the course such as assignments, due dates, contact information of the lecturers and any other information relevant to the course and the students learn at their own pace. The courses are presented at the lecturers' discretion, who decides on the additional teaching methods to be employed. With already large workloads and an overburdened administrative responsibility, not all lecturers use additional or innovative teaching methods.

The researcher is of the view that the lecturers have a responsibility to create a journey of learning for the students, and teach students how to take ownership of their own learning as they navigate their way through study material, assignments and examinations which support their acquisition of knowledge in an ODL environment.

3. Satellite broadcast as a teaching method at UNISA

Satellite broadcasting is not a new technology used within the teaching environment, as it has a long history dating back to the early 1980s where this mode of delivery was used in India, which was one of the first countries to use satellite broadcast and is now still used extensively by the Indira Ghandi National Open University. This mode of education is also used extensively by the Chinese Central Radio and Television University as well as at the Monterrey Tech in Mexico which has four satellite television channels operating 24 hours a day and seven days a week, providing two-way communication through email questions from students, which means that students watch the broadcast and if they experience any problems can email the lecturer immediately and the lecturer will respond to the student (Bates 2008:online). As can be seen for the above examples, satellite broadcasting plays a valuable role in many developing countries, and by using satellite broadcast, the capacity to reach many students is possible.

Barker and Platten (1988:44) pioneered in 1986 the use of satellite broadcast in one of the courses taught at the Texas Tech University and is referred to as a one-way video, two-way audio interaction. Satellite broadcast, which was used to reach vast audiences of students, captured the interest of many college and university administrators since the classes are presented at a relatively low cost per student. Abdous and Yoshimura (2010:733) proclaim that satellite broadcast or interactive television makes live audio/video broadcasting possible in real time to remote sites where students are able to interact with their lecturers and peers." Bates (2008:online) adds to this and maintains that satellite broadcast plays a significant role in many developing countries as many students do not have access to the internet and the message can be reached by many students.

Abdous & Yoshimura (2010:733-741.A) studied the differences in final grade and satisfaction level among students and found that satellite broadcast can bridge the physical distance which exists between the lecturer and the student in such a manner that the student who attends a face-to-face class can attain equivalent grades and satisfaction levels. It is revealed from this study that the students feel as comfortable with face-to-face classes as they do with satellite broadcast classes.

Abdous and Yoshimura (2010:733-741) profess that students from generations which are more familiar with learning in a classroom may prefer satellite broadcast as a teaching method as they welcome the flexibility, convenience and are able to access this teaching mode from remote locations, which is cognisant of the satellite broadcast teaching method. Govender (2012:3), who is a lecturer at UNISA and uses satellite broadcast, is of the opinion that according to the annual booking schedule of UNISA, satellite broadcast is a very popular teaching mode made use of at UNISA.

In a UNISA document entitled 'Towards an ODL pedagogy' (2011:10) pedagogy is defined as the methodology of teaching and can also be used to refer to teaching strategies and teaching styles employed within a particular course. According to this definition, satellite broadcast can be referred to as a teaching methodology which is the unit of analysis of this study.

Satellite broadcast at UNISA according to Wessels (2012b:9-11) is used for a live or pre-recorded lecture, where the lecturer sits in the studio and the presentation is recorded and offers the full sight and sound experience to the student. Satellite broadcast allows the lecturer to reach new and specific audiences and it is a manner of addressing the students so as to bridge the gap between the lecturer and the student. Students ask the same questions and experience the same problems, so this is an effective method of dealing with the recurring questions which students have. The lecturer decides on which areas will be dealt with during the class and prepares a PowerPoint presentation, which is also made available to the students. Wessels goes further and explains that the students sit in during the live recording at venues across the country and can interact with the lecturer, asking questions via email, text message or can also call in to the studio, which encourages two-way communication. The classes take place in real-time and the students who are based in the remote

areas can also benefit from this method of teaching, as the class is broadcast at venues countrywide at the various regional and satellite offices of UNISA, and the students can attend the class at a convenient location.

In another presentation, Wessels (2011:3-6) asserts that satellite broadcast is a lonely experience as the lecturer sits in the studio in front of the camera and has to teach to the camera. Satellite classes have been made more interactive by Wessels by posing a question to the students and the students have to respond via an email, text message or a telephone call to the studio. The student who sends in the first correct answer then wins a book prize or other UNISA promotional items. The researcher found that this type of involvement on the part of the students makes them active participants in their own learning process as opposed to passively listening to what the lecturer is saying, which assists in bridging the cognitive and emotional divide. A copy of the DVD of the satellite broadcast class is posted to all students who are registered for the subject, which ensures that the students who were not able to attend the class still benefit from the class conducted.

