The strategic drivers directing the Department for Education Innovation (EI) comprise a focus on education, quality, international competitiveness and innovation. The vision, mission, strategic foci and strategic objectives therefore stem from these thrusts.

**Vision:**
Education excellence at the University of Pretoria.

**Mission:**
EI leads, facilitates and supports education initiatives in partnership with lecturers through the integration of a wide spectrum of teaching and learning strategies, based on international best practice. The needs and specific contexts of lecturers and students are approached holistically to establish appropriate flexible learning environments.

**Strategic Foci:**
- Identifying interventions that will stimulate sustained involvement in education innovation by all teaching staff
- Roll-out of new systems such as WebCT Vista (clickUP), Umfundi and e-SAP
- Active participation in and support for the HEQC audit of the University
- Implementation of the Smart Podium project and upgrading of teaching facilities in lecture halls
- Study success at UP, with a focus on the tutor project, teaching large classes and assessment (including e-assessment)
- Renewed focus on appropriate training for academic staff.

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An Annual Review provides the opportunity for the Department for Education Innovation (EI) to reflect on the past year and to consider the extent to which we have implemented the strategic foci that we set ourselves a year before.

This overview addresses each of the Department’s strategic foci for 2006 and reports on our achievements in meeting certain stated or observed needs of our clients, while pursuing our vision and mission. Before we modify our strategic foci for the coming year, we need to consider the year under review and evaluate our progress. Each of the items reported below is described in more detail in the relevant sections of this annual report.

- **Stimulating sustained involvement in education innovation by all teaching staff**

  Every second year academic staff members are identified and rewarded for their contribution to teaching excellence. The year 2006 was again the time for this special highlight, in which 30 academic staff members received awards for education innovation. Six laureate awards were presented to lecturers in the Faculties of Education, Veterinary Science, Economic and Management Sciences and Engineering, Built Environment and Information Technology (see the section on Education Innovation).

- **Chancellor’s award for teaching and learning**

  Unfortunately no Chancellor’s Awards for Teaching and Learning were granted during 2006. Academic staff and the Department for Education Innovation are encouraged to identify and nominate potential recipients for this award.

- **Roll-out of new e-learning systems**

  The existing version of WebCT (Campus Edition) was not scalable or robust enough to accommodate the growing use. In 2005, the recommendation of EI to replace WebCT Campus Edition with WebCT Vista was accepted by top management and WebCT Vista 4 was purchased (now called ClickUP).

  Umfundl, the new computer-based testing (CBT) system of the University of Pretoria, which replaces Question Mark Designer, was launched at an exciting event on 9 October 2006. The Electronic Student Academic Portfolio (eSAP) creates a digital portfolio of students’ achievements throughout the course of their studies at the University of Pretoria. The Electronic Comprehensive Patient Care and Education (ePCCES) System will replace the School of Dentistry’s paper-based, standardised student training protocol for Patient Clinical Examination, Diagnosis and Treatment Planning. Both these systems were tested and piloted in the Faculty of Health Sciences.

  - **Active participation in and support for the HEQC audit of the University**

    One of the strategic foci of the Department was active participation in and support for the 2007 HEQC audit of the University. EI staff members were involved in and contributed significantly to three of the audit task teams, namely Teaching and Learning; Programme Development, Management and Review; and Student Assessment and Student Success. Many of the documents, guidelines and evaluation instruments developed by EI are referred to in the University’s self-evaluation report.

  - **Development of a Smart Podium prototype and upgrading of teaching facilities in lecture halls**

    Lecture halls on the Health Sciences and Hatfield campuses were identified as well as the Council Chamber, Senate Hall, Groenkloof Auditorium and others. Existing, and in particular, newly planned educational venues need to integrate technology in such a way that it is didactically, ergonomically and aesthetically conducive to being used seamlessly and with ease by the lecturer. As part of the strategy to equip venues with well-integrated educational technology, the concept of installing a “Smart Podium” in all priority classrooms was investigated. A Smart Podium safety houses in one unit all the equipment that a lecturer requires (e.g. networked PC, screen, keyboard, DVD player).

  - **Study success at UP**

    Student throughput (completion rates and drop-out) has become a national concern during recent years. In order to enhance throughput rates and identify potential students, the University of Pretoria maintains a database of specific data, monitors emerging trends, and has initiated a number of interventions, such as anti-semester courses and summer schools.

    Other factors which contribute ultimately to study success are initiatives such as the tutor project, addressing the problems inherent in teaching large classes, and effective assessment practices. All these initiatives progressed during the year under review, as reported in the relevant sections of this report.

    - **Renewed focus on appropriate training for academic staff**

      The management requirement for all new academic staff to attend courses on and workshops in higher education policies and practices, is now well established. A total of 117 new academic staff members participated in the education induction programme during 2006. Workshops in assessment, which forms an important part of the core business of the University, were attended by 58 academic staff members.

      The design and development of e-learning activities are supported by a number of formal and informal courses, which attracted over 600 registrations. In order to meet requests from lecturers for shorter and more flexible times for training sessions, a series of seven hands-on clickUP lunch time sessions were introduced, each focusing on one particular topic or tool. The focused sessions, as well as the take-away lunch packets provided, proved to be a great success.

    - **Creative studios**

      In 2006 the Department for Education Innovation identified a need that the graphic design, video and photography units from the three campuses (Hatfield, Onderstepoort and Medical), should combine as one unit, with one head. This unit is now known as Creative Studios and continues to provide specialised services to all the departments at the University.

      The graphic designers assist in capturing concepts in audio and/or visual forms, which range from graphic images to animations, voice-overs and other forms of sensory stimuli. Advances in technology (e.g. 3D and 3Dh) make it possible to include increasingly more sophisticated multimedia in learning material provided to students. In addition, academic staff members are assisted with the development of posters, PowerPoint slideshows or other visual material for academic purposes.

    - **Research and development (R&D)**

      Changes and advances in the higher education environment emphasise the need to keep up-to-date, which pre-supposes a sound basis of educational R&D.

      Major strides were achieved in the various projects during 2006. In particular, two strategic, university-wide documents were accepted by the Senate and the University Council, namely Guidelines for Teaching and Learning and the Assessment Policy and Framework.

      A report on Research-based Postgraduate Education resulted in several strategic decisions being made in this area. The report will be used as part of the institutional audit by the HEQC in 2007.

      A formal study on student throughput (completion and drop-out rates) was conducted to determine reasons leading to student withdrawal, and to analyse the withdrawal statistics in the calendar years 2003 and 2004. Based on this research, the University is now taking steps to increase student success in all faculties.

      An upgraded instrument for undergraduate student feedback on the quality of taught modules was implemented.

    - **International collaboration**

      Collaborative projects were conducted between the Department for Education Innovation and Imperial College, London; The Prince Leopold Institute for Tropical Medicine, Antwerp; University of Dortmund, Germany; European Consortium of Innovative Universities; University of Illinois at Urbana-Champaign, USA; University of Maryland University College, USA; Carl von Ossietzky University, Oldenburg, Germany; Massachusetts Institute of Technology, Boston, USA; Chalmers University of Technology, Göteborg, Sweden; and the US Naval Academy, Annapolis, USA.

      Thank you: 

      Director: Department for Education Innovation

28 February 2007

The staff members of the Department for Education Innovation have made all good and great things happen. I would like to express my sincere thanks for their hard and professional work, often beyond expectations. A special word of appreciation is extended to all those who have leadership responsibilities.
In recognition of its commitment to the delivery of excellent education, the University of Pretoria acknowledges the efforts of staff members who contributed to education innovation through the development of innovative teaching practices.

The Education Innovation Awards

Education innovation achievements were recognised during the biennial award ceremony hosted by the Department for Education Innovation on 3 October 2006. The awards are presented to staff members or academic groups who have developed innovative products or methods to promote teaching and learning, in areas such as facilitation of learning, curriculum development and assessment.

A total of 30 nominations were received in 2006. Of these, nine were recognised for education innovation, 15 received certificates, while six received Laureate awards.

