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Institutionalising the eLearning Division at the University of the Western Cape (UWC): Lessons Learnt

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ABSTRACT

Universities need to re-align teaching and learning in response to advances in educational technology. The University of the Western Cape (UWC) established an eLearning Division (ED) in May 2005 which has experienced rapid growth. In this paper, we present the role of the eLearning Division in the institutionalisation of eLearning. We argue that a supportive leadership and effective organisational policies and strategies are key components to the success of the establishment of eLearning. Furthermore, we show that the success is also pegged to the continuous review and updating of the organisational policies in the light of new requirements.

Our strategy for staff development involves facilitating changes in the mindsets of UWC's community towards the use of Information and Communications Technology (ICT) in teaching and learning through empowering them for online course facilitation as well as enhancing their computer literacy skills. Our challenges result from resistance from some of our intended clientele, as well as the challenges of coordinating the Division's activities with well established divisions and entities within the university. The eLearning Division's success and achievements are based on continuous review and feedback as we strive to improve and enhance our service to meet the needs of UWC educators.

Keywords*: eLearning division, support structure, institutionalisation, limited resources, resistance, organisational policies.*

INTRODUCTION

The use of eLearning has grown considerably in recent years and has triggered a great deal of interest in this age of rapid technological progress, transforming the very nature of higher education (Pollock & Cornford, 2000). Higher Education Institutions (HEIs) use Information and Communications Technology (ICT) not only for their academic functions, but also for their support functions, such as administration and communication (Cronjé & Murdoch, 2001). ICT has become part of higher education not just in the daily practice of teaching and learning, but also through policy frameworks, in a way no other teaching technology has done in the past. New media technologies are replacing or supplementing conventional course delivery (Murphy, Walker & Webb, 2001). This change has urged many eLearning facilitators, who are complementing their teaching with eLearning resources, to explore the use of both commercial and Open Source Learning Management Systems (LMSs) (Newman, 2001).

The generic challenges of navigating a transition from a pioneering phase of eLearning to its effective institutionalisation are well recorded in the literature. The early hopes that eLearning would transform education have given way to a more realistic understanding of the role of eLearning in university education and the success factors for effective implementation (Zemsky and Massy 2004). While innovators and early adopters are likely to initially accept relatively high levels of risk, their continuing use of eLearning requires a multi-stakeholder, strategic commitment at the highest levels of the institution to the provision of the effective support systems (Holt, Rice, Smissen and Bowly 2001, Zemsky and Massy 2004, Moser 2006) which

may enable bottom up initiatives to succeed. Mainstreaming eLearning also requires an increase in resourcing as well as a significant shift in the balance of activity and investment from pioneering online and mixed mode teaching projects to facilitating the involvement of the more risk-averse early majority (Moser 2006:3). The implications include purposeful and concerted efforts in areas such as ongoing consultation to assess educator and student needs, enhanced usability of software, effective technical support systems, and responsive instructional design partnerships combined with staff development processes (Uys, Nleya, and Molelu 2004:72-5) which enable educators to design and manage online interactions. Such developments both give rise to and are fuelled by the growth of local networks of educators who use online learning environments in their teaching (Carr, Brown, Cox, Czerniewicz, Deacon and Morrison 2005). In the mainstreaming phase universities also need to consider how course development by lecturers is recognised and incentivised in order to maximise takeup (Uys et al 2004:73).

This paper reflects on some of the issues that Higher Education Institutions (HEIs) face in the transition between a pioneering phase when a small number of educators are introducing eLearning to practice and the institutionalisation of eLearning so that it becomes an integral part of teaching and learning throughout the university. We present the establishment of the eLearning Division at the University of the Western Cape (UWC) as an illustration of organisational change to support eLearning across a whole university in a context of limited resources and lack of human capacity.

The University of the Western Cape (UWC) uses a home-grown online learning environment which started 'as a small set of scripts for use in teaching Marine Botany' by a pioneer of eLearning within the institution, Professor Derek Keats The system has undergone several phases of open source development in order to keep abreast of what was happening in the rest of the world (Wikipedia 2007). In 2000 the LMS was implemented officially at UWC, and a Teaching and Learning Technologies Unit (TLTU) was established to harness and support the system as well as to promote E-learning. Technological development tended to outpace the development of the eLearning community of educators and support staff. This resulted in a lack of communication and integration between the work of the developers and the support division (TLTU). As a result attempts to promote the LMS were seen by many educators as a form of evangelism rather than a genuine response to teaching and learning needs. As is often the case, at the outset many lecturers used the eLearning system administration purposes only; according to some lecturers the environment failed to provide what was necessary for teaching and learning, which resulted in the system only being used for drawing class lists. On the other hand, lecturers appreciated being able to control and manage their online content.

