

Demystifying the Technology Myth: Experiences of 'Techno-Phobians' in Teaching Adults Through myUnisa

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ABSTRACT University of South Africa (UNISA) is an Open Distance Learning institution with over 270,000 students all over the world. In 2005 it introduced a course management system, *myUnisa*, to enhance communication between lecturers and students. This was in keeping with best Open Distance Learning practice but some academics had problems with technology as a teaching tool because of limited computer knowledge and skills. These 'techno-phobians' who had morbid fear for technology regarded teaching through it as a mystery and unattainable feat. Although the University provided short training it was inadequate to dispel anxiety and equip lecturers with adequate knowledge and skills to teach through technology. Through determination to protect their career, some academics formed a support club, taught each other to gain confidence and shed the myth regarding technology. This case study which used qualitative research method reports on 20 self-confessed 'non digital natives academics' who shared their experiences with the researcher regarding how they learnt to teach through *myUnisa*. The objective of the paper is to share the experiences of some academics with their colleagues in Open Distance Learning environment with little or no computer skills and to encourage them to persevere through their own efforts to acquire the basics to enable them provide students with academic support needed to succeed in their studies.

INTRODUCTION

In the contemporary world technology has made serious incursions into education- teaching and learning- which has resulted in fast growth in Open Distance Learning. The advancement of technology in the 21st century with its concomitant quality communication has motivated many higher education institutions in Africa to embrace the blended approach to teaching and learning. The digitisation of education can help solve many challenges, including access to education, affordability, language, distance and discrimination. It enables the mass delivery of quality education across geographical boundaries. In South Africa the Mobile phone maker Nokia has capitalised on the popularity of the social networking platform Mxit to launch MoMath, a teaching tool aimed at the youth (Verkade 2013). Indeed communication through technology is the bed rock of distance teaching and learning. The department of Higher Education and Training (South Africa) for instance has planned to use technology to implement an open distance learning programme for adults under the National Senior Certificate for Adults (NASCA) project. The aim of the programme is to provide learning opportunities for youth and adults who do not hold a National Senior Certificate (DHET 2013). As

Butcher (2003) affirms all education and training involves processes of communication between an educational provider and learner, and it is essential to develop an understanding of the modes of communication most appropriate to a particular teaching and learning process. As Bates (1998) aptly observes, the major characteristics of tele-education are the low- cost use of media to extend the teacher beyond the classroom walls to very large number of students and the use of technology to allow for more interaction between teachers and learners at a distance. Technological communication between lecturers and students can take place in various ways which includes the use of computers and computer- based multimedia, whether they be stand alone or part of a network (Butcher 2003). Africa has the highest mobile internet connectivity levels in the world and, for many on the continent, a cellphone is the first and probably the only 'computer' they will ever own. This makes the inclusion of this tool as a key medium for delivering education, a logical choice (Verkade 2013).

The University of South Africa (UNISA) is the *de facto* leader in Open Distance Learning (ODL) in Africa with over 270,000 students scattered all over the world. These students who are scattered all over the world need academic support to be successful in their studies. Citing

Quan-Baffour (2005), Arko-Achemfuor (2013) affirms the importance of learner support in distance education to ameliorate student attrition. In its effort to bridge the distance between lecturers and students in order to ensure effective learner support the University in 2005 introduced a course management system commonly known as myUnisa. In an open distance learning environment student support is very crucial for the realisation of learning goals. The main purpose of myUnisa is therefore the enhancement of communication between lecturers and students via the internet for the achievement of effective learner support. Butcher (2003) asserts that those deciding to use technologies to support education need to understand the nature of the communication between educators and learners in order to seek ways to support and enhance these processes. Any teaching and learning process consists of combination of different modes of communication which in turn support the teaching and learning strategies and activities of a particular course. The two way communication aims at providing students with academic support they desperately need in order to breakdown the perceived isolation associated with open distance learning delivery and its concomitant student attrition. Bates (1998), intimates that the application of new tele-communication and computer technology to education provides an opportunity to solve many of the major educational problems facing the world. New technologies provide opportunity for global networking, increased interactivity and more control for learners, in a highly cost-effective manner. This form of technological approach will be the way forward for education in the future: all we as distance educators have to do is to learn how best to embrace it (Bates 1998).

