

PERSPECTIVES OF DISTANCE HIGHER EDUCATION STUDENTS ON ONLINE INTERACTION

Kefiloe A. Maboe

Department of Health Studies
University of South Africa, South Africa
maboeka@unisa.ac.za

ABSTRACT

Higher education institutions are gradually adopting online teaching and learning. This research was explorative and descriptive in approach to explore students' online interactivity with their peers and lecturers in a distance education context. Focus group interviews with 54 participants were conducted at six regional campuses of the University of South Africa. The sample consisted of second and third-year Health Services Management (HSM) students. Data was collected from June to September 2012. Giorgi's phenomenological approach was used for data analysis. The findings revealed that students benefitted from online interactivity but encountered more challenges than benefits. Challenges were academic, institutional and administrative in origin. The article recommends a collaborative effort by the university management, information technology specialists, students, lecturers, and the public and private sectors to resolve these challenges. The university should further consider and formalise utilisation of other social media like Twitter, Facebook, LinkedIn and Instagram besides the prescribed online interactive tools to promote online interaction and to facilitate teaching and learning.

Keywords: Distance education; higher education; interactivity; lecturers; online; students



INTRODUCTION

Distance education is ‘a field of education that focuses on the pedagogy, technology and instructional system design that aims to deliver education to those students who are not physically “on site” as in a traditional classroom or campus’ (Saikia 2011, 72). It has an advantage to those people who occupy multiple roles in life and who intend to pursue their studies. ‘Transformation of higher education and creating questions about what constitutes quality in education was considered’ (Gallagher-Lepak, Reilly and Killion 2009, 134).

‘Open’ is an extension of distance education: ‘Open distance learning (ODL) is a multidimensional concept aimed at bridging the time and the geographical, economic, social, educational and communication distance between student and institution, student and academics, student and courseware, and student and peers (Unisa 2008, 1). The education sector has made accessibility of information communication technology (ICT) a key paradigm (Apena 2012, 440) and raised the quality of individualised distance learning.

The use of various forms of electronic media, such as computer-based applications, increases time effectiveness and improves delivery of information. Electronic delivery may use synchronous communication, in which students participate at the same time, or asynchronous communication, in which students do not participate at the same time (Abarashi 2011, 55).

Nursing education faces challenges in preparing students to live, work and study in an information communication and technology driven world (Maboe and De Villiers 2011, 93). This has an impact on teaching staff and students, although teaching staff need to understand the uniqueness of online learning environments and adopt new pedagogies for teaching in the virtual classroom. Student engagement and improving learning outcomes require a strong sense of community in order to enhance the potential for online learning. Students who are to study online should be prepared to collaborate with their peers through ICTs (Clarke 2008, 17).

Regardless of whether students prefer distance learning or traditional learning, lecturers should strive to build integrative interactive activities in the content to promote deep learning with the students. It is the duty of lecturers to make sure learning is taking place by designing, developing, engaging and motivating students’ experiences to facilitate learning whether the student is physically in the classroom or online. For staff members to succeed as distance learning practitioners, they need to be exposed and empowered in online facilitation skills. Quality in an ODL programme depends on administration of clear and accurate communication with students. Access to the development opportunities related to instruction, content knowledge and technical skills are expected from the academics (Tomei 2008, 687).

This article explores and describes students’ online interactivity with their peers and lecturers in a distance education setting. Exploration of online interactivity will

bridge the gap of no and/or poor interactivity between HSM students in an ODL institution to facilitate teaching and learning.

BACKGROUND

Exponential growth in the demand for higher education, global competition in the provision of higher education, and rapid advances in information and communication technologies demand a re-examination of how universities fulfil their core functions of storage, processing, dissemination and application of significant knowledge, decrease in government funding for education, the changing nature of knowledge, changing student demographics and expectations, to real life problems are some of the challenges the universities are facing. 'Over the ages universities have undergone many conceptual paradigm shifts of how they teach and to whom. In the last three decades there are numerous approaches that have appeared to adopt ICT for the purpose of learning and education for over ages' (Rajasingham 2011, 1).

