Department for
Education Innovation

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Annual Report
2015

www.up.ac.za/education-innovation

Table of Contents

The vision of the Department for Education Innovation (EI) is: *'Creating synergy towards innovative education environments for student engagement and success'*.

The achievement of this vision in 2015 is highlighted in the reports of the different sections. Worth mentioning separately here are the following:

Conferences

The Director of EI and various members of EI staff, particularly in E-Education, worked closely with the Vice Principal: Academic to host two conferences during 2015 related to the new hybrid model of teaching and learning.

- January 2015: *Flexible Futures: Shaping e-learning for higher education*
- November 2015: *Flexible Futures: Shaping e-learning for UP* (2 to 16 November 2015, with most of the conference online and only one day of contact – 9 November)

Both conferences targeted the Senate members and both showcased exemplary work being done at the University. For the January conference we were fortunate to attract presenters from two highly ranked international universities (Sue Rigby, Vice Principal: Learning and Teaching, Edinburgh University in the UK and Sherman Young, Pro Vice-Chancellor: Learning, Teaching and Diversity, Macquarie University in Australia); the founder and head of OERu, Wayne Mackintosh (who participated online using Skype); the head of OER Africa, Catherine Ngugi, and the first designer of a MOOC and a leader in learning analytics, George Siemens, who participated online using Blackboard Collaborate. The impact on the University has been positive. There is now a high-level understanding, from the level of the Executive to Faculty Management and academic heads of departments, of issues of good practices in contemporary teaching and learning using technology and the potential for a new delivery model to be deployed at the University. The role of EI in the conferences but also in the e-learning maturity at the University is central.

Grant funds

The Department administers a number of grant funds in addition to its operational budgets.

- Department of Higher Education and Training: Teaching Development Grant

- Department of Higher Education and Training: Foundation Provision Training

- Michael and Susan Dell Foundation

  Professor Naidoo visited the Dell Foundation in Austin during February 2015.

- MasterCard Foundation

Professor Naidoo attended a couple of the MCF conferences in North America.

- Kresge Foundation

The University secured a grant from the Kresge Foundation to use data to improve undergraduate student success, particularly the success of first-year students from disadvantage backgrounds. The Siyaphumelela grant of $100 000 annually was awarded at the end of 2014 and work started in early 2015. The overall project is managed by the Director of EI with support in the department from Dr Lemmens, Professor Naidoo and Mr Jordaan and external to the department from Dr Madiba (DSA) and Mr Mouton (BIRAP). We interacted regularly with the Kresge Foundation on the Siyaphumelela project, including hosting two visits from the data coach, Jan Lyddon. The Kresge Foundation also partially funded our SAHELA event, a pre-conference workshop at SA AIR, organized by Dr Lemmens and Mr Jordaan. Professor Naidoo was funded by the Kresge Foundation to attend the Achieving the Dream conference in the USA in February 2015.

Graduate-on-time project

EI worked with the Vice-Principal: Academic to launch a new campaign to encourage students to graduate on time; that is, within the minimum time stipulated for a particular degree, so completing a three-year degree such as the Bachelor of Arts in three years and not four or five. Professor Naidoo took the process forward with the Faculty Student Advisors.

Work readiness and entrepreneurship project

EI worked with the Vice Principal: Academic to conceptualize a new project to make visible to prospective employers value-added co-curricular achievements of students that develop knowledge, skills and attributes valued in the workplace.

Learning analytics

Data collection and analysis are key activities in Education Innovation and the focus is on student experience, engagement and success. HERI produced 11 reports. Mr Jordaan produced Analytics for Learn reports on all the Master's programmes, some Faculty reports and reports for the ten modules targeted for review in the Siyaphumelela project. In addition, he worked with EMS to use Analytics for Learn for their Six Weeks Project. Dr Lemmens and Mr Jordaan continue to take the lead nationally with analytics and arranged the third annual SAHELA event in 2015. They worked intensively with Blackboard and the Siyaphumelela data coach to grow their knowledge of data analysis and use. Dr Lemmens managed the SASSE project and presented the results at the Task Team for Student Access and Success as well as conducting road shows per Faculty. EI collaborated closely with BIRAP on building research capacity around student success. The Student Academic Readiness Survey (STARS) was put online. At least two South African universities have shown an interest in acquiring the programme from UP. Mr Jordaan continues to run the annual ECAR survey of online use and devices with students and included the data in the 'Flexible Futures' conference pack in January 2015. We have a long way to go still to present analyses of data, rather than raw data, to the university in a digestible fashion. Jan Lyddon's workshop with the Task Team showed what could be done with the Excel spread sheets on differential student success to make meaning. Reports to outside funders are a necessary part of grants and financial reports have to be balanced with narratives. We manage to meet deadlines.

Awards for teaching excellence and community engagement

Teaching Excellence Laureate

The Education Consultants (ECs) once again organized the Laureate awards and there were two winners, one individual and one team:

- Dr Patricia Forbes, Faculty of Natural and Agricultural Sciences
- Professor Stephen Coetzee and Ms Astrid Schmulian, Faculty of Economic and Management Sciences

The role of the EC per Faculty is to assist the nominees with the compilation of a teaching portfolio. ECs also serve as part of the evaluation panels.

Community Engagement Award

The Community Engagement Office organized the award and served on the evaluation panels. Results were moderated by the previous winner, Dr Martina Jordaan from the Faculty of Engineering, Built Environment and IT.

- Mr Frik Grobler and Mr Christo Fritz, Law Clinic, Faculty of Law

Online Academic Orientation

UPO, an online academic orientation module, is intended to assist first-year students to transition to the University and adapt old strategies, plus learn new strategies for time management, studying and test-taking. We added a 'taster' for 3D (Doing Diversity Differently) to UPO. Professor Naidoo, who manages the module, also negotiated a free pilot of some CENGAGE material for three faculties and that we could use the Pearson's MyFoundations for free. Having the Faculty Student Advisors (FSAs) monitor what are now separate courses per Faculty has helped a great deal.