The idea of *myUnisa* (that is, teaching and supporting students through the internet) was seen by the UNISA community in general as a step in the right direction but the major problem was that in practice a number of the emerging academics had problems regarding the new teaching strategy because of inadequate computer knowledge and skills. As Bates (1998) affirms, the new interactive technologies present some fundamental challenges for the many established, large scale autonomous distance teaching institutions based on the industrial model. These interactive technologies not only require sophisticated equipment and communi-

cation systems but they also require highly skilled teachers in large numbers, if high level of interactivity are to be maintained at a social level (Bates 1998). A major challenge to the application of technology to teaching at the University of South Africa is the fact that many of the emerging black academics are 'non-digital natives' who might have come from disadvantaged school background where computer skills and knowledge were not part of the school curriculum. The little computer skills and knowledge acquired through self-teaching or 3-4 hours workshop for beginners of once or twice in a year might only be limited to very slow typing speed and sending of e-mails. This lack of technological skills by some academics could impede the implementation of myUnisa at UNISA hence the need to get the 'technophobic' academics trained in basic computer skills. Despite the effort by the University to provide them with basic training through minimal workshops some of the academics who experienced phobias with technology initially believed that it would not be possible to teach 'an old dog new tricks'. The idea of computer application to teaching brought much stress, psychological fear and anxieties among these 'techno-phobians' or 'non-digital natives'.

Realising the enormity of how the problem of lack of basic computer skills hindered their open distance teaching practice, a group of emerging academics- 'non digital natives'- found some ways and means of overcoming the technological obstacle. Through constant practice, determination and group support [informed by the need to become effective ODL practitioners] the techno-'phobians' gradually gained the confidence which eventually destroyed the myth they had about technology as a teaching medium for adults at a distance. This was a real breakthrough for the lecturers who before this time feared and regarded teaching through computer, a skill they could never attain later in life. This case study used the qualitative research method to explore how the 'techno-phobian academics' shed the technological myth through perseverance and used myUnisa (that is, the internet) extensively to support students in the ODL environment. The study reports the experiences shared by the 'techno-phobian' academics regarding how they learnt, through collegial support, to teach through myUnisa. As a 'techno-phobian' himself the researcher em-

ployed action research (in this case study) which allowed participants to critically reflect on, interrogate and improve their practice as ODL practitioners in the use of technology to support students in an open distance learning environment.

Objective of the Study

The objective of the paper is two-fold, that is, to

- share the experiences of some academics with their colleagues in Open Distance Learning environment with little or no computer skills and
- to encourage academics who are 'non digital natives' [aka techno-phobians] to persevere through their own efforts to acquire the basics to enable them provide students with academic support needed to succeed in their studies

Theoretical Framework and Literature Study

This research is informed by Critical Rationalism of which the Austro- British philosopher, Sir Karl Popper (1902-1994), is the chief proponent. The theory postulates that humans have to learn how to act and react in their environment in order to survive (Zecha 2002). Critical Rationalism aims at self-criticism and evaluation because it is based on the premise that self-criticism is education and education is problem solving. The theory sees education as a process of helping humans to learn and become responsible members of their society (Zecha 2002). That is, through education humans learn to solve problems and by so doing they are able to adapt to their environment and become better members of their communities. In line with this stance Critical Rationalists see education as a process of helping humans to learn and become responsible members of their society. To be able to take action to improve their conditions and thus become responsible members of society humans, as *rational beings*, must take *critical view* of their lives and behaviours through introspection, self-evaluation and self-criticism hence the name *Critical Rationalism*. The theory is in line with action research where practitioners do some introspection, self-evaluation and take the appropriate action that is, learn to improve their practise. Open distance learning

practitioners need relevant new knowledge and skills in order to become more effective in reaching out to their students to provide them with support. Without new knowledge and skills in technology most lecturers cannot adapt to contemporary open distance practise of teaching and supporting students at a distance. In that case they would have failed to exist as effective open distance education practitioners. The academics in open distance learning environment require relevant knowledge, skills and information for survival because without true information, knowledge and skills they cannot be better Open Distance Learning practitioners.

The implication of this theory is that it is only through continuous professional development activities that academics in open distance learning environment could be equipped with the relevant information, knowledge and skills they need to enable them take a *critical view* of their actions, be sure of themselves and become effective members of the community of open distance practitioners.

