

# CHAPTER 1

## Reacting to pressure: Origins of the research

### 1.1 Introduction

The University of South Africa (Unisa) is credited with having established correspondence studies as a regular mode of academic teaching. But this analysis has also placed Unisa in the very uncomfortable position of a single-mode correspondence distance education (DE) provider. Otto Peters (1998, p.162) compares the institution to a nineteenth century correspondence college. Although his assessment takes cognisance of the fact that the institution attempted to upgrade its practice and delivery in 1995, he criticises the low value placed on structured DE courses, the lack of support for students, and the dominance of texts as compared to other available media and technologies. Unisa management defended this situation by citing a commitment to low costs and easy access, as well as the support of a great number of courses as reasons for the shortcomings. They attributed the lack of instructional design as part of development to the high workload of the educators.

When the criticisms of Peters regarding support and text content were considered it was evident that the use of new Internet communication technologies could provide some solutions to the problem. It was important to identify a form of online provision that could address the problems of the lack of ongoing learner support and static print-based delivery of learning materials.

It is the contention of the researcher that the creation of an learning community can improve the learning experiences of learners at Unisa. The collaborative nature of such a community can provide opportunities for interaction between students and the educators that the dominant print-based cannot. Unfortunately, the very efficient but compartmentalised industrial print-based production context of Unisa could not easily accommodate all the new facilitation

responsibilities that a successful online learning community would demand. A new change-oriented approach would have to be adopted.

This thesis describes the implementation of the online learning community in the print-based delivery environment of Unisa as an attempt to address the problems and bring about innovation. The research reports on the development of a successful learning experience that was based on community and support, the critical analysis of teaching practice, and the adaptation of the team approach as a development environment. Achieving this is significant in the print-based production culture of the research context. It can also be significant for distance education and face-to-face institutions that are often characterised by a dominant production culture that inhibits change.

## **1.2 Introducing the study**

### **The context**

Unisa has been an examining body since 1873. In 1946 a Director of External Studies was appointed and this step established Unisa's distance education delivery. The situation in 2003 is that Unisa has 130 000 registered learners. It delivers 4000 different courses through 60 teaching departments, and learners can take examinations at 500 centres worldwide. The institution can be regarded as a mega-university in terms of the definitions of Daniel (1986, p. 16 & 1996, p. 30) and Peters (1998, p. 157), because its active student enrolment on degree courses exceeds 100 000.

Unisa has a well-oiled production system in place, which is well-staffed, in fact, the number of administrative and technical support staff is 2063 compared to 1244 teaching and research staff. Educators are the authors who write study materials. From the authors materials go to an editorial department, then to a print production department from where they are dispatched to learners.

The delivery mode is mainly print-based with very little communication between educators and learners. In some instances audiocassettes and video materials are added to the course packages. A few departments still hold discussion classes in major cities; there is a tutor system in place but it is understaffed; and a few departments have contact via videoconferencing with groups of learners at four learning centres.

### **The technology imperative**

Institutions of higher education, whether they engage in direct contact teaching or distance education, face the pressures and challenges of integrating technology into their teaching. As part of a distance education initiative communication technologies can be used to market educational products, support communication and other forms of structured activity, or deliver courses completely online. Higher education institutions are also facing strong competition from the new virtual and corporate universities. The virtual university is mimicking the traditional university while the ‘corporate university’ has taken the opportunity to provide just-in-time training to staff of multinationals (Heydenrych 2000). Following the technology imperative, institutions may engage technologies for the sake of technology, or in order to provide learners with needed technological skills for the workplace. But when the pedagogical imperative is given priority, the quality of teaching and learning stands to be enhanced.

Unisa, therefore, is faced with the challenge to change its production culture in order to accommodate new products and services. The lifelong learning needs of working adults are changing rapidly and universities will have to react to these needs (Bates 2000, p. 7). It is possible that institutions of higher education could transform into competitive education businesses using new communication technologies without changing obsolete teaching practice. Such a scenario would demand maximum economic efficiency and competitiveness but these qualities are often in competition with quality teaching and learning.

An institution may therefore have a comfortable niche market while persisting with outdated practices, systems and organisation. The change in teaching and support demanded by environments like the online learning community, however challenges face-to-face and correspondence DE practice. Institutions of higher learning cannot remain undisturbed under such pressure, neither can instructional designers (educational technologists) who are meant to be as developers of innovative learning experiences.

### **The challenge**

Institutions (whether direct teaching or correspondence) have to position themselves timeously to accommodate the information technology revolution as a positive factor in learning provision. The pressure to implement technologies is high but universities are slow to develop policies regarding proper support for Internet courses (Schnorr 1999, p 115). Graves, Henshaw, Oberlin, and Parker (1997, p. 448) are of the opinion that ‘institutions that continue to resist these structural changes will not realize significant benefits from the new technologies’.