Student demographics have also changed dramatically, as universities and education centres compete to provide open and online undergraduate and graduate courses in various disciplines, including nursing. 'Due to advances in ICT, the desire to improve skills and changing economic times nowadays, there is an increase in an enrolment in distance education and on-line environments' (Ring 2012,1). United States of America is an example. There is the increase in the development of online programmes in other health disciplines like online nursing courses at the associate, baccalaureate and graduate levels' (Reeves and Reeves 2008, 46).

Many universities including the University of South Africa (Unisa) and its satellite campuses are increasingly considering their teaching and learning environment to be fully online. They are transferring courses and programmes online at both graduate and undergraduate levels (Dixon, Dixon and Axman 2008, 256–257). 'Other academic colleagues are offering online learning opportunities at an increasing rate. In that regard health professionals are also not left behind' (Reeves and Reeves 2008, 46).

Technology and distance education are focused on the same method (Tomei 2008, 719). One element that must be uppermost in the designers' minds irrespective of what form of distance education, is the extent of student engagement that is needed and how to engineer it (Moore and Kearsley 2012, 113). It is of importance that students must be assessed with regard to their ability to succeed online by the universities. Furthermore, it is important that they begin the work of learning, and they need continual access to lecturers, libraries and other student resources in an ODL environment. 'There must be accessibility to resources appropriate in order to support students learning. Students must have adequate access to the resources' (Tomei 2008:687).

The goal of effective and appropriate learning needs the resources to sustain a quality distance education programme. In this regard students are to be supported

by faculty and the institution towards achieving appropriate learning. Clear and accurate communication to students depends on the administration of a quality ODL programme. Furthermore, there must be recruitment of lecturers and support staff, they must be provided with development opportunities related to instruction, content knowledge and technical skills, and they must receive feedback on their teaching. Students' engagement and online learning are not to be divided, although it has been indicated that it is a complex process. However, it is supported by all kinds of engaging activities being also physical and psychological tools. Students in one or more location could watch and listen to the lecturer and their peers in real time and maintain interactivity within remote location with online interactivity modes' (Hrastinki 2009, 78). It is of no use if the resources are available to support ODL program but the students and the lecturers are not utilising them. This article explored students' online interactivity with their peers and lecturers in a distance education setting.

THEORETICAL FRAMEWORK

The theories which underpin this study are the following:

Vygotsky' social development theory

The most important aspect which supports student-centred learning is constructivism. 'It focuses on how an individual student gains understanding of phenomena. Furthermore we do have social constructivism. This emphasises that meaning and understanding of social encounter' (Vygotsky 1978, 56–57). There is the proposition of the concept of Zone of Proximal Development (ZPD) by Vygotsky which suggested that students learn subjects best just beyond their range of existing experience with assistance from the teacher and a peer so that the distance from what they know or can do independently or what they can know or do with assistance from the teacher or a peer can be bridged (Vygotsky 1978, 86). Vygotsky's ideas match this article perfectly because they address pedagogy and student interaction between their peers and the lecturer. Quintana (2005,6) also noted 'the two major types of social interactions in learning, that is engaging in dialogue with others and gaining assistance from others is because of the importance of social constructivism'.

Bruner's cognitive constructivist theory

Bruner's cognitive constructivist theory is also contributing towards this article. Students use their minds depending upon their ability to develop and use technological tools that will make it possible for them to express and utilise new and fresh ideas (Bruner 1966, 31).

Tomei (2008, 696), noted a major theme in Brunner's theoretical framework. This theme is that learning is an active process in which students construct new ideas or concepts which are based on their previous and present knowledge.

Pask's conversation theory

According to Pask's theory, learning occurs through conversations about module that will serve to make knowledge outstanding. In a team more than one user can learn module represented in a conversational style (Pask 1976, 185). In this way interactivity is promoted.

Moore's transactional distance theory

Moore's theory is also relevant to distance learning and explains the relationship between participants in a distance learning situation. The teaching behaviour found in transactional distance includes two variables, namely dialogue and structure. Dialogue is the term that helps focus on the interplay of words and actions and any other instruction between teacher and students when one gives instruction and the other responds. Elements found in the course design are called structure (Moore and Kearsley 2012, 210–211).

The theories' focus corresponds to this study because they discuss learning as an active process through conversation between the students and the lecturers.

