

DEPARTEMENT VIR  
ONDERWYSINNOVASIE

DEPARTMENT FOR  
EDUCATION INNOVATION



UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA

Denklelers • Leading Minds • Dikgopolo tša Dihlalefi

## Vision

Creating synergy towards innovative education environments for student engagement and success

## Mission

- Leading through knowledge generation and application related to educational theories, practices, trends, policies and technology.
- Creating a vision for quality teaching, learning and assessment and enabling staff to accomplish that vision
- Advising decision-makers at all institutional levels on educational practice that promotes student engagement and success.
- Providing academic professional development opportunities, support and facilitation in a variety of media
- Designing, developing and refining learning resources and environments in all media.
- Integrating theory and practice, different technologies, resources, people and processes.

# Department for Education Staff 2010



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# Director's Message

In 2010, the 'world-cup-soccer' year, the Department for Education Innovation (EI) proved to be a winning team. The annual report tells of strategies deployed and goals achieved through internal collaboration and team spirit. The department excelled not only in its work but also in supporting campus world-cup initiatives, winning the best stand at the Spring Day and generally having a positive, participatory ethos. Every member of the department participated with passion and professionalism in the activities of the department and the University in 2010.

The vision of EI is: '*Creating synergy towards innovative education environments for student engagement and success*'. If one analyses the vision, 'creating' immediately links to 'innovation'. EI employs creative people with the knowledge and skills to assist lecturers to design and develop teaching, learning experiences and assessment that engage students intellectually. The department also conducts research into innovative methodologies and tools. The phrase 'creating synergy' points to the collaborative nature of EI's work as we work in teams to support academic staff and bring together teams that could include ITS, the Library, Student Affairs, Academic Planning and so on to serve the core activities. The notion of 'environments' is significant in that we support lecturers in face-to-face, distance and online environments. It is clear that EI works directly with lecturers but the beneficiaries are the students. Many of the initiatives of the department focus on student surveys and the analysis of data related to factors that impact on student success as well as the University's statistics of success.

With its focus on the continuing professional development of academic staff, it was natural that EI led the initiative to draft a *Policy on Academic Staff Development*. The purpose of the policy is to align professional development programmes with the strategic focus to improve teaching and learning. The policy was approved by the Senate during 2010.



The impact of the Department for Education Innovation is thus extensive.

EI supports a blended approach to learning through

- education consultants who offer the Education Induction Programme for academics new to the University and continued academic development of lecturers and tutors for face-to-face teaching and assessment as well as curriculum design;
- the e-learning section that maintains the learning management system, *clickUP*, trains lecturers and administrators to use it and supports them in their endeavours, as well as focusing on other technologies that support education;
- creative studios whose artists design graphics and animations;
- qualified photography and video specialists;
- research into students' experiences that impact on learning success and retention.

A renewed interest in 2010 was inquiry-based learning. A strategic innovation think tank (SIT) session was devoted to exploring the concept and a workshop was held on Teaching in a Research-Intensive University.

2010 was also the year of the bi-annual Education Innovation Awards. Dr Josef de Beer of the University of Johannesburg was the external moderator. Six Laureates were awarded:

1. Dr Hannelie Dippenaar, Faculty of Education, was nominated for incorporating community-based learning projects as part of teacher education – language across the curriculum.
2. Ms Kato Plant and eight other participants in group from Faculty of Economic and Management Sciences (Auditing and Internal Auditing) were nominated for their Business Communication course presented to postgraduate internal auditing learners.
3. Dr Rinelle Evans, Faculty of Education was nominated for her project on teaching large classes: innovative instructional design of a multilingual module.
4. Professors Jannie Hugo and Tessa Marcus and Drs Marietjie van Rooyen and Angelika

Reinbrech-Schutte, Faculty of Health Sciences, were nominated for L-CAS – the longitudinal clinic attachment programme for students – learning medicine in context from year 1.

5. Professor Danie Lombard, Faculty of Health Sciences, was nominated for an integrated model of study support.
6. The Mining Engineering Department (Professor Ronny Webber-Youngman, HoD), Faculty of Engineering, Built Environment and Information Technology, was nominated for an innovative teaching and learning education strategy in developing the ‘ideal’ mining engineering practitioner.

For the first time in 2010, monetary awards were attached to the Laureates. Dr Dippenaar was awarded the MTN sponsored award for the most innovative teaching and learning project.

EI contributed towards the student access and success initiatives of the Vice Principal: Teaching and Learning in 2010. Detail is given in the report from HERI. One of the major milestones was the development of a model by Professors Kilfoil and Ogude to capture the essence of the emerging framework:

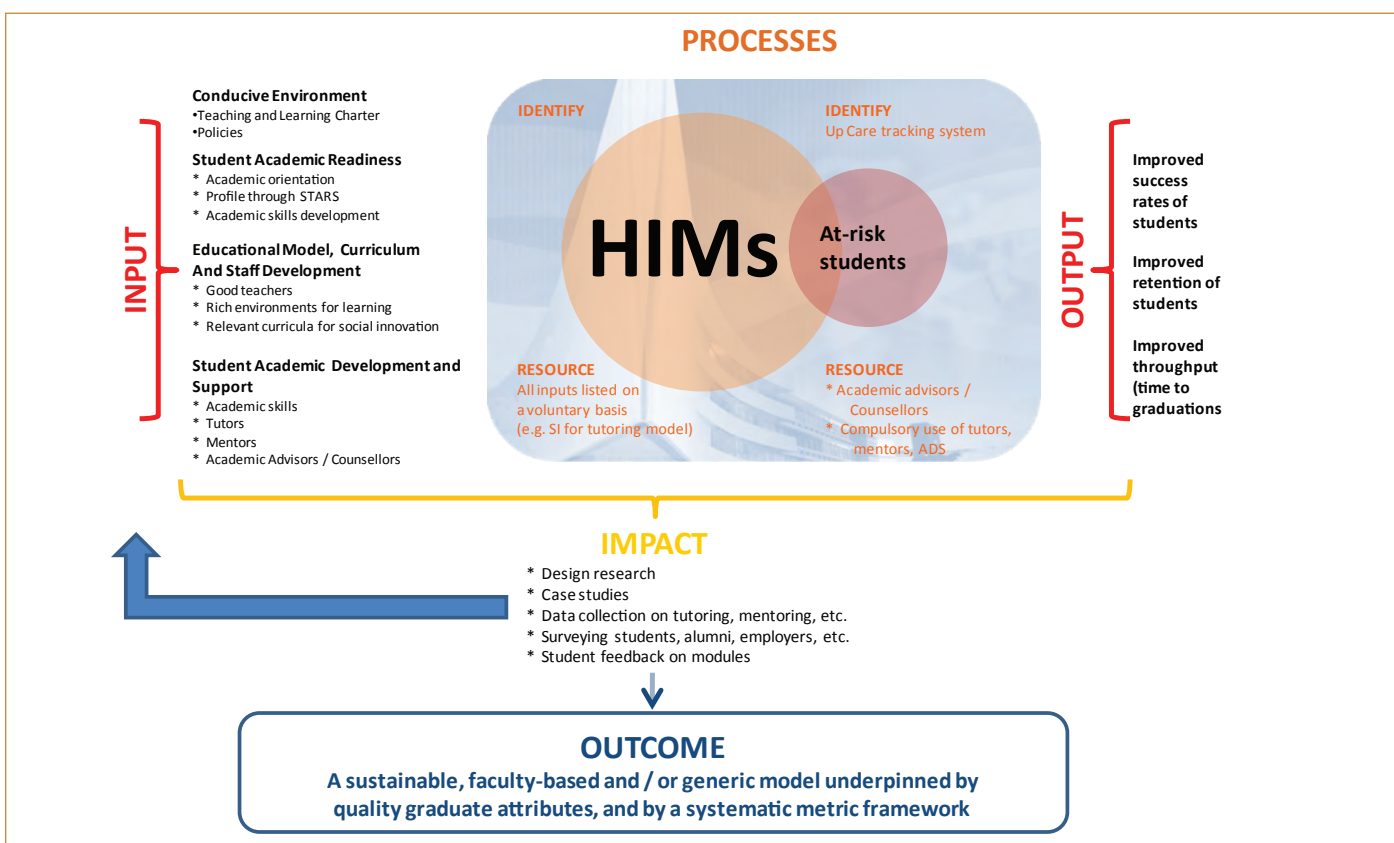


Figure 1: Student Academic Development and Excellence Model

The model seeks to capture at a very high level the practices at UP. It is based on the Kellogg Logic Model of Input, Process, Output, Impact, Outcomes. The acronym HIMs refers to high impact modules, defined in more detail in this report in the Education Consultancy section. One of the characteristics of the HIMs is that they have large classes and therefore affect many students. The process block seeks to capture the whole university with the HIMs highlighted for particular attention as high-risk modules and then high-risk students within HIMs but also within the entire student population also receiving attention. A feedback loop from impact studies shows that the elements of the model are being researched and improved constantly.

As part of its commitment to continuous quality improvement, the Department for Education Innovation distributed a satisfaction survey on campus electronically during May/ June 2010. The results were extremely positive both about the department overall and relating to the three sections of the department evaluated individually: Creative Studios and Communication Technology, Education Consultancy and E-Education. There were 118 responses, 106 from Faculties, 12 from support departments. There were seven questions, the last one merely to identify the Faculty or other affiliation of the respondents. In terms of the department meeting client expectations overall, the combined 'good' and 'excellent' rating was 83.78%. The level of satisfaction per section had a combined 'good' and 'excellent' rating of 82.35%. For 71.86% of respondents, EI has impacted significantly on their ability to perform their work well. Services will definitely be used again by 86.61%. The services would be recommended to a colleague by 85.82%. Services are indispensable to 76.71% of respondents. Open-ended responses showed a similar positive trend with items clustering around attitude, quality, professionalism and value added.

The department has enjoyed good management and leadership in 2010 and particular thanks go to Dr Matete Madiba (Deputy); Almero du Pisani, Kim Zimmerman, Rika Hefer and Estelle Mayhew from Creative Studios and Communication Technology; Dr Willem Jorissen and Sanet Haupt from Education Consultancy; Dolf Jordaan and Detken Scheepers from E-Education; Dr Gerhard du Plessis from Higher Education and Research Innovation; and Elize de Waal from the Operations Office.

*Professor Wendy Kilfoil*

# Creative Studio and Communication Technology

Creative Studios and Communication Technology is headed by Almero du Pisani. Reporting to him are three line managers: Rika Hefer (Prinshof studio), Estelle Mayhew (Onderstepoort studio) and Kim Zimmerman (Hatfield studio). The portfolio offers graphic design, video and photography services. Creative experts assist in capturing concepts in audio and/ or visual forms, which range from graphic images, photographs and video to animations, voice-overs and other forms of sensory stimuli. In terms of teaching and learning, the use of audio and visual elements assists students with different learning styles to engage more meaningfully with the content. Communication technology, which is involved with video, audio, Skype and other communication technologies – for example, Google Talk – provided many learning opportunities for students during 2010.

## Highlights and New Initiatives of 2010

In 2010 the Department for Education Innovation's Creative Studios continued to provide specialized services to all the departments at the University.

One highlight was the Health Sciences' project to stream live surgical operations *via* fibre optics from theatres in the Steve Biko hospital to a seminar room. It was almost completed during 2010 and should be operational by February 2011. Video Production at the Prinshof campus is involved in this project. This technology enables students to view live video footage of an operation and to communicate with the surgeons during the procedure. Postgraduate students will benefit the most from the initial project.

