E-readiness of open and distance learning (ODL) facilitators: Implications for effective mediation

Jabulani Nyoni

This article is a narrative report of the findings from the analysis of multicultural facilitators' discourses on their e-readiness in the use of information and communication technologies (ICTs) affordances in open and distance learning (ODL) mediation experiences. First, the findings revealed by qualitative deconstructive discourse analysis indicated that the majority of ODL facilitators lack those e-readiness skills that are critical in the effective manipulation of ICT affordances tools in ODL mediation environments. Secondly, some facilitators did not fully understand what undergirds ODL andragogy, principles and practices. Institutions' academic lecturers are periodically given e-training, but this seems to be inadequate. I, therefore, recommend that a comprehensive orientation tutorial package, covering e-readiness, e-training and ODL principles and practices, be organised for all inexperienced, as well as newly employed lecturers, to appropriately prepare them for the rigours of ODL pedagogies and methodologies.

Key words: ICT affordances; ICT adaptances; learning mediation; e-readiness; ODL facilitator/instructor

Introduction

Open and distance education or open and distance learning (ODL) is an established approach to education in the world today. Distance learning has a history of over a century involving different teaching approaches and following the technological evolution concerning the delivery of educational materials and the communication between learners and instructors/lecturers. As information communication technologies (ICTs) take on a more visible role in people's lives, moving from research institutions into communities, schools, and homes, people become more aware of how ICTs are both mediators of and, in themselves, learning settings in ODL.

Jabulani Nyoni

Department of Educational Leadership and Management,

University of South Africa E-mail: nyonij@unisa.ac.za Telephone: +27 12 429 4474 A significant body of literature (Heinrich, 1995; Fullan, 1994; Wang, 2002) supports the view that the way lecturers teach is a product of their own education, training and experiences. It is unreasonable to expect lecturers to change their existing pedagogical approaches when they have not been provided with sufficient and appropriate training in how to work with ICTs and incorporating new teaching technologies into their mediation methodologies. Borotis and Poulymenakou (2004: 669) view e-readiness as "the mental or physical preparedness of an individual for some e-learning experience or action". E-learning readiness helps a lecturer to design e-learning strategies comprehensively and to effectively deliver learning experiences to an ODL student (Kaur & Abas, 2004). Students must also be "e-ready" so that a coherent achievable strategy, tailored to meet their needs, may be implemented (infodev, 2001). Invariably, e-learning readiness assessment provides key information to organisations to supply solutions which can cater for the specific needs of each learning group (McConnell International, 2000).

Despite a number of South African institutions embracing ODL as delivery mode, studies have shown that, while the higher education system functions relatively well, higher education still faces major challenges, including low participation rates; high attrition rates; a curriculum that does not speak to society and its needs; the absence of an enabling environment that allows every individual to express and reach full potential; and poor knowledge production that often does not translate into innovation (RSA National Planning Commission, 2011). While knowledge production is the rationale of higher education, high-quality knowledge production cannot be fully realised with a low student participation rate and a curriculum or environment that is alienating, and does not articulate the vision of the nation, nor with an academic staff that is insufficiently qualified (RSA National Planning Commission, 2011). The challenge to institutions of higher education is to accommodate as many students as possible, while offering each one of them a reasonable chance of success, and ODL remains the best vehicle to meet that demand cost effectively.

Open and distance learning historical perspectives

In line with age old ODL trends in education provisioning, the British Open University was established in 1969 to widen access to education in Britain and has served as a model to many others. It introduced a programme for a certificate in education for graduates who wanted to enter teaching but had no professional qualification. Students used computer conferencing as an integral part of the course to interact with tutors and with one another. In comparison, the University of the South Pacific teaches education and other disciplines by combining correspondence lessons with broadcasts and with regular computer conference sessions at regional centres. The university was one of the earliest users of communication satellites and is able to run two-way seminars with its students by means of satellite links (Runfang, 2008).