PROBLEM STATEMENT

Unisa expects teaching and learning to take place online. Lecturers and students must interact through the myUnisa discussion forum platform, which is a prescribed online interactive tool. To achieve this objective, collaboration between the university, lecturer and student is important.

Collaboration is supported by active interaction between the lecturer and the student online. Abrami et al. (2011, 87) note 'there are challenges that may limit the implementation of emerging technologies even if opportunities are given in the learning environment of collaboration of distance education programs around the globe. Challenges of implementation of these technologies might be assumed as due to a lack of accessibility and connectivity'. 'Student-lecturer interaction was also noted to be a primary variable in online student satisfaction and persistence' (Croxtton 2014, 314). The lecturer and the student must be critical role players in an open distance learning context to facilitate learning. Students and lecturers' online interaction is considered a key goal. Online participation requires maintaining their relationship with one another.

myUnisa is a website prescribed by Unisa which is used for interaction between students and other students, students and lecturers, students and study material,

and student and the university. This website, in a way, further facilitates teaching and learning. Yet, irrespective of the opportunities granted by the university for interaction purposes to distant students, this opportunity is not used maximally and/or not used at all by the researcher's students in the Health Services Management (HSM) programme. This is the main problem of this article.

RESEARCH PURPOSE

The purpose of this article is the exploration and description of students' online interactivity with their peers and lecturers in a distance education context.

RESEARCH DESIGN AND METHODOLOGY

Design and setting

The chosen design was qualitative, exploratory and descriptive in nature. Six regional Unisa campuses around South Africa were the setting. These comprised the Polokwane, Sunnyside, Bloemfontein, East London, Cape Town and Durban campuses.

Sample

Selection of purposive sampling technique was considered that is, selecting cases that will most benefit the study (Polit and Beck 2008, 355). Second- and third-year registered students in HSM were recruited for participation and used as the sample. There were 54 participants who matches also the inclusion criteria being those who are participating online interaction, irrespective of race, country of origin, sex and age.

Ethical considerations

Ethical approval was granted by the Research and Ethics Committee of the Department of Health Studies at Unisa. Permission to conduct the study was granted by the Chair of the Department of Health Studies at Unisa. Unisa ethical policy was adhered to. Informed written consent was obtained from the participants. Confidentiality and anonymity were maintained by not writing participants' names on the transcripts and using codes instead. Participation was voluntary and participants were allowed to withdraw from the study with no explanation at any time if they felt uncomfortable.

Data collection

Data collection was conducted after ethical approval was obtained. It was conducted from June to September 2012 in the form of focus group interviews. Participants were recruited and a rapport was built a day before the actual data collection. Proof of ethical clearance and the letter of permission to conduct the study were shown to the participants. Prior to the actual interviews, the entire research process was introduced and a thorough explanation was given. Participants were informed that their participation is voluntary and were ensured that there will be no penalty if they decide to withdraw from participating. The title and purpose of the research were explained. Written informed consent was obtained and verbal permission to use ADR was also obtained. Fifty-four participants volunteered to participate. Tools which were used for data collection were the researcher, Audio-Digital Recorder (ADR) and a semi-structured interview guide. One focus group interview was held in each region with an average of 10 participants in a group and this lasted between 45 and 60 minutes.

Codes were assigned by the researcher to the participants for consistency and for data analysis purposes. The coding was calibrated according to the abbreviation of the name of the regional campus, followed by a 'P' standing for a participant and the number; for example, in one region 'POLP1' was a code.

The participants were probed in order to get further information. Field notes were also taken to record any other usable and useful data, such as observed non-verbal and gestural cues in order to augment further data collection. Data was collected until no new information emerged and data saturation was reached.

Data analysis

Data analysis happened simultaneously with data collection. Notes were taken by the researcher, non-verbal and gestural cues were observed, and analysed at the same time. Verbatim transcription of ADR was done thus increasing the data accuracy. The data that was analysed were the participants, description of online interactivity, and ODL, if they were feeling comfortable to interact online and whether they benefit from online interactivity at Unisa. Each participant's transcription was analysed using Giorgi's phenomenological approach and steps in order to orderly capture the participants' experiences. The steps are indicated by showing the interview transcriptions from the participants, interpretation of participants' meaning, creation of subthemes and finally commonalities of subthemes of individual responses were identified, grouped together and compared.