A new version of the LMS was launched in January 2005. The system offers interactive and collaborative features that can enliven and enrich online teaching and learning including chat, discussion forums, blogs, wikis and podcasting. Its use by the institution was also part of a larger trend towards the mainstreaming of open source software at UWC which meant that the university needed a structure and processes for the effective support of users (facilitators, teaching assistants, tutors and learners) of its Learning Management System. The institution had to re-evaluate the nature and role of eLearning support structures. Thus the closure of the TLTU allowed for the rethinking of the purpose and scope of eLearning support. The Elearning Development and Support Unit (EDSU) established in 2005 was given the responsibility of ensuring that academics understand the importance of ICT in education and how it can be used to enhance their face-to-face teaching and learning. The division has a team of dedicated people who have developed training programmes in order to ensure the successful implementation of online courses in KNG. The observations and reflections which follow arise from the work of this unit.

INSTITUTIONALISATION ISSUES

The integration of the work of an eLearning Division into a Higher Education organisation is a task accompanied by several institutionalisation issues. All the issues outlined in the following paragraphs had to be considered to ensure successful integration.

Clear motives for going online

A HEI's decision to enter the eLearning environment ought to be an educational decision and not so much a technological one (Lujan, 2002). An institution may implement a LMS that is excellent in terms of content and technical implementation, but there are elements that must be examined if meaningful input to the system's effectiveness is going to be made (McCormack & Jones, 1998:147). An eLearning system is a progressive new tool for teaching and learning, but until eLearning facilitators realise the change required by the use of LMSs and understand the specific skills required of learners, LMSs should not be used in Higher Education (Fetherston, 2000:51).

The eLearning strategy of UWC (1999) affirms the above by stating that: 'Academic staff need to have the necessary skills, competencies and attitudes, educational and theoretical background as well as access to the technology needed to develop and manage courses that include access to and use of ICT'. This use of ICT is further improved through the practical implementation of instructional design training and support provided by the instructional design team of the eLearning division.

Gaining the support of top management

The eLearning initiative and strategy should be driven and marketed at the highest level, in UWC's case the Senate level and the different boards of an institution. Palloff and Pratt (2001) suggest that E-learning initiatives should be embarked on by a working group consisting of leaders from all academic departments. This would ensure, according to Allan (2002) that institutions communicate strategies based on the recommendations and guidance from across the institution and beyond. The Executive Director (equivalent to Chief Information Officer) of the Information and Communication Services (ICS) department is part of the institution's Senate body. This position gives him the edge to promote eLearning initiatives at this level of governance. The Executive Director is also the 'father' of the in-house Open Source Learning Management System, KNG. He is a 'hands-on' leader, developing eLearning tools for the LMS whilst also steering the strategic aim of the eLearning initiative. The Manager of the eLearning Division (which is a part of ICS) has been selected as a member of the Senate Life Long Learning Committee, also enhancing the marketing of eLearning initiatives from within.

Many departmental leaders have attended the eLearning training sessions and encouraged many of their staff members to attend as well. Some of these heads are at the forefront, including steering pilot projects. The buy-in from these departmental leaders, referred to also as 'eLearning Champions', models behaviour, making eLearning an initiative that many more would want to pursue. It also reinforces the signal that top leadership in the institution support the initiative.

Building an effective eLearning strategy

It is of utmost importance that 'organisational policies, infrastructure and resourcing be reviewed in the light of the new eLearning requirements' (Ellis & Phelps, 2000). Thus an eLearning strategy is important to realise the vision and intention of eLearning at the institution. Centralised

resources, support and the specific departments within the institution need to be aligned with the eLearning strategy.

According to Clark (2002) an eLearning strategy is an important tool that provides processes of 'decision-making' concerning the activities within the leearning environment. The eLearning strategy of UWC was developed by a task team consisting of nine members, who were instrumental in the decision-making process from the seven faculties.

De Vries (2005) suggests that an eLearning strategy should proclaim the *what*, *why* and *how* about the technology chosen to deliver and enhance the traditional teaching approach. The UWC strategy states that:

- *Information and Communication Technologies will be integrated into the curriculum to promote the four digital academic literacies, including basic computer literacy, digital information literacy, digital information fluency and digital knowledge creation*.
- *Technology will facilitate the transformation of teaching and learning according to a constructivist paradigm leading to active and independent learning (information literacy)* [UWC, 1999].