As early as the 1970s, a radio-based school in Colombia was reaching over 100 000 rural students every year. Currently The National Technological University in the United States is using satellite and broadcasting technology to meet the needs of engineers for postgraduate study without their having to leave their jobs to attend campus lectures. In China, the combined use of television, classroom sessions and printed materials is providing university education to about a third of all the students in higher education. Uganda set up a number of programmes designed to equip untrained and unqualified teachers with professional skills. In the 1970s, for example, Tanzania succeeded in recruiting 45 000 potential teachers of whom 38 000 obtained their qualifications (Chale, 1983: 31). Other countries such as Kenya, Nigeria, Lesotho, Botswana and Zimbabwe have exploited ODL methodology in one way or another in the mediation of learning.

ODL institutions make use of several different media and do not rely on online mode of delivery only, as it is often misconstrued. Students may learn through print, broadcasts, the internet and through occasional meetings with tutors and with other students. The question of ODL legitimacy is no longer an issue, because most of the traditional institutions have gradually incorporated the different media and technologies available to mediate learning and teaching. The following question was used to frame the study:

How "e-ready" are open and distance learning (ODL) academic facilitators to use the e-education portal for e-information dissemination and e-learning in mediating learning experiences with students?

Theoretical framework

In the adult working world, networking, collaboration and adaptation are some of the preferred principles of practice in information sharing, growth and development, as well as benchmarking, particularly when it comes to ODL. So much has been said about ODL adult learning (andragogy) (Knowles, 1990), but very little on academics (lecturers) becoming continuous adapters to affordances that are designed to enhance teaching and learning. ODL andragogy remains relevant to adult learning more so when ICT affordances are the main modes of information dissemination and mediation of teaching and learning.

I identified three theories as espoused by Mason (2006) to serve as my theoretical lens. I used these to explore and examine how e-ready academic lecturers were to work with ICT adaptances in order to select the most appropriately blended ODL affordances in their teaching and learning. These included self-directed learning as the preferred model, adults' experience as a rich course resource, a problem-based rather than subject-centred approach, and the importance of a social context for learning (Knowles, 1990). I view facilitators as adults who can embark on self-directed learning while executing their primary function of facilitation. Through practice and exposure, lecturers are capable of change and can translate those changes in the

way they design their curricular and learning development programmes given the multiplicity of ICT affordances.

Another influential adult learning theory is referred to as "experiential learning" (Kolb, 1984). This theory describes the adult learning process as a cyclical pattern wherein the student moves from experience, through reflection, to conceptualising and then action. This process forms the basis for many training and learning events and, more recently, for continuous professional development in the ODL workplace. However, Brookfield (2005: 4-5) added a cautionary note to the wholesale acceptance of experiential learning as the defining feature of adult learning:

Because of the habitual ways we draw meaning from our experiences, these experiences can become evidence for the self-fulfilling prophecies that stand in the way of critical insight. Uncritically affirming people's histories, stories and experiences risks idealizing and romanticising them. Experiences are neither innocent nor free from the cultural contradictions that inform them.

A third focus of research is particularly relevant to online ICT education of adults: the social context of learning. The various strands of this theory have been brought together by Wenger (1998: 6) in his account of learning as social participation. While social interaction is not a prerequisite for all types of learning, many tasks in an ODL workplace rely on teams or are conducted through interaction with clients, suppliers or fellow employees. Wenger (1998) sees these communities of practice as pervasive not only in the workplace, but in all aspects of society:

We all belong to communities of practice. At home, at work, at school, in our hobbies – we belong to several communities of practice at any given time. And the communities of practice to which we belong change over the course of our lives. In fact, communities of practice are everywhere (Mason, 2006). (See figure 1.)

