School of Information Technology launches experimental lecture room

The Faculty of Engineering, Built Environment and Information Technology launched a revolutionary new teaching venue, the Tswelopele venue, on 18 July 2008. It is located in the Information Technology Building and has been created especially for the M.IT students of the School of Information Technology, but it will also be used for ad hoc postgraduate teaching by special request and for experiments in teaching by Education Innovation.

→ *At the launch of the revolutionary Tswelopele were (from left) Prof Robin Crewe, Vice-Principal, Mr Johan Kruys of PPS, and Prof Theo Bothma, Head of the Department of Information Science.*

Tswelopele has cutting-edge technology that will change the way in which classes are presented. Two standard data projectors, which are used separately, are installed in the venue. They are linked to a desktop computer or laptop, a camera (for capturing images from books on the desk in the front or anything else in the venue) and can produce output on two screens in the front or plasma screens at the back of the room. This system is linked to a sound system in the ceiling. A smart board is linked to a copier and computer. The venue has a wireless network with Internet access and a wired network for internal class communication, copying and printing; video-conferencing facilities are planned for the future.

The lecturer has the option to present the class from the computer at the desk in the front or to move around the venue and use a laptop to present the class.

Although the different technologies and their possible applications are mind-blowing, it has major implications for the way in which lecturers will plan and present their classes. They will probably have to refine their preparation for classes much more than is necessary for the traditional way of presenting a class to enable students to participate actively in the search for knowledge. Emphasis will, therefore, have to be on engaging students in an interactive search for knowledge, discussing this critically and finding additional support for their viewpoints from all the resources that are available via the web, which includes the vast number of electronic journals available via the library's web site. Students (who will have to bring their own laptops) will have the opportunity to collaborate with one another during sessions or surf the web to find relevant answers or more detail to enable them to participate at a more informed level in discussions. If the question facility is implemented, it means that questions they plan to ask during a lecture will have to be programmed, together with the possible answers, beforehand. Although the effective and efficient use of the technologies entails more work, it will also give lecturers more control over the teaching situation and significantly raise the level of the teaching and learning. In addition, students will have less opportunity to doze off during lectures! Once video-conferencing facilities are available, it will be possible to get specialist guest

lecturers from anywhere in the world to present or participate in lectures or even to have joint modules with lecturers and students from different countries participating in a module.

The venue was constructed with the help and cooperation of several academic and support service departments at the University. The Architecture Department assisted with planning the layout and placement of desks in the room. The School of Information Technology provided input in specifying the functionalities required for the venue, while the Technical Team of the Department of Computer Science installed the system, and the Department of Facilities Management also played a supportive role.

It should be noted that Tswelopele is the only lecture venue on the Hatfield Campus with commissioned art, provided by the Department of Visual Arts.

However, the School of Information Technology did not finance the project alone, but did so with the partnership of the Department of Education Innovation – who wanted a venue where they could showcase and test the latest in educational technology – and the Professional Provident Society of South Africa (PPS).

PPS granted funds to commence with the refurbishment and more recently added the balance of the funds necessary to complete the venture. This is an example of PPS's belief in supporting higher education. They have a genuine interest in nurturing professionals, but are also fully cognisant of the financial strains universities experience. ✪

→ *The new experimental lecture room*