

DEPARTMENT OF TELEMATIC LEARNING AND EDUCATION INNOVATION

The Department of Telematic Learning and Education Innovation was a centralised academic support unit at the University. In line with UP's vision and mission to excel in the teaching of its students, the mandate of the Department was to provide leadership in a blended approach to curriculum development, teaching and assessment to the benefit of student learning and success. In this context, "blended" refers to an appropriate mix of contact and technology-enhanced strategies.

Historical perspective

By 2001, the Department had existed in one form or another for more than three decades. Changes in the higher education landscape, environment and society inevitably led to changes in approaches to educational practice, for example, the growing demand for places in higher education institutions, social change, the pursuit of quality, changes in learning theory and therefore teaching practice, developments in information and communication technology (ICT), and the globalisation of education. To address these issues, particularly perceived trends towards more distance education and a greater use of technology, the University transformed the Bureau for Academic Support Services into the Department of Telematic Learning and Education Innovation (TLEI) in 1997. It was known by this name until 2007, when the name of the Department was changed to the Department for Education Innovation (EI).

Departmental structure

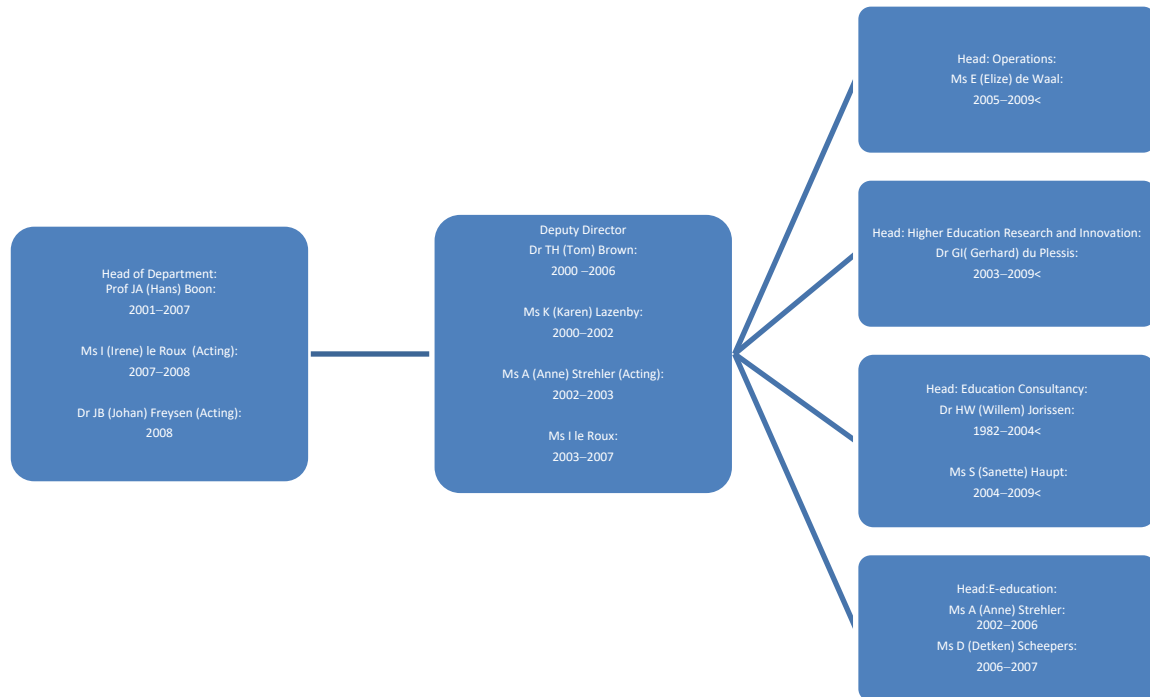
The Department's main office was located in the Education and Law Building (later known as the Information Technology Building) on the Hatfield Campus. A decentralised group of staff was located in the HW Snyman Building on the Prinshof Campus from where it served the Faculty of Health Sciences, while another group of staff was located in the Paraclinical Building on the Onderstepoort Campus, from where it served the Faculty of Veterinary Science.