Faculty Student Advisors (FSAs)

The FSA system has only been in place for three or four years and has been a success story in terms of supporting lecturers and students. Professor Naidoo convenes the FSAs as a community of practice. The CoP met three times and received coaching in using the results of the student academic readiness survey (STARS) and mid-year the cluster analysis showing academically at-risk students. Fortunately, we retained most of the FSAs from 2014, so we have a more competent and knowledgeable group. FSAs were also trained to initiate the complete in minimum time campaign during registration and will hand out 'Class of ...' badges to students who consult them.

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Excellence is achieved through 'habits of the mind, habits of the heart, and habits of the hand' (Shulman, L.S. (2005). Signature pedagogies in the profession. *Dædalus*, 134:52-59. American Academic of Arts and Sciences.) Each person in EI contributes to our excellence every day, none more so than the managers: Professor Ana Naidoo, Deputy Director; Mr Dolf Jordaan, Deputy Director; Ms Detken Scheepers, head of E-Education; Ms Sanet Haupt, head of Education Consultancy; Mr Almero du Pisani, head of Creative Studios and Communication Technology; Dr Juan-Claude Lemmens, head of Higher Education Research and Innovation; Ms Gernia van Niekerk, Manager: Community Engagement and Ms Elize de Waal, head of the Operations Office.

Professor Wendy Kilfoil

ACADEMIC DEVELOPMENT

Academic development is the joint responsibility of the student and the academic but is also facilitated by support staff and departments. The process is facilitated through the office of the Deputy Director: Academic Development who works with the Department of Student Affairs and the Chairs of the Teaching and Learning Committees and Faculty Student Advisors (FSAs) in the respective faculties as well as donor staff. The sub-directorate, Academic Development, headed by Professor Ana Naidoo, spans professional development, institutional research into student success and an extended section dealing with academic support for students.

The two line managers within the department reporting to her are the head of Education Consultancy and the head of Higher Education Research and Innovation. The Education Consultants work in the individual Faculties with academic staff, run priority courses to develop teaching excellence across the University and support the academics in developing projects to promote the scholarship of teaching and learning and achieve teaching excellence.

The Higher Education Research and Innovation (HERI) unit primarily carries out institutional research related to student success initiatives, such as evaluating the Orientation Programme for first-year students, evaluating the academic readiness of first-year students and then evaluating student-risk based on these results, investigating the causes of first-year student dropout, evaluating the predictive value of the NSC and NBT and evaluating the mentorship programme, among others.

Academic development of students begins with the first contact that the student has at UP, and ends with graduation. The Deputy Director: Academic Development has oversight on the support provided to students by the FSAs in each Faculty. These advisors, funded by the Teaching Development Grant from the Department of Higher Education and Training, are employed by the Faculties to work with the lecturers to provide co-curricular skills support aimed at student success. FSAs have a matrix management relationship with the Deputy Director: Academic Development, who convenes them as a community of practice. They run study skills and time-management workshops in groups and are also available for individual sessions with students to address their perceived problems. With the lecturers' help, they can identify students who are performing poorly to invite them to talk through and address their challenges.

As part of the support provided to students, all first years must register for UPO, an online module forming an initial component of the holistic academic support framework. By engaging in the activities within the module students will get to understand the University environment and gain the confidence to help themselves. The module has a wide range of academic support services to enable a student to succeed. These student services are available throughout the first academic year. In 2015 each Faculty had its own UPO module ranging from UPO101 to UPO120. Students are informed of the module in the welcoming brochure as well as in the Faculty-specific sessions conducted by the FSAs. Of the 11,903 students registered for UPO, 9,163 obtained a 'Progress satisfactory' result. This computes to a 77% completion rate. Those who did not complete the module received a result of 'Progress Unsatisfactory'.

2015 saw the launch of a new campaign in respect of student support which will be implemented in 2016. The campaign to graduate on time aims to work with all entities at UP to improve our 'minimum-time-to-completion' rates.

Additionally, external foundations support the academic development of specific students, particularly those with potential but at risk for financial reasons.

- The Dell Young Leaders (DYL) programme attracted another 50 students in its fourth year of operation, bringing the total number of recipients to just under 200. The Michael and Susan Dell Foundation (MSDF) provides bursaries as top-up to the National Student Financial Aid Scheme. Furthermore, a wrap-around grant is provided for additional support such as leadership training, preparation for the workplace and psycho-social support. By offering comprehensive support via a

dedicated coordinator throughout these students' university lives, it improves their graduation rates and helps in finding meaningful employment in their chosen professions.

- The MasterCard Foundation Scholars Program (MCFSP) has been operating at the University since 2014 and this year had a total of 60 Scholars from South Africa, SADC, as well as other countries on the Continent, enrolled for both undergraduate and postgraduate programmes. The MCFSP focuses on leadership and a commitment to 'giving back' within one's own community; hence a focus on community engagement and transformative leadership activities. In June three Scholars who were chosen to represent the group at a Scholars Convening in Palo Alto (Stanford University) and were accompanied by the Deputy Director: Academic Development. Preparation for the workplace takes the form of internships during their period of study. Twelve Scholars participated in internships in the summer recess period.

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EDUCATION CONSULTANCY

The Education Consultancy (EC) group was headed by Ms Sanet Haupt. The Education Consultants (ECs) are responsible for assisting academics in their pursuit of teaching excellence. Their services include curriculum development, teaching and assessment. These services are founded on strong relationships that have been built in the Faculties. The focus of each consultant in her/ his respective Faculty is negotiated with the Deputy-Dean of the Faculty, or head of teaching and learning, and reported at the Faculty Teaching and Learning Committee, or its equivalent, and is aligned to the strategic initiatives of the institution. Where these positions and structures do not exist, the Dean plays an important role. The profile of each EC is a combination of teaching knowledge and a background in any of the disciplines in the respective Faculty, combined with the skill of relationship building.