Commonalities of the participants' responses at the six researched Unisa regional campuses were grouped together. Afterwards the final results were obtained. Data was coded independently by the researcher. This happened together with the filed

notes. Data coding helped to identify both dominant issues emanating from written responses and themes from non-verbal cues (Patton 1990, 376).

After getting information from the related types of narrative information that described the phenomena under study were grouped, themes and subthemes were noted. Thus a rich description of online interaction modes, challenges, prospects and approaches to improve online interactions in a distance education setting was finally provided. The analysis included a description of variations in these HSM students' responses to commonalities and patterns in their major experiences. Capturing of the themes and subthemes are discussed under the findings.

FINDINGS

Challenges of students' online interaction were noted. Students' indicated that they need support with regard to that. The challenges are institutional, academic and administrative in origin although they experience certain benefits of online interaction as well.

Administrative challenges

Computer illiteracy, computer shortage and dysfunctionality at Unisa computer labs

The participants repeatedly indicated that they were computer illiterate, which clearly suggested that they would not succeed in interacting online:

Another challenge is computer literacy, if you are not, you don't have enough or adequate skills, you might end up even thinking that the internet is difficult but it is only because you are not used to working with the computer. (BLMP1)

And eh the other thing is the lecturer letter says everything about an Distance Education setting but now the other challenge is, as we are all here maybe the rest of the group that is left, we look at the age we found that the people are not computer literate. (POLP2)

Irrespective of computer illiteracy, computers in the distance education setting do not function well and there are not enough of them, as indicated by the participants:

Another point is that ma'am another challenge there is a shortage of computers because sometimes you get there but all the computers are in use, it's only ten computers in our lab and mm sometimes there are students that are using that for more than three to four hours so you want to use the computer sometimes but it is full, so it's another challenge. (ELP7)

Sometimes even if eh mm there are computers that are free you will notice that they are not functioning well now, you will find yourself being queuing in the left few if you say you've got five computers the three of them are not working. (ELP4)

The students' frustration with the challenges they were encountering with regard to computer illiteracy and insufficient and poorly functioning computers caused them to make suggestions on how the university could resolve the problems. The following suggestions were made:

I just think as for computer literacy, we just have to ask Distance Education setting to organise classes for students who are starting the programme. (BLMP7) (Maboe 2013, 104).

Okay another thing as you say what are other ways or innovation where to interact online ehmm, well! There are better thought way unless maybe the university can go to better third a party software I mean socially we've got Facebook and we've got WhatsApp, where we can communicate far from the distance. (POLP4)

[Frowning] I think from when you were, were when you start with the course I think it should be added even if it took six months this basic computer should be added in the curriculum. (ELP2)

Lack of internet connectivity in other areas, incompetent Distance Education setting technicians and network unavailability:

Unisa caters for students around the globe, but students who live in rural areas and beyond South Africa's borders are frustrated by a lack of internet connectivity. This was supported by the following statements

In Lesotho people don't have internet at all [talking more loudly] and they have to travel to Bloemfontein to register. (BLM P6) (Maboe 2013, 105).

There are some lectures, I do not know whether they are video conferences or not, which are usually held at the main campus of Unisa and other campuses around South Africa, if maybe students outside South Africa maybe when these sessions are conducted. Wherever you are you can be able to access them [lecturers] from your computer online. (PTA P8) (Maboe 2013, 105).

Yes eh I've attended quite a few video conferencing and most of the discussions that are being there are sent by mail, most of the time, but what you are saying you feel more at ease and comfortable if you see the lecturer, you always get this, this lecturer letter sometimes, you don't even going through the ... you know, but if you get this TL and you were not at the same time at the VC. So you just you are revising and most of especially in EL most of the time they've got a problem, this video conferencing, sometimes you come at the centre and there will be nobody to open for you or if it opens it just goes off and nobody will be able, you must go out and ask for somebody to fix it and she or he will tell you I don't know how to. (ELP3)

The results and registration data are downloaded from the Unisa website. Students are frustrated that when they download they do not get the information they want, such as their results. The findings revealed that online registration at home is slow and unreliable, leading to delays in receiving study material. Late release of results disappoints the students and puts them in a predicament as to whether or not to

register for the following semester. Even if the results are late, registering at home online is frustrating. Unisa should give students support in this regard:

That is not alright but the same thing happened here and I couldn't download my results they've said they've changed the date, yet they have said the 20th of June, so I tried about a week and I was panicking and I had to come to the university. (ELP2)

I just want to add to what the previous speaker has said. It took very long for those results to become available, resulting in late registration for the new semester. I logged on to the website of Unisa but the results were not available. (ELP6) (Maboe 2013,111).