At the beginning of the period under review, the Department was headed by Prof JA (Hans) Boon. Following his retirement during 2007 due to ill health, Ms I (Irene) le Roux headed the Department in an acting capacity until 2008. When she left the University in 2008, Dr JB (Johan) Freysen served as Acting Director until November 2008, when Prof WR (Wendy) Kilfoil was appointed as the new director.

The Director was supported by two deputy directors. These deputy director positions were held by Dr TH (Tom) Brown from 2000 to 2006, Ms K (Karen) Lazenby from 2000 to 2002, Ms A (Anne) Strehler in an acting capacity from April 2002 to July 2003, Ms I le Roux from 2003 to 2007, and Ms NRM (Matete) Madiba¹ from July 2008 until the end of the period under review.

The structure of the Department at the beginning of the period under review was as follows:

¹ Ms Madiba obtained her PhD in 2009.



In 2002, the Department deployed decentralised graphic, photography and video production services in the faculties of Veterinary Science and Health Sciences. Multidisciplinary teams of education consultants, instructional designers and creative staff served each campus.

The Department comprised five sections, whose activities supported the execution of its mandate. These were Operations (headed by Ms E (Elize) de Waal from 2005 until beyond the period under review), Higher Education Research and Innovation² (headed by Dr GI (Gerhard) du Plessis from 2003 until beyond the period under review), Education Consultancy (headed by Dr HW (Willem) Jorissen from 1982 to 2014 and Ms S (Sanette) Haupt from 2004 until beyond the period under review), E-education (headed by Ms A (Anne) Strehler from 2002 to 2006, Ms D (Detken) Scheepers from 2006 and Mr D (Dolf) Jordaan from 2007 until beyond the period under review), and Creative Studios and Communication Technology (headed by Mr A (Almero) du Pisani from 2006 until beyond the period under review).

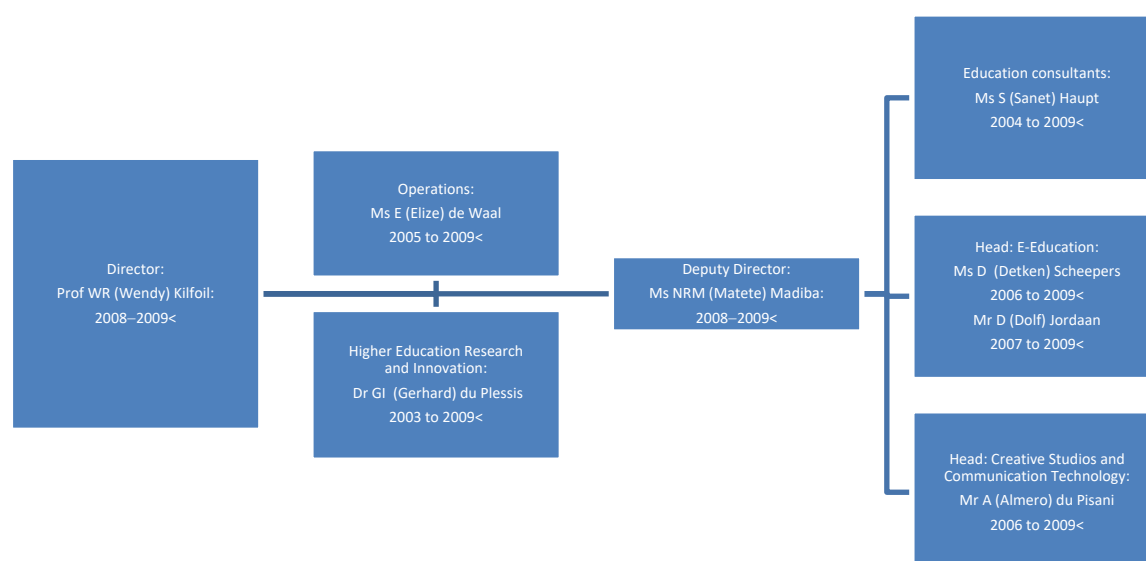
Following a decision to structure the Department along community-of-practice lines, rather than in integrated teams, the Creative Studios and Communication Technology section was divided into a Graphics, Video and Photography section, and separate e-learning and education consultancy groups were formed.