The annual Design Indaba held at the International Convention Centre in Cape Town (CICC) was again attended by eight staff members. It is a world-

renowned, prestigious and internationally recognized conference where the best creative minds from all corners of the globe and from diverse creative backgrounds are identified and invited to share their secrets, experiences and design processes. EI designers were exposed to new ideas and innovative ways of working in the various creative disciplines. With the depth and breadth of topics that were covered, there was opportunity for them to develop their sensibilities in the task of assessing and improving their abilities in their relevant specialist fields.

Excelling is always a highlight. A poster designed for Professor Maria Marchetti-Mercer, Head of the Psychology Department, won best poster award at a conference in Paris.

Some of the larger projects completed by the Creative Studios photographers were:

- Consumer Science 1 Recipe development- Food shots and cooking methods
- Tukuport aerial photos
- CAAC teaching aids
- Food Sciences' frozen vegetables comparison
- Onderstepoort Veterinary Hospital: Lion autopsy
- Department of Electrical, Electronic and Computer Engineering; Innovation competition, Portraits
- Faculty of Humanities, Digitisation of art books and slides
- Education Innovation Awards
- UP Arts: 101 ceramic collection of UP and Anton van Wouw exhibition catalogues
- Photo shoot for the Department of Electrical, Electronic and Computer Engineering



- Portraits and group photos for various academic departments
- General Campus photographs of buildings.

Some of the larger projects completed by the Creative Studios video team were:

- African Moot Court in October in Benin, for the Law Faculty
- Consumer Science, training videos regarding red meat, chicken and fish
- Tuks Sport, colours award production
- Innovation awards videos
- Various marketing videos for Veterinary Science (year project), HPC etc
- Tuks expert lecture series.

Communication Technology was involved in the following larger projects:

- Installation and commissioning of video conference technology in the Auditorium, Moot Court and Seminar room at Law Faculty
- Installation and commissioning of video conference technology in Geology Department.

## Institutional Support

While the main function of Creative Studios is to support innovative teaching and learning, it supplies a service across the University, as is evident from the list above. Its services are used by the Executive, Corporate Communications and Marketing, and presenters at conferences to create quality informational and promotional products.

During 2009 the University Council approved a major facility expansion project for the School of Engineering as well as the construction of a parking garage. The Project Manager of the Engineering Building Project approached Communication Technology, which forms part of this section, to investigate the possibility of filming the construction process. Communication Technology staff in collaboration with a member of the E-Education section of EI researched possible solutions and found that a permanent web cam would be the best solution. EI procured the hardware, did the installation next to the Aula and since May

2009 has been responsible for capturing, storing and showing the construction process on <http://web.up.ac.za/building>. This project is still running and will terminate when the building activities are completed. A second webcam and storage facility were set up to film the new building for the Faculty of Natural and Agricultural Sciences.

Communication Technology undertook a large number of IP videoconference link-ups during 2010 owing to higher bandwidth that came available during 2010.

Other institutional support activities in which Creative Studios and Communication Technology were involved, include the following:

- Installation of temporary translation facilities in the Aula during the inauguration of the new Principal and Vice Chancellor
- Annual Medical Orientation Programme (MEOP)
- Benchmarking exercise between UP and North West University Technical Support Services
- [WebEx](#) support for Onderstepoort.

## Design and Development Impact

All the graphic artists received new 64-bit computers during 2010 with the latest Creative Suite software (CS5). These advances in technology make it possible to include increasingly sophisticated multimedia (video, sound, animation, digital photographs and complex graphic images) in the learning material provided to students. Multimedia are part of the blended learning model at UP, to promote visual literacy and enhance learning experiences.

Large numbers of academic and research posters were created on the three campuses and feedback from lecturers indicated a positive impact on the quality of teaching and learning.

Creative Studios constantly upgrades technology to be able to assist lecturers with top class products; for instance, software updates were made to enable staff and students of the Department of Communication

Pathology to communicate with other lecturers and students in the USA during an event for individuals living with aphasia and cognitive communication disorders, via a Skype connection.

Creative Studios is a regular contributor to the Education Induction Programme for new lecturers. Technology required for the training was arranged and some input was provided by Creative Studios. A lecture on the use of media in teaching and learning was also provided at each Induction. The impact of the exposure at the Education Induction Programme is that the head of Creative Studios receives more and more invitations to lecture at academic departments on the use of media and PowerPoint. Given that PowerPoint is a dominant lecture hall presentation tool nowadays, improving its use significantly impacts on the quality of the students' experiences.

# Education Consultancy

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The Education Consultancy portfolio is headed by Ms Sanet Haupt and Dr Willem Jorissen. They have staff on the Hatfield, Onderstepoort and Prinshof campuses as EI allocates one education consultant per Faculty. Education Consultancy provides a designated and specialized support service to all categories of teaching staff at the University. The core mandate of this support service is to develop, sustain and foster best and next practices in teaching, learning and assessment. A pivotal skill of education consultants is the ability to build relationships. Each Faculty has a dedicated education consultant who liaises with the Dean, Faculty Teaching and Learning Committees or equivalents, heads of departments and individual lecturers. In addition, the community of practice works together on large-scale academic professional development initiatives, such as the Induction Programme and assessor training.

## Highlights of 2010

During 2010 the Faculty Engagement Model, as a strategic approach to engage with Faculties in order to enhance teaching and learning, was rolled out in all Faculties. Education Consultancy collected contextualized knowledge regarding each department's priorities and needs. This information was used to develop teaching and learning improvement plans. The execution of the priorities within the improvement plans was managed by education consultants through the formal Faculty structures, giving continuous feedback on progress of activities and raising issues, challenges and successes. The implementation of this approach has led to the alignment of education consultants' activities with Faculty priorities as identified by the respective heads of departments. Mutually beneficial relationships were built by stimulating continuous focused dialogue.

## Faculties

The multiple and specific needs of the Faculties are reflected in the priorities as identified and captured in the Faculty teaching and learning improvement plans. Some of the major achievements for 2010 were:

## Economic and Management Sciences

EC: Dr Fritz Dresselhaus

The education consultant was busy with a number of initiatives at Faculty, department and individual lecturer level including the following:

1. Tutor training within Accountancy: Team teaching with members of staff from the Faculty; students derive the benefit of both theoretical grounding and subject related practical tips and advice by role models.
2. First-year assessment survey in the Faculty: The ratio of formative to summative assessment through MCQs versus longer type questions was evaluated to measure compliance with policy.
3. Multiple-choice questions developed for Economic and Management Sciences to support the learning of students.
4. Continuous professional learning workshops on various topics were offered to staff on mediating learning, curriculum development and web-based learning.
5. Meetings with representatives from Umalusi to bridge the gap between school and university.

6. A need was identified to diminish the gap between school and university and improve throughput rates of first-year students in Accounting Sciences. Towards this end, focus group interviews with purposely selected groups of first-year students were conducted. Based on analysis of the interviews, a number of interventions will be implemented in 2011, such as e-tutoring and providing students with a concept map of the programme with clarification of the relationships and purpose of modules in the programme. Students who did not have accounting at school will engage in an accounting board game that illustrates accounting concepts in practice. This group will also receive a weekly set of multiple-choice questions in *clickUP* that address current key concepts, accompanied by explanatory feedback. Their tutors will also provide online tutoring in *clickUP*. Training of the tutors was scheduled for January 2011.

7. Faculty-based research: This longitudinal study is in its 4<sup>th</sup> year investigating student success by gathering data on student expectations from first-year students. This multi-pronged strategy aims to investigate the expectations of first-year students regarding:

- the University
- their Faculty
- their course
- their lecturers
- their own aspirations.

Students' experiences of their studies are also investigated across all their years of study. The data allows the researchers to compare experiences of students from their first year to their last but also to compare students in the same cohort or across different cohorts. The most salient finding gleaned from this research in 2010 was the importance new students placed on help and academic support from lecturers. Both from their initial expectations and experience also surfaced the high premium they placed on lecturers' teaching skills. The issues arising from this investigation inform improvements in student academic support, professional development of staff and imminent curriculum revision in some programmes. The strategic value of this project was emphasized by the principal of the University.

## Education

EC: Ms Neo Tshetlo

Education has been involved in a major revision of curriculum as well as a variety of other teaching and learning projects in which the education consultant was involved in 2010:

1. The review of designated study guides was completed. Individual face-to-face assistance was provided, upon request, in this regard. The role of level descriptors in curriculum design was highlighted in workshop sessions and departmental meetings, as part of the curriculum revision process.
2. Tutor training workshops were conducted to contribute towards the continuous improvement of the Faculty tutor-training model. The aim is to work towards a student-support strategy that will entail an integration of various interventions and approaches.
3. Assistance was provided for the design and constructive alignment of the portfolio assessment of a new module. The upshot of this exercise was that it provided an opportunity to engage in a collaborative exercise between more than one Education Innovation section and academic staff members. This synergy yielded a conference paper that is being developed into a journal article.
4. Opportunities for research were explored that will include further collaboration of EI and the Faculty with the envisaged goal of strengthening the B Ed ECD/ FP programme. This initiative was in response to a DoE/ EU call for HE participation in addressing the nation-wide paucity of ECD/ FP teachers.
5. Further support was provided through outlining the significance of the principle of constructive alignment in assessment at a Faculty-specific assessment workshop. Academic staff members were assisted in various instances that included the compilation of promotion and Education Innovation Award portfolio submissions.

## Engineering, Built Environment and Information Technology (EBIT)

EC: Dr Ronel Callaghan

Several initiatives contributed to a vibrant teaching and learning environment in the Faculty in 2010. Just three are mentioned below:

### 1. Peer Instruction (PI) and Just-in-Time-Teaching (JiTT)

Professor Eric Mazur, Physics professor at Harvard and internationally recognised for the development of interactive teaching strategies, presented an online workshop series to lecturers during the second semester of 2010. Delivery modes included Elluminate (synchronous software), online surveys and video conferencing. The aim of this workshop series was to promote student engagement in UP. Peer Instruction (PI) and Just-in-Time-Teaching (JiTT) are two research-based methods for engaging students, improving conceptual understanding, increasing retention in modules and programmes, and enhancing academic performance. Participants also learnt about an approach to instructional design. Finally, participants applied the knowledge gained to a specific course module they are (or will be) teaching, by re-designing (or designing) the syllabus for this course module and developing a plan for implementing PI and JiTT. Various departments and sections in the University participated and in the end 46 people were involved in the process.

### 2. The Whole Brain Initiative in the School of IT

The School of IT is reviewing the presentation strategies and learning material of Computer and Information Literacy (CIL121) with the aim of converting them to a Whole Brain teaching and learning approach. The focus for 2010 was on requirement analysis and a variety of workshops, focus groups, surveys and questionnaires was used. Training the assistant lecturers and piloting whole brain concepts in the classrooms also featured during this year. Whole brain activities were also planned, designed and created. The Whole Brain initiative within CIL121 is an example of synergy and collaboration between various sections within EI, as well as academic and support staff.

### 3. Multimedia and student engagement in Mining Engineering.

The Department of Mining Engineering is in the process of developing support material for all their courses. This material will assist students in gathering background knowledge about Mining Engineering during their first two years of generic Engineering studies, and prepare them for the third year when they start specializing in this department. The material will also be used in the different modules. It includes multimedia elements such as videos, sound clips, graphics, etc. The department is also preparing to promote interactive teaching and learning strategies and the material will support this drive.

## Health Sciences

EC: Dr Glynis Pickworth

The Faculty continues to promote the provision of quality learning programmes. The following are a few highlights:

### 1. Some new qualifications have been implemented.

The Postgraduate Diploma in General Ultrasound had its first intake of students in 2010. This was the culmination of long process of getting the qualification registered and accredited, followed by curriculum planning based on a blended learning approach. Continuous reflection on the implementation of the Clinical Associates programme focuses on strengthening a student-centred teaching approach in the programme.