Education must be based on the intention to assist individuals to engage in introspection, self-evaluation and development. The concept education is based on actions through which human beings attempt to produce lasting improvement in the structure of the psychic dispositions of other people to retain their components they consider positive or to reject the formation of dispositions they regard as negative. The indication is that through self-initiative and continuous professional learning lecturers in open distance learning can critically re-examine or evaluate themselves and make concerted efforts to learn or improve their abilities, skills and attitudes which could make them better distance educators. Brezinka (1992) affirms that education involves those actions through which human beings attempt to produce lasting improvements in the structure of the psychic dispositions of other people to retain components they consider positive or to prevent the formation of dispositions they regard as negative. The intention of education is to assist individuals to develop by equipping them with the relevant knowledge and skills to take part in socio-economic advancement of their society. Without these intentions, as Zecha (2002) points out, there is no education. In the context of this paper and open distance learning; continuous professional development efforts should prepare lecturers to play more active and positive role

in the application of modern innovative approaches to distance teaching. The ability to reach out to all categories of students and support them through technology can take the 'distance' out of distance learning. This might be a paradigm's shift from a pure correspondence to distance teaching and learning where lecturers and students are in constant interaction.

METHODOLOGY

This research project was a case study. In line with its theoretical foundation of critical reflection the project took the form of action research in which the researcher sought to critically examine some aspects of his own practice and those of his academic colleagues in order to improve their teaching. McKay (1999) intimates that the purpose of action research is to generate insights by working with practitioners within particular local practice contexts in exercises which are relevant to the local contexts. In this study the local context is the University of South Africa, an Open Distance Learning institution, where a group of academics got together to reflect on their ODL practice with the sole aim of improving it. The participants in the study were a group of 'non-digital natives' who lacked computer skills for effective distance teaching. They came together, reflected on their situation and took action to improve their skills to become better educators and better able to support distance students.

Although a case study does not refer to any specific method that is applied in a study it allows a limited number of units (be they individuals, groups or institutions) to be analysed and studied intensively. Here (in this case study) the researcher was directed towards understanding the uniqueness and the idiosyncrasy of a particular case in all its complexity. The objective of a case study is to investigate the dynamics of some single bounded system typically of a social nature such as an organization, a family, a group, a community or participants in a project, a practice (Welman et al. 2007).

In this study the group studied was highly representative or typical of a particular population; in this case some of the University of South Africa academics. The researcher purposively selected 20 participants who were academics at the University of South Africa for an in-depth interview. He used the focused group interviews and participant observation to collect data for

the investigation. The qualitative research approach was employed in this study in which focus group interviews were held with 20 information rich academics at the University of South Africa. Focus group is a semi-structured group session, moderated by a group leader, held in an informal setting, with the purpose of collecting information on a designated topic (Streubert and Carpenter 1999). Quan-Baffour (2006) affirms that the use of focus group interviews allows the researcher to elicit information from small group (of about 5-8 people) through discussions on specific themes in a more natural conversation environment. The focus group approach is intended to engage the research subjects in a conversation in which the researcher encourages participants to relate, in their own terms, experiences and attitudes that are relevant to the issues under investigation (McKay 1999). Apart from saving time and money focus group interview is a strategy to obtain better understanding of a problem, assessment of a problem, concerns or an idea through a discussion with small number of participants with rich information on the subject being researched. The approach affords the researcher the opportunity to probe deeply and to explore dimensions of the areas under investigation hence its adoption as a data collection tool for this study.

During the focus group discussions the participants reflected on their attempts at using myUnisa and how to devise better ways of doing it through talking about their experiences and supporting each other. The researcher facilitated the focus group discussions, probed and encouraged participants to see things in positive regard from different angles. As the groups discussed issues the researcher ensured that 'stronger' members in the groups did not dominate the discussion. This was done by giving every member of the group the opportunity to speak on the issue under discussion. He created space for openness and informal and relaxed discussion. From observation it appeared from the ease with which the participants discussed matters and the flow of conversation that the participants did not feel threatened in any way.

Selection of Participants for the Focus Group Interviews

The 20 academics who participated in this case study were selected from the College of Education. The participants were identified and

selected from the attendance list of 2 short ICT workshops for lecturers with limited skills in computer usage. These participants who formed part of the 'techno-phobians' were made up of 13 males and 7 females. The researcher informed each of the participants the purpose of the discussion and they all willingly accepted the invitation to take part. The researcher arranged the participants in four groups of 5 members each. For the convenience of the participants each group discussion took place in one of the participants' office nearer to specific group members. Judging from how busy academics are the researcher allowed group members to choose meeting times that would be convenient to them. The focus group discussions which took place between 12- 13 hours (lunch time) were completed in two weeks during the month of September 2012.