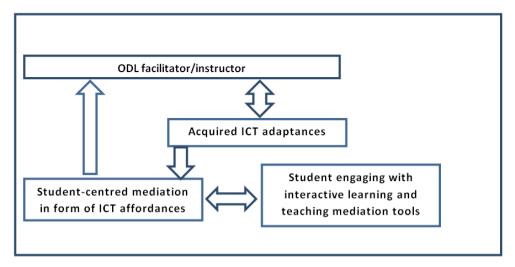


Figure 1: ODL student and facilitator/instructor process of interactivity

The flow chart indicates the mediation process that occurs between an ODL student and the facilitator/instructor. The instructor uses his/her adaptances (ability to use operational competency skills to select and manipulate the most appropriate ICT affordances that can be used effectively in mediation of learning processes). The student works with interactive ICT affordances in engaging with learning processes and submits tasks using the same mode of delivery (Nyoni, 2012).

The value of communities for learning is that they create, hold and distribute knowledge in ways that exceed individual capabilities (Mason, 2006). The *designated portal* for ODL e-information dissemination and e-learning mediation was used as a case to gather the views of chairs of department and academic instructors/facilitators on its use. Wenger (1998) opines that communities of practice change over time and these changes are brought about by a number of factors. Some of the factors could be attributed to technological advancements that might influence learning mediation methodologies, retirements, political, innovation and many others.

E-readiness to work with ICT affordances

New developments are emerging continually in the realm of ODL education. These developments have an impact on different aspects of distance learning such as teaching-learning, student support services, evaluation and assessment, and ODL management system which are undergoing revolutionary changes. I have witnessed some distance education institutions such as Unisa adopting ODL andragogy as the vanguard for leadership, management, instruction and learning. The paradigm shift necessitates adopting a mind-set that allows making adaptive adjustments in the way academics deliver their instructional modular programmes and curriculum design. To succeed and survive in an ODL institution, given the multiplicity of ICTs, digital affordances need instructors endowed with appropriate adaptances. Adaptances in this context refer to knowledge and competency (which encompasses skills, knowledge and attitudes) that are acquired through practice, allowing one to identify student-centred ICT instructional tools that can be manipulated in the process of mediating learning. Adaptances allow the ODL facilitator/instructor to break with orthodox distance education methods by incorporating new and student-centred, blended methodologies in an endeavour to bridge the gap between campus and student. A lack of ODL-oriented ICT adaptances, at times, dissuades ODL facilitators from blending their traditional instruction and learning methods with the most appropriate ones that appeal to the newer generation of students.

As the readiness of academic facilitators to use the new technology is critical to the success of implementing e-learning in ODL institutions, it is worthwhile to investigate whether and how prepared they are to embrace the new technologies in mediation of learning experiences. The purpose of this research was, thus, intended to analyse the e-readiness of facilitators with regard to the use of the new technologies in ODL environment.

It was hoped that the experience gained from this research would be beneficial to other ODL institutions exploring the use of e-learning technology in new teaching and learning activities.

Methodology

Deconstructive discourse analysis and internal criticism were employed and guided by a developmental qualitative critical case study methodology. The methods were used to analyse the data which consisted of a compilation of a developmental critical case study. Chiefly, deconstructive discourse analysis employs internal criticisms, which are guided by a developmental qualitative critical case study methodology (MacLure, 2003). The study involved four academic department chairpersons and five facilitators/instructors from ODL institution who participated on a voluntary basis. The purposive sampling method was preferred, since I specifically wanted to involve ODL practitioners.

The following data collection methods were used: password secure blogging (Hewson, Yule, Laurent & Vogel, 2003: Mann & Stewart 2000); semi-structured interviews (Fowler, 2002); and electronic ledger repository (Waldo, 1998). A blog is the short form for "weblog" (Jacobs, 2003), and is written by individuals or groups of people on the World Wide Web. The data collection processes continued until data saturation was reached. The methodology required me to maintain a critical attitude towards chairs of department's and facilitators' adaptances needed in selecting the most appropriate ICT affordances in ODL in teaching and learning mediation processes (Crotty, 1998: 78, 80-81; Cohen & Omery, 1994: 138-139).