The UWC eLearning strategy also affirms that a strategy should encourage users to embrace technology in order to 'provide opportunities for lifelong learning'.

Establishing an eLearning support structure

Learning Management Systems (LMSs), multimedia, and other educational technologies supplement learning experiences. To use eLearning effectively, institutions must amend pedagogy, develop and train users in order for them to become more technologically and didactically proficient, and establish a reliable and flexible support structure (Arabasz & Baker, 2003) that is maintainable, efficient and effective (Joseph, 1999). The Elearning Development and Support Unit (EDSU) at UWC is tasked with these responsibilities since it was established to provide a structure for the implementation of integrated, holistic support and development for the institution. The eLearning division has endeavoured to integrate the use of technology in education by developing a training programme that would empower the educators to take control and ownership of their eLearning initiatives. Lecturers are encouraged to use eLearning tools effectively to deliver their core functions of teaching and learning; research and community outreach. The authors acknowledge that eLearning implementation does not only encompass the delivery of training programmes; in this case it was necessary to embark on a campaign that would familiarise educators with the EDSU's mission, and bring them on board. This was necessary, as prior to 2005 lecturers who engaged with the previous LMS stated that there was insufficient eLearning support. The division reaches across faculty boundaries and focuses on matters concerning the relationship to and use of educational technologies with teaching and learning.

THE ROLE-PLAYERS WITHIN THE DIVISION

Dedicated teams were created to support both the academic and non-academic staff as well as students of the institution.

Instructional Designers (IDs)

The instructional design team has a major responsibility toward the academics who need training and support in order for them to engage effectively with the E-learning tools and enhance the teaching and learning process. The IDs ultimate responsibility is to aid the lecturers and facilitators at UWC to develop the skills, perspectives and confidence to adopt eLearning as a complimentary mode of education for the students. The ID team delivers face-to-face training on a weekly basis using the university's LMS. During these sessions the lectures are trained on how to use the core functions of the system which include; creating an online course, assessing and evaluating the progress of students and effectively communicating with students online. This training is started by a one-on-one consultation in the participant's office and sustained through ongoing e-mail and telephonic support. The Instructional Design team of the division started training academics in September 2005. Since then they have trained a number of 156 lecturers on a voluntary basis across all faculties. More lecturers have indicated that they want students trained in the use of the LMS. The design team has conducted 91 one-on-one consultations with a number of lecturers across 7 faculties.

Figure 1: *Online Course Creation Model (J. Stoltenkamp, April 2006)*: Developed from the generic Instructional Design Model -ADDIE & Salmon, G. (2003) E-Moderating

The instructional design team delivers a training programme, based on an 'Online Course Creation' model (depicted in figure 1) which was developed at UWC by the eLearning Manager. This model is adapted from the generic ADDIE instructional design model to ensure the successful implementation of online courses. The training programme also includes one-on-one office consultations, telephonic and email support. The results of this training programme has been motivating, attracting lecturers on a voluntary basis. From January to April 2007 regular scheduled face-to-face training was not conducted, yet the adoption response remained high. The persistent efforts and support offerings had spread by word of mouth, creating a curiosity around the possibilities of eLearning tools, and ultimately the creation of interactive courses.

The model is also presented at eLearning departmental visits in order to market the team as a support structure concerned with the creation of interactive online classrooms based on sound

pedagogical principles. During the visit it is highlighted that the lecturer's decision to enter the eLearning environment should be an educational decision and not so much a technological one (Lujan, 2002).

Learning Management System Student Training

Both lecturers and students are taught on how to use the system. From January 2006 to July 2007 the unit trained 2208 students from the faculties of Law, Community & Health Sciences, Science, Arts and Economic and Management Sciences. Pilot Projects have been formed with different faculties and departments. Some of the faculties offer online courses in collaboration with universities and experts from other parts of the world.

ICT Staff Training Team

The division has created the awareness that the use of technology should not demand advanced technological skills from staff and that it should be accessible and manageable. Computer literacy training and development is provided to all UWC staff members in order to empower them with relevant skills in the workplace. The team offers both proprietary and Free and Open Source software. Databases, spreadsheets and presentation software tend to attract the biggest interest amongst participants and some departments are sending their staff in groups. After attending sessions, some departmental representatives request departmental 'customised training programmes'.

Support is provided for those who want to have Open Source Software installed on their office computers and this support is also sustained through one-on-one consultation for the staff members who attend face-to-face training sessions.