Training is a scalable strategy used by the EC group to provide initial and continuing professional teaching development: several priority courses are designed and developed by the group. During 2015 all the training courses offered by this group were redeveloped to be delivered in a blended mode. Courses were chunked into small units to enable lecturers to negotiate with their HODs, through their performance contracting, to complete only the sections they needed.

During 2015 the ECs were involved in the redesign of EI's intranet. Focus-group discussions were organized in each Faculty to determine why they would visit EI's intranet and what icons would be suitable to use.

HIGHLIGHTS AND NEW INITIATIVES OF 2015

Against the background of generic expertise and support described above, each EC is involved differently in the focus of a particular Faculty for a specific year. Below are examples of unique projects:

- The Faculty of Health Sciences was responsible, together with The Network, for organizing the annual SAAHE (South African Association of Health Educationalists) Conference which took place from 13-16 September at the Birchwood Conference Centre. The EC was a member of the local organizing committee, helping with the programme and securing chairpersons for all the sessions. The conference was a great success attracting many national and international delegates.

- The EC in the Faculty of Natural and Agricultural Sciences is involved in the planning and execution of many of the Faculty's projects in collaboration with the Deputy Dean.

  o She helped to organize the SCITAL Forum's activities. The July 2015 Forum was devoted to representations in science education and was conducted by Professor Hsin-Kai Wu, an international expert on this topic from the Graduate Institute of Science Education at the National Taiwan Normal University

  o An intensive survey was conducted in the Faculty about tutorial services and a report was submitted to Prof Duncan. The EC conducted a pilot study, using interviews, to inform her about questions for the questionnaire. The questionnaire that she compiles was distributed in the entire NAS faculty. The EC analysed the data and compiled the report and it was quality assured by the Deputy Dean. The report served at the Senate Teaching and Learning Committee and Prof Duncan indicated that he would like similar information gathered in other faculties. The data collected from this survey has now been reworked into a journal article.

  o The EC in compiled a guideline document to assist staff who wanted to apply for promotion in the Faculty and the Deputy-Dean quality assured it. The document subsequently served at the Senate committee and was deemed exemplary by Professor Duncan. A peer review document accompanies this guideline document and the simplicity of it was welcomed by Professor Duncan. NAS shared it with EMS. A number of instructional classroom practice

evaluations were conducted, some as follow-ups to the induction course, some as CPD and others for promotion purposes.

- o The EC in conducted training outside UP (on request). She and the EC from EMS conducted a workshop at Milpark Education on a Saturday.

- o The EC was part of two quality visits (Zoology and Statistics) and she is actively involved in supporting Zoology with planned interventions.

- o The EC acted as a group facilitator at the Teaching and Learning day of the Extended Programme.

- o The EC grabbed the opportunity to invite an international visitor at EBIT, Professor S Brophy, and he subsequently became a guest at another SCITAL event.

- The Faculty of Humanities embraced the new hybrid teaching and learning model approved by the Council at the end of 2014. From the Teaching and Learning Committee a special Hybrid Learning Task Team was established in which the Faculty EC and ID played an active role. They, among other activities, arranged a discussion session for the Faculty on 20 May with Dr Lynette Nagel as key presenter. The activities of this task team also provided momentum for the online session presented at the UP Flexible Futures Conference (2-11 November 2015). The session *Yesterday, today and tomorrow,* with Professor Rehana Vally, Professor Amanda du Preez and Ms Ana Garcia was based on personal experiences by the panel members, as well as online journals written by task team members. The Faculty EC and ID both participated in the journaling activity; the text analysis base work; as well as the conceptualization of the presentation.

   Another faculty member, Dr Susan Haskins also presented a session on 9 November: *Using Online Tutorials to Engage with the Ancient World*. This was based on an online tutorial project initiated by the lecturer and supported by both the Faculty EC and ID.

   Apart from the above activities various individuals as well as the departments of Sport and Leisure Sciences (16 February and 5 May), Social work and Criminology (28 August) and Modern European Languages (25 November) requested and received support and training in Hybrid Learning – arranged and facilitated by both the Faculty EC and instructional designer (ID).

   E-tutoring is also increasingly used as substitution or enrichment of the current tutoring models in Departments. The tutor training traditionally offered by the EC of the Faculty, was (after a conducting a needs analysis in the faculty) changed also to include online tutor training.

   In relation to tutoring, the Faculty of Humanities drafted a tutoring plan for acceptance at Faculty Board 2016. The EC coordinated the drafting of this plan on behalf of the Faculty Teaching and Learning Committee and all tutor coordinators in the Faculty.

   As part of the renewed focus on teaching portfolios of evidence, for appointment and promotion purposes at UP, the Faculty of Humanities' Teaching and Learning Committee established a peer review process for the Faculty. A task team coordinated by the Faculty EC drafted a concept document. The widely consulted peer review process and criteria are reflected in the document 'Guidelines for the evaluation and documentation of teaching practice for the purpose of appointment and promotion' to be approved by the Faculty Board in 2016.

   A number of peer reviews were conducted by the EC on request:
   - For promotional purposes: 7
   - For non-promotional purposes: 4

   Thanks to DHET funding, the Teaching and Learning Committee established an annual award that is presented during its Humanities Day activities. To assist the Faculty in organizing a call for applications a Task Team was established to prepare a set of guidelines and criteria for approval by the TLC. The

Faculty EC, together with Professor Rehana Vally, played a central role drawing up this document. Professor Amanda du Preez (Visual Arts) was presented the Teaching Excellence Award for 2015 and Dr Angelika Weber (Modern European Languages) a special Faculty award for exceptional runner up.