Table 1: Facilitators' prior knowledge and skills in ODL blended methodology

Sample of the study: (N = 15)

Number	Attribute	Qualifications
11	Full-time professional lectures skilled in diverse range of programmes (College of Education)	PhD/DEd
4	Part-time facilitators	MEd
	Had prior knowledge of ODL blended methodology	
	Had prior knowledge on the effective use of ICTs for mediation	
9	Males	
6	Females	

Deconstructive discourse analysis incorporated a similar critical attitude towards the meanings permeating in the data and towards my own beliefs. The essence of deconstructive discourse analysis is captured in MacLure's (2003: 3) argument that our commonsensical beliefs of educational realities (MacLure, 2003: 9, 171-173)

should be deconstructed and torn apart to enable proper engagement with the discursive educational realities (MacLure, 2003: 4). The next step involved critically scrutinising internal criticisms that helped in systematically and comprehensively analysing the textual materials. Bell (1999: 113-116) suggests that internal criticism could be used in critically analysing the contents of a document with regard to its genre; the language it employs; the author's background and experiences; the purpose, background, reliability of the document; etc.

Having examined the methodology and methods for analysing the primary textual and discursive data used in this article, I explored the views of the facilitators on how they went about identifying ICTs affordances which could be used for mediating learning and what implications the use of these affordances would have for ODL andragogy. Table 2: Coding scheme for identification of an interaction type in ODL blended mediation

Technical mediation type								
Category								
Indicator	Enumeration	Environment	Effectiveness	Ease of use	Engagement			
Definition	Counting of occurrences	Institutional environmental factors	Perceived educational effectiveness	Personal ease of use	Sense of personal engagement with the ICTs			
Criteria	The frequency of contribution of each participant	Vision about ICTs in college; actual level of e-readiness in college; e-readiness to change within college; incentives available	ICTs can: solve personally relevant educational problems; provide new forms of learning experiences; provide support for the existing curriculum	Hardware, software	Self-confidence with ICTs: ICTs fit with current experience			
Key words	Postings	Vision	Personally relevant; new	User- friendliness	Confidence Self-efficacy			
	Threads	Reality Change						
	Repeats		Change	experiences;	Accessibility	Connectedness		
	Attachments	Incentives	supporting curriculum	Availability				

The table indicates the form of typological criteria I used to identify the following themes: ODL epistemologies and ontologies; critical conceptions of ODL principles and practices; facilitators' ICTs e-readiness in ODL mediation; mentorship and orientation. These themes emerged from asynchronous blogs managed by ODL

academic facilitators. Deconstructive discourse analysis was applied to deconstruct the common interests, beliefs and experiences of the facilitators and explored their e-readiness to use the e-education portal for e-information dissemination and e-learning in order to mediate learning experiences of students.

FINDINGS. THEMATIC DISCUSSION AND CONCLUSIONS

The aim of this study was to analyse the views, as conveyed in text form, of ODL facilitators, including chairs of department, on the issue of e-readiness in using ICT affordances for e-information dissemination and e-learning mediation in ODL. The study allowed me to draw conclusions from the deconstruction of blogs posted by participants on how they viewed the use of ICT as one mode of learning mediation. Results from the deconstructive discourse analysis were categorised into five themes (Miles & Huberman, 1994) (see table 2). The themes were then ranked in order of frequency. The reason for ranking the themes in this way was to measure the relative importance of each theme within the catalogue of users' responses.

Results of ICT-related student portal (site)

Below are some of the examples of extracts from facilitator/instructor blogs. Gender issues were not taken into cognisance in this study.

Prof XXXX (Age 51, male, nationality: South African) said:



Through MyUnisa, lecturers can link with all learners who have computers (email facilities) in a particular course or module and learners can also link together so that they communicate amongst themselves. In this way, learners can help one another and are able to communicate (as individuals or as a group) with their lecturer at any given time. Through MyUnisa, learners are able to form study groups, and can also motivate and advise one another. Therefore, learners have the opportunity for engagement with the university and one another through this technological facility.

