

	<p style="text-align: right;">Date : 25/05/2007</p> <p>From libraries to e-learning centres: a South African library experience</p> <p>VIVIAN AGYEI Tshwane University of Technology Pretoria, South Africa</p>
<p>Meeting:</p>	<p>111 E-Learning</p>
<p>Simultaneous Interpretation:</p>	<p>No</p>
<p style="text-align: center;"><i>WORLD LIBRARY AND INFORMATION CONGRESS: 73RD IFLA GENERAL CONFERENCE AND COUNCIL</i> 19-23 August 2007, Durban, South Africa http://www.ifla.org/iv/ifla73/index.htm</p>	

Abstract

Though relatively new to the family of universities and in particular, universities of technology, Tshwane University of Technology (TUT) Library and Information Services (LIS) is one of the fortunate South African higher education libraries which have a dedicated and fully-fledged IT and Systems Section. Further, TUT LIS has a Section referred to as Electronic Resource Centres which is commonly known as ERCs. The Section includes Internet Centres, popularly known as I-Centres. Each of TUT's nine learning site libraries has an ERC. Four of the learning sites have I-Centres, some in student residences. Many of the libraries have a training room attached to the ERC. Those which do not have a training facility schedule training at certain times and only thereafter avail the ERC for other use. Many of the academic departments have computer laboratories for use by their students. These are not related to ERCs or I-Centres.

The LIS works in cooperation with the Directorate of Teaching and Learning with Technology (TLT) and Information, Communication and Technology (ICT) Services to support the teaching departments and students' learning endeavours.

The LIS is involved in a project to increase the University's success and throughput rates. Other partners in this project are from HEDS (Higher Education Development and Support) Directorate comprising: Curriculum Development, Teaching and Learning with Technology, Cooperative Education and Student Development and Support.

The aim of this paper is to share experiences of the TUT LIS in offering support to e-learning. The newly formed LIS embraced the model of the ERC/I-Centre as a one-stop facility that one of the merger partners, Pretoria Technikon, had established. The other partner, Technikon Northern Gauteng had partially developed an ERC to "extend access to the book/journal in electronic format".

Introduction

It is true that “old habits die hard”. But, the fact is that they do die. Some libraries, of which TUT LIS was one, have tried to keep to the old way of delivering service to their clients. For example, our LIS has tried to have library computers utilised only for searching the library catalogues and subject online databases. However, technological developments and the resultant introduction of e-teaching and therefore e-learning has steered the libraries towards a one-stop service for its clients; i.e. computer stations used for OPAC and typing of assignments, access to e-mail, playing games as recommended by lecturers, and for e-assessment. That, after librarians had for many years believed that it was not their function to provide students with computer skills except the skills that enabled the students to use library resources.

Another interesting fact was that while other institutions of higher learning established a good number of large public walk-in computer laboratories for their students, none of TUT’s merger partners saw that as their responsibility. The responsibility of creating space in the libraries and opening up full access to students at a nominal fee for maintenance came from the Department of Teaching and Learning with Technology, jointly with the library. Initially, it was to be a temporary arrangement, but, after the merger, all the role-players came to realise that it was not going to be possible to go back to compartmentalising how the modern student learns; i.e. by using the library computers for subject information and then going to find a free computer elsewhere to type up assignments. It was through recognition of the way students prefer to learn and do assignments that the one-stop model of electronic service delivery was created.

Background to the establishment of the Tshwane University of Technology (TUT)

Tshwane University of Technology came into existence in January 2004 as a result of a government-commissioned merger of three former Technikons of Northern Gauteng, North-West and Pretoria. Pretoria Technikon (now the Pretoria Campus of TUT) was the only historically advantaged technikon – historically white, and therefore had most if not all facilities required for an institution of higher learning. Technikon Northern Gauteng (now the Soshanguve Campus of TUT) was moderately equipped for it was started by white South Africa to provide for township blacks north of Pretoria. Technikon North-West (now the Ga-Rankuwa Campus of TUT) was the most disadvantaged because it was started by a homeland government for rural township blacks.

Technikon North-West students were the most disadvantaged of the three merger partners with hardly any computer facilities, especially for those who had not enrolled for computer studies. The Technikon could not provide adequate facilities for its end-user computing students without interfering with the

programme of teaching laboratories for computer science students, let alone provide computer facilities to generally support e-teaching or e-learning. Electronic teaching was basically unheard of at this institution. The only place for those students to access computers was in the library, and even there, not for typing assignments.

Technikons were created to produce work-ready graduates with good grounding in technology. However, Technikon North-West, amongst others, could not provide all its students with skills in technology owing to inadequate funding.

