

BRIDGING THE REGIONAL DIVIDE – INTERACTIVE VIDEO AT THE UNIVERSITY OF NAMIBIA

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ABSTRACT

As part of its response to an increasing number of part-time students enrolling from around the country along with the notion that previously disadvantaged students have particular learning needs, the University of Namibia has developed distance learning initiatives at regional level that make use of interactive video (videoconferencing) equipment in order to afford these students the opportunity to gain access to higher education from various remote regions of the country. This paper describes the milieu in which these initiatives exist along with both the system configuration and the programmes that make use of the systems. Education in Namibia – a brief overview

Prior to independence in 1990 Namibia (then called South West Africa) was governed by the apartheid regime of South Africa. As a result, the Bantu Education Act informed the nature and quality of education for the black majority of the country. The essence of this system was to limit the educational opportunities of students in “non-white” schools to include basic skills in reading and writing but also ‘dish washing’ and ‘the weeding of flowerbeds’. Mathematics and science subjects were not deemed to be necessary.

Part of the Liberation struggle sought to highlight the need for an education based on learner-centred and democratic notions. The document *Toward Education for All* summarized the new policy under the major goals of Access, Equity, Quality, and Democracy. After independence teacher education became a key area in the reform process and resulted in the development of a new national teacher education programme the Basic Education Teaching Diploma (BETD) which replaced the previous programmes that operated along ethnic lines and were based on an examination system the prime goal of which was to reinforce the racist prejudice.

(Dahlstrom, 1995; MEC, 1993). The broad emphases of the BETD programme are taken from the document *Toward Education for All*, and expect teachers to be involved, by way of practice-based inquiry in the exploration of:

- learner-centred approaches to teaching and learning;
- reflective teaching and learning;
- learning that is practical and active (as opposed to a passive transmission-absorption model of learning);
- learning that links practice to theory (rather than vice versa);
- learning that encompasses ‘the community’, rather than delimited by the physical boundaries of the school.

These changes have been more successfully implemented in Namibia’s central region where the capital (Windhoek) is located. The country’s more remote regions have been less able to implement educational reform. Therefore, twelve years after independence, the Namibian education system is still

characterised by severe disparities in allocation of resources. Some schools have highly educated teachers, extensive equipment, and relatively small classes while other schools have teachers who have limited training and classrooms that are overcrowded and poorly equipped.

THE ROLE OF THE UNIVERSITY OF NAMIBIA IN REDRESSING THE IMBALANCES

Created by an act of Parliament in August, 1992 as recommended by the Commission of Higher Education, the University of Namibia is tasked with creation and dissemination of knowledge for a new democracy in Namibia following on from the apartheid legacy. In an effort to address some of the critical development issues facing the previously disadvantaged communities in parts of Namibia the University of Namibia has established centres in every region which assist these communities in gaining access to distance education courses and other learning resources. As part of its commitment to outreach, extension and continuing education, UNAM is in the process of implementing an extensive programme of public education through these centres and through its Northern Campus in Oshakati as well as through its newly established ICT resource, the Information and Learning Resource Centre (ILRC)

Faced with the difficult task of making effective use of limited resources for a much expanded clientele, the Interactive Multimedia Services section of the ILRC was tasked with investigating how the university might extend these resources (particularly those of skilled academics) located at its main campus in Windhoek in order to better serve the communities of located over 800 km away in the far north of the country. It was immediately evident that it would be financially impossible to replicate the various faculties and departments (and the academics which

staff them) located on the Windhoek campus at the campus in Oshakati. After considerable investigation, the university agreed to implement an information and communication technology (ICT) solution to the challenge. This began with the expansion of UNAM's Wide Area Network (WAN) to include not just the Northern Campus but all of its regional centres. Namibia has the advantage of an ICT infrastructure unmatched by almost any nation in Africa. Linked by fibre optic cable to South Africa's satellite system, UNAM has been able to invest in ISDN based interactive video systems.

INTERACTIVE VIDEO AT UNAM

The decision to install interactive video systems at UNAM was based on the belief that it would provide a cost effective tool for the delivery of quality teaching and learning and opportunities for collaborative teaching and learning making best use of limited resources. It would also enable "live" support for UNAM students in the remote sites giving them access to expertise not available locally. The systems are also used extensively for administrative aspects of each campuses operation as well as collaborative research projects between the campuses and other institutions around the world.

The University of Namibia has the following interactive video systems installed:

Location (see map below)	System and Main Uses
Windhoek campus Boardroom Oshakati campus Boardroom	PictureTel Concorde 4500 used for tutor to class teaching, smaller tutorial groups and seminars as well as for administrative meetings.
Windhoek campus Classroom Neudamm campus Classroom	PicturTel 970 Series used for larger groups and for class-to-class teaching and larger administrative meetings
Oshakati campus Classroom Ogongo campus Classroom	PictureTel Concorde 4200 used for larger groups and for class-to-class teaching and larger administrative meetings

Each venue also contains a document camera, a networked PC or laptop and a video cassette recorder.