The Interview Process

The researcher used a semi-structured interview schedule which provided a framework to ensure that pertinent issues on the topic were discussed across the various groups. The researcher however allowed respondents the latitude to elaborate on any ideas that they felt warranted further explanation and encouraged them to relate their perspectives to issues under discussion. The following issues were explored through the focus group interviews:

- Initial feeling or reaction to teaching through myUnisa [internet] when it was introduced in 2005
- What participants did, their current experiences and feelings about myUnisa
- Participants' work load with regard to the new and additional ways of teaching
- How students view their teaching and
- Whether they will recommend teaching through the internet to colleagues in other open distance learning institutions

In September 2012 the 4 focus group interviews were conducted with each session lasting for about 40 minutes. Participants were required to respond to the above issues and encouraged to relate their responses to their own experiences, to agree or disagree and to substantiate their opinions concerning the items on the interview agenda. During the discussion the researcher observed the proceedings, listed, made notes of responses and asked further questions

for clarification where necessary. Both consensus and dissenting views from participants were taken care of, recorded and included in the data.

RESULTS OF THE FOCUS GROUP INTERVIEWS

The focus group interviews presented interesting results. The main findings that are discussed in the next section of the paper are summarised here below.

- Self-criticism and introspection can lead to positive action that is, problem solving. Realising their inadequate computer skills and knowledge the 'techno-phobians' or the 'non-digital natives' academics became more desperate to learn the skills that can make them more useful to their clients-students- and employers. To be able to take action to improve their conditions the academics with inadequate computer skills took a critical view of their ODL practice and learnt skills which would enable them to survive in the environment- an ODL institution.
- Perseverance conquers. Through persistence, hard work, determination and group support lecturers who did not have technological skills and therefore could not apply technology to teaching would be able to learn the skill and become effective ODL practitioners.
- Unity is strength. The 20 'techno-phobians' succeeded in their effort to acquire skills which would enable them to teach through technology because they came together and supported each other to overcome a common threat- inadequate computer skills.
- The acquisition of technological skills by the 'non-digital natives' has not only improved their communication with students but also enhanced teaching and learner support in the Open Distance Learning environment. The improved computer skill among some of the emerging academics has contributed immensely to the university's effort to use technology to reach its students scattered all over the world.
- The skill for teaching and supporting students through the internet has increased the confidence of lecturers as open distance learning practitioners who previously felt inadequate and inferior in the application of technology to teaching.

DISCUSSION OF THE RESULTS OF THE FOCUS GROUP INTERVIEWS

A major aspect explored in the focus group interviews was participants' initial feeling and reaction to the university management's request for lecturers to teach and provide students with support through the internet. Based on the responses from all the 4 groups it was clear that initially the participants had mixed feelings and negative reaction to the decision by the university management to make myUnisa compulsory for lecturers. Although all the participants were in agreement that there was the urgent need to provide a comprehensive support for students they were gripped with fear when the implementation came into effect without first establishing the skills level of all academics and making provision to train those who might need technological skills. Truly all those who decide to use technologies to support education need to understand the nature of communication between educators and learners to be able to seek appropriate and better ways to support and enhance such processes (Butcher 2003). The participants added that their lack of skills to teach and support students through the internet made them think of the worst – inability to offer students with academic support and possible loss of job- since they knew nothing about myUnisa. One participant expressed her frustration in the following words;

'the employer did not use technological skill as one of the requirements for employment. Some of us went through our education without computer training and have worked here for over 10 years. The employer should be aware of this and equip us with computer skills before requesting us to teach through technology. With this enforcement without proper training some of us seem to have no future at this institution'.

Another male academic added:

The few hours beginners' workshop is not enough; besides some of the facilitators are not good. What makes matters worse is that the timing is not always suitable for most of us. You are invited to attend the short courses when tuition deadlines are to be met!