When the South African government commissioned mergers in higher education, the aim was to transform the higher education sector, increase access to higher education by the majority of its population and thus have all sharing equally in the national resources. Historically disadvantaged institutions like the Ga-Rankuwa campus that merged with a historically advantaged institution like Pretoria Technikon had as their biggest challenge, to provide equal facilities and services to their students like they were on all other TUT campuses because fees had been harmonised/equalised. Students would not accept that it was impossible to provide equal services overnight – they felt that they had paid higher fees and therefore deserved the services that their counterparts on the Pretoria Campus had. Otherwise, what was the purpose of the merger? Where was the transformation? The library services had to deal with the same issues, hence, the establishment of the ERC for Ga-Rankuwa in 2004.

Towards establishment of ERCs and I-Centres

Libraries have for many years been the forerunners of utilising technology to support teaching, learning and research. Students learnt computer skills from library orientation/information literacy training sessions but were not allowed to use the computers in the library for non-library purposes; e.g. typing, or access to e-mail except for sending retrieved files to own e-mail address. Faced with the challenge of making computers available for all students, the Technikon North West ICT Department collaborated with the Library and Information Services (LIS) to plan for docking stations to be housed in the Multi-media Centre in the Library. The plan was that students would take turns to loan laptops and utilise them for a given period of time in the library, like was the case with books (study materials). Then came the merger in 2004.

Inevitably, the merger brought about advantages to institutions like Technikon North West, which would have taken longer to attain the benefit of current technological facilities.

Pretoria Technikon had introduced ERCs in its libraries and I-Centres in other buildings and student residences. The Department of Teaching and Learning with Technology launched its first Partners@Work Programme in 2004 in which a lecturer was taken from each of the eleven (11) faculties for a year's intensive training in using technology in teaching. The lecturers were trained in producing teaching materials, e.g. video, CD, DVD, etc. and test them in the classroom before the year ended. This opportunity was not available to the Ga-Rankuwa lecturers in 2004. Three participated in 2005. Their programme is fully sponsored by donor funds and is done in partnership with teams of specialists

from the UK and the US. LIS has been including an Information Literacy Training Librarian in the programme per year since 2005 as teaching technologies have an impact on library resources to support students and the staff with appropriate information resources. The Information Literacy Training Librarians also design electronic training modules and test them on the students. The Librarians involve their colleagues TUT-wide in the design and testing of the modules for information, sharing ideas, advice and common vision.

The level of utilisation of computers by the Pretoria Campus staff and students was and is still higher than at its merger partners. Technikon Northern Gauteng had a computer laboratory in the Library, but, with twenty computers for eleven thousand students, accessibility was limited. It was, therefore, admirable that one of the merger partners had a system that worked. The libraries, like other departments, had to provide equally for all the University students because the fees had been harmonised/equalised.

Definitions

The Electronic Resource Centre is one of the specialised services that the Library and Information Services offer in collaboration with the ICT, Department of Teaching and Learning with Technology and academic departments to advance students' skills in utilising technology in learning. The main uses of an ERC are for students to:

- be enabled to type assignments, CVs, etc.
- have access to electronic tests and any other academic resources, including games prescribed by an academic programme
- if necessary, have access to library databases
- send and receive e-mails
- have electronic discussions with fellow students
- have electronic discussions with their lecturers
- have electronic interaction with experts online with regard to their studies and other informal matters
- sharpen their typing and Internet skills

For the levy that students pay at registration, they are each presently allowed three hours at a workstation at a time to do all or any of the tasks mentioned above. They may download and print files, send and receive faxes or scan documents at a separate charge. ICT consumables like diskettes, flash disks, DVDs and CDs are sold to students in the ERC. ERCs are housed inside the libraries or attached to them. They therefore operate within library hours. They have their own staff, funded from the student levies. The staff comprise of an overall manager, a technical and an administrative assistant. Each ERC employ an ERC Assistant and Student Assistants.

An Internet Centre (I-Centre) is open longer and works as the ERC but is less controlled and is usually outside the library building. Students utilise the facility any

time at their convenience. Presently they are open until 22:00. The aim is to have them open 24 hours per day.

A training/assessment centre is part of the ERC that is reserved for training and/or online tests. Lecturers book to use it.

LIS support to e-learning

Through the efforts of the Directorate of Teaching and Learning with Technology (TLT) - previously known as the Telematic Education Directorate, and of course the natural progression of things in education and training, TUT is fast moving towards e-teaching and resultantly, e-learning. Establishment of ERCs and I-Centres is one Way of supporting e-learning.