Laureate awards for Education Innovation:
The CAAC Team
Department of Life Skills and Disabilities, Centre for Augmentative and Alternative Communication, Faculty of Education,

Prof Y Jordaan
Department of Marketing and Communication Management, Faculty of Economics and Management Sciences

Prof JAW Coetzer
Department of Veterinary Tropical Diseases, Faculty of Veterinary Sciences

Prof B Lubbe
Department of Tourism Management, Faculty of Economics and Management Sciences

Dr M Hornsveld
Department Anatomy – Veterinary Science, Faculty of Veterinary Sciences and Department of Animal and Wildlife Sciences, Faculty of Natural and Agricultural Sciences

Dr TM Steyn
Centre for Academic Development, Faculty of Engineering, Built Environment and Information Technology, School of Engineering

Recognised for education innovation:
The Distance Education Community at UP
Innovative open learning model in distance education

Unit for Distance Education

Dr PH du Toit
PGCHE Portfolio, The Department of Curriculum Studies

Dr JP Joubert
A mentorship program for B(SportSci) students, Department of Biokinetics, Sport and Leisure Sciences

Mrs I Joubert
Story reading project, Department of Early Childhood Education

Dr C Lubbe
Reflective exploration in Educational Psychology

Ms E Olivier
The Jonathan Jansen collection, Academic Information Service, Groenkloof

Mr NA Taku
Leading role in establishing a learning environment that fosters law skills, Centre for Human Rights

Dr CN van der Westhuizen
Teaching Practice and Internship, Department of Languages

Mr GP van Rheede van Goudsboom
A unique approach to teaching at the UP

Department of Marketing and Communication Management

The following lecturers received a certificate for education innovation:

Mrs E Antonites
Department of Financial Management; Web-supported facilitation of learning in Financial Risk Management 711 (FRB 711)

Dr CJ Bender
Department of Curriculum Studies: Service-Learning Training for Academic staff

Me AC Botha
Department of Early Childhood Education: Story books and assessment

Dr N Claassen
Department of Physiology: Development of career opportunities in Occupational Hygiene for BSc students who graduate in Human Physiology

Ms N Cunningham and S Snyman
Department of Visual Arts: Learning through reflective thinking

Mrs J de Riddler
Department of Biochemistry: The design of virtual laboratory software to help students reach the desired outcomes in their second year in Biochemistry practicals.
The educational consultancy service provides designated support to academic staff at the University in order to promote best practices in teaching, learning and assessment.

The educational consultants in the Department for Education Innovation (EI) support the University’s academic staff members in their efforts to pursue excellence in all aspects of teaching and learning. The education consultants also give input into university-wide educational policy and practice.

Each faculty has access to a particular education consultant. Their activities include:

- The provision of a university-wide consultation service addressing the educational needs of lecturers, tutors, departments and faculties within a flexible learning environment.
- Promoting best practice in terms of quality teaching and learning within faculties.
- Supporting groups and individual lecturers with the planning and development of learning opportunities, learning materials, curricula, assessment opportunities and assessment instruments.
- Practice training in terms of the above and other relevant topics.
- Facilitating discussions or workshops on relevant topics.
- Evaluating (on request only) various aspects of the teaching practice of individual lecturers.
- Providing educational input and support at relevant forums, such as Programme Committees, Education Innovation Committees and other relevant ad hoc committees.
- Providing continuous support to new lecturers in faculties.
- Presenting and facilitating a general training programme for tutors.
- Facilitating open discussion between tutor co-ordinators.
- Conducting university-wide projects, such as the project on large classes.
- Support and conducting educational surveys and research within faculties.
- Forming part of e-learning project development teams.
- Some of the education consultants presented papers and workshops at international conferences and the research output of this support group signifies their scholarly intent and standard of research. Particular projects conducted during 2006 include, amongst others:
  - Streamlining processes concerning proposals for new learning programmes;
  - Study guide survey and guidelines;
  - Teaching large classes;
  - Redefining the job description and post levels of education consultants, in close collaboration with Deans;
  - UP teaching principles and guidelines;
  - Assessment principles and guidelines;
  - Teaching portfolios for lecturers;
  - Tutor support evaluation; and
  - International teaching initiatives (CDIO in Engineering).

During 2006 this support service was aligned with decision making and regulatory processes at a higher level than was previously evident. With the undergraduate appointment of a vice chancellor dedicated to teaching, closer collaboration is envisaged between academics, decision makers and EI.

Education induction programme

The Department offers regular education induction programmes to newly appointed lecturers. The introductory week-long course introduces participants to the theory and skills relating to teaching responsibilities in higher education and is aligned with the National Standards for Higher Education. Apart from this introductory week, various follow-up activities form part of the complete programme. The induction programme was presented three times during 2006 and was attended by 117 lecturers in total.

Training of junior staff members

Education consultants provide training and support within faculties to prepare junior staff for their responsibilities as learning facilitators. These workshops include amongst others, INNOVIL, a customised education induction course for facilitators of CIL courses, INNOVALT, an induction course for novice assistant lecturers and tutors in the School of IT, training of Faculty of Law Academic Associates and customised sessions for junior lecturers, teaching assistants and tutors from a variety of faculties. During 2006, 176 junior lecturers and tutors from a variety of faculties attended customised training sessions.

Assessment workshops

The Department presents a three-day Assessment workshop that addresses principles of assessment and planning for assessment. The workshop includes a series of sessions on specific assessment methods (e.g. written examinations, orals, practical examinations, portfolios). Four assessment workshops were presented during 2006, and were attended by 58 lecturers.

Study guide project

Following a decision taken by the Vice Principal’s committee in June 2005, the Department for Education Innovation embarked on a survey of study guides at UP and a review of the guidelines and criteria used to evaluate study guides.

Phase 1 of the project was a survey of a representative sample of study guides according to a generic set of core criteria. Follow-up initiatives are currently underway, in order to facilitate the ongoing development and improvement of study guides.

Phase 2 involved a review by an external panel, of the guidelines and criteria used to evaluate study guides. The improved guidelines and criteria will guide lecturers in the process of developing and upgrading their study guides.

Addressing problems associated with teaching large classes

During 2006 a needs analysis was undertaken by EI with the aim of identifying the problems lecturers experience when teaching large classes. Brainstorming sessions were facilitated in the Faculties of Humanities and Economic and Management Sciences.

Some of the problems in teaching large, heterogeneous groups were explored and verbalised. These include difficulty in promoting active and collaborative learning, timely and appropriate assessment of learning, fostering and transferring love for a subject, enabling guided learning, for example practical performance-type learning activities and fostering student attributes such as argumentation skills. A dire need was expressed to upgrade lecture halls and media for teaching. The load on lecturers needs to be reviewed, since they do not find time to keep abreast in their field of study, nor to pursue the scholarship of teaching (Buyer). The value of well designed study guides and the importance of additional learning material or opportunities, e.g. web-supported learning, are evident. Additional tutor support is seriously needed.
These efforts address key issues in order to develop a framework for the integration of, and a holistic approach to the proposed tutor system.

Students with special needs
The Disability Workgroup, which was established in 2005, succeeded in a number of initiatives aimed at creating an inclusive environment within the university. The workgroup consists of stakeholders from various interest groups across the university community.

In working towards ensuring that students and staff with special needs realise their potential, the group addressed the following issues: accessibility to buildings and residences (where possible); disabled parking; learning material, including material from the Academic Information Services; accessibility of electronic material; and learning facilitation support.

In an effort to track students with special needs, the university application form now makes provision for collecting information on special needs or disabilities, including accommodation requirements.

Diversity
The National Plan for Higher Education, which was approved by Cabinet in February 2001, identified five key priorities and strategic objectives necessary for achieving the overall goal of the transformation of the higher education system. Two of these goals initiate dialogue and action on diversity within higher education.

As part of staff development at UP, the Education Induction programme in particular, includes a focus on the concept of diversity. The objective is to sensitize new lecturers about the diversity of UP students, support mechanisms and initiatives for addressing these challenges.

FACULTY-SPECIFIC HIGHLIGHTS
Health Sciences
A Medical Education Orientation Programme (MEOP) was implemented for the first time in July 2006. The programme is presented over four days and is a supplement to the general Education Induction programme. It is specially directed at the lecturing staff of the School of Medicine.

A training session was conducted on giving constructive verbal feedback and the analogy of a take-away burger was used to illustrate each step in the process. A poster on this topic was presented at the Association for Medical Education in Europe and was awarded a prize.

In the School of Dentistry the Assessment Committee started a process of reviewing modules in the undergraduate dentistry curriculum. The preparation of the self-evaluation report required for the 2007 audit by the Health Professions Council of South Africa was completed.

The HEQEC and SAQA documentation for new qualifications and learning programmes, such as an MPhil in Pain Management and a Bachelor’s degree in Medical Clinical Practice, was completed and will be submitted to Senate.

Veterinary Science
The planning and preparation of the HEQEC and SAQA documentation for changing the Veterinary Nursing Diploma to a degree has been completed and the documentation will be submitted to Senate. The Faculty underwent accreditation by the South African Veterinary Council (SAVC), after which the final report and recommendations are awaited.

Humanities
The particular aim of the Humanities Education Innovation Committee in 2006 was to stimulate discussion and debate around students’ academic discourse abilities. Two Teaching and Learning Discussion Forums were hosted in the Faculty.