### 2. A survey of teaching and assessment practice

The survey was conducted in the MBChB programme in response to recommendations made by the Health Professions Council of South Africa. A review of the teaching and assessment practice in the modules of the BChD programme continues.

### 3. Research into health sciences education

Teaching staff are encouraged to participate in educational research and a number of presentations were made at the annual South African Association

for Health Educationalists (SAAHE) Conference. The education consultant is frequently involved in joint research projects with the academics in this field.

## Humanities

EC: Ms Marena Lotriet

Humanities engaged seriously with curriculum issues in 2010 and the education consultant was involved.

1. Education Innovation actively supported the model for academic development that was implemented in the faculty. This included support with curriculum development and training of 'skills tutors'.
2. Depending on the needs, a number of departments or disciplinary groups within departments embarked on intensive curriculum and/ or assessment review supported by Education Innovation in various ways: curriculum mapping, training, intensive work sessions and stakeholder workshop facilitation.
3. In November/ December a questionnaire for Student Feedback on Programmes was piloted in the Department of Biokinetics, Sport and Leisure Sciences. This was done electronically in the survey tool on *clickUP*. The results presented valuable information for curriculum review. The questionnaire will be refined and implemented for all closed/ professional programmes in the Faculty in 2011.

## Law

EC: Dr Rejoice Nsibandé

In 2010 there were two major projects in which EI staff was greatly involved:

1. Students' Classroom Experience Survey: Towards the end of 2010, Education Innovation staff worked with the Deputy Dean in the Faculty to design a questionnaire that was used to establish reasons for students not attending classes. This survey involved all students (from first year to fourth year). Analysis of data is still in progress and issues emerging will be reported to

the Faculty for consideration in order to improve their teaching and learning practices in a way that respond to students' expressed needs.

2. A process for mapping LLB modules using the curriculum mapping software was started mainly with the intention of helping the Faculty to prepare for its self evaluation as part of a quality review process. Modules have been uploaded and the focus in 2011 will be on starting with the analysis with the aim of improving curriculum design.

## Natural and Agricultural Sciences (NAS)

EC: Ms Thabi Mtombeni

The Faculty has a number of ongoing projects particularly related to student support and success. Two such projects are mentioned below:

1. Extended Curriculum Programme: 4-year B. Sc. programme

Staff members in the Extended Curriculum Programme were involved in curriculum development activities through the use of the curriculum mapping tool. Attention was also paid to improving academic student support by improving academic literacy. Inter-university collaborations with regional universities were initiated in 2010 with the outcomes of these being workshops and meetings between UP and the University of Johannesburg staff. Another major outcome of this collaboration is the planned future workshops and symposium for 2011 for sharing of best practice in these programmes. Invitations will be extended to other institutions with similar programmes as well as other UP Faculties with similar initiatives such as are to be found in Humanities and EBIT (ENGAGE or Augmented Programme).

2. High Impact Modules (HIMs)

High impact modules exhibit the following characteristics:

- Low pass rates/ high failure rates (suddenly or over time)
- Large enrolments
- Serving many programmes

- Serving programmes associated with scarce skills
- First-year modules

In 2010, the HIMs initiative's main focus was improving student learning and performance by adopting improved student support initiatives. Highlights in the Faculty of Natural and Agricultural Sciences included the following:

- The curriculum of the first-year, first-semester modules in the Departments of Chemistry, Mathematics and Applied Mathematics and Biological Sciences was reviewed and several adaptations were made to improve the learning of the first years when they begin their university studies.
- Two workshops were held, one in each semester, where the following resolutions were reached:
  - Increased focus on reviewing the curriculum through curriculum mapping.
  - Improving teaching and learning by improving academic student support.
  - The adoption of the Supplemental Instruction<sup>1</sup> programme as a mechanism for increasing learning opportunities for students would be piloted using two modules in two departments: Chemistry and Mathematics and Applied Mathematics.

## Theology

EC: Ms Faith Ndlovu

1. Six academic staff members attended the *ClickUP* Basic training. A summary of the total number of modules on *ClickUP* was also made available to the Education Innovation Manager of the faculty.
2. In preparation of the review of several modules within the Faculty, five academic staff members plus one administrative staff member attended the Curriculum Mapping Software training.

3. Curriculum and Study Guide Review – all academic staff members involved in facilitating the different components of the content of the module TEO 101 (Theology Orientation Module) attended a half-day review session of the curriculum, the study guide and planned an integrated assessment strategy for the June examinations.

## Veterinary Science

EC: Dr El-Marie Mostert

The education consultant at Onderstepoort doubles as a project manager (e-learning) as well. Her work with curriculum development and the use of technology to enhance teaching are both highlighted below:

4. A process of revising the curriculum of the B V Sc programme was initiated during 2010. Education Innovation actively supported all Faculty structures and staff members involved in this process. It is an ongoing process in which EI plays an active supporting role.
5. The Department of Veterinary Tropical Diseases (DVTD) in the Faculty is a partner of the LINQED Educational Network. This network is an initiative of the Prince Leopold Institute of Tropical Medicine (ITM Antwerp), Belgium and the Belgian Directorate General for Development Cooperation (DGDC). They presented a workshop on 'Technology Enhanced Learning (TEL): Exploring possibilities and tools for low-resource settings' in Antwerp for partner institutions of the network. The EI consultant was invited to assist in designing and facilitating the workshop in Antwerp. There is ongoing collaboration between EI, DVTD and ITM to develop an online e-learning course for the LINQED network.
6. Research was conducted to determine student experience on their 3<sup>rd</sup> and 5<sup>th</sup> years of study. The outcome of this research is used to inform decision-making to improve student experiences overall. Final-year students were asked to evaluate their programme and indicate their future plans. The feedback from the final-year questionnaire is to determine the validity of the

<sup>1</sup> This programme is a peer-learning strategy that has a proven record of impacting positively on student learning and increasing pass rate.

graduate profile. This research is commissioned by the Dean and serves in the Faculty Plan for 2011.

## Projects

Many UP projects involved teams of Education Consultants working together or with other sections of EI. Some of the major cross-cutting projects are mentioned below.

### Study Guide Project

During 2008, a project was initiated to research the value of study guides for students within a broader institutional project to improve student success and to enhance engagement. The first step was to survey student to ascertain their perceptions on the value of study guides as learning tools that contribute to their student success. An open ended questionnaire with four questions was administered in three Faculties. Data were analysed using Atlas.ti quantitative research software. Findings indicated that students valued study guides highly for their directional/pathfinder characteristics.

The project clearly pointed to a need to study the wider curriculum context of which individual modules and guides form part. The Study Guide Project thus became linked to three other initiatives, discussed below:

- The Large Class Project: An e-resource to support the teaching of large classes, using *clickUP*, was launched at an Eduvate Forum in 2010. The launch was well-attended and Professor Jeff Jawitz of UCT was the keynote speaker. Lecturers will be logged in as students on the system. The purpose is to engage lecturers who face large classes in relevant discussions; support decision-making to improve teaching in these classes; and expose lecturers to resources, including literature on how to handle large classes.
- Curriculum Mapping: EI continued to use the Rubicon Atlas curriculum mapping program licenced in 2009 to analyse the curricula of modules and whole programmes. The HIMs

modules were prioritized as were programmes undergoing revisions or external panel review. The project suggests that mapping out modules and programmes in this way leads to productive conversations between education consultants and lecturers or whole departments on curriculum and pedagogical issues. The customized UP template within the software is structured in such a way that it will allow a level of flexibility to cater for different departments and programmes. The ITS department has allocated consultants to support the curriculum initiative so that data captured in the software integrates with UP systems and supports better use of *clickUP* and the quality of study guides. During 2010, more than sixty modules were loaded on the system.

- High Impact Modules: Study guides from the identified HIMs were used to gather data and trends to inform improvement strategies. Ethical clearance was granted from the relevant committees to gather data on students' views on the value of study guides. Using these data, together with those gleaned from the curriculum mapping activity, the template for compiling study guides was revised during 2010.

The findings of the survey into study guides plus the data emerging from the three linked projects will inform further improvements to the study guide template, as well as the new policy on curriculum development, study materials and study guides that is in the process of being developed.

### Education Induction of New Lecturers

Education Induction Programmes were offered for newly appointed lecturers on two occasions in 2010. A total of 65 staff members attended these events. The week-long programme introduced participants to the theory and skills related to teaching in higher education, while the follow-up day a few months later provided an opportunity for them to exchange and discuss success stories and challenges in real-life teaching practice. ECs provided support after the training through being available for consultation services and conducting class visits when requested



## Professional Development Opportunities for Lecturers

Table 1: CPD for academic staff

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Education induction for newly appointed lecturers	None	75	114	103	85	81	59	67	60	65
Education induction for junior lecturers and academic co-workers	None		62	25	74	60	76	14	32	28
Education induction for tutors	116	84	212	133	95	118	186	182	198	221
Assessment workshops	None		291	35	40	58	42	51	27	60
Extended programme training	None								117	18
Other educational themes	704	248	291	142	654	131	49	27	49	107

to do so. All EI portfolios were involved in the Education Induction as well as a number of lecturing staff for focused sessions.

### Assessment

Three campus-wide assessment training workshops were presented. These three-day workshops were based on the following: principles of assessment, UP's assessment policy and planning for assessment. The workshops included sessions on specific assessment methods; for example, written examinations, orals, practical examinations and portfolios.

### INNOVIL Training

Education consultants provided a customized education induction course for the assistant lecturers in the School of Information Technology. The aim of this training is to prepare the assistant lecturers for their responsibilities as learning facilitators and special attention is given to planning and facilitating various learning opportunities that enhance active learning. The programme was presented successfully and from the feedback it was clear that the assistant lecturers valued the opportunity to practise their skills

and apply what they had learnt in the micro lessons. Their feedback is considered when planning the next course to ensure that the content is relevant for these lecturers. In January 2010, 28 junior lecturers attended the course. Education consultants provided some additional guidance and addressed any problems that might have been experienced.

### Tutor Training

The Department for Education Innovation arranges tutor training for all Faculties and education consultants conduct the training. In 2010, 221 tutors were trained.

An investigation was conducted into University-wide tutor practice. The focus was on using the collected data to propose a guiding framework. A report on the findings of the investigation was forwarded to the Vice-Principal: Teaching and Learning. Three models were operating in the University and recommended as the basis for Faculty-specific models: voluntary supplemental instruction, compulsory tutoring for students at risk and consultation. Tutoring must be actively managed in each Faculty.

# E-Education

Mr Dolf Jordaan and Ms Detken Scheepers are the line managers for the E-Education portfolio and their staff members are located across the Hatfield, Onderstepoort and Prinshof campuses. However, the community of practice works together on common operational issues such as *clickUP* and CBT. 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 within blended learning environments.

## Highlights of 2010

In addition to the growing support provided by the E-Education group for *clickUP* and computer-based testing, the following projects were completed in 2010:

- research into the use of *clickUP* by lecturers,
- the *BrightenUP your IDEAS/ Blink IDEES* booklet on the implementation of Teaching and Learning Principles within the online environment,
- a new *clickUP* Gradebook course,
- investigation into the use of the Gradebook as the central repository for marks,
- approval of upgrade of *clickUP* project (2011-2012),
- incremental and effective use of Elluminate as Synchronous Software, and
- approval of a pilot project to investigate the use of clickers.