In 2009, the Unit for Educational Technology was transferred to the Department of Information Technology Services. The loss of this section, combined with the phasing out of partnerships, off-campus examinations and learning centres, obviated the need for a second deputy director.³ As a

² A new Action Research and Development Unit was established in the Department in 2003, headed by Dr GI du Plessis. This was renamed the Higher Education Research and Innovation section in 2008/09.

³ The second Deputy Director position was later reinstated.

result, the departmental structure was revised to include a Management Committee, comprising the Director, Deputy Director and line managers of the five divisions. The departmental structure at the end of the period under review was as follows:



Also in 2009, strategic planning was undertaken for 2010 to 2020. The Department's mission was determined to be the following: Creating synergy towards innovative education environments for student engagement and success.

Relevant knowledge about education and other core knowledge and skills in the Department were obtained from studies (theory and practice), continuing professional development, experience with (in)formal mentoring and coaching, empirical research and benchmarking. Relevant staff members were encouraged to complete higher degrees, including doctorates.

In 2005 and 2009, the Department underwent quality reviews by external panels and received a number of commendations. Undoubtedly, one of the highlights during the period under review was the commendation given to the Department by the audit panel report of the Higher Education Quality Committee (HEQC) of the Council on Higher Education (CHE) in 2008, as well as the pivotal role in the transformation of teaching and learning envisaged for the Department by several recommendations in the report.

Higher Education Research and Innovation

This section, which was established in the Department in 2003 and was initially known as the Action Research and Development Unit, was renamed Higher Education Research and Innovation (HERI) in 2008/09. It engaged with policy development and implementation, the design of and research into feedback instruments, as well as student retention and success.

In 2005, research was conducted to produce a new assessment policy. Guidelines for teaching, assessment and curriculum design were produced in 2006. In 2007, a project was launched to evaluate teaching for selection and promotion, as well as a project on performance indicators for teaching and learning. From 2007 to 2009, HERI investigated ways of producing a quality of learning index. During 2007 and 2008, research was conducted into a framework for teaching and learning.

There was ongoing evaluation of the existing student feedback instrument and a new feedback instrument on practical training was developed between 2005 and 2008. In 2005, a longitudinal study of student attrition and graduation rates was launched. In 2006, research was undertaken to investigate the state of research-based postgraduate programmes. From 2007, work was done on the range of factors that might impact on students' learning experiences and study success. A Student Academic Readiness Survey (STARS) was piloted and finalised by the end of 2009 for implementation in 2010.

In 2007, a stakeholder workshop was held on integrated student support services, and in 2008, the Forum for Integrated Student Support (FISS) was constituted. In 2009, the manager of HERI undertook the project management of initiatives of the Vice-Principal: Teaching and Learning around student retention and success using a faculty-based model.

Education Consultants

During the period under review, this section focused on faculty-based engagement and academic staff development to enhance teaching and learning, with an education consultant from TLEI dedicated to each faculty. The Department operated in collaboration with education innovation managers and committees in most faculties. In 2001, consultants and faculty education innovation managers or coordinators developed faculty-specific education innovation plans and implemented these plans in July of that year. In May 2003, Senate approved a university-wide Education Innovation Plan.

A policy on education induction was approved by Senate in 2001. The Education Induction Programme was first offered in January 2002, with a second offering presented in July 2002. Thereafter, it ran two or three times a year, with between 60 and 100 academics attending annually. In 2006, a Medical Education Orientation Programme was launched to supplement the Induction Programme for staff in the Faculty of Health Sciences.

Assessor training was developed in 2002. It was implemented for the first time in 2003. After that, it ran two or three times a year, with approximately 30 to 50 participants attending annually. At the time, the Department was already offering training on multiple-choice questions and contributed to regulations on objective assessment.

The section also trained tutors. The investigation into a tutor system began in 2001 and a proposal for a new system was submitted to the University in 2002. In 2009, research was again conducted into the prevalent models in each faculty with a view to streamlining tutoring.

The Department offered biennial Education Innovation Awards to individuals or groups who could provide evidence of sustainable innovation in teaching. The first awards were given in 2002. There were three categories: recognition, certificate and laureate.

Summer schools began in 2000 with only three modules on offer, with TLEI providing seed funding for the initiative. Over the years, summer and winter schools became institutionalised and faculty based.