Figure 1. Map of Namibia showing UNAM's regional campuses/centres

The courses on offer via interactive video can be divided into two main categories. Firstly, those in which the interactive video is used to supplement print based distance learning course materials offered by UNAM's Centre for External Studies (CES). In this case the sessions are aimed primarily at assisting students with

particular concepts or assignment tasks in which they may be experiencing some difficulty along with Q & A sessions in preparation for their examinations. They take place during two month long sessions during the CES Vacation Schools and at more irregular intervals at the request of students. Most often they involve the

tutor/lecturer at the Windhoek site and a group of students with a facilitator at the remote site in Oshakati or Ogongo.

The second category of courses are those that are implemented in a similar way to the face to face sessions in that they occur according to a weekly schedule. The Bachelor of Science (agriculture) degree courses offered between the Neudamm and Ogongo campuses follow this mode as do the Post Graduate Diploma in Special Education, Bachelor of Nursing and Bachelor of Education courses offered between Windhoek and Oshakati. Most often these courses have students participating at both sites while the lecturer might be located at either site. Currently the university is running 53 hours a week of interactive video sessions for these courses.

In the near future the Faculty of Economics and Management Science will start to offer its Bachelor of Business Administration and Masters in Business Administration via interactive video as well. Due to scheduling of courses this will require the installation of an additional system at both the Windhoek and Oshakati campuses. Other faculties are also considering making use of the system including the Faculty of Law that wishes to make use of lecturing staff from a university in South Africa to offer courses at UNAM.

Other uses of the system include postgraduate students most of whom are staff at the university who are enrolled in courses at universities in the USA or Europe and wish to make contact with their supervisors either for consultations or to conduct oral examinations. Collaborative research initiatives also take place between UNAM and other universities around the world via interactive video although these are still conducted in person for the most part. Finally, the administration of the various campuses has been greatly facilitated by the use of the systems.

Previously staff needed to travel long distances to attend meetings which in most cases took 2 days from their schedules. Now they can step out of their offices, attend the meetings and be back in their offices in a couple of hours.

IMPLICATIONS OF USING INTERACTIVE VIDEO FOR EFFECTIVE TEACHING AND LEARNING

The University of Namibia is in the early stages of utilising Interactive Video for course delivery. Even so, both lecturers and students have commented on the effectiveness of the medium as a tool for teaching learning. A significant part of this success is the training in which staff are introduced to the factors for successful interactive video sessions. Based on the principles inherent in inquiry based learning these include an emphasis on having clear aims and objectives and careful planning of the sessions, strategies for encouraging participants to be involved, using a variety of interactive styles and tasks, and ensuring effective feedback/evaluation mechanisms that may be quite different to those they used to in the face-to-face classroom. Staff are also given guidance in the preparation of teaching materials, how to present themselves and materials effectively to their remote students and how to make effective use of the facilitator at the remote site. The presence of a technician in the room with the lecturer to run the system (including camera controls, document camera and VCR operation) as well a facilitator at the remote site who has the dual role of operating the system as well as encouraging feedback from the remote participants and reinforcing or clarifying concepts when required. Preliminary results indicate a marked improvement in the performance of distance learning students who participate in the interactive sessions in relation to their peers whose

mode of study consists of print based materials alone.

There are however significant challenges involved in the use of interactive video for effective teaching and learning. There is still a tendency on the part of some staff to retreat into more didactic modes of delivery that result in less effective teaching and learning. As a result their students become passive recipients in sessions that take on the character of an extremely monotonous television broadcast (the so-called 'talking head' syndrome). This has been a major concern to those tasked with responsibility for the interactive video sessions. There is currently no quality control procedure in place for these sessions although an informal procedure is in place where lecturers are not asked to teach on courses if they seem reluctant to modify their style in keeping with the requirements of effective use of the technology. This is not to say that their teaching style should be driven by the technology but simply that they must be cognisant of the implications of using the technology. Experience has indicated that it is likely that these lecturers, in their face-to-face classes, adopt a similarly didactic approach as well. Ironically, this reluctance to change may be related to those same issues the systems were set up to address – namely those inherent in a previously discriminatory education system in which a didactic style was all too common.

FUTURE PLANS

With the expanded use of the systems the cost incurred may, to some extent, negate the perceived savings made on travel costs and employment packages of additional staff. To address this the university is investigating its use of the ISDN systems and may replace them with IP based systems. Plans are underway to introduce IP based systems in each of the smaller regional UNAM centres and to link them

via a video conferencing bridge to enable students from other parts of the country to participate in the interactive sessions. Plans are also underway to establish web-based courses that will include synchronous interactive video sessions and asynchronous video recordings of sessions (the latter being less effective but more widely available by way of desk-top PCs). UNAM is also investigating the possibility of joining the Global Distance Learning Network (GDLN) an initiative of the World Bank Institute in order to benefit from that organisation's expertise in content development and delivery. There is a definite need to introduce some type of quality control into the use of the interactive video. This will probably form part of the existing course evaluation procedure which is currently under review.

As with any educational endeavour the process of development and evaluation is ongoing. Staff and students at the University of Namibia are attempting to make effective use of ICT and in particular interactive video to offer quality teaching and learning. Given Namibia's educational history this is not an easy task but with continued research and dedication it will prove a most rewarding one.

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