The Department for Education Innovation plays a central role in evaluating and selecting software to advance teaching and learning at UP. The current systems (*clickUP* and *Umfundi*) have reached their end of life, which necessitates the implementation of new systems. The e-education group embarked on this process during 2010.

## Design and Development Impact on Quality of Teaching, Learning and Assessment

### Instructional Design

Instructional designers support UP's blended learning model by recommending a combination of instructional methodologies and multimedia products to be used within the web-environment (*clickUP*). *clickUP* enables lecturers to make use of a blended approach to their teaching and learning activity by providing students with access to additional online resources, and more opportunities for interaction with course content, fellow students and lecturers. A blended approach may positively impact on student learning by providing additional learning time and materials, as well as additional opportunities for collaboration, as shown in a meta-analysis study of empirical research of online learning.<sup>2</sup> The percentage of modules that makes use of a blended model (77% in 2010) at UP compares well with international studies that focus on world trends in e-learning.

Multi-disciplinary teams consisting of instructional designers, graphic designers and video producers worked together with subject experts to complete an interactive CD-Rom multimedia product for the Faculty of Health Sciences. This product is used to support the module on Infectious diseases in the post-graduate Diploma in Family Medicine.

Resource CD/ DVDs are also used to distribute a variety of documents and media to students.

<sup>2</sup> United States Department of Education. (2009). *Evaluation of Evidence-Based Practices in Online Learning: A Meta-Analysis and Review of Online Learning Studies*. Retrieved January 12, 2010, from <http://www.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf>

**Table 2: Resource CDs completed in 2010**

Department	Title	Project Leader
Diagnostic Imaging	DIM781	Prof A Carstens
Diagnostic Imaging	DIM783	Prof R Kirberger
Industrial and Systems Engineering	BIE 310 Engineering Economics	Dr PJ Jacobs
Financial Management	FRB 711 Financial Risk Management	Mrs E Louw
Graduate School of Technology Management	Master's in Engineering Management first years	Dr S Benade
Graduate School of Technology Management	Master's in Project Management first years	Dr S Benade
Graduate School of Technology Management	Master's in Engineering Management & Master's in Project Management second years	Dr S Benade
Graduate School of Technology Management	Honours in Management of Technology	Dr S Benade
Graduate School of Technology Management	Master's in Technology Management	Dr S Benade
Mining Engineering	PEE 410 Mine Environmental Engineering	Prof R Webber-Youngman
Mining Engineering	PMY 311 Surface Mining and Geotechnics	Prof R Webber-Youngman
Mining Engineering	PSZ 410 Strata Control	Prof R Webber-Youngman
Graduate School of Technology Management	Master's in Engineering Management & Master's in Project Management first years	Dr S Benade
Graduate School of Technology Management	Master's in Engineering Management & Master's in Project Management second years	Dr S Benade
Graduate School of Technology Management	Honours in Management of Technology	Dr S Benade
Graduate School of Technology Management	Master's in Technology Management	Dr S Benade
Mining Engineering	PEE 320	Prof R Webber-Youngman
Mining Engineering	PFZ 780	Prof R Webber-Youngman
Mining Engineering	PME 320	Prof R Webber-Youngman
Mining Engineering	PMY 320	Prof R Webber-Youngman
Mining Engineering	POY 783	Prof R Webber-Youngman
Mining Engineering	PSC321_410	Prof R Webber-Youngman
Mining Engineering	PSZ 321	Prof R Webber-Youngman

Department	Title	Project Leader
Centre for Augmentative and Alternative Communication	Case Studies CD	Prof K Uys
Centre for Augmentative and Alternative Communication	First-year module	Prof K Uys
Centre for Augmentative and Alternative Communication	Second-year modules	Prof K Uys
Department of Music	Reference Materials Volume 4	C Lotter
Physiotherapy	POL 300	Ms K Moster
Radiography	RAW 280	
Education Innovation	Assessment	D G Pickworth
SHSPH	HME 870 - Health Measurement	E Webb
SHSPH	ACM 770 - Occupational Health and Safety	Dr N Claassen
Education Innovation	Education Induction	Ms M Lotriet

**Table 3: Computer-based Testing (CBT) 2010**

	TESTING CENTRE	TOTAL
Number of tests	Hatfield campus CBT	121
	Hatfield campus IT labs (Umfundi)	31
	Hatfield campus IT labs (CompAssess)	17
	Prinshof campus	416
	Prinshof campus (ppt)	37
	Onderstepoort campus	77
	Onderstepoort campus (ppt)	8
	Groenkloof campus (Umfundi)	49
	Groenkloof campus (CompAssess)	13
	clickUP tests**	3 605
	<b>Total</b>	<b>4 374</b>
Number of tests taken by students	Hatfield campus CBT	24 792
	Hatfield campus CIL (Umfundi)	19 953
	Hatfield campus IT labs (CompAssess)	37 772
	Prinshof campus	34 986
	Prinshof campus (ppt)	1 546
	Onderstepoort campus	3 183
	Onderstepoort campus (ppt)	735
	Groenkloof campus (Umfundi)	12 436
	Groenkloof campus (CompAssess)	4 772
	clickUp tests **	265 684
	<b>Total</b>	<b>405 877</b>

\*\* Includes self assessment

**Table 4: Modules on *clickUP* 2002 - 2010**

<i>clickUP</i> modules	2002	2003	2004	2005	2006	2007	2008	2009	2010
Undergraduate modules	200	391	847	1 036	1 351	1 292	1 405	1 552	1 737
Postgraduate modules	420	675	754	874	1 086	727	699	808	980
Number of departments involved	82	86	90	115	117	120	120	120	120
Students with access to e-learning	17 377	21 200	26 576	30 201	31 572	30 574	31 491	31 635	38 591
E-assessment									
Number of e-tests	122	322	335	543	483	1 907	1 891	1 966	4 374
Number of students taking e-tests	64 000	126 907	125 768	149 843	161 205	207 351	320 609	388 012	405 877

## E-Assessment

The *Umfundi* system, *clickUP* Quiz Tool and *CompAssess* (for computer literacy testing) are used to enable computer-based testing (CBT) at UP as part of a wider assessment strategy that also uses other types of assessment. Many departments have very large classes and CBT enables them to assess their students regularly. Even modules with smaller enrolments make use of this type of testing to pace their students through their work. The students are provided with timely and informative feedback and therefore CBT is not only used for assessment but also provides a learning opportunity to the students.

Lecturers are encouraged to use the statistics provided after completion of a test to improve the questions in the data banks continuously. Lecturers are also urged to use this type of assessment to test on higher cognitive levels. Many examples of innovative uses of CBT, which assess higher order thinking skills such as synthesis, exist.

The Department for Education Innovation assists lecturers by providing support and training in the use of CBT technology, creating applicable questions and interpreting the statistical analysis. Training on the effective use of objective assessment, as well as other assessment methods, is provided by the department. EI works closely with the Department of Information Technology Services to ensure a sustainable, reliable and stable CBT environment.

During 2010, 405 877 computer-based tests were taken by students. These statistics include tests done within the *Umfundi*, *clickUP* and *CompAssess* systems, as well as tests where MS PowerPoint is used to complete the tests.

## Continuing Academic Development Related to Teaching, Assessment and Use of Technology

### Staff Training in Web-Supported Learning

E-Education presents various staff training courses to enable lecturers to manage and facilitate courses in the online environment. A *clickUP* Gradebook course was developed to address the needs of staff responsible for managing grades/ marks in *clickUP*. It was implemented in February 2010 and presented eight times during the year. This training was also used to pilot the use of Elluminate to present hands-on computer training to staff. The results from this pilot indicated that a very high level of computer literacy is needed for participants if hands-on training is presented in this format. While the Elluminate system is a very worth-while environment for other forms of teaching, hands-on computer training is best presented in a face-to-face environment.

The 2010 data indicate a rise in the attendance of the *clickUP* Basic and *clickUP* Assist courses. The Facilitation of e-Learning (FeL) course had to be cancelled twice owing to a lack of participants. During

2010 the FeL course was reviewed and a decision made to incorporate some of the material presented in the course into the other courses.

The training team embarked on a new approach towards the *clickUP* training that will be implemented from the second semester of 2011. These changes were based on the following influences:

- The upgrade of *clickUP* to Blackboard version 9.1 (to be implemented in 2012) will necessitate an altered approach to training lecturers for the system.
- The *clickUP* Lecturer survey conducted in February 2010 revealed that
  - Most lecturers use the *clickUP* system as a content distribution system and do not use other functions available in the system.
  - Lecturers complained that the *clickUP* courses are too long.
  - Lecturers requested more flexibility with regard to the content within the *clickUP* courses to address their immediate needs. Lecturers often sat through a two-day training course because they were interested in one aspect covered within the course.

The new *clickUP* training bouquet will consist of a '*clickUP* overview' session that will provide a contextual overview of functionalities in the upgraded *clickUP* system that will lay a foundation for the other courses, namely '*clickUP* content', '*clickUP* assessment', '*clickUP* engagement' and '*clickUP* administration and management'.

The structure of the *clickUP* courses will follow the following basic outline:

- a component that will lay a strong pedagogical foundation,
- a component where the lecturers will plan

- how to implement the content learned, and
- a component during which lecturers will work hands-on with the tools of their choice to build a workable solution.

The attendance of the courses was as follows:

## Student Training in Web-Supported Learning

Training and orientation are necessary for students to take full advantage of the e-learning environment. During the first-year orientation week in January, the E-Education group presented orientation sessions to more than 9 000 first-year students in the functionalities available to them within Student Online Services. EI also offers customized student training sessions in *clickUP*. Postgraduate students were also trained. Further support for students is provided by means of a help web site: <http://www.click.up.ac.za/students>.

## Support

During 2010 the e-support office provided continuous support that included creating new *clickUP* modules, providing access to existing *clickUP* modules, assisting with *clickUP*-specific functionalities, and organizing 'just-in-time' training for lecturers. E-support also provided valuable support to lecturers through the creation of quizzes by using of Respondus Lite. Various just-in-time training sessions were also presented to lecturers in the use of this software in order to empower them to manage their own assessments in *clickUP*.

EI support was also extended in 2010 to provide assistance to programmes presented by the Gordon Institute of Business Science (GIBS). GIBS extended the use of *clickUP* to support an ever-increasing number of their programmes. It is envisaged that all

**Table 5: E-Education training 2010**

Course	<i>clickUP</i> Basic	<i>clickUP</i> Intermediate	<i>clickUP</i> Assist	<i>clickUP</i> Grade book	Podcasting	All courses	Just in Time	Total staff trained
No. of attendees	133	30	84	89	4	340	106	446

**Table 6: E-Education training 2001-10**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
<i>clickUP</i> Basic, Intermediate, and Advanced	180	122	147	223	153	148	191	226	174	163
Facilitation of e-learning	New course					8	22	10	0	0
E-Admin/ <i>clickUP</i> Assist						97	Not presented		25	84
<i>clickUP</i> Gradebook	New course									89

the GIBS programmes will be supported by *clickUP* in the near future.

## New Initiatives

### Piloting New Technologies

During 2010 the use of Elluminate as Synchronous Software enabled lecturers to present real-time lectures to specifically post-graduate students and to invite international guest lecturers to present lectures to students. Elluminate was also used to facilitate a panel discussion consisting of three international and one national speakers during the 18<sup>th</sup> European Conference on Information Systems (ECIS) held at the University in 2010.

## Upgrading/ Changing Existing Technologies

### Umfundi

The *Umfundi* system has been used for computer-based testing since 2007. The Department for Education Innovation plays a central role in selecting software and helping lecturers to design and implement such assessment. Owing to an increased number of technical problems experienced with the system, the Senate committee for Teaching and Learning appointed a Steering Committee with representation from academic, EI and ITS stakeholders to investigate the future of CBT at UP.