The ICT team has trained 849 people since the start of the regular monthly training sessions in September 2005. They also provide specialised department-specific training to cater for the different needs of staff. The needs are derived from analysis and assessment within the departments

Digital Academic Literacy Team: Computer Literacy Student Training

The Digital Academic Literacy course has been designed for novice computer users to become empowered within their first semester with general computer skills - mainly word-processing for academic purposes. The students also acquire search engine skills, learning how to use the Internet effectively and to distribute information according to the approved procedures at the university.

Whilst many students come to the computer skills classes, support team considered these an opportunity to introduce relevant and useful content, focusing on themes around citizenship within a national and international context and more importantly on the HIV/AIDS pandemic.

Materials Development Team (MDT)

The MDT is also currently working towards a FOSS environment, producing training and online manuals and simulations. Users need to receive documentation that enables the facilitators and administrators of the system to understand the various application tools in use. Thus the team creates suitable materials as well as working with eLearning practitioners creating manuals, simulations and other educational materials for their courses.

Digital Media Team

The digital media team highlight the need for multimedia to enhance the teaching-and-learning experience, rather than detailing the exact application of the MM within eLearning. In the African context, the main constraint on delivering digital media over the web is bandwidth. Productions with a lot of audio, video, and graphics are especially restricted because these types of media generate large files with slow download times for students with dialup Internet access. The digital media team offers CD–web hybrids which overcome this limitation by combining the media-rich capacity of CD technology with the immediacy and resources of the Internet.

The Digital Media team has also joined the Instructional Design team in their LMS training sessions. During these sessions the DM team has trained all the participants on image processing using the GIMP (Graphical Image Manipulation Programme) Editor, which is the Open Source equivalent of Photoshop. The GIMP editor enables the participants to learn how to make use or incorporate their digital media aspects within their online courses.

INTEGRATING eLEARNING WITH HUMAN RESOURCES PROCESSES

It is considered that learning will be among the most imperative developments of a Higher Education Institution's teaching and learning activities over the next few years (Clark, 2002). Indeed, eLearning should be an integral part of human resources processes and approaches, such as training, overseeing the performance of lecturers and offering incentives to them (Tucker 1997).

At UWC an action plan to achieve the link between the eLearning division and human resources department (HR), includes the process of forwarding the structured monthly eLearning training schedules to the HR department who also assesses the training evaluation forms that lecturers complete immediately after each training session. During staff induction programmes which are also steered by HR, newly appointed staff members are introduced to eLearning resources, including LMS training. Lecturers have recently been encouraged to work toward using eLearning by means of an incentive - a laptop. Their performance is measured against a rubric which depicts outcomes that they should achieve in order for them to gain access to the incentive. They are expected to meet outcomes such as participating in a face-to-face LMS training session; developing an interactive online course; presenting at an eLearning seminar; and sharing online experiences and challenges with the greater campus.

EDSU is trying to instil a cultural change by promoting what is called lunch-time seminars - referred to as 'brown bag lunches' in many countries. Since April 2006, nine academics from the seven faculties have presented at the lunch-time seminars, describing their challenges and successes using eLearning.

CONCLUSION

At UWC, eLearning is a rapidly growing option in teaching-and-learning. This paper shows how an eLearning support structure continuously drives the eLearning initiative. It also shows that for the success of eLearning initiatives, institutional leaders should be motivating, guiding and directing lecturers to use this mode of delivery. This paper also shows that considerable planning needs to be undertaken when implementing an eLearning strategy, and since educational technologies are ever-changing, strategies and institutional policies must be reviewed. The need for continuous assessment and review of institutional policies was highlighted by the Rectorate in the case of UWC, where eLearning has been identified as an important aspect of our institution's

core business. This is especially important in our context where eLearning can be used to address various issues such as access, shortages of classrooms and remedial assistance for learners.

Moreover the paper has demonstrated the shift from a pioneering phase to a mainstreaming phase where eLearning is implemented as a core strategy of the whole institution. The shift is being negotiated successfully partly because the university has created a support unit which is able to offer reliable and astute advice to clients in difficult positions, thus building a vital relationship of trust within the campus community. It has also been successful in terms of getting academics on board on a voluntary basis and supporting them timeously. The 'non-evangelist nature' of the unit has allowed the division to see the fruits of their efforts, especially when lecturers are taking lunch-times to engage in eLearning discourse. The model (Fig 1) of analysis, design, development, implementation and evaluation, aligned with access, socialisation, information, communication and knowledge building has proven a systematic indication of the unit's contribution to quality online learning at UWC.

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