In some faculties, longitudinal studies were initiated to gauge the expectations and experiences of students, for example, in Economic and Management Sciences (since 2008) and Veterinary Science (since 2009).

An old UP curriculum framework – the Cone Model – was reworked to include relevant curriculum development principles and the latest South African legislative parameters. The model was used to facilitate curriculum development throughout the University and in the revision of the study guide template. Linked to this, Atlas Rubicon Software, to support curriculum analysis and development, was acquired in 2009 and 60 modules were loaded.

Some 31 high-impact modules (HIMs)⁴ were identified for 2009 in the faculties of Economic and Management Sciences, Natural and Agricultural Sciences, and Humanities.

ClickUP⁵ was extended to provide e-resources to support the teaching of large classes and in extended programmes. From 2008, the Department ran annual workshops for extended programme lecturers using funding earmarked by the Department of Education.

E-education

This section promoted and supported the use of an e-learning environment in a blended teaching and learning model, in line with established international good practice. The unit continually investigated a range of technologies to enhance teaching and learning, such as e-portfolios, synchronous software and podcasting.

The University had already started an online learning management system (LMS) in 1997. It upgraded to WebCT 4.1 in 2004. In 2005, the upgraded system was branded as clickUP. In January 2007, clickUP upgraded to the Vista edition of Blackboard. The plagiarism detection software, Turnitin, was integrated into clickUP in the same year. The virtual campus, first developed in 1998, went live in January 2004 with new Student Online Services (SOS) and Lecturers Online (LOL) portals aligned to the University's information technology (IT) systems.

There was an exponential growth in the use of the LMS. The number of online modules increased from about 400 in 2001 to 2 360 in 2009. The number of students with access to e-learning increased from 7 399 in 2001 to 31 635 in 2009.

⁴ These are modules with a low pass rate or high failure rate (suddenly or over time), with large enrolments, that serve many programmes, that serve programmes associated with scarce skills, and which are first-year modules.

⁵ The University's online learning management system.

The HEQC audit panel commended the Department for Education Innovation for its sound pedagogical grounding of computer-based teaching (CBT). Various systems were used for CBT since prior to the turn of the century. In 2007, *Umfundi* replaced Question Mark Designer. Instructional designers from the Department and an outside contractor developed this new CBT system to address the needs of University's lecturers and students. The use of CBT escalated over the decade from 36 760 tests taken in 2000 to 388 012 in 2009. Between the pressure for open laboratory space and laboratories for CBT, the number of computers available to students rose significantly during the period under review.

Instructional designers from E-education and staff from Creative Studios and Communication Technology collaborated to develop multimedia products for lecturers. Although the design and development process was lengthy and costly, high-quality multimedia products had the potential to be substantial learning aids to students. The number of multimedia products completed annually depended on demand. A total of 60 multimedia products were completed during the period under review.

In addition to staff training (199 lecturers in 2009), this section offered training to all first-year students during orientation (in the region of 6 000 in 2009) and to postgraduate students on request. All first-year students also received a Student Support CD-ROM with information pertaining to their orientation into the University.

Mobile or m-learning had become increasingly important. TLEI undertook a pilot project using SMSs with three distance education programmes in the Faculty of Education in 2004 and 2005, and in 2006, it collaborated with the Department of Information Technology Services to develop an SMS system for the University. In 2005, good progress was made with several m-learning pilot projects, such as the use of personal digital assistants (PDAs) and laptops.

The E-education group also completed a number of large projects during the period under review. These included a quality management system for instructional design at UP (2003), an electronic Student Academic Portfolio (eSAP) system for the School of Medicine (2005), an electronic Comprehensive Patient Care and Education System for the School of Dentistry (2007) and a clicker pilot study for the Faculty of Engineering, Built Environment and Information Technology (2009).

In 2007, the E-learning group initiated (W)ITS-UP-TUT-UJ meetings with the instructional designers of the University of the Witwatersrand (Wits), the University of Pretoria (UP), the Tshwane University of Technology (TUT) and the University of Johannesburg (UJ), which enabled benchmarking and the sharing of good practice. This initiative grew with more institutions joining the community of practice until beyond the period under review.