On the other hand, the IT and Systems Section of LIS supports library services by providing infrastructure for electronic service delivery and being responsible for the library administration system (Innopac/Millennium), development and maintenance of custom services to enhance electronic service delivery to the TUT community; e.g. LIS staff portal, LIS Intranet, Event Management System (EMS), LIS staff Communication System' Electronic Resources Portal (ERP), Management Information and the LIS Homepage. Selection (in liaison with Information Librarians and Lecturers), acquisition and linking electronic resources to the catalogue for accessibility are some of the main focuses of the Section. The Section is a centralised support service to all the TUT libraries. It has the following staff complement: The IT and Systems Manager; the LIS Administration System Librarian; Databases Content Librarian, Custom Systems Librarian; the Electronic Content Librarian and IT Support Engineers for desktop support. The Section has recently requested creation of a post of Web Developer.

Implications of e-learning for the operation of library services and library support for e-learners

Support for e-learning in TUT was not a systematically planned service provision. Since the then ICT Services did not entertain creating space for a computer centre for students' use, the Pretoria Technikon Library was asked for space for computers that were going to be donated for development of student computer skills. The TLT Department plan was not fully disclosed to the library, hence the clash later on in priorities for service provision. Also, the management of the ERC fell onto the library's lap in due course. Even presently, there is very little joint planning for e-learning between lecturers, the LIS, TLT and ICT Services. TLT is pushing ahead with their programme to train lecturers to be technology-literate but afterwards, they came to realise that neither the classrooms nor the libraries were equipped to support e-teaching. They then turned to the ERCs.

The libraries have, through ERCs become centres of learning: the lecturers expect the libraries to deliver adequate space, bandwidth and cutting-edge high-speed

computers for them to use their learning management platform; e.g. WebCT. They also expect the libraries to avail ERCs or I-Centres for them to administer e-tests and hold lectures, train their students, etc., whereas the libraries are not warned in advance to cater for the higher bandwidth. There is also no financial commitment by TUT for the libraries to extend the facilities. The only source of funding for the centres is the student levies and they may not be used to provide infrastructure which should be the responsibility of the University. Although there is little joint planning, all the parties involved agree on one thing: all want students to have the best experience of studying in TUT and that there is no going back to searching for information only in the libraries.

To create order in ERCs, in 2007 the ERC Steering Committee tasked a small team to go and observe what other successful universities in the country have done for benchmarking, and recommend a model for ERCs in TUT. Feedback is expected within June 2007, after which the Committee will decide on implementation.

The LIS is willing and able to support e-learning. Only, planning with all stakeholders must take place. The LIS has accepted the role of running the centres. Therefore, the newly approved organisational structure for LIS incorporates ERCs and I-Centres. It is therefore envisaged that the one-stop model will continue but under better planning conditions.

Model for Managing ERC Service Provision

An ERC Steering Committee comprising all nine library Heads, TLT, ICT Services and a students' representative, chaired by a Deputy Vice Chancellor to which LIS reports was established to give direction to the ERC services and account for the collected student ERC levies. Therefore, the ERCs report to LIS on operational matters and to the Steering Committee on strategic matters.

Aspects of Library support to e-learning and e-learners

The biggest challenge to librarians is to be abreast of developments in IT; sharpen information retrieval skills utilising the latest technologies; training and/or facilitation of learning to utilise the electronic resources; inclusion of students as e-services assistants and allowing the utilisation of library computers for:

- ❖ Typing of assignments
- ❖ Games to be played
- ❖ Access to e-mail
- ❖ Access to chat rooms
- ❖ Printing
- ❖ Sending and receiving faxes
- ❖ Scanning documents
- ❖ Downloading music and other documents

All the above is done within the University's policy on electronic communications and that on copyright.

How e-learning centres add functionality to library services

Ideally, libraries should be available 24 hours per day. Owing to humanitarian reasons, most are open based on social conditions around the institution; e.g. availability of transport for after-hours staff; availability of staff to work shifts; availability of funds for paid-over-time work; etc.

At TUT

- Availability of services irrespective of time or location is becoming a reality as the e-information resources-base grows
- Information/IT and Systems/Information Resources Management Librarians are hard-working at establishing with appropriate links peer-reviewed e-resources to serve the clients instead of them wading through the vast information on the Internet. To this effect a policy on the selection, evaluation and creation of access to “open source” publications has been developed for approval by TUT structures
- Employment of student assistants to work in the centres, especially students of ICT, gives the students practical training and for those utilising the centres the opportunity to be guided by their peers. There is no way the libraries could have afforded full-time staff for the many centres. It is a bonus that students also can look after facilities instead of full-time staff only
- Availability of the Internet Centres for longer hours, especially those in student residences as their hours of service are designed to suit the students. Issues of security for female students become non-existent as there is no exposure to risks of leaving their residences after-hours and exposure to all weather conditions. The library services are extended to the students irrespective of time and location
- Accessibility of the centres to non-resident students is another bonus as they can use them at their own convenience. Therefore, transport becomes a non-issue. Those from far-away places can come in to use the facilities on weekends as well.