The committee decided to conduct a full investigation and product evaluation of possible replacement systems. Such system(s) should adhere to the necessary functional and technical criteria and be commercially available.

The members of the steering committee, under the leadership of an ITS project manager, compiled a product assessment sheet that contained the functional and technical criteria and weighting scores for a replacement system. An open tender process as prescribed by the Procurement Division was followed and six submissions were received.

All vendors who submitted a tender were requested to complete a self-evaluation of their product with the product assessment sheet that UP provided. Based on the results of these self-evaluations, three products were identified to invite for demonstrations. These demonstrations and the rest of the evaluation process will continue in 2011.

### ClickUP

The original vendor of *clickUP* as the Learning Management System (LMS) implemented at UP was WebCT. An upgrade of the original WebCT LMS was implemented in 2006. Soon thereafter the international e-learning market changed dramatically with the merger between LMS vendors, WebCT and Blackboard. UP is currently using the Blackboard LMS. The University branded the Blackboard LMS as *clickUP* in 2007.

In 2009 Blackboard released a new LMS and announced an end of life date, namely 2012, for their current LMSs. The official support for the current version of *clickUP* will end in October 2012. The current UP LMS license agreement makes it possible to implement and use the new version of *clickUP* in co-production with the existing version. This enables the smooth transition and change management process between the current and new version. It also allows UP to use the opportunity

to pilot the new version in 2011. The underlying teaching and learning philosophy of the design of the current version of *clickUP* has also been replaced and adopted nationally and internationally by a fundamentally different e-learning philosophy of social collaboration, personalization, openness, social learning assessment and engagement.

E-Education staff explored the new system extensively in 2010 and undertook a change management workshop in order to prepare themselves for the change.

A broad stakeholder committee was established in 2010, chaired by the Vice Principal: Teaching and Learning, in order to coordinate the implementation of the new version of *clickUP*. The committee will act as Steering Committee for the duration of the implementation of the project. The committee will also function during this period as a sub-committee of, and report to, the Senate Teaching and Learning Committee.

## Student Feedback

E-Education runs an annual survey of students' experiences with *clickUP*. In 2010 some questions from an international Educause survey of undergraduate students' use of Information and Communications Technologies (ICTs) was combined with the annual student satisfaction survey. More than 3 800 students completed the survey. The aim of the combined survey is to compare data of UP students' use of ICT, not only with other national, but also with international higher education institutions. Results from the survey indicated that UP students have access to a variety of ICTs and that they prefer modules that use information technology moderately to extensively. The survey also provided valuable data about students' cell phones usage and preferences. More than 99% of the students indicated that they own a cell phone. A third of the students own a smartphone. About 65% of the students access the internet from their phones either daily or several times a day. About 99% of the students indicated that they would access *clickUP* on their cell phones if UP offered such a service to them. The popularity of social networking websites is also apparent as 92% of the students stated that they use these sites.

There is also a clear increase in the sophistication of the mobile devices the students have access to as well as in their access to broadband internet.

## Research into Lecturers' use of *clickUP*

An exploratory research project on the factors influencing the adoption and usage of the learning management system (*clickUP*) was launched in 2009 to determine why some lecturing staff at UP use or do not use *clickUP* as the LMS of the University of Pretoria. The study used a mixed method design and included both qualitative and quantitative methods. The first phase of the study (focus group interviews), was completed in 2009. The second (a questionnaire to acquire quantitative data) was administered to lecturers *via* the online survey tool, *Surveyshare*, to allow them to complete the survey at a time and place convenient to them.

The user population comprised 1 225 lecturers and the non-user population only 254 lecturers. The total response consisted of 432 lecturers, which is a 29% response rate from the entire population.

The results can be summarized as follows (NOTE: All values below were calculated using the ratings: 'To a large extent' and 'Yes definitely'):

- Lecturers' general perception of *clickUP* is positive (46%) to very positive (25%).
- Less than 5% of respondents indicated a negative perception of *clickUP*.

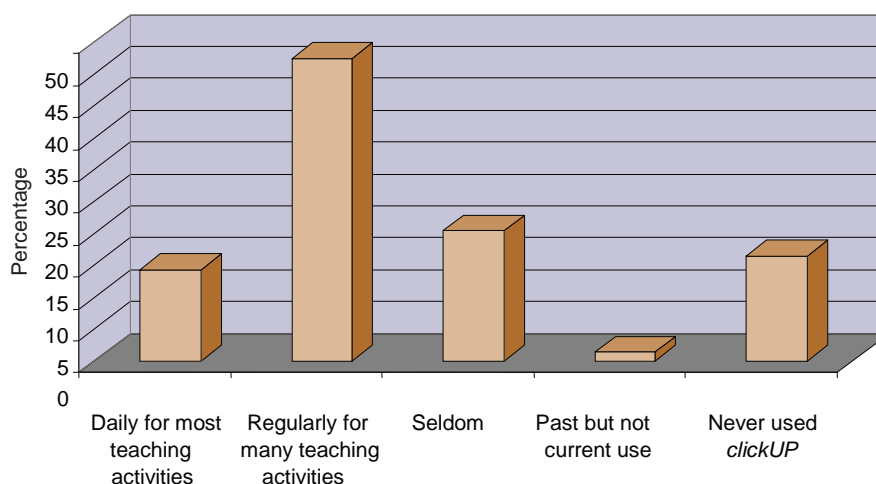
In terms of training and support offered by EI, the research shows the following:

- The current *clickUP* training and support opportunities seem to be sufficient.
- Lecturers who were not completely satisfied with the current training opportunities gave the following reasons:
  - Non-awareness and non-exposure to the system
  - Inability to attend the current set training sessions because of time constraints and other work commitments.



The general perception of *clickUP*, its uses and the training and support opportunities surrounding the system are positive. A number of factors prevent lecturers from making more use of *clickUP*, of which the limited time they have available (64% agreement) is the biggest contributor. The Department for Education Innovation should adapt its training strategies to accommodate the limited time academic lecturers have to attend training sessions. Departmental visits and online training strategies were suggested as needing incorporating to a larger degree.

The results from the survey indicated that a holistic approach addressing all areas relating to and impacting on *clickUP* should be followed by the University to ensure an increase in the quality of *clickUP* use. The information gained will be used to develop strategies to ensure the optimal use of this electronic learning platform and that, upon implementation, these strategies are monitored and evaluated. Reports on the research were sent to the Senate Teaching and Learning Committee and the Department of Higher Education and Training.



**Figure 2: Use of *clickUP***

The tables below provide a summary of the most important results of the research.

**Table 7: Primary motivators for *clickUP* use**

The educational benefits for the subject/module	42%
The perception that <i>clickUP</i> saves lecturers' time	36%
Sufficient training and support from EI	24%

**Table 8: Factors preventing lecturers from using *clickUP***

<i>clickUP</i> cannot add educational value to teaching because it dehumanises teaching	17%
<i>clickUP</i> cannot add educational value to teaching because the system is too inflexible to add value	11%
<i>clickUP</i> cannot add educational value because the subject field does not lend itself to the use of <i>clickUP</i>	11%
Problems experienced in <i>clickUP</i>	17%
The amount of time it takes to perform <i>clickUP</i> duties	12%
Limited computer skills	4%

**Table 9: Factors that will encourage lecturers to make use of more features of *clickUP***

Department-specific training sessions by EI	49%
Case studies presented by other academics	40 %
Online case studies	40%
Acknowledgement or reward of <i>clickUP</i> use during performance appraisal and promotion	37%
More access to computers for students on campus	35%

**Table 10: Most popular future/other training and support opportunities**

Customized session based on the need of an academic department	65%
Concise training sessions via the computer	60%
Online step-by-step sheets with instructions	58%
Short online video clips demonstrating how to use a tool	56%

**Table 11: Challenges and limitations relating to *clickUP***

Limited time available	64%
Use of <i>clickUP</i> not taken into account for performance appraisal	61%
A lack of sufficient support from Heads of Department and colleagues	19%
Deactivation of module after a semester	27%
System downtime	26%
Unforeseen 'session timeouts'	26%
Bandwidth limitations from satellite campuses	22%
Lecturer having access to an old computer that slows down access to <i>clickUP</i>	16%
Students having limited access to computers on campus	13%

## BrightenUP Your Ideas

A group of instructional designers compiled a booklet entitled *BrightenUP your IDEAS/ Blink IDEES*. The booklet consists of ten chapters, each addressing one of the UP Teaching and Learning Principles. The book contains practical case studies (at UP and other higher education institutions), and other learning activities to illustrate how the particular principle may be put into practice within a blended learning environment. Copies of the book were distributed to all lecturing staff of the University and it is hoped that it will be used as a tool to spark ideas to enhance the teaching and learning practice of lecturers.

# Higher Education Research and Innovation (HERI)

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HERI is managed by Dr Gerhard du Plessis. It is a small unit comprising four people in total. Additional capacity is created through providing internships for postgraduate students (four Master's students doing research in psychology in 2010) and contracting UP students to assist with data capturing.

## Highlights and new initiatives

Some long-term research-based initiatives came to fruition in 2010. Several new projects were launched during the year, under the auspices of the Steering Committee for Student Access and Success, chaired by Professor Ogude, supported by Dr du Plessis.

## Maturing Long-Term Projects

### Continuous Alert, Referral and Engagement System (UP Cares)

HERI has been involved with the Bureau for Institutional Research and Planning (BIRAP) on a basic student tracking mechanism for a couple of years already. The scope of the tracking system and the ability to use it much earlier in the student's career at the University was made possible by work being done by the PeopleSoft implementation team and the E-Education portfolio of EI to integrate the gradebooks in the two systems. The business intelligence (BI) tools in PeopleSoft Oracle allow for the mining and integration of data on individual students for the purpose of tracking student progress possible. In addition, the BI tools can integrate information from various sources such as NBT results, outcomes of the STARS, etc. giving a more meaningful picture

of student risk profile. The UP CARES initiative was thus launched in 2009/ 2010. HERI became involved because of the portfolio's experience and its a vision of integrating research activities and outputs to provide essential information to the Faculties and the Executive through each stage of the student life cycle. This includes the assessment, profiling, and tracking, alert, referral and intentional engagement with undergraduate students, especially the first-year students who are most susceptible to failure or withdrawal.

Although the project evolved during 2010 at a conceptual level, progress in the area of tracking and continuous alert was hampered by the transition to PeopleSoft. Progress was also slow as a stakeholder committee to steer the project had to be formed and this was only achieved in late 2010. UP CARES has, however, been prioritized for 2011. A formal stakeholder structure (the UP CARES Task Team) will coordinate initial and subsequent phases of the implementation of UP CARES during the first semester in 2011.

## Assessment and Profiling of First-Year Students

HERI currently uses many sources to determine the factors associated with retention and attrition of undergraduate students. Various structured questionnaires have been developed to assess this phenomenon; for example, the Academic Readiness Questionnaire (STARS), its counterpart, the First-Year Experience Survey (FYES), and a Student Learning Experience Survey.

Exit interviews with first-year students who opted to discontinue their studies are also conducted. Departmental sources – for example, the *ClickUP* Gradebook for the capturing of formative assessment results, as well as institutional information (for instance, on high risk modules) – from BIRAP, are used to determine ‘risk’ on individual, module and programme level. Finally, research on students’ navigation behaviour on, and use of the functionalities of *ClickUP* also form part of the profiling process and will be prioritized during 2011.