Creative Studios and Communication Technology

In 2006, the three groups that had provided graphic design, photography, video production and video conferencing services to UP on the Hatfield, Onderstepoort and Prinshof campuses were combined into one section known as Creative Studios and Communication Technology.

To address some of South Africa's educational needs, the University started the TeleTuks Schools Project in 1994 using interactive television (ITV).⁶ The Schools Project was a donor-funded project for Grade 11 and 12 learners and lecturers taught supplementary classes in Mathematics, Physical Science, Biology, English, Geography, Accounting and Vocational Guidance in the afternoons at schools in Gauteng, Limpopo, North West and Mpumalanga. At its height in 2003, there were 176 broadcast hours, and 174 schools and about 3 700 learners were involved.

Different UP programmes, mainly Nursing, Education, Accounting and African Languages, were broadcast via satellite to students in Southern Africa. During 2004, the decision was made to phase out the satellite channel and the ITV broadcasts owing to a number of factors, one being that lecturers and students had moved over to web-based platforms that were more flexible. Service points were set up in Mmabatho, Mokopane, Nelspruit, Polokwane, Pretoria, Rustenburg and Witbank. These points provided administrative support with a facilitator on site, tests and examinations, ITV broadcasts, video facilities and occasional tutorials.

Creative Studios (Hatfield) was identified as one of three design studios that were officially sanctioned for the University's marketing design projects. At the end of 2007, it was recognised for being one of three "brand champions" of the year. This section played a core role in the Centenary Celebrations in terms of photography, videos, and the design of posters and flyers.

Educational Technology

This division was transferred to the Department of Information Technology Services from 2009. While it was still part of the Department, it was responsible for purchasing, installing, securing and maintaining technology in lecture halls. An audit of lecture hall technology took place in 2001/02. It was determined that only 26 lecture halls had fixed data projectors. A further 72 were installed in large lecture halls. As a result of the audit, 284 lecture halls had such facilities by 2008. As part of the strategy to equip venues with well-integrated educational technology, the concept of installing a "smart podium"⁷ in all priority classrooms was investigated and implemented in 2006. The Educational Technology One-stop Service was introduced during the last quarter of 2003.

External cooperation agreements

For a number of years, the University worked with National Private Colleges (NPC) according to a partnership model. TLEI was responsible for running the project. The initiative was terminated owing

⁶ A dedicated satellite channel (the TeleTuks Satellite Channel) was implemented in 1997 to provide ITV through digital satellite television (DSTV).

⁷ A smart podium is ...

to the development of national policy frameworks around partnerships between private and public institutions. By the end of 2004, 21 875 students had graduated from the partnership programme. Teach-out agreements were instituted for UP students until 2005.

TLEI was responsible for all external collaborations on e-learning. From 2003 to 2007, there was collaboration with the Imperial College in London. From 2003 to 2005, UP collaborated with the University of Bergen (Norway) and five other African countries on research into higher education. The Prince Leopold Institute for Tropical Medicine (Belgium) partnered with UP from 2003 to 2006 to develop selected modules for a new postgraduate programme in veterinary tropical diseases for delivery online.

The Department was also responsible for organising external examinations for postgraduate students in Southern Africa from 2003 until the end of 2009, when faculties became responsible for managing their own examinations.

Further highlights

In 2003, TLEI hosted the First Annual South African WebCT Users Forum at the University of Pretoria in conjunction with Eiffel Corp to showcase the implementation, adoption and actual use of WebCT across multiple disciplines. The Department, together with the University of South Africa (Unisa) and TUT, hosted the fourth International Conference on Mobile Learning in Cape Town from 24 to 28 October 2005. The Department for Education Innovation hosted the Eduvate International Conference from 25 to 27 June 2008. The theme was “Education innovation quest: a century in the service of knowledge”.

The Department for Education Innovation slotted into the New Management Model,⁸ which was implemented at the University in 2007, under the Vice-Principal: Teaching and Learning, Prof NA (Nthabiseng) Ogude. There was subsequently a prominent focus on the recognition and value of excellent teaching, learning and assessment practice at the University.

⁸ See Chapter 2.3.2: Senior management: New Management Model.