Professor Christi van der Westhuizen established a first-year module on diversity ('Doing diversity differently'). While the Faculty EC actively supported her in the micro level curriculum design and study guide preparation, the ID supported her with the online conceptualization and activation of the module.

- The EC in the Faculty of EMS had worked for a short period in the Faculty of Law and continued with a major project on clickers in Law after she transferred between Faculties. She spearheaded and project managed an intensive survey on *Monitoring and evaluating the use of the clicker response system in second year law modules*. All research instruments were developed and administered by the EC. A questionnaire as data collection instrument for collecting feedback from students on their experience with the use of clickers in five identified Law modules was developed and the survey administered via Qualtrics. The EC attended a 2-day Qualtrics training course to develop skill in the use of this tool. A second questionnaire as data collection instrument for collecting feedback from lecturers on their experience with the use of clickers in their classrooms to engage students in the learning process was developed and administered via e-mail communication. The EC developed an interview protocol and two focus group interviews were conducted with selected second year Law students on 23 and 24 November 2015. The data collected from this survey is now to be reworked into a conference paper on *The effective use of a clicker response system in promoting the development of conceptual knowledge of basic law concepts and principles*. A spin-off from this survey was a poster presentation during the Flexible Futures Conference of 9 November 2015 entitled *Piloting clickers in the Faculty of Law* presented by the ECs in the Faculty of EMS and the Faculty of NAS.

- Education Innovation collaborated with the Faculty of Education when it embarked on a renewal project of the Bachelor for Education (Honours) in early 2015 in order to implement the hybrid model in the contact sessions and an internet dependent model with reduced contact sessions for students enrolled for distance education. The Deputy Dean (Teaching and Learning) organised workshops for the conceptualization phases with all responsible module lecturers, support staff and a SAIDE observer to advise on the discussions. The process afforded the respective degree groups the opportunity to rethink the underpinning philosophy and educational approach of the qualification. Vygotsky's social constructivism was adopted as a theory to support the philosophical assumption of the 'flipped classroom'.

The Education Consultant and Instructional Designer were involved in the development of respective module materials starting with the mapping of the modules. The process of re-designing the materials included programme overview, curriculum mapping of the respective packages and development of learning materials taking into consideration the importance of student engagement through appropriate higher order thinking activities; facilitation strategies that guide and drive the development of higher cognitive knowledge; aligned assessment opportunities ensuring that the challenge and scaffolding ("chunking" and sequencing) are established and purposes clear, and the increased use of the learning management system as a tool to support the learning process. Constructive alignment of the different components was checked and the appropriate use of the learning management system was monitored by the Head: E-Education. Contact session materials, including material on the web, were ready to implement at the end of 2015.

DESIGN AND DEVELOPMENT IMPACT ON QUALITY OF TEACHING, LEARNING AND ASSESSMENT

CURRICULUM DEVELOPMENT/ REVIEW

The UP Study Guide guidelines document was thoroughly revisited and revised. These guidelines are available from the Department for Education Innovation and will soon also be available on the EI website.

This was part of a bigger project of revising all policies and guidelines related to teaching and learning by November. The revised documents will serve at the Senate in 2016.

- Policy on Teaching and Learning

    Appendix A: Teaching and Learning Principles

- Policy on Curriculum Design and Development

    Appendix A: Guidelines on curriculum design, development and implementation

    Appendix B: Guidelines on using credits, notional hours and level descriptors for academic planning within the Higher Education Qualifications Sub-Framework

    Appendix C: Research-/Inquiry-based model for Teaching and Learning

    Appendix D: Graduate attributes

- Policy on Teaching Evaluation (student feedback instrument)

- Policy on Teaching Support Staff (previously Policy on Tutoring)

    Appendix A: Guidelines for implementing the UP tutoring system

- Policy on Academic Professional Development: Teaching and Learning

- Policy on Assessment

A curriculum workshop, presented by staff developers from Rhodes University was coordinated by EI and presented in the Faculty of Veterinary Science for all academic staff who would be involved with the currication of the Degree in Veterinary Nursing as well as other interested lecturers. The workshop was attended by 16 academics.

A new MSc (Tropical Animal Health) degree was developed in a joint venture between the Faculty of Veterinary Science and the Institute for Tropical Medicine (ITM), Antwerp, Belgium. Training was presented by the EC and an instructional designer from the Department of Veterinary Tropical Diseases to the lecturers from ITM in Antwerp. All the study guides were reviewed before the commencement of the degree.

TEACHING DEVELOPMENT

Teaching development varies from Faculty to Faculty depending on just-in-time needs. Below are some examples:

- In the Faculty of Veterinary Science, the use of clickers in the classroom for all year groups (BVSc II, III and IV) was implemented. The EC provided training and some refresher courses on the use of clickers to enhance learning to the lecturers and assisted them with the administrative processes. The EC assisted in compiling questionnaires for both the lecturers and the students to obtain their perception of the students and lecturers regarding the use of clickers as a learning tool and to determine the needs for a support strategy for lecturers using clickers. The results of these questionnaires were processed and discussed in the Faculty. The EC and ID of this Faculty presented the results at the annual HELTASA Conference in the format of a poster presentation.

- In the Faculty of Health Sciences, the EC organized a series of Brown Bag Lunches with a focus on hybrid learning that were held throughout the year allowing teaching staff to share good practice with colleagues. The Faculty also instituted faculty teaching awards. The EC chaired the workgroup which developed the process and criteria. Six awards were made at an awards ceremony in November.

- In the Faculty of Economic and Management Sciences (EMS), two sessions were presented by the EC at the Faculty's quarterly Brown Bag Workshop Series, namely *Setting the exam paper with assessment principles in mind* and *Engaging students in learning*. A DVD recording on *Engaging Students in Learning* was produced by Creative Studios and distributed to each HoD in the Faculty. The EC also worked with the School for Public Management and Administration regarding the writing of learning outcomes and strategies on how to engage students actively in the classroom. The Department of Marketing Management approached her to assist with improving their assessment practice by evaluating test and examination papers of selected first- and second-year modules. She presented workshops on Bloom's Taxonomy and engaging students in learning in INNOVIL, the Academic Induction programme. She was a panel member for one quality review (Department of Financial Management).