### The Student Academic Readiness Survey (STARS)

The purpose of the project is to determine the academic readiness (cognitive and non-cognitive) of students admitted to the first year of study using the Student Academic Readiness Survey (STARS). The STARS instrument (a 115-item questionnaire) assesses students’ academic readiness by gauging their support needs in fields like motivation, well-being, integration and support, goal orientation, academic skills, anticipated/current academic involvement, and vocational identity. Based on the results, a programme consisting of tutoring, mentoring and academic advising is developed to support students who are identified as being at risk of failure or withdrawal. The STARS was administered in 2010 for the first time to 6 835 student from the five pilot Faculties and one school (Natural and Agricultural Sciences; Economic and Management Sciences; Humanities; Education; and Engineering, Built environment, and Information Technology; and the School of Health Sciences) during the orientation week. The STARS was also administered to first- and second-year students of the new Clinical Associate Programme (Department of Family Medicine).

Biographical data of all respondents relating to gender, race, home language, preferred language of education, and admission point score are merged with student responses (using student numbers as anchors). The remaining variables (home environment, distance travelled daily) are drawn from the responses as volunteered by students.

Reports were generated from the STARS data, including individual student STARS reports, and several aggregate reports, such as Faculty profiles, a

**Table 11: Aggregate Institutional Profile of the STARS**

Motivational factors	Low	Medium	High
Planning	30%	54%	16%
Locus of control	30%	53%	17%
Self-efficacy	30%	56%	14%
Leadership	11%	64%	8%

Academic involvement	Low	Medium	High
Test taking skills	25%	60%	14%
Engagement	35%	43%	21%
Reading behaviour	15%	52%	33%

Well-being	Low	Medium	High
General well-being	28%	56%	16%

Integration and support	Low	Medium	High
Institutional support	30%	56%	14%
Financial support	15%	54%	31%
Family support	18%	47%	35%
Sociability	34%	51%	15%

Vocational identity	Low	Medium	High
Career exploration	17%	59%	10%
Career guidance	9%	43%	47%

Goal orientation	Low	Medium	High
Goal achievement	35%	46%	19%
Future vision	16%	44%	40%
Hope agency	15%	55%	30%
Hope pathway	12%	65%	23%
Optimism	22%	50%	28%
Self-motivation	35%	55%	10%
Hopefulness	18%	49%	33%
Agency	17%	61%	22%

Skills Support needed	A lot	Some	None
Study skills	19%	60%	21%
Reading skills	12%	32%	57%
Writing skills	9%	37%	54%
Time management	23%	51%	26%
Test taking skills	16%	48%	36%
Math skills	23%	46%	30%
Computer skills	20%	43%	37%
Presentation skills	21%	48%	31%

short-list of students per risk area, and an institutional profile of all first-year students. A handbook containing guidelines on how to interpret the reports and a summary of the STARS psychometric properties was made available.

### The First-year Experience Survey (FYES)

FYES (a 134 item questionnaire), which can be considered as a follow-up of STARS, as it measures the same constructs eight months later, was implemented in 2010. The aim is to determine whether first-year students were able to make the transition from school to university, and close the potential gaps (addressed their needs from a non-cognitive perspective). Provision is also made for items gauging students' perceptions regarding their learning experience. These items partially overlap with the Student Learning Experience Survey (SLEUS) targeted at final-year students.

FYES was developed and launched during 2010 among 1 656 students from the five pilot Faculties (Natural and Agricultural Sciences; Economic and Management Sciences; Humanities; Education; and Engineering, Built environment, and Information Technology). The data of these surveys were processed in exactly the same way as applies to the STARS data. Similar reports were created. Individual students' FYES profiles were published alongside their STARS profiles on the portal referred to earlier. A comparison of individual results from STARS and FYES shows that student's risk profile was reduced in the course of the year quite significantly in a number of categories.

A handbook containing guidelines on how to interpret the reports and a summary of the FYES psychometric properties is also available. A report containing the psychometric properties of common items from both the STARS and FYES, using the RASH model, is also available (with-in group comparison of the items).

### Survey of the Learning Experience of Undergraduate Students (SLEUS)

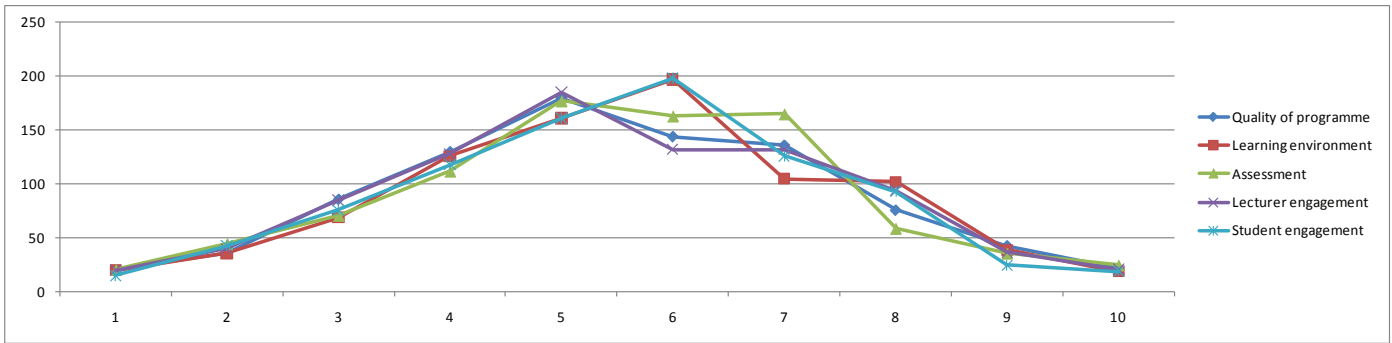
One of the performance indicators against which the University of Pretoria will measure its performance on an annual basis is the Quality of Learning Index, of which this survey constitutes phase 1. The conceptual design of this index is based on a basket of weighted sub-indicators. Data informing this index will be tapped from several sources (students, lecturers and institutional data).

Following the development work completed between 2008 and 2009, the instrument was piloted among students during October 2009. The survey aims at capturing students' perceptions across six domains: quality of programmes, lecturer engagement, student engagement, learning environment, assessment, and quality of student support services (both academic and non-academic). A sample of 30% final year students were selected using stratified random sampling techniques. An electronic platform was used to administer the survey. Sampled students were targeted via prompts on *clickUP*, sms, and e-mail. A total of 700 students were targeted. Of the 700 students targeted *via* e-mail and sms, only 81 students completed the survey. An anticipated response rate of 10% was reached by the end

Score	Quality of programme	Learning environment	Assessment	Lecturer engagement	Student engagement
1	21	20	21	20	15
2	36	36	45	40	43
3	86	69	71	85	76
4	130	126	112	128	118
5	180	161	177	185	161
6	144	197	163	132	198
7	136	105	164	132	126
8	76	102	59	94	93
9	43	39	36	37	25
10	22	19	25	21	19

Table 13: SLEUS data

**Figure 3: SLEUS data**



of November, after which the survey was closed. Analysis of the data commenced with the Rash model to peruse the functioning of survey items. The data generated will be reported in the 2010 Report on UP's Performance Indicators during 2011.

### Exit Interviews with Withdrawal Candidates

The aim of this ongoing study is to identify and prioritize the reasons behind, and pre-disposing factors affecting, student withdrawals at first-year level, as volunteered by students themselves. A total of 8 258 FTE students enrolled in 2009. During the academic year under study, a total of 990 students (12%) withdrew from their studies. During 2010 telephonic semi-structured interviews were conducted with 465 first-year students registered in all nine Faculties at the University (46% participation rate).

The salient reason for withdrawal has consistently been 'wrong study or career choice' during both the 2008 and 2009 cohorts, dropping marginally in 2009. The majority of the students encountered problems during the first semester, leading to actual withdrawal or migration in July. A significant withdrawal trend emerged in the 2009 cohort, namely 'academic reasons'. During 2008 the new high school curriculum (NSC) was introduced. Subsequent research on the difficulty level indicated that the Mathematics and Mathematical Literacy papers in general were not able to differentiate between learners at the upper end of the performance range (Umalusi, 2009). This could have influenced the levels of academic preparedness of the students. Few students actually seek support within the University's formal support structures to address their problems. Students who chose to continue their studies at another tertiary institution did so largely because of study choice, financial demands and language barriers.

A similar, but more focused, study, which targeted high achieving students (students with an aggregate average A and B symbol), was also conducted during 2009 to determine why these students specifically withdraw from their studies. Results will be available early in 2011.

### Identification of High-Risk Modules

High-risk modules were identified based on an analysis of module examination statistics done by the Bureau for Institutional Research and Planning (BIRAP). The analysis makes provision for a wide range of success variables, including module cancellation rates, year marks (determines entry to examinations), attendance rates for examinations, pass-rates following first examination, supplementary examination attendance rates, and pass rates for supplementary examinations.

A weighted index of all these variables, in combination with the year level at which such modules are presented, as well as the number of students enrolled for these modules, was determined for each module. This index was used to identify so-called High Impact Modules for each Faculty.

Although the successes of this approach has led to its establishment as an annual best-practice, the continuation of this strategy during 2011 is subject to the successful piloting the BI tools of PeopleSoft and the mining of data in a fashion comparable to the approach taken during 2009.

## Review of the Current Student Feedback Instrument (SFI)

HERI has a long association with the design, development and implementation of the current student feedback instrument. During 2010, a task team was activated to develop a new, concise instrument and associated process. While HERI participated in the stakeholder committee, the process was led by Dr Jorissen, the head of Education Consultancy.

It was recommended that the current automated process used for data capturing, processing and reporting be maintained, with the proviso that a number of norm-based analyses be added to the report. The task team defined an approach to be followed to accommodate both the need for standardized data for use at institutional level, as well as to make provision for the contextual variation between Faculties. The envisaged feedback instrument will thus make provision for three sections; namely, the conventional biographic component, a section consisting of standardized items to be administered across the institution, and a flexible section consisting of items that will address the unique contextualised feedback needs of any particular faculty.

By the end of 2010, the task team had finalized a number of key constructs and associated items considered for inclusion in the standardized feedback section of the instrument. The items will be piloted in a number of Faculties and the data analysed to determine the final selection of ten standardized items to be included into the institutional section of the instrument.

## Enhancement of Quality of Practical Training

Feedback instruments for the evaluation of practical training in various departments were developed, piloted and administered in collaboration with several departments; namely, the Faculty of Theology, Department of Criminology and Social Work, Department for Consumer Sciences. The instruments have gone through two or more rounds of assessment and ample data are available to determine trends on a year to year basis. The Department of Drama and the Department of Communication Pathology assessed their practical modules in 2010. The results

of the surveys were used by each department to improve the quality of practical training and to inform the training of external supervisors.

## Student Access and Success Initiatives

Some initiatives were geared towards addressing immediate concerns in the area of student success, while others set the scene for a broad-based and integrated approach to student success over the medium term. Some of the projects had an institutional nature, while others were aimed at student success in Faculties. Five Faculties were identified with the view to piloting these initiatives (Humanities, EBIT, Education, EMS and NAS). The staff of HERI were directly and indirectly associated with these projects and activities.

### Faculty-based student support

During 2009, all Faculties approved the establishment of a Faculty-based student support model. The model was piloted in at least five Faculties, although a number of Faculties opted to activate some of the elements of the model according to need. The development of the Student Academic Development and Excellence Model discussed in the Director's Message attempted to capture the many activities at a high level of conceptualization.