Discussion Forum 1: 28 May 2006
More than 50 lecturers (including some from other faculties) attended this discussion forum focusing on students' academic discourse abilities – a concern shared university wide. Besides the programmes offered by the Unit for Academic Literacy, it remains a challenge for each lecturer to provide opportunities to students to improve their academic discourse abilities.

Opportunities for information seeking, information processing and information producing are but some of the possible ways of achieving this goal.

Discussion Forum 2: 6 October 2006
This session was a continuation of the debate on students’ academic discourse abilities and was attended by about 44 lecturers (including some from other faculties). Participants voiced their concern about rigid spaces for learning at the University and discussed possibilities for opening up new and enabling spaces, by dismantling physical and mental boundaries. The role of reflection (by both lecturers and students) was stressed.

Engineering, the Built Environment and Information Technology
The ministerial priority for increasing the numbers of qualified engineers became evident in the strong trend in increased registrations and admissions. This in turn creates pressure on educational contexts, site funding, lecture venues, equipment, and staff availability often lag behind in terms of expansion. Lecturers explored alternative and improved methods of teaching. Funds were secured to upgrade some areas in order to make space available in which students could work.

CDIO (concept, design, implement, operate) is an international initiative to enhance the standards and quality of engineering education, which currently has 24 collaborating institutions of higher education across the globe. The University of Pretoria is a regular contributor to these activities and leads a theme group on student learning and assessment. This collaboration not only helps the faculty to stay abreast with trends in engineering education, but also bolsters international awareness of standards pursued by UP. Furthermore it ensures that UP qualifications are internationally recognised through the Washington Accord and by building close relationships by means of educational and research projects.

Under the leadership of Prof Chris Pistorius, the 3rd African Regional Conference on Engineering Education (ARCCEE 2006) and 4th South African Conference on Engineering Education (SACEEE 2006) were held in September 2006. The conference themes were “Enhancing Engineering Education” and “Women in Engineering”.

Education
Although many professional development initiatives are already in place in the Faculty of Education, the Education Innovation (EI) committee aims to generate ideas of how innovation can be introduced and sustainably maintained among academic staff, in order to enhance student learning by improving teaching practice.

While much energy and many resources have been dedicated to building the Faculty’s research portfolio over the past five years, under- and postgraduate teaching still require sustained investments and to this end the EI committee selected the improvement of university-level teaching within the frame of Boyer’s Scholarship of Teaching, as a focus for 2006/7.

During 2006 the Faculty began this initiative with a series of workshops which aimed to create awareness of the purpose and quality of the B.Ed programme.

Topics:
• Workshop 1: The purposes of the B.Ed degree
• Workshop 2: The place of assessment in the B.Ed degree
• Workshop 3: What knowledge is of the most worth?
• Workshop 4: What is the status of teaching in the B.Ed degree?
• Workshop 5: What is the status of learning in the B.Ed experience?

Economic and Management Sciences
One of the main focuses of the Faculty was to optimise the usability of study guides following feedback and recommendations by the Department for Education Innovation. Further implementation of the e-learning platform for learning and organisational purposes was worked upon within departments.

Detailed discussions and brainstorming sessions were held to define problems associated with teaching and administrative tasks and to identify various areas for support by EI. The following areas were explored:
- The specific needs of different subjects and their typical thought constructs;
- Problems experienced with the facilitation of learning and with assessment;
- Student profiles;
- Constraints experienced in teaching halls;
- Problems experienced with the use of media;
- Administrative loads and associated constraints;
- Learning resources and time;
- Decreased motivation and job satisfaction of lecturers.

Despite the challenges posed by large class sizes, the excellent teaching practices of a group of lecturers in the faculty were recognised with the awarding of Certificates for Education Innovation (see section on Education Innovation Awards).

Natural and Agricultural Sciences
Various lecturers in the faculty received recognition for their contributions to teaching excellence (see section on Education Innovation Awards).

A tutor project was initiated by the Department of Chemistry (Dr M Potgieter) in collaboration with EI, with the aim of providing integrated, sustainable student learning support in both theory and practical sessions. The following positive findings were observed:
- Both the tutors and the tutorial sessions were highly rated by students;
- The teaching approach that focuses on collaborative and autonomous learning appears to be effective;
- Student learning skills were perceived to improve;
- Addressing student needs during tutor sessions was perceived to be the strongest determinant of improved academic performance;
- The tutors that were recruited appeared to have the appropriate attributes; and
- Using questioning as a teaching strategy to improve thinking skills appeared to be effective.
The core focus of e-education is the skilful and appropriate integration of various information and communication technologies, including the worldwide web (WWW), interactive multimedia delivered on CD-Rom and computer-assisted assessment.

Instructional Design

The Department for Education Innovation (EI) follows a team approach to instructional design. Together with the Department’s educational consultants and academic staff members in the faculties, the instructional designers recommend a combination of instructional methodologies to be used within a flexible learning model. In consultation with a team of experts, the instructional designer then designs, develops and delivers a range of learning materials, utilising the most effective media and technologies for the specific learning purpose.

Piloting of WebCT Vista (called the ‘clickUP system’ at UP)

Online learning via the Internet is one of the delivery modes used, where appropriate, in a flexible learning model. Traditional face-to-face classroom sessions are combined with online interaction, communication, learning facilitation and assessment activities. The philosophy is to use the Internet to optimise and support student learning.

The existing version of WebCT (Campus Edition) was not scalable or robust enough to accommodate the growing use. In 2005, the recommendation of EI to replace WebCT Campus Edition with WebCT Vista 4 was purchased. WebCT Vista 4 is a powerful enterprise application, which is supported by an Oracle database. This offers various technical advantages that were not possible with previous versions of WebCT. The implementation was divided into three phases:

• Phase 1: Pilot project 1 which ran from January to June 2006;
• Phase 2: Pilot 2, which ran from July to December 2006; and
• Phase 3: Full implementation of all first semester modules by January 2007 and second semester modules by July 2007.

A formal project management structure was established to manage the implementation phases of the upgraded version of WebCT (called clickUP at the University). Ten project task teams were established within EI, with ITS representation, where necessary:

• Project management and administration: This task team was responsible for the overall project management, risk management, task team coordination, communication within task teams, and for ensuring the successful deployment of the new learning management system.
• Technical build: This team was responsible for the deployment planning, hardware selection, installation and optimisation of the technical infrastructure, and planning and implementation of the Learning Context configuration. The team worked in close collaboration with the Universities of Johannesburg and Stellenbosch, which are implementing the same system.
• Systems integration, business processes and policies: This task team was concerned with integrating WebCT Vista from a technical perspective with other systems such as the Student Information System, authentication systems and portals. The outcomes were enhancements to the existing student and lecturer portals, as well as the review and improvement of system and business processes and policies.
• Pilots: This task team planned and implemented two pilot projects. The initial small pilot project during the first semester tested the new system for robustness and stability, and established criteria to measure the success of both pilot projects. The second pilot during the second semester, established, with greater participation across faculties, that the production environment is scalable in terms of the new technology.
• Teaching and learning: This task team consisted of educational consultants and instructional designers and was responsible for re-evaluating the existing flexible learning model of the university. The task team also tried to determine different ways to support the uptake of best teaching principles and the effective integration of e-learning within different educational models across faculties.
• E-learning asset management and migration: This task team ensured that content, templates and other e-learning assets are managed appropriately through the configuration of the new system. A successful template management strategy was implemented and after a systematic investigation of its implications, a unique Learning Context design was implemented.
• Teaching and Support: This task team was responsible for the delivery of new staff training programmes, training material and a Help web site to support lecturers participating in the two pilot projects. A new training strategy and curriculum were designed and implemented, which included popular clickUP lunch time sessions.
• Communications: This task team developed a communication strategy to convey information about the implementation of the new system to all users. An information session was held during March 2006, to officially brand the new learning management system of UP as the clickUP system, to announce the clickUP strategy, and to promote the support services provided by EI. Two electronic newsletters were also sent to all personnel at the university.

The E-education team is experienced in developing different types of multimedia, including tutorials, simulations, case studies and collections of resources (usually visual). The aim is to make each programme as interactive as possible and to engage the user in active learning. The team approach with a wide diversity of specialists has made it possible to develop award-winning multimedia of a high standard.

Within the UP context, multimedia refers to the use of many different media (sound, graphics and animation, for example) within one programme to achieve a specific outcome. Such a programme is traditionally designed as a stand-alone programme distributed to students on CD-Rom. The content is usually a specific topic within a course or module and the multimedia product supplements and complements other modes of teaching.

E-learning demands.