Solutions chosen to address challenges in providing an e-learning centre in the library

Most of the challenges to the LIS in providing e-learning centres in libraries were borne of the attitude of the then institutional academic management towards provision of computer facilities for use by all students. When the need for provision of computers for staff was satisfied, it was assumed that Internet Cafés would provide the services required by students. Little consideration was given to the fact that by changing the mode of teaching, a change in the mode of learning would follow. Since libraries have had to keep up with technological changes in the format of literature to support teaching and learning, it followed that they would be looked upon by students and lecturers to provide an enabling environment for e-learning. The snag was that there was no provision of funds for the extra facilities. Hence, the requirement that students must pay small levies.

It took a lot of debating between the LIS and TLT to agree that students pay for learning as to LIS, the ERCs were an extension of library services, only the medium of information had changed from paper to electronic. LIS believed that the institution's decision to go for e-teaching should be accommodated in the student fees and the libraries get a fair share for them to avail the required facilities.

Some of the solutions to address the challenges of e-learning service provision in the library were the following:

- ✚ Cooperation with TLT and ICT Services: planning together yielded positive results as all acknowledged that working together was better than competition.
- ✚ The IT and Systems Section was involved in drafting the TUT Technology Plan. This would make sure that during implementation or when funds are allocated, LIS would be among the beneficiaries
- ✚ LIS cannot computerise services without the involvement of ICT Services for their technical expertise. Their purpose in TUT is to give technical support for service delivery to students and staff, including library services
- ✚ Liaison with the Student Development and Support Directorate, specifically for participation in the Life Skills Programme for Foundation Year courses. These are courses offered to upgrade the entry level of students who did not obtain satisfactory grades in high school to prepare them for university level studies
- ✚ Liaison with Curriculum Development Services with the aim to integrate library utilisation in the curriculum. If lecturers work with librarians in curriculum design and delivery, it becomes easier to share resources. The aim has not yet been achieved, but joint planning meetings are held regularly
- ✚ Involvement of Information Literacy Training Librarians in the Partners@Work Programme of TLT to equip them with skills to develop and utilise newer technologies in information literacy training/user education
- ✚ Involvement of System Librarians in the annual Ditch Workshops to share information and experiences to enhance their skills and for benchmarking. The workshops are fully sponsored by TENET
- ✚ Plans are underway to employ wireless access. The ICT Services and TLT Directorates are working on more funding proposals from overseas companies and institutions for provision of infrastructure for e-learning. LIS will benefit from the ventures
- ✚ Participation of LIS in funding proposals to the national Department of Education for upgrading facilities to support teaching and learning and for upgrading to smart classrooms, including tele-/video-conferencing facilities at each campus
- ✚ Funding proposals for donations of new computers and networked printers for populating the ERCs and I-Centres. DELL Corporation has donated 350 Pentium 4s in the past year. They are committed to donating even more computers to TUT. Highveld Steel Corporation in Witbank has donated computers and money for populating the ERC in the Witbank Campus annually for upgrades and extensions. These kinds of partnership ensure that e-learning provision is realised
- ✚ Space for the centres is another challenge. But recently, TUT is looking seriously into audits of space needs per campus with the aim to plan for

moving faculties to a single delivery site model. LIS space needs have been included

- ✚ LIS is planning to establish more centres in the students' residences as this model works very well where it has been operational.

Conclusion

Although it was not initiated by LIS, the ERCs and I-Centres have become the best vehicle of e-learning support by TUT libraries. There are very good lessons learnt from before and after the merger of the three former technikons: provision of effective services to students takes priority of competing for resources. It is therefore, heart-warming to see all important stakeholders; namely, academic support services departments, join efforts to afford TUT students the best learning experience.

References:

1. University of Bristol Teaching Support Unit. Section E: Learning Resources
<http://www.bris.ac.uk/tsu/policy/strategy/guidee.html>
3. Chowdhury, Gobinda G. SIMS: A Student-centred information management system to support learning and living in HEIs. 2006/7
http://www.ics.heacademy.ac.uk/projects/development-fund/fund_details.php?id=77
3. Parker, Doreen; Maquignaz, Laura; Miller, Jane. Library services to support E-learning: user surveys at the Victoria University of Technology
<http://www.iatul.org/conference/proceedings/vol11/papers/5%20minuten%20presentaties/Parker.htm>