The registration process when you do it from home it is slower until you receive your books than when you register or the process from the university concern because we registered the same day, but her books were received almost two weeks online. Sooo the process if you register from home is much slower to receive your books than when you do it from the university, so I don't know if they processed the university education first and how do they monitor the distribution of the books. (POLP1)

Cognitive/academic challenges

Students indicated that lecturers do not respond to e-mails and discussion forums, or that they delay doing so. There is no feedback from lecturers during online interaction and they become unavailable with no notification. The discussion is supported by the following quotations:

My challenge is I don't get! a respond from my lecturers. I remember I asked one lady a question concerning how I can approach my errh! This specific assignment until today when I check every time on the website there's no response. (CTP4)

Trying to address maybe to suggest the solution for the second one isn't that we are addressing reliability I mean, it goes without saying that one that we are usually posting questions and you our lecturers are not responding, I mean let you guy have a norms to direct that after this poster that within this day you should have responded because it's really frustrating. (POLP4)

[Using hands closing eyes] And eh as far as I know emails ... they delay when ah when ah they are supposed to answer your mail, query they take time to respond to the queries. (DBNP7)

Because sometimes it's very annoying when you put it online and then you never ever get a response the whole time you have been with that subject there's no response at all from any lecturers. (DBNP2)

Students emphasised that lecturers were inactive online. I think the other challenge is that in most of the modules lecturers are not that active in the discussion forums except for one module. (PTAP6)

Well uhm being an international student, I can't attend. You know some lectures are once a month not everybody is posting that information under institution's website. (DBNP5)

Affective and social challenges

Students are social beings, they belong to the society and are members of their families and the community at large and need support from them. Furthermore, in an educational context they also need more support from the lecturers, their peers and the institution in order to succeed academically. This will alleviate their challenge of being isolated socially and academically:

I said that uhm sometimes you need to sort of like touch base with somebody else. (DBN P2)

Sometimes we use but the people do not respond they only respond to others but you find they are not responding to you and I think another thing that makes it a bit hard for us to go on the forums, we just call our colleagues, colleague I have a problem here. (BLMP3) (Maboe 2013, 109).

I mean most of us are parents and we've got other responsibilities we can't spent our whole pay on books (talking with a hard voice) and then if you can have it on e-books, I mean you just download the chapter that is applicable to you. (POLP6)

DISCUSSION

It has been noted and further revealed from the findings that there are identified gaps of online interactivity irrespective of studies which have been conducted. Online interactivity is the key to enhancing teaching and learning in a distance institution setting. The benefits of online interactivity may be recognised and be the largest when students interact, collaborate and help each other' (Abrami et al.2011, 87). For distance education to be successful online interactivity between the students and the lecturer is the core and the most important concept to enhance teaching and learning. This means that students and lecturers need to interact, provide connection and create effective understanding, get information and express feelings to facilitate teaching and learning (Dabaj 2011, 1).

According to Croxton (2014, 314) 'interactivity is referred to as an important aspect which promotes satisfaction and persistence for online students at a distance learning context , and that students differ and preferences for types of online interactivity is based on what type of students they are. The most critical factors in facilitating student satisfaction in an online program is student-lecture interaction (Nandi, Hamilton and Harland 2012,7). Interestingly, the transaction known as distance education is regarded as an 'interplay between people who are lecturers and students in environments that have the special characteristic of being separated from one another' (Moore and Kearsley 2012, 132).