Unisa is not unique in facing the challenge of having to change its correspondence-based practice and production when confronted with the advance of new technologies. Daniel (1996, p. 40) sees problematic teaching and support as a strong characteristic of mega universities. The production and delivery cultures of mega universities are unique and they may experience problems when they implement new technologies to improve teaching and learning. However, a strong teaching culture and a commitment to learner support would probably assist with the transition.

A discussion of situations at international mega universities is important to illustrate the value of innovative teaching and extensive learner support. In 1996 the annual purchase of printing paper at the Indira Gandhi Open University (IGNOU) in India was 1100 tons (Daniel 1996, p. 40), a significant

indication of its print-based correspondence tradition. While there is a desire to use other media as modes of delivery, external constraints limit their options. However, at the time IGNOU had 229 study centres and was experimenting with establishing other communication technologies to enhance teaching with the help of 12 800 part time and support staff while remaining competitive.

The Open University of the United Kingdom has over 300 learning centres supported by 7 500 tutors (Booyse et al. 1995, p. 11). These statistics also provide evidence of a strong commitment to student support and communication.

In contrast, after experiencing rapid growth in student numbers during the 1970s and 1980s, Unisa did not properly establish a quality teaching and support system as it entered the reality of mass distance education. The current print-based delivery was founded on the tradition of transmitting knowledge to learners who have to accept it uncritically. There is a lack of learner-learner and teacher-learner interaction in most learning packages. This is similar to the situation in India in the 1980s when correspondence courses in general were of poor quality (Daniel 1996, p. 172) and were accompanied by minimal student support. The quality of Unisa's correspondence learning in terms of learner support was questioned in the 1990s by authors like Tait (1994, p. 28) and Peters (1998, p. 161).

Daniel (1996, p. 174) reports that the striking feature of IGNOU's planning documents is 'their focus on making the current system work better rather than looking for solutions in new technology.' In contrast the Centre National de l'Enseignement à Distance (CNED) focused on employing 'glamorous' technologies, like satellite video transmissions to enrich and not to fundamentally change its traditional correspondence teaching methods (Daniel 1996, p. 171).

Bates (1991, p. 12) is of the opinion that it would be easier to create new institutions of higher education based on online technologies than to convert old industrial model institutions doing mostly conservative correspondence teaching — such an opinion suggests a difficult road for institutions like Unisa. Daniel (1996, p. 25) concurs with this and goes on to say that when new knowledge media is targeted, new institutional types have to be established as part of a comprehensive re-engineering of the provision of learning. At Unisa, however, an attempt was made to marry the independence of learners and the production of a ‘perfect package’ of materials, with as little tutor intervention as possible. The result was the development of instructional industrialism (Evans and Nation 1989b, p. 243) and economies of scale. Alienated staff, who seem to have gradually lost affinity with the experience of the learner, are delivering the product. In an attempt to extend the delivery mode beyond print, the possibility presently exists that the characteristics of Unisa’s current print-based delivery may be replicated online — this would be the advent of ‘online instructional industrialism’. A transformation is therefore demanded in teaching and support as part of learning provision. In effect this would change the roles of mega universities. This changed role should mean that universities should not only be ‘purveyors of information but also purveyors of humanity, preparing learners to communicate and to think productively in society’ (Pepichello and Tice 2000, p. 55). In the online learning community the role of the instructor changes to that of facilitator. He or she no longer merely provides information (Naidu & Oliver 1999, p. 333; Cohen 1999, p. 221; Brandon & Hollingshead 1999, p. 121). In this learning process faculty members become partners with learners in an environment that is cooperative, collaborative and supportive. A flexible and empowering learning environment is supported. The shift is, therefore, from teaching to facilitating learning and as such it demands a commitment to engage with learners.

Within the Unisa production environment instructional designers (educational technologists) assist with the packaging of texts — in a sense they represent the requirements of the system and might not necessarily advocate change towards

good learning during the materials development process. There is a restrictive production and delivery process that does not allow for innovation in DE nor opportunity for the instructional designer to challenge the system sufficiently towards change. This production culture has given rise to two situations:

- Quality distance education is equated with a text that is produced according to strictly enforced specifications and ‘human services’ are neglected.
- A production environment calling itself a distance education institution develops around print production with a limited role assigned to the instructional designer.

Initially in this environment the course design team functioned only partially (limited labour responsibility was assigned), and unfortunately the role of the instructional designer evolved into that of an agent who had to uphold the specifications of a text-based learning experience. The result is a very strong production culture that will not necessarily be successfully changed by decree.