- The EC for EMS had previously worked in the Faculty of Law and completed some projects with which she was busy. She trained 45 tutors in the Faculty of Law during 2015 and did some tutorial interventions in the Departments of Private Law, Mercantile Law and Jurisprudence. She also conducted a number of instructional classroom practice evaluations, some as follow-ups to the induction course, some as CPD and others for promotion purposes.

- In support of the peer review process, the EC for the Faculty of Humanities arranged a discussion session on the writing of portfolios and conducting peer reviews (17 November). Apart from the hybrid learning sessions for departments mentioned earlier, the EC also facilitated workshops and discussion sessions for various departments on the following topics:
  - Teaching Portfolios (Social Work and Criminology, Modern European Languages
  - Curriculum Transformation (Modern European Languages).

  The EC furthermore handled a number of personal one-on-one as well as online consultations on the above as well as other topics, including the compilation of study guides.

RESEARCH INTO TEACHING, LEARNING AND STUDENT EXPERIENCE

- ECs promote the scholarship of teaching and learning (SoTL). For instance, in the Faculty of Humanities Dr Ensa Johnson and colleagues from CAAC received a SoTL grant in 2015 for research on *The implementation of a hybrid learning model in the Honours Programme in Alternative and Augmentative Communication (AAC) at the University of Pretoria*. Both the EC and the ID of Humanities actively took part in conceptualizing the proposal. They furthermore supported in designing the questionnaire and conducting the interviews with students. A number of other academics received SoTL grants funded from the DHET Teaching Development Grant to pursue research into their teaching and the following were some of the projects: *Evaluating the Mathematics component of the 4-year degree programme; Evaluating the value of clickers to optimize active learning in the Statistics 100 course; Strengthening democratic citizenship education within the BEd Foundation Phase Life Skills programme; Experiential Learning as a method to address the employer expectation gap on pervasive competencies in a Tax curriculum; Empowering future life orientation teachers with skills to apply the school curriculum meaningfully in diverse contexts.*

- EI initiates institutional research projects related to student experience and success. ECs were involved in particular with longitudinal studies in EMS and Veterinary Science. In 2009 a longitudinal study was initiated on request of the Dean Veterinary Science to inform decisions that could improve programmes and services rendered by the Faculty. The project is managed by ECs, who take responsibility for the questionnaires, the data gathering and analysis and reporting. Data are used to inform decisions regarding the implementation of the new curriculum in the Faculty. One example of a change that resulted from the study is the inclusion of more practical, hands-on learning opportunities for the students. The results have been used for accreditation purposes and for addressing student issues in the Faculty. The reports have been presented at the VETEX committee meetings by the ECs and are presented to the Dean annually. A comprehensive report has been compiled of all the data (2009-2014) that will be used to represent the student voice in the upcoming (2015) international accreditation of the Faculty. The study was further extended to also include

working veterinarians. The rationale of questioning them was to determine if their training had been sufficient to prepare them for working life.

CONTINUING PROFESSIONAL DEVELOPMENT TO ENHANCE UNIVERSITY TEACHING

The table below gives totals for various forms of workshops offered by the Department for Education Innovation from 2011-2015. An explanation of various types of training is then given.

Table 1: Training offered by Education Consultancy group, 2011-2015

	2011	2012	2013	2014	2015
Education Induction (Academic Induction from 2015)	74	76	67	74	68
INNOVIL	34	34	35	33	40
Tutor Training	286	204	493	418	497
Assessment (see below)	51	34	62	9	0
Hybrid Learning (new in 2015)	-	-	-	-	55
Teaching portfolios(new in 2015)	-	-	-	-	33
Extended Programmes	43	15	90	67	65
Clicker training (*ad hoc*)	-	-	-	23	-

The priority assessment training had to be cancelled because of low enrolments but ad hoc training was presented to Faculties on demand. The Faculty-based training will continue as the norm in 2016 after the ECs revised the course for this purpose.

ACADEMIC INDUCTION

In the past, academics had to attend two different induction programmes: one for research and one for teaching (education). This year (2015) a combined programme (Academic Induction Programme) was implemented in collaboration with the Department of Research and Innovation Support (DRIS) for the first time. There were at least two reasons for this new development:

- Being an academic means that you are not solely a teacher or solely a researcher but have to combine both competencies to fulfil your role at the University;

- The teaching-research nexus has been well-researched internationally so we can help the academic to explore a possible nexus between research (own research) and teaching (developing students' graduate attributes).

Two programmes were presented: 6-10 July and 5-9 October. A total of 68 staff members attended. Numbers are deliberately restricted per session to ensure the best quality. The programme begins with some initial online elements and resources, continues with the contact engagement, and is followed some months later by an Induction Follow-up and Certificate Ceremony, which is a networking opportunity where participants share promising practices after six months of teaching and assist each other in achieving excellence in teaching and learning. The Induction Follow-up and Certificate Ceremony for the July group was 6 November and the October group will be on Friday, 1 July 2016.

The table below provides an overview of the response rate and response of attendees to selected items of the PeopleSoft feedback received on the merged priority courses. These items were selected as they represent indicators that point toward the quality of the interventions.