It is of significance to note that the student and lecturer are expected to participate actively in a dialogue in order to reach the benefits of learning. It is further noted that academic and social online interactions are expected to facilitate teaching and learning. If the two types of interaction are deficient in distance education settings,

it is unlikely that teaching and learning will materialise. Academically, interaction enables students to share their knowledge with regard to their studies. 'Socially, students can form study groups online to support each other academically. It should be further realised that online engagement does not always happen automatically between students' (Nandi, Hamilton and Harland 2012, 5). This means that lecturers' intervention is needed in that regard to encourage and to motivate their participation online.

There is a need of vigorous socialisation of students on the systems which are used by Unisa for online activity. This need is probed by the findings which indicated that students feel isolated academically and socially. They feel isolated and bored because they do not see each other. Isolation can be alleviated by interacting specifically online. This should not be left unnoticed because learning in an open distance context will be defeated. To support the recommendation that lecturers should socialise the students into the system, it should be noted that the social role of the lecturer includes behaviour that influences the students' relationships both with lecturers and with other students (Alvarez, Guasch and Espasa 2009, 332). Social role tasks include managing cooperative interactions among students. This could be done through synchronous online activities.

The lecturers should further emphasise to the students the importance of using online activities and how to access and participate in the institution's website. They should socialise them into the distance education system. Furthermore, the university at large should collaboratively socialise the students to the systems which they are using. A serious concern is receiving no response from the lecturers which leads to uncertainty about whether students' correspondence has been received.

An emphasis is that, lecturers should send questions in all modules and other activities online for students to respond to. They are the key role players of motivating their students to be engaged online. They should intervene whenever the discussion forum is quiet and enquire from the students their reasons of being quite in interacting online. However, this is not happening according to the finding of this study, as lecturers were said to provide no response or a delayed response. A lecturer has the right to be involved in the discussion forum even if the discussion is between students, more specifically if the students are facing challenges which need lecturer's intervention.

It is of importance that online lecturers be of value in giving students' direction through the learning process, and further refer them to other people who can provide support in online learning (Barbera and Linder-Van Berschot 2011, 170). It has been overemphasised that the social and affective support should not be left unnoticed. Even if the student can get cognitive and administrative support, affective support should also be considered, as it has an impact on the students' psychological and mental state. 'Study groups are important component of learning in order to promote academic success. It involves synchronous interactions that often depend on non-

verbal cues, such as tone of voice, gestures, proximity and facial expressions' (Franceschi, et al. 2009, 76).

Computer illiteracy is students' most frustration, which sometimes poses an obstacle to interacting online. Non-functional and fully occupied computers is their challenge when they go to the university computer labs to get further assistance. It seems the issue of students' computer literacy is not highly considered by the university. A student indicated that his or her children and spouse provided assistance in accessing the discussion forum. Self-directed students and those who are highly computer literate find online learning a rewarding concept. Although this study has shown that computer illiteracy leads to less reward in online interactivity. They no longer need to be fortunate enough to live near a university that offers a course in their preferred mode of education.

Students who are living in rural areas are disadvantaged to be study at a distance. They do not have an internet connection, leading to minimal interaction or no interaction at all. They have to travel for a long distance from their residential areas in order to be connected which means that they are unfortunate. According to Benson and Morgan (2013, 45), using social media allows students to communicate and collaborate across national, internationally and cultural boundaries as well as acquiring and becoming engaged actively in the learning process in order to master academic content. In this regard use of other social media is recommended.

CONCLUSION

Major challenges were revealed and students indicated that they need academic, technological, institutional and administrative support. They acknowledge that the university need them to interact online but they are challenged by their computer illiteracy, connectivity and accessibility hence those who reside in rural an outside South Africa do not benefit form online interaction.

RECOMMENDATIONS

There should be collaboration between top management of the Unisa, government, lecturers, students, and ICT specialists to address the students' challenges. The university should indicate the level of computer literacy as their admission criteria since it is an open distance learning institution. Vigorous orientation of the prescribed online tools which are used by the university should be done. An ICT specialist should be available for 24 hours to help students who are having challenges. The university to should formalise the use of social media for online interaction like Twitter, Face book and Imo in order to facilitate teaching and learning. Each Department to have an ICT specialist to address students' challenges even the lecturers too.

LIMITATION OF THE STUDY

The study focused on one department of students who are doing the same program. Further research is recommended to other departments thus covering different programs.

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