Umfundi, the new computer-based testing system

Until 2006 there were three CBT systems used on campus, namely Question Mark Designer, the WebCT Quiz tool and CompAssess. Umfundi, the new
computer-based testing (CBT) system which replaces Question Mark Designer, was launched at an exciting event on 9 October 2006. The Umfundi system offers various new and unique features, such as advanced question types (e.g. the multiple hot spot question). Reports can be customised according to the needs of the lecturers and students can input comments to the lecturer about specific questions. The history of a question can be tracked and advanced statistics can be provided after a test.

There are currently six testing centres at the university where CBT is used, namely:

- Main Campus – CBT lab (120 computers)
- Prinshof Campus (2 labs with 80 computers each)
- Wierda Campus (76 computers)
- IT Laboratories (300 computers)
- Onderstepoort Campus (140 computers)
- Mamelodi Campus (76 computers)

CBT is a high priority at UP due to the growing demand for this type of assessment and the advantages for lecturers and students. Although the impression exists that only multiple choice questions can be used, CBT is suitable for testing on different cognitive levels. Several other, more demanding question types are also available.

One of the most obvious advantages is the fact that marking is done automatically. This enables lecturers with large student groups to assess their students regularly. Because the students are provided with timely and informative feedback, it is not only an assessment tool, but also a learning opportunity. It is, however, very important to remember that objective assessment forms part of the total assessment strategy of a department or faculty and should be implemented as such. Training on the effective use of objective assessment, as well as other assessment methods, is provided by the Department for Education Innovation.

Staff training in web-supported learning

The Department presents various staff training courses to equip lecturers to manage and facilitate courses in the online environment. All the courses are UP priority courses, which implies that there is no cost to academic departments.

Due to the pilot of the clickUP system, no formal courses in WebCT Campus Edition were offered during 2006. An innovation was the introduction of clickUP lunches, which are one hour lunch time sessions introducing lecturers to the new tools in the clickUP system. This format proved to be very popular amongst lecturers, not least due to the “brown-bag” lunches which were provided. The clickUP lunches comprise a series of seven different modules offered over seven months; thus lecturers should attempt to attend the full series. A total of 447 lecturers attended the lunches from May to November 2006. The series will be repeated during 2007 (see the schedule at http://www.click.up.ac.za/training.htm).

The clickUP Basic, clickUP Intermediate and clickUP Advanced courses. Another innovation was to include, in the clickUP Basic course, sessions on best practices in preparing materials for web delivery, using software such as Powerpoint, CutePFd and IrfanView. The newly designed clickUP Basic course was offered three times in the latter part of 2006 and was attended by a total of 148 lecturers.

The Facilitation of E-learning Course is an introductory course on the planning and facilitation of e-learning, with particular emphasis on how to make optimal use of the electronic learning environment. The course is based on an experiential learning approach and has both online and face-to-face components. In this way, lecturers experience what it is like to be a student in the online environment. The course was attended by 8 delegates during May 2006.

Student training in web-supported learning

Student training and orientation is necessary to enable students to take full advantage of the online learning management platform. The compulsory undergraduate Computer Information Literacy (CIL) courses were part of the clickUP pilot project, which means that first year students in 2006 obtained the necessary training to access and utilise the platform. For other students, the Department will continue to offer customised student training sessions in clickUP, in which the new role of the online student is discussed and students are allowed practice in accessing and using online courses and tools is facilitated. Further support for students is provided in the form of the Student CD-ROM, which was redesigned for clickUP. It contains the Sun Java software required to run clickUP. Twelve thousand Student CD’s were produced at the end of 2006, to be distributed free of charge to all first year students during orientation in 2007, as well as to any existing students who require it.

Student feedback

Student satisfaction was measured at the end of each semester by means of the online Student WebCT Experience Survey. In July 2006, 3,923 students completed the survey in Umfundi and in October 1,050 students completed the web-based Survey Share survey (surveyshare.com). Results from the latter were easily downloadable in the form of raw data, frequency counts and graphs. A surprisingly high proportion of respondents (84%) have access to computers either at work or at home, and 33% of respondents find it difficult to access a computer on campus when they need one. Eighty five percent of respondents found the opportunities for ‘anywhere, anytime’ learning on the web to be convenient.

For the first time, feedback from the surveys was communicated to students via articles in the student newspaper Perdeby (24 July and 16 October). The feedback indicates that students generally welcome the web-supported environment. They request more courses to be supported online and that lecturers should make better use of the functionality of the system.

Electronic Student Academic Portfolio (eAP)

The Electronic Student Academic Portfolio (eAP) creates a digital record of learners’ achievements throughout their studies. The following functions are currently available: creating comments for use during assessment, development and use of rubrics, creating and using groups, setting up assignments (this function has many sub-functions) and assessment of assignments.

Various departments in the Faculty of Health Sciences used the system during 2006, with 24 assignments being conducted across the MBChB curriculum. This usage of the system highlighted a few additional requirements and changes needed within the system, which were addressed and will be implemented in the near future. A total of 53 staff members and all MBChB students from the first year to the fifth year attended training in the use of the system. During 2007 further attention will be given to the development and implementation of the next phase of the system.

eCPCES (Electronic Comprehensive Patient Care and Education System)

The Electronic Comprehensive Patient Care and Education System will replace the School of Dentistry’s paper-based, standardised student training protocol for Patient Clinical Examination, Diagnosis and Treatment Planning. This product was a joint venture between the Department of Restorative Dentistry, the Department for Education Innovation and the development company, Executive Connections International Pty Ltd. During 2006 attention was given to final changes to the programme as recommended by users, as well as the development of an e-tutor.

The Department of Information Technology Services completed the installation of the computers at the dental chairs in the ward during 2006. The programme was also installed and used on 4 computers at the Department of Dental Management Sciences. Full implementation of the system in the clinical ward of the Department of Restorative Dentistry is planned for 2007.
EI’s creative experts assist in capturing concepts in audio and/or visual forms, which range from graphic images to animations, voice-overs and other forms of sensory stimuli.

In 2006 the Department for Education Innovation identified a need that the graphic design, video and photography units from the three campuses (Hatfield, Onderstepoort and Medical), should combine as one unit, with one head. This unit is now known as Creative Studios and continues to provide specialised services to all the departments at the University.

The EI personnel at the Medical campus now all sit together in new offices in the HW Snyman building. This means that the education consultants, instructional designers, computer-based testing and Creative Studios can now function as a combined unit and are more accessible to the personnel of UP who make use of these services.

Two graphic designers at Creative Studios (Medical Campus) delivered poster presentations at a conference for “The Guild for Natural Science Illustrators” in Madison, Wisconsin. This provided the opportunity to network and benchmark with some of the best scientific illustrators in the world. After the conference, the University of Wisconsin Madison, the University of Columbia in New York, 3dh Corporation in Atlanta, Georgia and Primal Pictures in London were visited.

The reason for these visits was to accumulate and share information with regard to graphics, video and photography, but mainly to discover what technology other institutions are using and investigate the new technology that 3dh Corporation is developing.

The Creative Studios Video Unit (Medical Campus) enjoyed a very positive experience in 2006 in the form of a course presented to a group of delegates from Angola. The course spread over a three day period and was presented by the EI senior video director. The aim was to be informative and to suggest possible means of making use of multimedia products in order to promote distance education in Angola. The course was well received by the visitors and further correspondence will be conducted.

Graphic services include the design of pamphlets, brochures, advertisements, exhibition material, electronic presentations, posters, transparencies and slide shows, as well as the layout and printing of reports, brochures, pamphlets and publications. Assistance with the provision of graphics for web sites, 2D and 3D animations and course material, as well as the production of graphics for multimedia and clickUP courses is provided.

Photographs are used for instructional, research and promotional purposes and range from photographs of scientific equipment and specimens to portraiture. Digital photography is also done, which is used for both web and multimedia programmes. Key services offered include studio and location photography, copying of artwork, illustrations and books, duplication of slides, computer-generated slides, macro photography, stereo microscope photography, scanning of slides and photographs (digitising) and writing them to CD, manipulation and restoration of photographs, film processing (slides, colour and black and white negatives), and production of photo-quality A4 and A3 prints on various grades and weights of paper.

The formats include 35mm and 120mm slides and negatives, in colour and black and white and digital images at 300dpi in *.tiff or *.jpg format.

Video and audio services include video production, 3D animation, tape duplication services and the conversion of video to electronic format (MPEG), as well as the provision of sound recording and editing services. Services involved in a typical video production include script writing, filming, editing (video and audio) and duplicating the final product. Typical examples of where these services might be needed include promotional videos (product or service), information videos, educational videos and the filming of events.