The model provides for a number of key academic and non academic initiatives and activation of role-players in Faculties, each complementing the existing centralized student support services on campus. During 2010, the respective elements were integrated into a coherent process and the support model was implemented in a differentiated manner along a number of unique and contextualized elements, approaches and configurations. Each of the processes and interventions reported under this section informs and contributes to the success of this model.

It is anticipated that the design of the model will be improved over time. Currently the model provides for the following:

- Student profiling, or the identification of students at risk using cognitive and non-

cognitive measures (APS, STARS, TALL, NBT).

- Differentiated approaches between semesters, including:
  - Placement in either the mainstream, or an approved extended programme;
  - Alternative channeling options, such as extended solutions based on students' actual performance during the first semester;
  - Appropriate interventions targeted to the specific student niche, such as tutoring, mentoring and academic advising;
  - Academic probation and eventual exclusion, backed up by tracking of students' academic progress;
  - A referral process;
  - The measurement of the impact of these measures through student tracking.

The model creates a platform through which student support can be rendered as early as possible at the point where the challenge/ problem manifests.

### **Evaluation of Academic Outcomes of Orientation Programme for First-Year Students**

During 2010, HERI engaged actively in the planning of the extended orientation period for first-year students. The approval of the format for the orientation of A2S Programme for 2011, presupposes that the impact of the new design should be evaluated. A comprehensive evaluation framework was developed and approved. The framework makes provision for several phases, among others a series of Faculty-specific surveys among first-year students, a series of follow-up focus group discussions with Faculty staff (academic and administrative) and student leadership, and the monitoring of a number of key student success performance indicators. The evaluation framework will be implemented after the A2S programme in 2011.

### **Alternate Pathways and Channelling of Students**

The Faculty-based support model was expanded through the introduction of a generic channeling

model that makes provision for guiding students within and between Faculties through a more suitable pathway in terms of both programme and teaching-learning approach. The model is based on close monitoring of student performance, identification of students in need of support, academic probation, directing such candidates using available alternatives such as formal extended programmes, and informal extended solutions (lowering of credit load, and systematic inclusion of academic and other forms of support, whether credit bearing or not).

During 2010, this model was partially compromised owing to the full subscription of the formal extended programmes, leaving little room for any channeling of students. This has led to a change in emphasis, i.e. the use of the more informal contextualized extended solutions available in the five participating Faculties.

### **Identification of Students in Need of Support**

Although a number of potentially 'at-risk student groups' have emerged in the international literature, only some of these groups were prioritized within UP. These include all first-year students facing academic probation based on their performance during the first semester; first-generation students; top performing school leavers; and students funded through the NSFAS system.

- Based on their first semester performance, first-year students in need of academic support were identified in collaboration with BIRAP. The students were required to join extra tutoring during the fourth quarter, especially when they were enrolled for HIMs. Several iterations of this tutor model emerged, based on the successes experienced during 2009. These alternatives varied between the traditional approaches to tutoring (walk-in models), to options such as Tutoring Help Desks run by senior postgraduate students.
- An overlap between the profiles of first-generation students and those candidates funded through the NSFAS system prompted an investigation into the characteristics of these students. The first phase of the project, a literature overview of the group in question, was initiated during the latter stages of 2010.



# Operations Office

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Walk it, talk it, wear it, share it – it was not only the successful motto for 2010 soccer but the Operations Office proactively support the department in terms of personnel, financial and logistical matters to ensure that we can function optimally. Zakumi (mascot) – symbolizes South Africa through his self-confidence, pride, hospitality, social skills and warm heartedness and Department of Education Innovation also symbolizes that and Fridays was YELLOW days. The core mandate of this support service within EI, led by Ms Elize de Waal, is to promote, encourage and sustain best administrative practices by consciously striving to increase effectiveness and efficiency. The group also needs a solid knowledge base (technology, human relations skills and finance) and the ability to adapt to new processes and systems. The degree of cooperation needed to function means that this office has to nurture relationships with many other support departments at UP. The Reception at Hatfield campus also provides a single point of contact (control) of entrances to our department as well as for receiving deliveries and assets. A significant number of staff and students also make use of Reception during tutor training of Faculties, training, meetings and IT entrance to Labs for a few of their staff members.

## Finances

In 2010 the Operations Office handled a combined departmental budget of R5 165 764. 00. In addition, the office handled purchasing and cost recovery for Educational Technology and Creative Studios and Communication Technology. Furthermore, EI managed two Department of Higher Education and Training grants, one for training related to extended programmes and the other for the promotion of teaching and learning. Two projects funded by the latter grant – the improvement of uptake of *clickUP* and the integrated study guides/ high impact modules/ curriculum development initiative – provided an additional challenge to the office.

A Skills Development Committee managed R32 167. 00 from the skills levy allocated to EI. The Operational Office dealt with the Education Innovation CIL novice lecturers and tutor training budget as well.

PeopleSoft – See it, Try it, Know it (whether we shall eventually love it is another matter because in 2010 the transition to PeopleSoft created significant problems for the Operational Office). 2010 was the year for changes, preparation, training, backlogs, problem solving and end-users had to familiarize themselves with new concepts and new look-and-feel of PeopleSoft. Significant backlogs occurred during the system downtime period between the 23 July and 9 August. The Operational Office ensured that business went on as usual with the go-live phase. A significant change was delegations and control over EI budgets; approval became a function of portfolio Cost Center Managers and Head of the Department. The Operations Office prides itself that its staff was able to give meaningful input into the developing systems within the new environment to ensure that they catered for the types of functions departments need to perform.

The Operations Office receives procurement requests, especially from the studios after which a summary is made and sent to Finance where a journal is generated. Missing information is followed up (e.g. telephone numbers, cost centre numbers, etc.). Table 14 gives details of the procurement activities of the portfolio.

Drawing up the annual budget, aligned with guidelines from the Director of Finance, the EI Operational Plan and UP strategies, was facilitated by the Operational Office in collaboration with the Director of EI and all line managers.

**Table 14: Orders**

STATISTICS: OPERATIONS OFFICE – 2010													
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Orders		41	49	69	51	83	56	23	160	136	116	70	29
Invoices Cred.		54	15	80	54	147	95	65	78	135	74	81	7
El Services	Invoicing Debtors	4	8	5	10	9	1	7	0	6	8	11	0
	Private income	2	2	7	12	2	1	3	0	5	1	3	2
	Journals:												
	Graphics Hatfield	22	42	55	69	27	33	32	31	39	32	40	10
	Graphics Medical	14	13	14	14	14	7	25	60	34	22	25	5
	Graphics O/ poort	4	0	12	6	5	10	7	0	21	8	5	0
	Graphics Total	40	55	81	89	46	50	64	91	94	62	70	15
	Video Hatfield	8	13	6	7	16	8	13	17	10	7	16	1
	Video Medical	0	0	12	8	6	11	5	5	5	2	2	0
	Video Totaal	8	13	18	15	22	19	18	22	15	9	18	1
	Photographic Hatfield	3	0	7	5	0	3	9	2	5	4	10	0
	Photographic O/ poort	2	11	2	5	0	2	0	2	2	0		0
	Photographic Total	5	11	9	10	0	5	9	4	7	4	10	0
	Studio Hatfield	0	0	0	1	0	0	3	0	1	0	1	1
	Journals totals:	53	79	108	115	68	74	94	117	117	75	99	17

## Human Resources

Some of the HR challenges the portfolio had to face were migration to PeopleSoft, the implementation of the new Service Model, assisting line managers and the Director to ensure diversity in the staff profile and recruiting new staff. El employs both permanent and contract staff. The Operations Office was effective in processing six permanent appointments filled

by candidates from designated groups relevant to ensuring a balanced equity profile in the department, eight contract appointments and numerous student assistants. There were two promotions, one staff member went on pension and three resigned. The Office registered an overtime project for Video and Communication staff.

Black Male	White Male	Indian Male	Coloured Male	Black Female	White Female	Coloured Female	Indian Female
1	11	1	1	14	30	1	2

**Table 15: Equity profile**

1	Snr Researcher: Higher Education
2	Snr Graphic Designers
1	Jnr Graphic Designer (Contract post) staff member on 2 years unpaid leave
2	CBT posts
1	Snr Instructional Designer
1	Graphic Assistant

**Table 16: Vacant posts in the process of being filled**

The Operations Office constantly liaised with line managers in EI to ensure that the performance development and management system operated optimally.

### **Institutional Collaboration**

EI plays an important role in the Health and Safety representation of UP. EI chairs the committee for the IT building.

# National and International Research Activities

Below is a table summarizing the research activities of the department in 2010 and it is following by details for each section. On an editorial note, most activities related to e-learning closely followed by more general teaching, learning and academic development. There was also a significant emphasis on student success.

## Publications in Subsidized Journals

Nagel, L. and Ice, P. Introduction to the community of enquiry framework and applications for programmatic improvement, *Proceedings of the 12<sup>th</sup> Annual Conference on World Wide Web Applications*.

Nagel, L. and Kotzé, T.G. Supersizing e-learning: What a Col survey reveals about teaching presence in a large online class. *The Internet and Higher Education*, 13 (1): 45-51.

**Table 17: Summary of research activities**

SUMMARY OF RESEARCH ACTIVITIES		2006	2007	2008	2009	2010
Number of publications (EI)	Non-accredited	1	0	1	3	1
	Accredited	7	2	4	2	2
Congresses and Workshops attended	International	20	5	12	3	0
	National	21	8	6	8	14
Papers presented	International	16	5	24	3	8
	National	5	4	6	15	24
Visits	International	37	2	12	4	3
	National	0	2	0	4	3
Visitors	International	11	23	4	8	4
	National	1	45	15	13	4
Active international collaborative projects		2	4	4	1	1
Posters presented	International	Previously included in section on papers/posters presented		3	1	0
	National			0	1	1
Research reports		3	2	3	3	6

## Publication in Non-Subsidized Journals

Blitz, J.J., van Rooyen, M.R., Cameron, D.A., Pickworth, G.P. and du Toit, P.H. 2010. Is temperament a key to success of teaching innovation? *AJHPE*, 2(1): 17-20.

## Service on Editorial Boards

Kilfoil, W.R. Member of editorial advisory board, *Progressio: South African Journal for Open and Distance Learning Practice*, University of South Africa.

## Conference Papers/ Workshops

Crole, M. and Mostert, E. Computer-Assisted Learning in Veterinary Anatomy: Implementing a tool to enhance student learning and optimise lecturing staff and running costs, SAAHE: Third National Conference hosted by the Northern region, Johannesburg, 22-24 July.

De Boer, A., Bothma, T.J.D., Scheepers, M.D. and Du Toit, P.H. Whole Brain teaching for Whole Brain learners – a solution for creating life-long learners in Information Literacy, 12<sup>th</sup> National Liasa Conference, Centurion, 27 September-01 October.

Du Plessis, G.I. Blended learning environments. Workshop on Pedagogy, AAU MRCI Grant, Faculty of Health Sciences, University of Natal, Pietermaritzburg, 29 November.

Haupt, S. Stanz, K and Nagel, L. Lecturing towards success: meeting, managing or abandoning first-year student expectations, SAAIR, Johannesburg, 21-23 September.

Jordaan, A.J.J. Effective implementation/ use of information and communication technologies in higher education. The 18<sup>th</sup> European Conference on Information Systems (ECIS): IT to Empower, Pretoria, 7 June.

Jordaan, A.J.J. Different approaches to Blackboard Learn: A tale of two universities, Blackboard World Conference 2010, Orlando, Florida, USA, 14 July.

Jordaan, A.J.J. The use of learning management systems at the University of Pretoria, E-Learning Update, Pretoria, 5-6 October.