The above responses point to one thing. That is, the enforcement of teaching and supporting students through myUnisa might not be effective among lecturers who lack computer skills. It might make some academics feel inadequate

and consequently lead to indifference, uncertainty and frustration among those who have too little computer skills. The researcher observed from the expressions on the faces of the participants that they were very frustrated initially when they were required to teach through myUnisa. This observation was confirmed by the discussions which revealed that the feeling of being inadequate in the presence of their fellow lecturers and the fear of possible loss of jobs was a serious source of frustration. The frustrations and feeling of being inadequate among the participants (lecturers) were genuine concerns because as Bates (1998) intimates, the new technologies require sophisticated equipment and highly skilled teachers if the levels of interaction are to be maintained. Ironically the feeling of being inadequate also served as an indirect motivation for participants to do some introspection, reflect on their practices, accept the reality of the situation and take action to learn computer skills. When caught up in such a dilemma humans have to learn how to act and react in order to survive in their environment (Zecha 2002). Thus the determination to become effective open distance learning practitioners led to the perseverance in the acquisition of technological skills through group efforts. However as the responses indicated, because of huge academic responsibilities those who lack computer skills might need more time to train before they can effectively use the myUnisa to teach. Their persistence to learn to acquire the basic skills on their own (through group support) seems to concur with the saying; *perseverantia superat* (perseverance conquers).

Regarding what the participants did to shed the technological myth and their current experiences and feelings about the application of technology to teaching, all the participants concurred that they were steadily making significant progress through their own efforts, group support and with the support of some individuals in the Directorate, Curriculum and Learning Development (DCLD) who sometimes provides them with one on one step by step navigation through myUnisa on request. The participants concurred that with the determination to become better ODL practitioners who can provide students with academic support and be able to protect their jobs they have embraced the myUnisa as a tool for distance teaching. Through determination, group support and constant prac-

tice they shed the myth and phobia surrounding the use of technology as a teaching tool. Thus to become better ODL practitioners in order to keep their jobs the lecturers had to take a critical view of their situation and the needed action to improve it (Zecha 2002). The indication is that no one is too dull or too *old to learn computer skills and wherever there is determination there is a way. The determination and the willingness to learn enabled them to overcome the inadequacy and fear surrounding technology. As one participant intimated;*

although I initially felt there was nothing I could do after serious reflection I came to terms with the fact that if I persisted through practise and with support from peers I would manage to acquire the basics, and that was what I did!

Two of the groups agreed that the university should provide more ongoing support and training for enduring or sustainable use of the technology in teaching at a distance. They added that the current practice of ad hoc 2-4 hours' training once a while may not have any lasting effect on lecturers' acquisition of internet skills. As one participant remarked,

internet training for us, adults, should be a process not an event, if it is to be sustainable. The little skill we have acquired through our own effort and collegial support must be sustained through more organised continuous professional development activities by the employer.

The issue of myUnisa and lecturers' work load revealed that the programme initially increased participants' workload tremendously. Three of the groups concurred in their responses that designing study materials and assessment tools and loading them onto myUnisa do not only require technical skill but also demands much time. The following remarks from two of the respondents in two separate groups attest to this fact. They said;

in addition to marking of assignments, examination scripts, writing of study materials, tutorial letters, meeting with students and attending numerous meetings one has to frequent the myUnisa site to update information and respond to students' queries and these increase the workload of academics tremendously'.

The 4 groups however conceded that once the relevant information is loaded onto the system one's workload becomes manageable and stable. All the groups indicated their support

for the university's effort to use multiple mode of delivery in order to cater for all categories of students in the context of open distance learning.

Three of the groups acknowledged that although not all students make use of *myUnisa* at the moment due to various constraints the comments of those who use it are positive and encouraging. The respondents reported their willingness to recommend the use of internet to their colleagues in other Open Distance Learning institutions as an effective teaching tool but warned that they need to be trained because it is not a hotchpotch activity. The participants added that teaching through the internet is a skill that must be consciously taught and learnt.

CONCLUSION

The application of technology to teaching at a distance is gaining more currency in the contemporary open distance learning environment. This case study focused on lecturers' perception in the use of technology as a tool for teaching and students support at a distance.

The investigation has revealed that when people are confronted with problems or barriers to progress in their work (for example, lack of specific skill) they need to engage in critical evaluation of themselves in relation to the situation to be able to take the relevant positive action to improve their condition. Academics lacking specific skills should not fold their arms in despair and worry about their situation but must take initiative to confront the problem head on because problem solving is learning.

Based on the findings of the investigation this paper concludes that since technology has become an important vehicle for teaching and learning institutions engaged in distance learning delivery should equip their lecturers with enduring skills not only to make them effective in teaching but also to demystify the use of technology as a tool for student support.

RECOMMENDATIONS

The paper recommends that the university authorities should as a matter of urgency find out the computer training needs of all academic staff and provide clinical training to equip them with the necessary skills for distance teaching and student support.

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