The Communication Technology Team works closely with Creative Studios and is responsible for video conferencing, and IT management within the Department. Tape duplication services include making multiple VHS copies from VHS, DV, DVCam, Betamax, Video8, Hi-8, Betacam and U-matic, as well as conversions from NTSC VHS to PAL VHS and from PAL to NTSC. Multiple copies from audio cassettes are also made. Conversions of video to MPEG include the digitisation of video footage for use in multimedia programmes, PowerPoint presentations and for the web. Sound recording and editing services cover general sound recording, voice recording, the recording of audio onto CD, transferring LP records onto CD and the writing of all recordings to CD.

Advances in technology make it possible to include increasingly sophisticated multimedia (video, sound, animation, digital photographs and complex graphic images) in learning material provided to students. This promotes visual literacy and enhances the learning experience.
The University of Pretoria (UP) manages service points to provide access to information, administrative services, tests and examination opportunities for off-campus students.

**UP-service points**

The Department manages UP service points in Pretoria, Witbank, Nelspruit, Polokwane and Mokopane. The following services are provided:

- Administrative support with a facilitator on site (enquiries, applications, courier services, photocopies, e-mail, fax, etc.).
- Tests and examinations.
- Video viewing facilities.
- Occasional tutorials on request.

Venues are hired from other higher education institutions, e.g. Unisa, Tshwane University of Technology and private colleges.

**Off-campus examinations**

An increasing number of postgraduate students apply to take examinations nearer to their home or work place. In the light of strengthened partnerships between tertiary institutions, off-campus examination logistics have become a successful collaborative enterprise between UP, Tshwane University of Technology (TUT) and Unisa. The MEM, MPM, MBA, MOT and MCom (Taxation) programmes, as well as the programmes of the Centre for Augmentative and Alternative Communication (CAAC) and the departments of Social Work, Nursing, African Languages and Afrikaans make use of the off-campus examination infrastructure.

**Teach-out agreement ends**

The teach-out agreement between Lyceum and the University of Pretoria officially came to an end during 2006. A significant number of more than 23,000 students graduated from these partnership programmes in the decade from 1996 to 2006. To provide pipeline students with sufficient assessment opportunities, the University arranged a Chancellor’s examination during January 2006 for students requiring one or two subjects to complete their qualification.
The importance of research and development in higher education is evident. Changes in the higher education environment emphasise the fact that education innovation needs to be based on educational research.

**Research-based postgraduate education**

The Unit for R & D was commissioned to conduct a survey on the current state of research-based postgraduate education at the University. The information gained from this research will inform strategic decisions regarding the development and support of postgraduate education, and will also be used in preparation for the 2007 institutional audit by the HEQC.

The research was conducted in several phases and targeted current research-based masters and doctoral candidates, as well as those who opted to cancel their postgraduate studies. A number of key issues emerged from the study, for example:

- need for general information (programme, facilities, funding, access);
- provision of key academic information services (electronic information resources, subject specialist support, selection of reference material, loan periods);
- clarification of roles and responsibilities of role-players;
- inclusion of postgraduate students into the research community;
- structured supervision and support (especially during proposal development and approval stage);
- smaller postgraduate supervisor-student ratios;
- accommodation and parking arrangements on campus for postgraduate students.

There are many factors that influence students to withdraw, continue, complete and return to UP to further their higher education. A model was proposed to explain these behavioural patterns.

**Guidelines for Teaching and Learning**

The Unit for R & D played an instrumental role during the inception, research and development of these guidelines, and the negotiations with role players and stakeholders during several workshops and ad-hoc strategic committees. The guidelines make provision for key points of departure on teaching, assessment and curriculum design, and providing specific guidelines to be borne in mind by faculties, departments and lecturers when planning these important activities.

The guidelines are based on the scholarship of teaching, which:

- recognises the symbiosis between teaching and research, in which teaching is informed by the newest developments in research, extends and enriches knowledge, and raises new questions for advanced inquiry;
- recognises the diversity of learning styles, experiences and backgrounds represented within the student body, and responds in ways that accommodate such variation; and
- acknowledges that assessment is a vital instrument in improving teaching and learning through structured and regular feedback from and to students.

**UP Assessment Framework and Policy**

Following the development work completed by a task team on assessment during 2005, the year under review saw the refinement of these principles, the integration of internal and national regulations and policies, as well as the gradual inclusion of recommended ‘best practices’ into the framework. The resulting UP Assessment Framework is published in paper, as well as CD-Rom and web formats, in order to enhance accessibility and interactivity.

The framework was used as a foundation for the development of a formal, university-wide assessment policy in collaboration with the Quality Assurance Unit. Faculties have the responsibility to ensure alignment of Faculty policies and practices, as well as regulations contained in the Faculty yearbooks with this policy.

The policy has the following objectives:

- to provide a vision for assessment;
- to align the strategic plan, institutional policy, regulations and guidelines on the assessment of student learning;
- to define the principles on which UP bases its assessment practices;
- to serve as a resource to provide information on current policy related to the assessment of student learning;
- to inform and guide assessment practices at UP; to provide a framework according to which faculty assessment policy and practices can be organised and interpreted;
- to create institutional awareness regarding UP’s responsibility and accountability towards assessment of student learning.

**Study Success: Undergraduate withdrawals**

A formal study was conducted to determine reasons for student withdrawal, and to analyse the withdrawal statistics within the calendar years 2005 and 2006. The legitimacy of withdrawal categories was assessed and category choices on the ‘UP Cancellation Letter’ were compared with reasons identified during telephonic exit interviews done with 100 students. The withdrawal letter now makes provision for ten key reasons for withdrawal.

**Feedback on the quality of undergraduate education**

An course experience questionnaire was developed to gain student feedback on the quality of programmes. The instrument was adapted from the literature (Ramsden) and contextualised for local use. It was activated as a survey on Umfundl (the UP computer-based testing facility) for use during external audits at institutional, faculty and departmental level.

An updated instrument for undergraduate student feedback on the quality of contact and web supported education was implemented during April 2006. It makes provision for: statistically confirmed, reliable information on teaching quality and assessment practices of individual lecturers. The feedback can be used for quality assurance, performance management, and academic staff development, taking into consideration the lecturer’s performance over a number of feedback periods. The usual paper-based data capturing instrument was implemented, as well as a fully automated electronic reporting facility.

Ongoing research on feedback on the quality of practical training, focussed on the following faculties / departments in particular:

- Faculty of Theology: A generic feedback instrument was developed; making provision for all the Afrikaans church denominations. The instrument was distributed among the final year students, following their practical exposure at the end of 2006.
- Department of Communication Pathology: Findings of the 2005 feedback were discussed during two departmental workshops. This led to a number of changes to, and added to the quality of training in the practical modules, and assisted the Department to attain key outcomes as stated by the professional board. A second round of feedback was conducted at the end of 2006.
- Department of Drama: The concept feedback instrument was developed further.

During 2007, the R&D Unit will pay specific attention to the development of strategic education documents, such as an education policy, a teaching and learning plan, a student charter and a code of conduct for lecturers. In the area of study success at institutional level, efforts will focus on the identification of non-cognitive factors that affect study success of first year students, as well as the implications thereof for student selection. Resources will also be directed towards the continuous monitoring of study success and student feedback.
International Collaboration

International competitiveness is one of the University’s important strategic drivers. Interaction and collaboration at international level is therefore strongly encouraged. In this respect, EI is involved in a number of projects aimed at providing technical and educational support to foster international academic collaboration.

Imperial College, London

A scholarship programme and Partnership Development Project are in place between the Imperial College London (UK) Distance Learning Programme (ICL-DLP), Wye campus and the Department of Agricultural Economics, Extension and Rural Development (LEVLO), University of Pretoria (UP). This international collaboration is supported by the Department for Education Innovation (EI).

The Centre for Distance Education (CDE), University of London, awarded funding for a project to develop an educational model for delivery and support of postgraduate distance learning in Southern Africa that incorporates m-learning. During 2006 four students in Malawi and Tanzania were selected for the pilot phase of the project. Meetings were held with the students to investigate their contexts and to establish their involvement.

Initial activities in which the students participated with their existing cell phones were conducted, not only to confirm the ability of the two institutions involved to communicate with the students, but also to investigate the possible use of smart phones. The outcome of these activities indicated that a mobile phone with smart phone capabilities was preferable to a PDA with greater storage capabilities. The smart phone provided to the students is the Nokia N70, supplied with a 1Gb storage card and Bluetooth connectivity. By receiving the smart phones the students committed themselves to the project for two years. In order to communicate the progress of the project, a blog site was created. For more information visit the address http://ict4d.typepad.com/mobile_learning/ (username and password are both mlearn).

The pilot project raised some technological, logistical and educational issues which need to be solved during the second phase of the project. The second phase will focus on the design and integration of educational activities aimed at adding value to the learning experience of a larger group of students.