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Figure 2: Sample comments on ability to use the student portal, myUnisa, for learning mediation (Nyoni, 2012)

Dr XXXX (Age 40, female, nationality: Kenyan) said:



The adoption rate is low among lecturers because the feeling from several academic staff is that it is additional work and because some learners are not online, it is regarded by them as optional. Some lecturers are reluctant to use this facility simply because they still believe highly in print media or are not computer literate. Presently, the university provides a one day training opportunity for UNISA staff so as to be able to use the facility of MyUnisa effectively. Not all lecturers have been trained thus far. Furthermore, the MyUnisa that is currently in place requires significant improvements in learner-lecturer interaction - a goal of any DE model that focuses on decreasing transactional distance between lecturers and learners, learners and the institution, and learners themselves.

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Figure 3: Sample comments on ability to use the student portal, myUnisa, for learning mediation (Nvoni. 2012)

As figures 2 and 3 illustrate, qualitative discursive texts were obtained in relation to bloggers' views on the use of an internet designated portal (site) for e-information dissemination and e-learning mediation. In the examples shown, two contrasting views of instructors/facilitators are indicated. However, a large number of bloggers posted negative texts, questioning the viability of the portal (site). They did, however, agree that it was an appropriate interactive tool for learning mediation.

Overall, four general conceptual themes characterised participants' views of the utilisation of the web page for ODL learning mediation, as revealed by examining the prevailing conceptions and discourses that are manifested in the textual data of this article.

ODL epistemologies and ontologies

The lack of clear-cut and coherent ODL theoretical foundations does not help to allay the confusion and uncertainty among facilitators in education. Some of the primary discursive texts by some of the bloggers read:

For me the differences between DE and ODL are blurred you know! Some of us believe ODL is online teaching and learning that the majority of our students do not have access after all.

Traditional forms of distance education involve passive media such as correspondence texts, audio and video broadcasts, and often entail the learner communicating with only the facilitator. That lecturers and facilitators still prefer traditional methods of learning and teaching, could partly be attributed to the fact the majority of the academics worked in or were associated with distance education institutions, hence the resistance to adapt. However, internet technologies have improved the traditional forms of distance education through increased communication (Schrum, 1998; McIssac & Gunawardena, 2001). The distinction between newer forms of

distance education utilising ICTs and traditional face-to-face education is being blurred in the facilitation of individualised and collaborative learning (McIssac & Gunawardena, 2001). McIssac and Gunawardena (2001: 403) state that the explosion of information technologies has brought learners together (social presence) by erasing the boundaries of time and place for both site-based and distance learners.

Critical conceptions of ODL principles and practices

Advocacy for the promotion of ODL and scepticism about ODL institutions, programmes and products, exist and persist in equal measure. Underpinning this challenge is the growing and urgent need to train and retrain, and continuously update the knowledge and skills of each institutional workforce to ensure that it remains relevant in an increasingly globalised knowledge economy (Mason, 2006). ODL institutions are flexible about mediation processes and are student centred; open to a number of permutations that are designed to help the student. Therefore, it uses ICT affordances that are designed to close the gap between the student and the institute. One common thread by one the facilitators in this study read as follows:

The communication between my students and I is done through tutorial letters. Everything they need is contained in that document. I have been doing this for the past 23 years and worked like a charm!

The statement by one of the facilitators emphasises the need for them to keep pace with ICT affordances because, in the majority of cases, students are adept in the manipulations of the electronic gadgets such as iPhones and tablets.

Facilitators' ICTs e-readiness in ODL facilitation

There is still a group of facilitators who lack even basic ICT skills, which could be due to levels of motivation and interest (Korte & Hüsing, 2007). Findings seem to indicate that there are a large number of facilitators who feel demotivated and, thus, reluctant to engage in some form self-directed learning (Knowles, 1990). One common thread read as follows:

Presently, the university provides a one day training opportunity for Unisa staff so as to be able to use the facility of MyUnisa effectively. Not all lecturers have been trained thus far. Furthermore, the MyUnisa that is currently in place requires significant improvements in learner-lecturer interaction.