Table 2: Response rates and feedback of participants on the 2015 Academic Induction Programmes

	July 2015	October 2015
Response rate	80%	82%
Participants feedback on selected items from PeopleSoft priority course evaluation:		
Stated objectives accomplished	93% felt they were achieved	96% felt they were achieved
Coverage of subject matter	71,4% felt that it was covered excellently	89% felt that it was covered excellently
Suitability of Programme Material	67,9% felt that it was well suited	82% felt that it was well suited
Level of Difficulty	100% felt that the level was appropriate	100% felt that the level was appropriate
Applicability to Work	64,3% felt it was applicable for work but 81% felt that the programme is highly recommendable	100% felt it was applicable for work and is recommendable

INNOVIL

The induction of novice lecturers (Innovil) for the EBIT Faculty seeks to create opportunities for newly appointed School of Information Technology assistant lecturers to acquire the principles and practices of teaching and assessment that they are likely to require to facilitate learning and assessment successfully. After the training session, participants are required to construct and then to test their own practice. These educational opportunities encourage them to reflect on their practice as new members of UP's teaching staff. The training took place from 12-16 January 2015 and 40 assistant lecturers from AIM, Informatics, and Information Science attended the workshop.

TUTOR TRAINING

Tutor training is customized for each department and is delivered jointly with the academics in these departments so that their specific needs are addressed. Tutors receive a letter of attendance after the training. Initiatives have been launched to quality assure the effect of the training. Almost 500 tutors were trained. In Humanities there is an increasing focus of including e-tutoring in the current departmental tutor models. This necessitated the inclusion of e-tutoring in the tutor training programme. In some Faculties more comprehensive tutorial interventions were done.

EXTENDED PROGRAMME

The Department of Higher Education and Training mandates that 10% of the Foundation Provision funding be set aside for staff development. This portion of the funding is administered by the Department for Education Innovation, specifically the EC in EBIT in 2015. With her retirement, the coordination has been taken over by the EC who coordinates all training activities for teaching development. The EC may initiate workshops and seminars and make all the arrangements or lecturers may approach her to fund conference attendance or a seminar. On campus as well as off campus opportunities were funded in 2015. Below a breakdown of the events:

ON CAMPUS

TEACHING AND LEARNING DAY

A teaching and learning day was hosted by Mamelodi Four Year Program (FYP) (17 July). It is an annual event that is hosted alternatively by ENGAGE (the augmented programme in EBIT) and the Mamelodi Four Year Programme (FYP) involving NAS and EMS modules. The majority of staff in the two programmes attended the

event. The Deputy Dean of NAS as well as the Deputy Director from the Department of Education Innovation were present. The keynote speakers were Dr Melanie Jacobs from the University of Johannesburg and Dr Juan-Claude Lemmens and Ms Esther Mphanda from the University of Pretoria.

The event provided an opportunity for a few staff members to share their best practices with the whole group and to indicate research activities that that resulted from their work.

STATISTICS COURSE

Need analysis for staff development showed a special interest in the analysis of research data and its interpretation through the use of SPSS software. A course was organized in-house through CE@UP. Thirteen delegates from both foundation provision programmes participated in the course. Their own teaching and learning data were used in the presentation of the course; therefore, it was a very practical and hands-on experience.

OFF CAMPUS

SASSE CONFERENCE IN DURBAN

There are Faculty members in both the ENGAGE and FYP programmes who are conducting research on their own practices. This year, two staff members from the ENGAGE programme attended the South African Survey of Student Experience (SASSE) conference (Durban, 3-5 June). The purpose was to share their own ENGAGE experiences with others and familiarize themselves with best practices at other universities.

HELTASA CONFERENCE

In both ENGAGE and FYP programmes, there are a number of staff members who are actively researching their teaching and learning practices and also their subject disciplines. Conference attendance becomes an opportunity for them to share their research work in the field of teaching and learning with their peers in other institutions. This year we had an opportunity to support two staff members whose papers were accepted for presentation at the HELTASA conference. There is a possibility that some of these presentations will turn into publications. The conference took place in Potchefstroom (17-20 November 2015).

FIRST YEAR EXPERIENCE CONFERENCE (FYE)

The South African National Resource Centre through the First-Year Experience Conference aims to examine programmes and initiatives, as well as provide opportunities for the exchange of practical and scholarly information. The EC from NAS was sponsored by her Deputy-Dean to attend this conference. She was there introduced to a project initiated at CPUT with TDG funding. She is now collaborating on the project to publish about tutoring. Sanet Haupt (the HoD) co-presented a paper on a longitudinal student experience project in EMS.

DELFI CONFERENCE

This international conference took place in South Africa this year (Port Elizabeth, 22-27 November). It provided an opportunity for staff members in the field of Mathematics Education to present their papers and to gain international exposure.

ASSESSMENT WORKSHOPS

Owing to low enrolments, the assessment workshops planned for 2015 were cancelled by CE at UP. In future, assessment training will no longer be a planned, centralized, inter-Faculty priority programme offered three times a year; instead, it has been revised to a Faculty-based approach that will be implemented from 2016. It might involve additional work but it might also attract more participants. The new practice will be monitored.

HERI is managed by Dr Juan-Claude Lemmens. The unit focuses particularly on institution-wide research into teaching, learning and student success.

HIGHLIGHTS AND NEW INITIATIVES OF 2015

The development of the UP Career App.tizer was the highlight of 2015. The Career App.tizer is a career exploration tool aimed at high school learners. As the name suggests it aims to get high school learners to start exploring different courses and careers offered by the University of Pretoria. The Career App.tizer introduces learners to their career interests with an online career interest survey; map their interests to courses offered by UP and link courses to careers. The app was developed by staff from the Department for Education Innovation together with four students from the Department of Informatics at UP with funding from the Kresge Foundation: Siyaphumelela programme. The Career App.tizer application was completed on 30 October 2015 and launched at the Flexible Futures conference (9 November). At the annual departmental projects day, these students received the first prize for documentation management, the Investec price for most innovative project as well as the first prize for the best project on 2015. The Career App.tizer is available at www.careerapptizer.co.za and on the Google Play store.