The Prince Leopold Institute for Tropical Medicine (ITM), Antwerp, Belgium

EI has been involved in supporting the Department of Veterinary Tropical Diseases (DVT), Faculty of Veterinary Science, in developing a masters degree in Veterinary Tropical Diseases which is being delivered predominantly online. Students attend contact sessions for the purpose of completing required practical and laboratory work. The Department of Veterinary Tropical Diseases is working in collaboration with the Department of Animal Health of the Institute of Tropical Medicine (ITM), Antwerp, Belgium, with the support of the Department of Production Animal Studies (UP) and the Department of Infectious Diseases and Immunology, Faculty of Veterinary Medicine, Utrecht University, the Netherlands.

A team from the DVTD visited the Institute in Antwerp, Belgium, in November 2006 for a workshop and to discuss the future collaboration within the framework agreement. Following this visit, a team from EI and Prof Johan Knoetze (Department of Education) participated in a very productive discussion with Dr M Madider (ITM) and the DVTD at Onderstepoort, about the future of e-learning and the impact of new technologies on the delivery of the MSc programme.

Many of the modules developed for this masters programme will also be offered as online short courses for Continuing Professional Development (CPD). During 2006, 28 modules were presented for CPD to students from all over the globe. Additional electronic resources in the form of nine multimedia CD ROMs and video material were developed and distributed to the students.

European Union Project on E-Competence

The European eCompetence Initiative set out to explore common problems faced by those working in academic staff development in this age of e-learning. The initiative served as a unique international forum for discussion around issues of academic staff development, technology in education, pedagogy and organisational strategies.

In the current implementation of the Bologna Declaration in European higher education, measures of effective learning are shifting from an input to an output orientation. Increasingly, learning outcomes and competence profiles are replacing the traditional notion of a discipline-based body of knowledge. The focus is also on skills, motivation and attitudes, which enable an individual to act in complex situations in a responsible and suitable way. This is the wider thematic context in which the concept of eCompetence was investigated.

The consortium included participating institutions from 24 countries. UP is one of only two non-European universities to contribute significantly to this project, through the Department for Education Innovation. Our participation included attendance at workshops and seminars, video conferences with the organisers, input into the formulation of definitions, writing up the UP case study for the final publication (see publication Fresen, Steyn & Marx, listed in the Reports section) and evaluating the written contributions.

The European eCompetence Initiative came to an end in 2006, with the publication of a report “The Challenge of eCompetence in Academic Staff Development”. Currently a number of universities, amongst them the National University of Ireland, the University of Dortmund and the University of Pretoria, are working towards a new project to apply for further European Union Funds.

University of Illinois at Urbana-Champaign, USA

Prof Bekisziew Ndimande, a Visiting Fellow in the Department of Social Studies Education at the University of Pretoria, developed and teaches an online course as part of an exchange programme between the University of Pretoria and the University of Illinois at Urbana-Champaign, USA.

“Teaching and Learning about Africa” is the title of the course, which intends to help future educators increase their awareness of and develop classroom curricula that represent students of different nationalities and diverse cultural backgrounds. More importantly, the course allows students at the University of Pretoria and the University of Illinois at Urbana-Champaign to engage in cultural and intellectual exchange on issues related to education, social development, and knowledge production.

All relevant readings are available and weekly reflection papers are submitted and evaluated within the online environment. This project is supported by EI and is a good example of the possibilities of international collaboration and the effectiveness of an online learning management system.

University of Maryland University College (UMUC), United States of America and Carl von Ossietzky University, Oldenburg (Germany)

The Masters in Distance Education (MDE) programme is offered jointly by the above two universities. True to its area of focus, the programme is offered as a totally online distance education programme and is facilitated by academic staff at both institutions. An EI staff member was invited to be a visiting expert on one module: Training and learning with multimedia. During November 2006 she facilitated a unit on e-learning project management and quality assurance in e-learning. The e-learning Quality Management System, some of its supporting documentation and other house materials on flexible, blended learning were provided to students as examples of real life practice in an e-learning support unit. Not only did this provide exposure to the practice at the University of Pretoria, it also enhanced the international nature of the MDE programme.
A number of new initiatives were launched by the Department for Education Innovation (EI) during 2006, which contribute to promoting excellence in teaching and learning at the University of Pretoria.

Client Satisfaction Survey

During June 2006, the Department for Education Innovation (EI) developed and administered a Client Satisfaction Survey to lecturers who make use of our services, in order to measure client satisfaction and impact on teaching practice. The survey was anonymous, but respondents were able to provide their name and contact details if they required follow up contact. We thank those that responded – we value your feedback and will act on it in order to effect improvements in our service delivery.

The overall findings are summarised in the table below, per question, per service unit:

<table>
<thead>
<tr>
<th>Service Unit</th>
<th>Q1 Overall level of satisfaction (Good + Excellent)</th>
<th>Q2 Impact on teaching practice (Different + Indispensable)</th>
<th>Q3 Intent to use service in future (Yes)</th>
<th>Q4 Recommended service to colleagues (Likely + Definitely)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Innovation &amp; Consultancy</td>
<td>75%</td>
<td>92%</td>
<td>75%</td>
<td>79%</td>
</tr>
<tr>
<td>E-education</td>
<td>73%</td>
<td>95%</td>
<td>88%</td>
<td>87%</td>
</tr>
<tr>
<td>Education Technology</td>
<td>62%</td>
<td>90%</td>
<td>70%</td>
<td>77%</td>
</tr>
<tr>
<td>Creative Studios</td>
<td>72%</td>
<td>78%</td>
<td>55%</td>
<td>69%</td>
</tr>
</tbody>
</table>

Discussion

• The level of overall satisfaction with the services provided is heavily skewed to the right: i.e. of the four service units, the lowest frequency of respondents using the service who find it to be satisfactory, good or excellent was 62%, with the other three scores being in the 70%.

• The extent of the impact of these services on the teaching practice of lecturers is also heavily skewed to the right, i.e. a moderate to indispensable impact was recorded for all the service units, with the lowest score being 78% and the other three service units scoring in the 90%.

• Customer loyalty is evident, since the intent to use the services in future ranged from 55% to 88%, with many of the open responses supporting the indispensable nature of the services provided.

• The willingness to recommend the services to colleagues ranged from 69% to 87%.

• There were various comments to the effect that the Education Consultancy service is excellent and valuable, in particular with regard to the guidelines for study guides.

• The E-learning service was described as being of incalculable value for staff to improve the quality of their service to students, and that lecturers would not be able to manage without it. Some lecturers asked for more training in e-learning, while the clickUP lunches were described as exceptionally innovative, valuable and making optimal use of time.

• The main negative reaction about E-learning was the instability of the IT infrastructure. Some lecturers even decided to revert back to previous practices due to IT problems. This area requires urgent and far-reaching action. Teams from the two departments are in close and regular contact about stabilising the IT infrastructure.

• Lecturers’ opinion of CBT varied from very positive to very negative, although where problems are experienced, these are solved quickly.

• The staff members in the Educational Technology Division are very helpful (even on weekends), but equipment in the venues is experienced as unreliable (out of order at critical times).

• Client satisfaction with the services and products of Creative Studios appears to be generally good.

E-learning

SMS System

A Short Message Service (SMS) was developed for the University by the Department of Information Technology, in collaboration with the Department for Education Innovation.

The SMS System provides two functionalities for UP personnel to distribute bulk official SMSs:

• Academic personnel, who need to send SMSs to students registered for a specific module, can make use of the system via Lecturers Online (LOL).

• Personnel who make use of the Cost Control system interface (administrative personnel) to send out bulk SMSs to a list of recipients in a formatted text file will gain access to this system in the UP portal through a portlet named “Bulk SMS sending”.

Self training material and assistance available: Viewlets or movie clips (short videos) on how to use the system and its functionalities are available for self training purposes. The different viewlets and Help pages may be viewed at http://www.up.ac.za/telematic/training/smssintro.htm.

If there is a need for further assistance or training in the use of the system, please contact:

- Gretchen Jacobs: (012) 420-4378 (Main Campus) [gretchen.jacobs@up.ac.za]
- Hannelie Untledt: (012) 354-1316 (Medical Campus) [hannelie.untledt@up.ac.za]

Publication of the E-learning Quality Management System

The e-learning Quality Management System, which has been in operation since 2003, was accepted for publication in a book of case studies published by CEN/ISSS, the European Committee for Standardization / Information Society Standardization System.

The initiative is an attempt to identify good practices in the implementation of quality approaches in e-learning. From the cases submitted to the project team, 11 were selected for further investigation. These cases were contributed by corporations or institutions in Canada, Italy, the Netherlands, Argentina/United States, Germany, France, South Africa (the University of Pretoria) and the United Kingdom (Open University).