There are certain guidelines provided to the lecturer in a 'Standard Operating Procedures' document (2011) for Satellite Broadcast which relates to aspects such as font size for a PowerPoint presentation, the correct clothing to wear to the broadcast class, training and making bookings to broadcast. Wessels (2012a) adds that the lecturer always has to look and sound professional as the student watches the DVD at home or even at work, therefore the lecturer should look at the camera and listen to what is being imparted to ensure professionalism at all times.

4. The advantages and disadvantages of satellite broadcast

As with any other teaching method employed, there are various advantages and disadvantages of satellite broadcast according to various authors. The advantages of satellite broadcast, according to the 'Standard Operating Procedures' of UNISA (2011:2) are as follows:

- Satellite broadcast plays an integral role in bridging the distance between the student and the lecturer.
- Satellite broadcast stimulates a sense of belonging and a sense of being a student.
- This is an interactive teaching and learning mode of delivery.
- Satellite broadcast enhances students' learning experience in improving pass rate and throughput.
- Satellite broadcast permits the lecturer to reach great numbers of students on a national or regional level.
- Satellite broadcast can be integrated to web 2.0 technologies for interaction.

Wessels (2012b) adds the following advantages of satellite broadcast, and are as follows:

- Students receive the DVD of the satellite class conducted and can watch the DVD of the class a few times if they do not understand the material covered.
- Students who attend the satellite class can ask questions via telephone, email
 or text message and can have their questions or queries dealt with
 immediately.
- All registered students have access to the information provided at the satellite class.
- Continual improvement of teaching materials and methods can be implemented as the lecturer is in contact with the students and recommendations and suggestions from the students are incorporated.
- Satellite broadcasting provides a common standard of teaching to all students wherever they may be located.
- This method encourages students to prepare course material ahead of the class in order to partake in the discussions.

Advantages of satellite broadcast according to Bates (2008:online) are:

- This method is the most effective to use when many students need to receive the same message.
- Satellite broadcast provides a common standard of teaching to all students, wherever they may be located.
- Satellite broadcast fits a transmission model for education, where students are expected to remember and understand what is being taught.
- Transmission of information to large numbers of students at a relatively low cost per student.

Bates (2008:online) has also identified various disadvantages to satellite broadcast:

- Satellite broadcast requires very high start-up costs and a high level of technical expertise to launch and maintain.
- Despite the use of alternative technologies for two-way communication (telephone and email), it is difficult to make satellite broadcast very interactive for the students.
- Satellite broadcast lacks the educational flexibility and is not flexible in terms of time or location.
- The need to provide convenient, secure and accessible local reception sites can add to the cost of satellite broadcast.

The disadvantages of satellite broadcast as identified by Wessels (2012b) are as follows:

- There is no direct access to the lecturer when using the satellite broadcast teaching method, implying that the lecturer cannot be spoken to directly, only via email or telephone.
- Not all the students can attend the class due to work responsibilities.

- Not all the students can watch the DVD as they do not have access to a DVD player or a computer.
- There is an increase in the workload when using this teaching method.
- Not all the students use the opportunity to ask questions as they want to listen to the lecturer and not miss the information provided.

The advantages of satellite broadcast far outweigh the disadvantages as the students are of the opinion that this contact with the lecturer assists them with their studies and motivates them. The advantages of satellite broadcast to the lecturer is that large numbers of students can receive the information presented in the satellite class and explanations can be provided to the student. A further advantage is that the researcher is able to ascertain during the class whether there are more areas of difficulty with the courseware which can be established during the class and dealt with.

5. Method of research

Cross (2001:online) contends that the job of the lecturer is to convert the subject knowledge into that which the students can understand and an effective approach, meaning joining together what is taught with how it is taught. A method to ascertain the effectiveness of teaching on students is to use classroom research whereby the lecturer uses their classrooms as laboratories for the study of learning, as this research process is embedded in the regular ongoing work in the class. The researcher used the satellite broadcast class as the laboratory for the study of learning to ascertain the reception of the satellite broadcast in teaching Public Administration at UNISA.

The researcher has used satellite broadcast as an additional teaching method during 2010 and 2011 in the four subjects taught, as the pass rate for the subjects dropped while the researcher was on sabbatical leave. The researcher decided to implement an additional teaching method to try to improve the pass rate. Three classes were conducted per subject for the four subjects over the two year period, which is 2010 and 2011. The first satellite class consisted of a discussion of the course requirements and completion of assignments. The second class consisted of discussions and explanations of the course content. During the third class, the researcher focused attention on the preparation of the course content for the examination as well as information on the examination process. Questions and concerns which the student had were also dealt during the class. The subjects involved in this research intervention are Public Decision Making 1, Public Service Delivery 1, Inter-sectoral Collaboration 3 and Public Service Delivery 5. The researcher found that at the end of 2010 that the pass rate for all four subjects in 2010 had increased by 30% (Wessels, 2011).