LONGITUDINAL PROJECTS

ASSESSMENT AND PROFILING OF FIRST-YEAR STUDENTS

HERI currently uses many sources to determine the factors associated with retention or attrition of undergraduate students. Various structured questionnaires have been developed to assess this phenomenon; for example, the Academic Readiness Questionnaire (STARS), and its counterpart, the First-Year Experience Survey (FYES). Exit interviews with first-year students who opted to discontinue their studies are also conducted. Institutional information (for instance, on high-risk modules) – from BIRAP, is used to determine 'risk' on individual, module and programme level.

THE STUDENT ACADEMIC READINESS SURVEY (STARS)

The purpose of the STARS 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 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 peer mentoring and academic advising is developed to support students who are identified as being at risk of failure or withdrawal. The STARS was administered during the orientation week in 2015 for the sixth time to 6,160 first-time entering first-year students registered in all nine Faculties.

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 number as primary key). The remaining variables (home environment, distance travelled daily) are drawn from the responses as volunteered by students.

The STARS reports were generated on the Oracle Business Intelligence platform, including individual student STARS reports, and several aggregate reports, such as Faculty profiles, students per risk area, and an institutional profile of all first-year students. A handbook containing guidelines on how to interpret the reports is also available with the institutional report. The STARS BI system identified 347 mentees for the mentorship programme and 1,061 students for academic advising. These students were referred to Faculty Student Advisors for academic development and to mentors to facilitate transition from school to university. The results generally show a normal distribution curve but that means that many of the students classified as

'average' probably need assistance as well. That is why it is so important to have in place a tracking system to support STARS so that each student is constantly monitored for engagement and progress across the semester.

Table 3: Aggregate Institutional Profile of the STARS 2015

Motivational factors	Poor	Average	Good
Planning	12	66	22
Locus of control	30	53	17
Self-efficacy	21	63	16
Leadership	32	46	22

Academic involvement	Poor	Average	Good
Test taking skills	28	53	19
Engagement	19	58	23
Reading behaviour	25	57	18

Well-being	Poor	Average	Good
General well-being	31	58	11

Integration and support	Poor	Average	Good
Institutional support	28	48	24
Financial support	29	53	18
Family support	28	51	21
Social integration	23	60	17

Vocational identity	Poor	Average	Good
Career exploration	35	49	16
Career guidance	13	43	44

Risk indicators	At risk	Not at risk
Engagement risk	10	90
Financial risk	12	88

Reading/ Writing risk	8	92
Time management risk	8	92
Transport risk	13	87
Accommodation risk	13	87
Mentee risk	6	94
Academic risk	24	76

THE FIRST-YEAR EXPERIENCE SURVEY (FYES)

The FYES can be considered a follow-up of the STARS, as it measures the same constructs eight months later. The aim is to determine whether first-year students were able to make the transition from school to university and close the potential gaps. FYES was administered electronically in 2015 to 2254 first-year students from nine Faculties. The data of these surveys were processed in exactly the same way as applies to the STARS data. Similar reports were created. A comparison of individual results from STARS and FYES (n = 1117) shows that proportionately more students presented with risk profiles (poor category) across most of the factors. Students therefore seem to have had more challenges during this year. Students may also have a more realistic perspective of their skills after experiencing university life when realising that their skills fall short of what is expected at university level. Regarding the motivational factors of students, the ability to plan or set academic goals and self-efficacy has decreased. Similarly, students also indicate that their test confidence as well as their engagement is lower. Students' financial needs seem to improve slightly during the year, although they experience less family support during the year (refer to table 3 below).

Table 4: STARS/ FYES Comparison

	STARS			FYES		
Motivational factors	Poor	Average	Good	Poor	Average	Good
Planning	10.5	64.0	25.5	22.5	59.4	18.1
Self-efficacy	19.4	63.0	17.6	32.2	54.8	13.0
Locus-of-control	27.7	53.9	18.4	29.3	53.7	17.0
	STARS			FYES		
Academic involvement	Poor	Average	Good	Poor	Average	Good
Test confidence	28.9	50.6	20.5	34.5	49.8	15.8
Engagement	17.8	53.5	28.5	33.1	46.9	20.0
	STARS			FYES		
Integration and support	Poor	Average	Good	Poor	Average	Good
Financial support	34.3	50.9	14.8	27.0	58.8	14.2
Family support	31.0	48.3	20.7	37.0	50.3	12.7

The aim of this cross-sectional trend analysis is to identify and prioritize the reasons and pre-disposing factors affecting student withdrawals at first-year level over time, as volunteered by students themselves. A total of 8,484 FTE first-year students were registered in 2014 (Bureau for Institutional Research and Planning, 2014). According to Bureau for Institutional Research and Planning (2014), 1,885 students discontinued their studies, including the students who 'abandoned' their studies by not registering for their second year. If these students are excluded, a total of 446 students discontinued their studies, which accounts for a 5.8% discontinuation rate. Of the 200 students interviewed, 149 students discontinued their studies and 51 students were dismissed by the University.

The primary reason for withdrawal has consistently been 'wrong study or career choice' since 2008 and remained the main reason in 2014 although this study only investigated the trends in drop-out in the first semester of 2014. This trend necessitates a proactive focus on career exploration and/ or career guidance before students apply at University. Career exploration and the need for career guidance is purposefully included into the STARS so that students can be identified at an early stage and then referred to Faculty Student Advisors. The majority of the students encountered career choice problems during the first semester, leading to actual withdrawal or migration to other courses. The data also showed that students experienced financial challenges (18.9%) and academic reasons (8.8%) and personal reasons (6.1%) during the 2014.