The UP case was required to show how we implemented, developed and evaluated quality in e-learning. The document had to be mapped onto the newly emerging ISO 9000 standard which covers the main phases of the e-Learning life-cycle (ISO/IEC 19786-1). The UP case has been included in the CEN/ISSS Workshop Agreement (CWA), a good practice guideline and report, showing outstanding implementations of quality approaches in the field of e-Learning. The (draft) document is published online at ftp://ftp.cenorm.be/PUBLIC/CWAs/draft/cwa1_20061109.pdf. Printed versions may be ordered from CEN.

Educational Technology

Smart Podium project

At present the majority of venues at UP do not reflect best practice for teaching and learning. Lecturers are hampered in their teaching activities by audiovisual equipment that is not standardised, integrated, maintained and/or supported. Compared with international standards, even the allocated number of educational technology support staff does not compare favourably.

Existing, and in particular, newly planned educational venues need to integrate technology in such a way that it is didactically, ergonomically and aesthetically conducive to being used seamlessly and with ease by the lecturer. As part of the strategy to equip venues with well-integrated educational technology, the concept of installing a “Smart Podium” in all priority classrooms was investigated.
Publications


Keynote addresses


International Conference Presentations


International Poster Presentations


on mobile learning, Banff, Canada, 22 – 25 October 2006.


International Workshops / Invited Lectures


National Conference Presentations


Research reports


Frensen, J.W. (2006). MU Direct and Educational Technologies at Missouri (ET@MO), University of Missouri - Columbia, Columbia, United States of America: E-learning design and development and academic staff training.

Frensen, J.W. Graduate & Continuing Studies, Stephens College, Columbia, United States of America: Graduate and continuing studies (in the online environment), student training and support.

Frensen, J.W. Online Campus, Columbia College, Columbia, United States of America: Online learning – management, delivery and staff training.


Visitors to TLEI

• Abawa, D., Quality Unit, University of Gondar, Ethiopia
• Adame, T., Academic Development and Resource Centre, Debor University, Ethiopia
• Bunaro, E., Academic Development and Resource Centre, Ariba Minch University, Ethiopia
• Cantrell, Dr M., EQUIP project, Academic Development and Resource Centre Project Office, Addis Ababa, Ethiopia
• Cherinet, F., Academic Development and Resource Centre, Addama University, Ethiopia
• Minjeyst, A., Academic Development and Resource Centre, Bahr Dar University, Ethiopia
• Seyoum, G., Academic Development and Resource Centre, Jimma University, Ethiopia
• Seyoum, Y., Academic Development and Resource Centre, Alemaya University, Ethiopia.Centre, Addis Ababa University, Ethiopia
• Stephenson, D., Blackboard Corporation, United Kingdom
• Slabbert, J.A. Universiteit van Dortmund, Dortmund, Germany: E-Competence project (European Union project).

Boon, J.A. Katholieke Universiteit, Leuven, Belgium: To study their TOLEDO system.

Boon, J. A. Vrije Universiteit, Amsterdam, Netherlands: The role of education consultants in e-learning.

Boon, J.A.: Universiteit van Dortmund, Dortmund, Germany: E-Competence project (European Union project).


Frensen, J.W. Graduate & Continuing Studies, Stephens College, Columbia, United States of America: Graduate and continuing studies (in the online environment), student training and support.

Frensen, J.W. Online Campus, Columbia College, Columbia, United States of America: Online learning – management, delivery and staff training.


Training provided 2006

<table>
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<tr>
<th>Course/Workshop</th>
<th>Times presented</th>
<th>Total participants</th>
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<tr>
<td>clickUP Basic</td>
<td>3</td>
<td>148</td>
</tr>
<tr>
<td>clickUP lunches</td>
<td>35</td>
<td>447</td>
</tr>
<tr>
<td>Facilitation e-learn</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>e-admin</td>
<td>13</td>
<td>97</td>
</tr>
<tr>
<td>e-SAP</td>
<td>3</td>
<td>53</td>
</tr>
<tr>
<td>Informal JIT e-learning sessions</td>
<td></td>
<td>74</td>
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<tr>
<td>Education Induction (Afr + Eng)</td>
<td>3</td>
<td>117</td>
</tr>
<tr>
<td>Assessment</td>
<td>4</td>
<td>58</td>
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<tr>
<td>Educational media</td>
<td>4</td>
<td>37</td>
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<tr>
<td>Educational themes</td>
<td>11</td>
<td>131</td>
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<tr>
<td>Education induction for junior lecturers</td>
<td>3</td>
<td>60</td>
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<tr>
<td>Tutor training</td>
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Modules in WebCT

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<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
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<tbody>
<tr>
<td>Undergraduate UP modules:</td>
<td>391</td>
<td>847</td>
<td>1036</td>
<td>1351</td>
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<tr>
<td>Postgraduate UP modules:</td>
<td>675</td>
<td>754</td>
<td>874</td>
<td>1086</td>
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<tr>
<td>CE at UP courses:</td>
<td>5</td>
<td>21</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>Number of students with access to WebCT:</td>
<td>21 200</td>
<td>26 576</td>
<td>30 201</td>
<td>31572</td>
</tr>
<tr>
<td>Number of personnel with access to WebCT:</td>
<td>802</td>
<td>987</td>
<td>726</td>
<td>938</td>
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<tr>
<td>Number of departments involved:</td>
<td>86</td>
<td>95</td>
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Computer-based Testing (CBT)

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<tr>
<th></th>
<th>2003</th>
<th>2004</th>
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<tr>
<td>Number of tests created</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Campus CBT</td>
<td>164</td>
<td>173</td>
<td>178</td>
<td>104</td>
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<tr>
<td>Main Campus CIL</td>
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<td></td>
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<tr>
<td>Health Sciences</td>
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<td>137</td>
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<td>202</td>
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<tr>
<td>Onderstepoort</td>
<td>21</td>
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<td>Groenkloof</td>
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Number of departments / groups

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Multimedia Projects – Completed in 2006

| Department                          | Title                                                                 | Project Leader | Instructional Designer |
|-------------------------------------|                                                                     |                |                       |
| 1. Education Innovation             | Student CD-ROM – 2007 version                                       | Dr Jill Fresen | Johan Slabbert         |
| 2. Veterinary/Tropical Diseases     | Helminth Infections: Companion animals                             | Prof JAW Coetzer | Linda Verster, Dr El-Marie Mostert |
| 3. Construction Economics           | Standard System for Building Works                                 | Prof Thys Sigle | Dolf Jordaan           |
| 4. Physiotherapy                    | Movement                                                            | Ms E Korkie    | Anne Strehler          |
| 5. Department of Veterinary Tropical Diseases | Small Animal Medical Dermatology: An atlas of common conditions arranged by dermatological syndromes | Prof Andy Leisewitz | Dr El-Marie Mostert, Programmer: Stefan Redelinghuys |
| 6. Department of Veterinary Tropical Diseases | Molecular Biology                                                  | Prof Estelle Venter | Dr El-Marie Mostert, Programmer: Renee Marais |
| 7. Otorhinolaryngology              | The nose, sinuses and nasopharynx                                   | Prof AHH Mulder | Liana Venter           |
### EI Executive Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Telephone</th>
<th>E-mail</th>
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<tbody>
<tr>
<td>BOON J A [Hans]</td>
<td>Director</td>
<td>+27 12 420 4112</td>
<td><a href="mailto:hans.boon@up.ac.za">hans.boon@up.ac.za</a></td>
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</tr>
<tr>
<td>KRUGER K [Karen]</td>
<td>Secretary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BROWN T H Dr [Tom]</td>
<td>Deputy Director</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VICTOR D [Dorette]</td>
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<td>+27 12 420 2681</td>
<td><a href="mailto:dorette.victor@up.ac.za">dorette.victor@up.ac.za</a></td>
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### Operational Office

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>JORISSEN H W Dr [Willem]</td>
<td>Head: Logistics and Partnerships</td>
<td>+27 12 420 2568</td>
<td><a href="mailto:willem.jorissen@up.ac.za">willem.jorissen@up.ac.za</a></td>
</tr>
<tr>
<td>BOTES M W [Ira]</td>
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<td>+27 13 690 2325</td>
<td><a href="mailto:ina.botes@up.ac.za">ina.botes@up.ac.za</a></td>
</tr>
<tr>
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<tr>
<td>SIEBERT F [Francis]</td>
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<td><a href="mailto:francis.siebert@up.ac.za">francis.siebert@up.ac.za</a></td>
</tr>
<tr>
<td>VISSER HJ [Heleen]</td>
<td>Relief Receptionist</td>
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### Research and Development