The teaching method utilised is satellite broadcast and the instrument used for this article is an evaluation questionnaire completed by the students which allowed for

self-administration. An exploratory study has been conducted to ascertain the views of the students with the use of this teaching method. The researcher could not manipulate the variables and can only report on the responses provided by the students. A total of 321 questionnaires were completed in two of the classes conducted during 2011 out of a possible number of students who were registered for that year.

6. Findings and discussion

The overall findings from the questionnaires were very encouraging as the students experienced the satellite broadcast very positively. An overwhelming majority of students felt that they gained an understanding of the information provided in the study guide and that they were clearer on the information in the study guide than before the class. Some of the students were of the opinion that the other lecturers should also use this as a teaching method as they gained from the satellite class conducted and they could obtain clarity on uncertainties and also obtain information on how questions are asked and how to answer them. The students mentioned that the satellite broadcast class provided them with an opportunity to ask questions about the sections in the study guide which they did not understand and were provided with answers immediately.

The majority of the students felt that this teaching method assisted them to prepare effectively for the assignments and the examinations. The vast majority of the students were of the opinion that they used their study material effectively during the satellite classes. A small number of the students pointed out that they cannot listen, watch and take notes at the same time. A few students felt that they cannot listen to the class and answer questions at the same time. Only some students indicated that a disadvantage was that more explanation of the study material was required. A small number of students were of the opinion that a disadvantage was that there was not enough time allocated for the class and that there was too little communication with the lecturer.

The recommendation made by a great majority of the students was that more satellite classes should be conducted. A concern to some of the students was that the class should be rebroadcast as they don't always get time off from work to attend the classes. A large number of students indicated that the class should be over a weekend or in the evenings. A few students indicated that they cannot afford airtime to send a text message to ask a question. An overwhelming majority of students indicated that clarity was obtained on how questions would be asked in the examination and how to answer the questions in the examination.

The trends identified by the research were that a small number of the students felt that the researcher was focussing on how to write an assignment and they felt that they knew how and they wanted to learn about the content of the subject instead. A large number of the students indicated that an advantage of satellite broadcast was that the class reaches all the students at the same time, throughout the country. A small number of the students specified that a disadvantage was that there is no direct one on one communication with the lecturer and that they would like to hear the questions which were asked by other students, since the questions asked by students telephonically were not aired. A large majority of the students felt that the satellite broadcast provided them with a clear understanding of the module. While not statistically significant, there is evidence of some students not being happy with the technology at their specific regional offices.

A large majority indicated that the class was advantageous as they are now able to answer questions and assignments in the correct manner. A large majority of the students were of the opinion that they have more understanding of what is expected of them. A few students indicated that they enjoyed seeing who their lecturer was, even if it was not face-to-face. An overwhelming majority of students indicated there appreciation for the class as distance education is not easy. A large number of students felt that support in any form is beneficial to students' studies.

This study has several limitations. Firstly, this study was dependent on the number of students who willingly completed the evaluation forms after the class and the researcher was also dependent on the regional offices sending the evaluation forms. The sample was selected based on the responses received from the students which may create a self-selection bias, which may in turn affect the results of the study. Secondly, the overall level of student responses was lower than expected, which also limits the generalisation of the results. The researcher relied on the administrative staff at the various regional and satellite offices to send the evaluation forms, and found that in some cases, evaluation forms were not sent from some offices, even though students attended the classes and completed the evaluation forms. Thirdly, the study was conducted with satellite broadcast classes presented in the field of Public Administration thus the perception may differ in other fields. Future study is warranted in this area.

The lessons which the researcher learnt from the study are that students appreciate any type of contact which the university provides. Studying at UNISA is lonely as the students are so removed and distanced from the teaching and learning process. Lecturers should accept that learning about teaching is a lifelong learning process and if not wanting to learn, will become educationally redundant. In a highly digital world, lecturers cannot be left behind, as the lecturers set the pace for the students, thus should always be one step ahead of the students and be familiar with what is happening in the teaching environment. The researcher has found this a very effective teaching methodology as more of the senses are involved in satellite broadcast teaching. Using different types of teaching methods will also ensure that more students are reached from the different generational groups.

7. Conclusion

ODL at UNISA is a multi-dimensional concept aimed at bridging the time, geographic, economic, and social and communication distance between students and institution, lecturers, courseware and peers and focuses on removing barriers to access learning and provides flexible learning options. The teaching processes at UNISA should be student centred which is why the researcher conducted this study, to obtain the views of the students and place the student at the centre of the teaching and learning experience.