In this context it is the opinion of the researcher that the institution will not be able to deal easily with the pressure to implement Internet communication technologies in order to deliver distance education.

### **1.3 The purpose and significance of the study**

The results of researching this challenge in the Unisa context may force stakeholders to realise that their standard ‘systematised’ or industrialised practice may not be a justified ‘economical comfort zone’. Bates (1991 & 2000) and Daniel (1996) are adamant that institutions cannot remain undisturbed regarding organisation and practice when implementing the new learning technologies. Implementing online learning provision without significant disturbance of practice and systems may mean that the mission was misunderstood, or that ‘technological window dressing’ was accomplished. Stakeholders will have to be challenged to explore innovative teaching and

learning via the online learning community — a change in teaching culture will have to be initiated. Lecturers who have proven their competency in the online learning community will probably develop a different perspective of their own correspondence teaching and it is expected that they will also become agents of change.

A learning experience, in the form of the online learning community, based upon engagement and support, would demand a different development approach and a subsequent change in teaching practice. The researcher reporting on this project, is also an instructional designer who has had to take up a different role in the Unisa context in order to initiate a process of change. It is a mission supported by Bates (2000, p. xiii):

‘... academic staff need to control or “tame” the virtual campus by ensuring that technology is used as a tool or as a means to further academic ends. This control will not be achieved, however, without aggressive intervention on the part of academic leaders and faculty members.’

As a key stakeholder in the development of learning provision, the role of the instructional designer may prove to be vital in the struggle to innovative successfully within this context. Members will not be able to merely interpret the print traditions of Unisa when such a new learning ‘product’ is introduced — the frame of reference of the online learning community requires a different approach. It will be necessary for the instructional designer to instill a critical reflective approach with course development team members in order to evaluate the practice and the systems they represent. In this regard the role of the instructional designer has to gain new responsibility and therefore respect in the future development and production system. The task requires not merely standard instructional design procedures and protocol, but the instructional design team will have to adopt a different ethic and methodology. Such a methodology needs to be practice-based, with the aim to eventually achieve

structural and organisational change in the educational workplace. This commitment may put team members and the learning developer in confrontation with traditions, policies and systems of the current print-production and delivery environment at Unisa.

### **Research questions**

The introduction of the online learning community, with the help of empowered stakeholders, will force the system and its agents to take a critical look at their practice. Such an introduction may cause lecturers to realize that they have been merely sending out information in print form. Being involved with learners in a supportive environment may lead them to challenge the system in terms of quality teaching. In addition, the inability of the system to handle different ‘products’ may also be disturbed for the better. Specific parts of the system, and the people operating them in a somewhat deskilled fashion, may change to accommodate innovation and improvement. The introduction of the online learning community in this context may be problematic in the following respects:

- The current correspondence-based teaching and support tradition promises to be tremendously inadequate and insufficient to be converted to an online environment.
- The impact of such an innovative teaching experiment may challenge the current structures, processes and systems of the organization.

In this regard it is appropriate to quote the opinion of Michael Moore and Geoffrey Cozine (2000, p. i):

‘With such growth of the technology, knowledge of how best to apply it in delivering instructional programs... lags far behind. There is a number of plausible explanations why this is so. One is that the educators, both in the classroom and in the administration, are unable or

unwilling to make the necessary organisational and structural changes in their institutions to take best advantage of the technology. Simply giving high-powered machines like computers and modems to teachers may extend their influence and improve the quality of their teaching, but can only do so marginally. Significant improvements require machines and humans to be reorganised into delivery systems that are more sophisticated than those existing before.’

There is no shortage of research proving the value and successes of collaborative online learning (Brandon and Hollingshead 1999; O’Donnel & O’Kelly 1994; Paloff & Pratt 1999; Harasim et al. 1995; Horton 2000; Stacey 1998). But these researchers departed from a mainly face-to-face production and delivery context and the successful implementation of online learning reported is presented against such production environments which may not be relevant to the nature of a print-based production system. No research could be found where a mass-correspondence distance education institution (with low levels of intervention in the learning experience) introduced innovations such as the online learning community that has strong levels of interaction and support.

The overarching aim of this research project was to intervene in order to stimulate critical reflection on current practice and systems within the institution. The institution was informed regarding the development process and its results in order to plant the seeds of a development and production culture which promotes a new understanding of learning and teaching. The questions that had to be answered from this context are:

- Can the online learning community (based on integrated support and facilitation) be a successful and quality learning experience in the Unisa context?
- Will Unisa lecturers (coming from a print-based delivery culture) cope with their new responsibilities related to support and facilitation?

- Will the development process and support services have to be revisited as part of a new production culture?