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<tr>
<td>DU PLESSIS G I Dr [Gerhard]</td>
<td>Specialist: Action R&amp;D</td>
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<td><a href="mailto:gerhard.duplessis@up.ac.za">gerhard.duplessis@up.ac.za</a></td>
</tr>
<tr>
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<td><a href="mailto:jeanne.bornmann@up.ac.za">jeanne.bornmann@up.ac.za</a></td>
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<tr>
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<tr>
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<td><a href="mailto:helena.kriek@up.ac.za">helena.kriek@up.ac.za</a></td>
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### E-Education

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<tbody>
<tr>
<td>SCHEEPERS M D [Detken]</td>
<td>Head: E-learning</td>
<td>+27 12 354 1575</td>
<td><a href="mailto:detken.scheepers@up.ac.za">detken.scheepers@up.ac.za</a></td>
</tr>
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<td>+27 12 354 2395</td>
<td><a href="mailto:laetitia.jacobs@up.ac.za">laetitia.jacobs@up.ac.za</a></td>
</tr>
<tr>
<td>DE BRUYNE E [Erika]</td>
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<td><a href="mailto:erika.debruyne@up.ac.za">erika.debruyne@up.ac.za</a></td>
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<td>+27 12 345 6364</td>
<td><a href="mailto:estelle.drysdale@up.ac.za">estelle.drysdale@up.ac.za</a></td>
</tr>
<tr>
<td>FRESEN J W Dr [Jill]</td>
<td>Project Manager</td>
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<td><a href="mailto:jill.fresen@up.ac.za">jill.fresen@up.ac.za</a></td>
</tr>
<tr>
<td>JACOBS G N [Gretchen]</td>
<td>Instructional designer</td>
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<td><a href="mailto:gretchen.jacobs@up.ac.za">gretchen.jacobs@up.ac.za</a></td>
</tr>
<tr>
<td>JORDAAN A J [Dolf]</td>
<td>Project Manager</td>
<td>+27 12 420 3721</td>
<td><a href="mailto:dolf.jordaan@up.ac.za">dolf.jordaan@up.ac.za</a></td>
</tr>
<tr>
<td>KOTZE M [Magdaleen]</td>
<td>Instructional designer</td>
<td>+27 12 808 3516</td>
<td><a href="mailto:magdaleen.kotze@up.ac.za">magdaleen.kotze@up.ac.za</a></td>
</tr>
<tr>
<td>MARX A S [Alta]</td>
<td>Instructional designer</td>
<td>+27 12 420 4121</td>
<td><a href="mailto:alta.marx@up.ac.za">alta.marx@up.ac.za</a></td>
</tr>
<tr>
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<td>Project Manager</td>
<td>+27 12 529 8251</td>
<td><a href="mailto:el-marie.mostert@up.ac.za">el-marie.mostert@up.ac.za</a></td>
</tr>
<tr>
<td>NAGEL L [Lynette]</td>
<td>Instructional designer</td>
<td>+27 12 420 2131</td>
<td><a href="mailto:lynette.nagel@up.ac.za">lynette.nagel@up.ac.za</a></td>
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### Educational Consultation

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<tr>
<td>HAUPT S [Sanet]</td>
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<tr>
<td>DELPORT R Dr [Rheana]</td>
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<tr>
<td>GOSSMANN C [Carol]</td>
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<tr>
<td>HICKS M [Marietha]</td>
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### Creative Studios and Communication Technology

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<tr>
<td>DU PISANI L A [Almero]</td>
<td>Head: Creative Studios and Communication Technology</td>
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<td>HENDRICKS A C C</td>
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<tr>
<td>VAN DER MERWE J H</td>
<td>Manager: Communication Technology</td>
<td>+27 12 420 3722</td>
<td><a href="mailto:hennie.vandermerwe@up.ac.za">hennie.vandermerwe@up.ac.za</a></td>
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### Creative Studios: Medical Campus [Graphic, Photographic and Video Services]

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<td>HEFER, R [Rika]</td>
<td>Manager: Creative Studios (Medical)</td>
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<tr>
<td>DANNHEIMER S [Sigil]</td>
<td>Snr Graphic Designer</td>
<td>+27 12 354 1836</td>
<td><a href="mailto:sigi.dannheimer@up.ac.za">sigi.dannheimer@up.ac.za</a></td>
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<tr>
<td>MARAIS R [Renee]</td>
<td>Jnr Graphic Designer</td>
<td>+27 12 354 1028</td>
<td><a href="mailto:reneDEI.marais@up.ac.za">reneDEI.marais@up.ac.za</a></td>
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<tr>
<td>REYBURN H [Heather]</td>
<td>Jnr Graphic Designer</td>
<td>+27 12 354 2219</td>
<td><a href="mailto:heather.reyburn@up.ac.za">heather.reyburn@up.ac.za</a></td>
</tr>
<tr>
<td>STOOP C E [Eliz]</td>
<td>Secretary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VAN BLERK H [Hannalie]</td>
<td>Graphic Designer</td>
<td></td>
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</tr>
<tr>
<td>VAN DYK A [Antoni]</td>
<td>Snr Video Producer</td>
<td>+27 12 354 1575</td>
<td><a href="mailto:anton.vandyk@up.ac.za">anton.vandyk@up.ac.za</a></td>
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### Creative Studios: Onderstepoort Campus [Graphic, Photographic and Video Services]

<table>
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<tbody>
<tr>
<td>MAYHEW E [Estelle]</td>
<td>Manager: Creative Studios (Onderstepoort)</td>
<td>+27 12 529 8097</td>
<td><a href="mailto:estelle.mayhew@up.ac.za">estelle.mayhew@up.ac.za</a></td>
</tr>
<tr>
<td>VERMEULEN C A [Charmaine]</td>
<td>Snr Photographer</td>
<td>+27 12 529 8062</td>
<td><a href="mailto:charmaine.vermeulen@up.ac.za">charmaine.vermeulen@up.ac.za</a></td>
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### Creative Studios: Hatfield Campus [Graphic, Photographic and Video Services]

<table>
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<tr>
<th>Name</th>
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<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZIMMERMAN K D [Kim]</td>
<td>Manager: Creative Studios (Hatfield)</td>
<td>+27 12 420 3932</td>
<td><a href="mailto:kim.zimmerman@up.ac.za">kim.zimmerman@up.ac.za</a></td>
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<tr>
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</tr>
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<td><a href="mailto:hettie.mans@up.ac.za">hettie.mans@up.ac.za</a></td>
</tr>
<tr>
<td>MOLONEY M L [Melita]</td>
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<td><a href="mailto:melita.moloney@up.ac.za">melita.moloney@up.ac.za</a></td>
</tr>
<tr>
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</tr>
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<td><a href="mailto:jenni.wilson@up.ac.za">jenni.wilson@up.ac.za</a></td>
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### Education Technology

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>FREYSEN J B Dr [Johan]</td>
<td>Manager: Education Technology</td>
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<td><a href="mailto:johan.freysen@up.ac.za">johan.freysen@up.ac.za</a></td>
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<tr>
<td>GREYLING W [Willie]</td>
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</tr>
<tr>
<td>MABOEA S S [Samuel]</td>
<td>Assistant: AV equipment</td>
<td>+27 12 420 4288</td>
<td></td>
</tr>
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### Support Staff

<table>
<thead>
<tr>
<th>Name</th>
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<tbody>
<tr>
<td>SEDIBE M N [Martha]</td>
<td>Assistant</td>
<td>+27 12 420 3807</td>
<td></td>
</tr>
<tr>
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<td><a href="mailto:stanley.phofedi@up.ac.za">stanley.phofedi@up.ac.za</a></td>
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### Student Assistants

<table>
<thead>
<tr>
<th>Name</th>
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<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>DUVENAGE J [Juanita]</td>
<td>RGT Testing</td>
<td>MALULEKE RR [Mr]</td>
<td>Education Technology Assistant</td>
</tr>
<tr>
<td>MAFELA LC [Calvin]</td>
<td>Education Technology Assistant</td>
<td>MOLEFE J [Jan]</td>
<td>Technician</td>
</tr>
<tr>
<td>MAGIDI V [Mr]</td>
<td>Education Technology Assistant</td>
<td>RAMMUPUDU NH [Hendrik]</td>
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<td>PHALANE JM [Mr]</td>
<td>Education Technology Assistant</td>
<td>RIVIMBI TL [Lucas]</td>
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<td>STEGMANN K [Karen]</td>
<td>RGT Testing</td>
<td>TSHIFURA GO [Oswald]</td>
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<td>VD WATH JG [Jan-Georg]</td>
<td>RGT Testing</td>
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