In the 21st century, advancements and improvements in technology have become part of the teaching and learning landscape which has also been the case at UNISA, and students need to be prepared. Satellite broadcast as a teaching method has been implemented by the researcher and offers the students an opportunity for real-time communication and interaction with the lecturer at a convenient location to the student and provides the student with the full sight and sound experience. The student has the opportunity to see the lecturer, listen to the lecturer, make notes and send text messages or emails or make telephone calls to the studio on any clarification required. Satellite broadcast can be used to bridge the gap between the student and the lecturer. The more teaching methods used, the more students are reached as students learn differently. From the study conducted, it is evident that satellite broadcast has been used effectively in teaching Public Administration and the researcher has found that this teaching method greatly assisted students with their assignment and exam preparation and improved their overall marks thus increasing the student pass rate for the individual subjects.

What the researcher found to be interesting about using satellite broadcast teaching, was that it allowed for the exploration of new methods of teaching and provided an innovative way of thinking about teaching the subjects, which had become the normal practice. The researcher also found that the use of satellite broadcast provided fresh and new ideas about teaching and made the researcher think more about the student and less about the content to be taught.

References

Abdous, M., & Yoshimura, M. (2010). Learner outcomes and satisfaction: A comparison of live video-streamed instruction, satellite broadcast instruction, and face-to-face instruction. Computers and Education, 55, 2, 733-741.

Barker, B.O., & Platten, M.R. (1988). Satellite: Student perceptions on the effectiveness of college credit courses taught via satellite. American Journal of Distance Education 2, 2, 44-50.

Bates, Tony, (2012), The continuing evolution of ICT capacity: The implications for education. [Online] Available: http://www.tonybates.ca/wp-content/uploads/2008/07/farrell.pdf (August 30, 2012)

Brynard, Petrus, (2012), A Flexible Model of Education in Public Administration. [Online] Available http://repository.up.ac.za/handle/2263/14117 (July 5, 2012)

- Cant, M.C., & Bothma, C.H. (2010). The learning-technology conundrum: Lecturers' perspectives. Progressio 32, 1, 55-73.
- Charles Darwin University, (2011), Facilitating Learning. [Online] Available: http://learnline.cdu.edu.au/t4l/teachinglearning/facilitating.html (November 24, 2011)
- Cross, Patricia, (2011), Teaching and Learning in the Next Context. [Online] Available: http://www.ntlf.com/html/sf/teaching.htm (February 3, 2011)
- Govender, D. (2012). Effectiveness of satellite broadcasting (television) in distance education. Progressio 34, 2, page numbers (not printed yet).
- McDonald, J. (2002). Is 'As good as face-to-face' as good as it gets? Journal of Asynchronous Learning Networks 6, 2, 10-23.
- Pityana, B. (2009). A country report for COL's forum on a decade of ODL in the Commonwealth. Paper delivered at the COL Forum on a decade of ODL in the Commonwealth, Abuja, Nigeria, 18 to 20 May 2009.
- Prinsloo, Paul, (2012), An education revolution? [Online] Available: http://staff.unisa.ac.za/e-connect/e-news/2012/07/04/an-educatio-revolution/ (July 4, 2012)
- Tait, A. (2003). Reflections on Student Support in Open and Distance Learning. International Review of Research in Open and Distance Learning 4, 1, 1-9.
- UNISA. (2008). Open Distance Learning Policy. Pretoria: UNISA.
- UNISA. (2011). Towards an ODL Pedagogy. Guiding principles and framework for an ODL pedagogy. Pretoria: UNISA.
- UNISA. (2011). Celebrating Teaching and Learning at UNISA. Pretoria: UNISA.
- UNISA. (2011). Standard Operating Procedures. Tuition and Facilitation of Learning. UNISA TV (Satellite Broadcast). Pretoria: UNISA.
- UNISA, (2012), UNISA. [Online] Available: www.unisa.ac.za (July 30, 2012)
- Wessels, R.G. (2011). The use of satellite broadcasting in bridging the cognitive and emotional divide. Paper delivered at the 2nd Celebration of Innovation in Teaching at UNISA, Pretoria, 17 March 2011.
- Wessels, R.G. (2012a). Satellite Broadcast at UNISA: Lights, Camera, Action. Paper delivered at the School of Computing at UNISA, Pretoria, 2 May 2012.
- Wessels, R.G. (2012b). The use of satellite broadcast to improve Public Administration education at UNISA. Paper delivered at the International Association of Schools and Institutes of Administration (IASIA) Annual Conference, Bangkok, Thailand, 16 to 21 July 2012.