Some participants admitted in their blogs that they were unable to use the site to mediate learning. They insist that they were comfortable with paper-based instruction.

Mentorship and orientation buddies

In this study, orientation refers to the induction process in which new employees are steered in the right direction with regard to their expectations about and impressions

of their workplace. Mentorship, on the other hand, occurs when an experienced employee works with a newer employee, one on one, to teach the new employee advanced concepts from experience. Some workplaces have mentoring programmes in place, while others assign a "buddy" to assist with orientation. Ragins and McFarlin (1990) define a mentor as an individual with advanced experience and knowledge who is committed to providing support and upward mobility to an inexperienced employee. This study found that the majority of facilitators are also adapting to ICT affordances, which makes it difficult to assign buddies:

It is all about training, training, and training!!! Very few among us can simply upload modules in myUnisa portal! It is as good as the blind leading the blind! Honestly we all claim that we know how to use computers! But the same claimants run around looking for help all the time!

ODL institutions need versatile buddy facilitators who are able to work with inexperienced colleagues in their comfort zones.

Discussions

The study revealed that facilitators failed to acknowledge that ICT affordances can be used (1) as tools for delivering material or for practising a specific learning content, which is a traditional way of using ICT; (2) as tools for supporting collaboration or knowledge creation, which is a change from the previous teaching practices; (3) as tools for structuring teaching-learning processes, which is a change from the teacher's management practices; and (4) as content for studies.

The online world is a medium unto itself (Carr-Chellman & Duchastel, 2000; Ellis & Hafner, 2003); it is not just another learning environment. There are vastly different dynamics in online versus old distance education courses. Because of the different dynamics, material that works well in a traditional distance education setting does not necessarily work in the online environment (Ellis & Hafner, 2003) and often needs to be re-engineered, modified or redesigned for online mediation (Koszalka & Ganesan, 2004; Zirkle & Guan, 2000). Simply taking material that was developed for distance education delivery and directly porting it into course management programmes such as WebCT or Blackboard tends neither to be effective nor recommended (Ellis & Hafner, 2003).

It is, therefore, important to emphasise that an increase in technology does not necessarily translate into an increase in learning and could, in fact, lead to an increase in problems (Mandernach, 2006), technology blues and wailing students (Sieber, 2005). The current status in ODL pedagogy requires facilitators who have the appropriate prerequisite ICT adaptances in order to be effective in their facilitation processes.

Recommendations

According to Reeves (2008), "(t)here is a need to make changes in the way technology is used in education to better take into account the digital competence students have". This is, indeed, strongly dependent on the ICT-related pedagogical competence of the facilitator. Facilitators, as indicated in the study, bemoan the scarcity of development programmes that are few and far between. It is advisable, therefore, that such e-ready programmes be increased to include not only new employees, but other experienced ODL personnel as well to bring them on board with ODL principles and practices. No newly employed ODL lecturers or facilitators should be allowed to teach until they have undergone the proper e-ready orientation inductions to increase their ICT adaptances.

Conclusion

Appropriate e-ready ICT affordances enhance e-learning mediation opportunities to allow for students' participation in progressive inquiry, collaborative learning and the students' active engagement in the knowledge creation process. However, as Lin (2001) says, the relationship between facilitators' conceptions and practice is complex. ODL facilitators, empowered with appropriate e-ready ICT adaptances, use ICT affordances appropriately to accommodate students' needs (Moseley, Higgins, Bramald, Hardman, Miller & Mroz, 1999) and they appear to have adequate andragogical means to pursue new andragogical practices (Hakkarainen, Palonen, Paavola & Lehtinen, 2001). However, ODL institutions, invariably, need to introduce well-grounded, employee-centred, e-ready orientation programmes to newly employed, novice and inexperienced ODL facilitators in order for them to choose appropriate or reject inappropriate ICT pedagogical mediation tools.

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