The objectives of the research are:

- to inform the institution regarding the quality learning that can be achieved in order to stimulate critical assessment of the quality of current print-based learning;
- to critically assess current teaching and support practice and to make suggestions towards a new teaching practice in terms of the online facilitator's responsibilities; and
- to provide the institution with a new instructional design (learning development) process that will provide for critical reflection and staff development as an integrated commitment.

#### **1.4 Research methodology**

The introduction of the online learning community, and the challenges it implied in Unisa's unique context, demanded an evolving methodology. Participants were expected to emancipate themselves from a given production context into becoming empowered to initiate change and innovation. Through the research participants had to be enabled to change practices, roles and systems in order to accommodate a different delivery mode.

Action research was adopted as it is conducted in cycles of planning, acting, observing, reflecting... and replanning, further implementation, observing and reflecting. As the spiral develops, understanding and practice evolve through the process of group critique and collaborative action. This process helps to obtain a reasoned justification of practices, processes and systems.

#### **1.5 Overview and structure of the thesis**

This study will report on the use of action research methodology to generate a critical reflective collaborative setting. The aim was to address the entire learning development and delivery process. The story will be told in terms of qualitative feedback. There was a need to infuse the institution with the results of this study in order to stimulate debate on the issues regarding change in practice and systems. Two deliveries of one online course development are described. It might be possible to consider the results of only two deliveries as not significant for generalisation in the entire context or to consider them not valid externally. However, the commitment of the researcher was to use the research to stimulate critical reflection with a considerable number of stakeholders in order to effect change in practice and systems on a larger scale. This research therefore can only reflect a moment in a process of change that is continuous.

The thesis is organised in the following way. After this chapter, Chapter 2 evaluates the suitability of Internet communication technologies, more specifically the online learning community, as a delivery mode that would address today's learning needs. In order to avoid a 'tired and stale pedagogy', it was regarded essential that the online learning community be founded upon a commitment to a sound learning philosophy in order to exploit the full potential of Internet communication technologies, and to facilitate delivery in a meaningful way. A social constructivist learning philosophy was adopted. This required the collaborative construction of knowledge in a community setting with the teacher enabling communication and interaction, and facilitating and stimulating the sharing and testing of ideas and constructs. The learning scenario is also in line with the requirement that distance education should be about a mediated conversation between all stakeholders in the learning experience. But such a learning scenario was found to be significantly challenging to the current print-based learning experience. This implies a challenge to teaching and support staff as well as question the efficiency and legitimacy of current instructional design staff and procedures used.

Chapter 3 explores the potential of action research as an appropriate methodology to promote change through self-criticism and involvement. It provides on the procedures that were followed during the research project. The action research cycles are presented as the research process, and the ethical issues anticipated within such a research environment, are also be addressed. The course selection, development and delivery, as part of the reconnaissance and planning phase of the first cycle, are presented as the sub-context within which change was to originate. This chapter will also provide a summary of aspects and tendencies identified during each cycle, and the following chapters will discuss the data in more detail.

Chapter 4 discusses the demographics of learners and the success of the learning experience. Learner feedback is provided in the form of summaries from their interviews and important aspects are highlighted which relate to the success of the online learning community in this context. Learners made important suggestions on the maintenance and redevelopment of this learning experience, but most importantly, valuable feedback on the nature of print-based delivery in the Unisa context is provided.

In Chapter 5 an overview is provided of the new teaching responsibilities that resulted from the creation of the online learning community. It was informed by staff experience on the sample course. A shift was required as the teacher was removed from the centre of the learning process and the learners became actively engaged in their own learning. Teaching were required to critically assess their own teaching practice, retain appropriate practice and acquire new skills that enabled them to cope with the new learning environment.

Chapter 6 discusses the background of the Unisa production system, the role of the instructional designer (who has become the leaning developer), a suggested development process and examples of change achieved through such a process. A collaborative process was needed in order to foster these changes and to infuse the organization with the spirit of these changes.

Chapter 7 provides information on the awareness course that was developed as an opportunity to assist staff to make a paradigm shift towards understanding the real value of supported online learning environments for Unisa.

Chapter 8 reflects on the implications of the research results. The success of the online learning community in the Unisa context is determined. The teaching responsibilities and commitment in the online community is outlined as against current print-based teaching practice. There is a need for change with print-based delivery in general in order to align itself with the requirements of the new learning experience. The current development and production culture, which restricts innovation and change in practice and systems significantly, is evaluated.

The next chapter will outline the foundations of the online learning community in terms of the history of Internet communication technologies, new learner needs, distance education principles, a social constructivist approach to learning and the features of Internet communication technologies. The characteristics of the online learning community will be outlined and research on its successful implementation will also be discussed.