Jordaan, A.J.J. and Scheepers, M.D. Institutional strategies to implement new version of Blackboard, Blackboard Management Workshop, Cape Town, 18-19 November.

Jorissen, H.W., Madiba, N.R.M., Motshoane, P. and Rammupudu, J. Study guides as mechanism to enhance excellence in teaching and learning, HELTASA-Higher Education Development: Academic Excellence, Opportunities and Challenges, Tzaneen, 23-25 November.

Jorissen, H.W., Nagel, L. and Lotriet, M. Diamonds for Africa: A blended learning implementation metaphor, COHERE: Blended Learning Conference, Toronto, Canada, 21 October.

Jorissen, H.W., Nagel, L. and Lotriet, M. Using a blended approach to create change, HELTASA-Higher Education Development: Academic Excellence, Opportunities and Challenges, Tzaneen, 24 November.

Kilfoil, W.R. Factual Presentation, Assessment at the University of Pretoria, UP Campus, Onderstepoort, 19 July.

Lemmens, J-C. Creating post-graduate stars: the Student Academic Readiness Survey (STARS), South African Association of Health Educationalists, Johannesburg, 22-24 July.

Madiba, N.R.M. Institutionalising quality learning in a research-intensive university, ALARA Eighth Action Learning and Action Research Association World Congress and Participatory Action Research and Action Learning, World Congress, Melbourne, Australia, 06-09 September.

- Madiba, N.R.M. Using technology for curriculum design and delivery, Education Week, Convention and Learning Expo, Johannesburg, 28-30 September.
- Madiba, N.R.M. HELTASA (Higher Education Learning and Teaching Association of Southern Africa) Annual General Meeting, HELTASA\_Higher Education Development: Academic Excellence, Opportunities and Challenges, Tzaneen, 24 November.
- Madiba, N.R.M., Mtombeni, T.N. and Sehlapelo, H. Curriculum mapping and quality teaching and learning, HELTASA-Higher Education Development Academic Excellence, Opportunities and Challenges, Tzaneen, 22 November.
- Madiba, N.R.M., Motshoane, P. and Bougard, N. Teaching Criminology in large classes: What are the effective methodologies? HELTASA-Higher Education Development Academic Excellence, Opportunities and Challenges, Tzaneen, 23-25 November.
- Mostert, E. Design and architecture of distance learning programmes, Writing good objective items, Computer-aided assessment, Technology-enhanced learning (TEL): Exploring possibilities and tools for low-resource settings, Antwerp, Belgium, 13-17 September.
- Motshoane, P., Rammupudu, J., Madiba, N.R.M. and Jorissen, H.W. Reflecting on the beast: Students' experience of large class teaching, HELTASA-Higher Education Development: Academic Excellence, Opportunities and Challenges, Tzaneen, 23-25 November.
- Motshoane, P., Rammupudu, J., Madiba, N.R.M., Jorissen, H.W. and Bougard, N. The use of participatory learning and action (PLA) techniques in fostering Afro-centric education, HELTASA-Higher Education Development: Academic Excellence, Opportunities and Challenges, Tzaneen, 22 November.
- Nagel, L. Implementing blended learning: a diamond metaphor as design guide, NADEOSA, Potchefstroom, 06-08 September.
- Nagel, L. Sustainable distance learning practice: Is a blended delivery mode superior to e-learning? What does the Community of Inquiry framework show? NADEOSA, Potchefstroom, 06-08 September.
- Nagel, L. and Ice, P. Introduction to the Community of Inquiry framework and directions for programmatic improvement, 12<sup>th</sup> Annual Conference on World Wide Web Applications, Durban, 22-24 September.
- Nagel, L., Swan, K., Burgess, M., Dringus, L., ICE, P., Rubin, B., Shea, P. and Vaughan, N. The Community of Inquiry framework: Ten years later, Sloan-C International Conference on Online Learning, Orlando, Florida, USA, 03-05 November.
- Pickworth, G.E. Using *in situ* training to change assessment practice, Third National Health Sciences Education Conference hosted by SAAHE, Johannesburg, 22-24 July.
- Rammupudu, J., Motshoane, P., Madiba, N.R.M. and Jorissen, H.W. The use of electronic voting systems ('clickers') in the classroom – research and practice, HELTASA- Higher Education Development: Academic Excellence, Opportunities and Challenges, Tzaneen, 22 November.
- Scheepers, M.D. A brief introduction to use of e-portfolios. Partnership for Higher Education in Africa Educational Technology Initiative (PHEA ETI), Wanderers Club, Johannesburg, 24 February 2010.
- Scheepers, M.D., De Boer, A., Bothma, T.J.D. and Du Toit, P.H. A mental model for successful interdisciplinary collaboration in curriculum innovation for information literacy, IFLA-ALISE-EUCLID satellite of IFLA conference, Boras, Sweden, 8-9 August.
- Scheepers, M.D. and Delport, R. Perceptions on the educational value of a learning management system in a residential South African University, 13<sup>th</sup> International Conference on Interactive Computer Aided Learning, Hasselt, Belgium, 15-17 September.
- Tshetlo, P.B.N. A multi-layered collaborative approach to the teaching of reading and writing, 5<sup>th</sup> Annual RASA conference-It all starts with literacy! Port Elizabeth, 01-03 October.

Untied, J.S.H. and Slabbert, J.A. Podcasts in higher education, Pre-conference workshop, South African Association for Health Educationalists, Johannesburg, 21 July.

## Conference Poster Presentations

De Bruyn, E., Meiring, J.H. and van Schoor, A. Computer-based testing for assessment of medical and dental students on the higher levels of Bloom's taxonomy, South African Association for Health Educationalists, Johannesburg, 22-24 July.

Scheepers, M.D., De Boer, A., Bothma, T.J.D. and Du Toit, P.H. Towards excellence in a mega class: Collaborative design and development of learning materials to facilitate Whole Brain learning in a Information Literacy course, IFLA-ALISE-EUCLID satellite meeting of IFLA conference, Boras, Sweden, 8-9 August.

## Conference and Workshops Attended Without Reading a Paper

31<sup>st</sup> SAACDHE Conference 2010: Positioning student counseling and development, -Best practice within a transforming Higher Education landscape, Stellenbosch: Du Plessis, G.I. and Lemmens, J-C.

CHE Colloquium: Facilitating and supporting evidence based approaches to success. Birchwood Hotel & Op Tambo Conference Centre, Boksburg: Du Plessis, G.I.

Creating a winning, workable environment workshop, Villa Toscana, Pretoria: De Waal, E., Du Pisani, L.A., Du Plessis, G.I., Haupt, S., Hefer, R., Jordaan, D., Jorissen, H.W., Kilfoil, W.R., Madiba, N.R.M., Molala, E., Mayhew, E., Scheepers, M.D., Zimmerman, K.

Diversity, transformation and the student experience in HE teaching and learning, Pietermaritzburg: Ndlovu, M.F.

Gartner Symposium/ ITxpo Africa 2010, Cape Town: Slabbert, J.A.

HELTASA-Higher Education Development: Academic Excellence, Opportunities and Challenges, The use of participatory learning and action (PLA) techniques in foresting Afro centric education, Tzaneen: Jorissen, H.W. and Motshoane, P.L.

South African Association for Health Educationalists, Johannesburg, Untied, J.S.H.

Design Indaba 2010, Cape Town: Du Pisani, L.A., Du Plessis, A.F., Hendricks, A.C.C., Maloney, M.L., Reyburn, H., Van der Merwe, J.H. and Wilson, J.D.

South African Survey of Student Engagement (SASSE) User Group Workshop, University of Free State, Bloemfontein: Du Plessis, G.I.

Teaching in the Student-Centred University. Faculty of Education, WITS University, Johannesburg: Du Plessis, G.I.

Workshop presented at the Annual SAAIR Conference, Key responsibilities and strategies for the practice of institutional research, Karen L Webber, University of Georgia, USA. University of Johannesburg, Johannesburg: Du Plessis, G.I.

Workshop presented at the Annual SAAIR Conference, How national and institutional frameworks might help assuring academic standards and improve student learning opportunities, Ian M. Robinson, Edge Hill University, Ormskirk, UK. University of Johannesburg, Johannesburg: Rai, L.J., Bornman, J. and Dresselhaus, F.H.W.

Workshop presented at the Annual SAAIR Conference, What matters most in Student success: Lessons learned in America, Randy L. Swing, College of Brevard, North Carolina, USA. University of Johannesburg, Johannesburg: Rai, L.J., Bornman, J. and Dresselhaus, F.H.W.

## Education Innovation Visits

De Bruyn, E. and Mostert, E-M. Bytes Solutions: Question Mark Workgroup, Midrand, E-learning, 15 October 2010.

Du Plessis, G.I. Benchmarking with Shelly Barnsley and other units, Centre for Science Access, University of Kwa-Zulu Natal, Durban Westville.

Kilfoil, W.R., Haupt, S. and Callaghan, R. Criteria for the rating of university teaching with Prof Estelle van Hamburg and Mr Pierre Volschenk, University of the North West, Discussion.

Madiba, N.R.M. Institutionalising Quality Learning in a Research Intensive University, University of Melbourne, Australia, To benchmark curriculum mapping in higher education.

Nagel, L. Consultation on Blended Learning in a residential university context and lecture attendance on post-graduate supervision with Dr. Anthony G. Picciano, Professor and Executive Officer of the PhD Program in Urban Education at the Graduate Centre-City University of New York, New York, USA, Study and/ or Research.

Nagel, L. Consultation with Prof Jennifer Richardson, Educational technology, Department of Curriculum and Instruction on the training of staff for the pedagogic use of Learning Management Systems, Purdue University, West Lafayette, USA, Study and/ or Research.

## Visitors to Education Innovation

Bossert, T. Harvard Collaboration with Pretoria and Fort Hare on Management Training, Department of Population and International Health, Harvard School of Public Health, Boston, USA.

Botha, L. Teaching and Learning Facilities, Student and Academic Support, Stellenbosch University, Stellenbosch.

Buthelezi, S. Benchmarking, School of Public Management and Development (SPM&D), University of Fort Hare.

Johnson, G. Discussion and Learning Techniques, South Africa Partners, Boston, USA.

Motswaledi, G. Ascertain what UP does about business intelligence, Finance and Administration, University of Botswana, Gaborone, Botswana.

Senekal, I. Benchmarking, Health Management and Leadership Programme, Department of Public Administration, University of Fort Hare, East London.

Swan, K. Workshop: Blended Learning, Blended Online Learning Presenter, College of Education and Human Services, University of Illinois at Springfield, Illinois, USA.

Whaits, A. Benchmarking E-Learning Platforms, Academic Manager, Varsity College, Cape Town.

## Research Reports

Du Plessis, G.I. and Wilken, R. Tracking the academic performance of students at risk of academic failure in the 2<sup>nd</sup> semester of 2009, based on 1<sup>st</sup> semester performance.

Du Plessis, G.I. and Rai. L.J. Evaluation of the first-year orientation programme.

Lemmens, J-C., Du Plessis, G.I., Roopen, S., Rungasamy, L. and Reynolds, J. Exit interviews at the University of Pretoria: Department for Education Innovation, University of Pretoria.

Scheepers, M.D. Report to DHET. An institutional investigation into factors influencing the adoption and usage of the learning management system (*clickUP*), Department for Education Innovation, University of Pretoria.

Scheepers, M.D. Report to Teaching and Learning Senate Committee. An institutional investigation into the factors influencing the adoption and usage of the learning management system (*clickUP*), Department for Education Innovation, University of Pretoria.

Scheepers, M.D. Research Report: Information Literacy Module (CIL 121) (to Professor Ogude).





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