Table 5: 2014 First –Year Enrolments and discontinuations

Faculty	Number enrolled	Percentage enrolled	Number discontinued	Percentage discontinued
EMS	1,682	19.8%	230	12.2%
EBIT	1,992	23.5%	418	22.2%
HEALTH	368	4.3%	25	1.3%
HUM	1,294	15.3%	353	18.7%
NAS	1,836	21.6%	660	35.0%
THEO	56	0.7%	13	0.7%
LAW	197	2.3%	25	1.3%
VET	119	1.4%	8	0.4%
EDU	936	11.0%	153	8.1%
TOTAL	8,484	100%	1,885	22.2%

Table 6: Student reasons for dropout from 2008-2014

Reason for dropout	2008	2009	2010	2011	2012	2013	2014
Study choice	61.9%	58.1%	46.1%	67.2%	48.0%	49.0%	54.7%
Financial	7.9%	7.5%	16.3%	6.5%	10.1%	13.0%	18.9%
Academic	7.2%	20.6%	9.0%	9.2%	10.1%	11.0%	8.8%
Faculty discontinuation	7.1%	2.2%	2.4%	0.5%	4.2%	5.0%	0%
Family	3.3%	1.1%	4.5%	0.5%	3.9%	5.0%	0%
Work	2.6%	1.1%	4.5%	3.8%	2.6%	2.0%	3.4%
Health	3.1%	2.2%	2.9%	0.5%	5.7%	4.0%	2.7%
Personal	4.1%	6.8%	12.2%	5.7%	18.0%	9.0%	6.1%
Institutional	2.8%	0.4%	2.0%	6.0%	0.9%	2.0%	5.4%

IDENTIFICATION OF STUDENTS IN NEED OF SUPPORT IN THE SECOND SEMESTER

As part of the second semester intervention programme, a cluster analysis is performed to identify students who had poor academic performance in the first semester. Clustering Analysis is a primary statistical method for finding relatively homogeneous clusters of cases based on measured characteristics. The K-means algorithm clustering method was utilized to analyse the data. The variables that were used in the first phase, performed by BIRAP, were the ratio of credits registered versus credits failed; the average mark for first semester, the ratio of poor modules, and the high school English mark. In the second round the borderline students were extracted from the data set and split into Sciences and non-sciences groups. The K-means cluster analysis was performed on these two groups separately. The variables that were used in the first phase, performed by HERI, were the ratio of credits registered versus credits failed; the average mark for first semester, the ratio of poor modules, however, the high school English mark was removed. This allowed identifying the borderline students at the granular level, thus splitting the lower borderline from the true borderline and upper borderline students. The lower borderline students became part of the at-risk group.

The at-risk students were required to consult the Faculty Student Advisor and join extra tutoring during the second semester, especially when they were enrolled for high impact modules (HIMs).

Table 7: Academic risk in the second semester (2015)

Row Labels	At risk	Border line	Not at Risk
EBIT	9%	33%	58%
EDU	5%	22%	73%
EMS	4%	14%	82%
HS	14%	13%	73%
HUM	7%	19%	74%
LAW	5%	11%	84%
NAS	9%	22%	69%
THEO	8%	17%	75%
VET	7%	10%	83%
Grand Total	**8%**	**21%**	**71%**

THE NATIONAL SENIOR CERTIFICATE (NSC) AS PREDICTOR OF ACADEMIC SUCCESS

In response to the uncertainty around the NSC qualification, Umalusi commissioned a pilot study to investigate the ability of NSC results to act as predictors of academic success at higher education institutions in 2014. In particular, it investigates whether results in three NSC matriculation subjects – namely, English, Mathematics and Physical Science, which are commonly used by higher education institutions in their admission process – could predict the academic success of students who have been admitted to their chosen programmes, and whether this relationship has changed since the introduction of the NSC in 2008.

The aim of this pilot study was twofold: firstly, to investigate the relationship between selected NSC results and academic success at higher education institutions and possible changes in this relationship over time; and secondly, to establish whether and how such research is feasible and comparable across higher education institutions that offer different programmes and levels of qualifications, impose different entrance requirements, and ultimately, differ in the type of students who select to enrol themselves at such institutions.

The aim of the project was taken forward in 2015 with an initial meeting with eight South African tertiary institutions and a revision of the methodology to accommodate the various analytical skill-sets at these institutions. An Excel tool was also developed to support representatives from the various institutions to run

standardised analytics required for the project, with related visualisations of the results and a performance indicator dashboard. The project will continue in 2016 with the eight institutions.

ENHANCEMENT OF QUALITY OF PRACTICAL TRAINING

HERI renders assistance to departments assessing practical work. 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 and the 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 Speech-Language Pathology and Audiology assessed their practical modules in 2015. The possible results of the surveys were used to improve the quality of practical training and to inform the training of external supervisors.

EVALUATION OF ACADEMIC OUTCOMES OF ORIENTATION PROGRAMME FOR FIRST-YEAR STUDENTS

The orientation programme was evaluated in 2015. The survey used in 2015, consisted of 33 questions with one question requiring qualitative feedback. The questionnaire was revised and adapted into an electronic survey format based on the previous years. A revision of the questionnaire followed in 2014 to allow for changes in the orientation programme. The aim of the questionnaire is to determine whether the programme attained the objectives set for the programme; to obtain information about how the students experienced the orientation programme and to collect suggestions about how the programme can be improved. The electronic survey format questionnaire was administered to all the students registered for Academic Information Management (AIM) 111 and 101 (semester 1) as a class activity to ensure a maximum response rate.

At the close the survey, 1496 students out of the 8 312 first-time registered students in the nine Faculties surveyed had responded, accounting for an 18% response rate. Students were generally satisfied with the logistical arrangements during the orientation programme. A large portion of the students appreciated the academic and Faculty-related sessions and found these useful, although some students experienced some dissatisfaction. Students suggested that for 2016 more 'Ask Me desks' and user-friendly maps should be made available for students. Another suggestion brought forward by the students was that more information about bursaries and student loans should be given. The orientation programme generally had a positive impact on the majority of the students, as most of the students found it to be useful and felt welcome at UP thereafter.
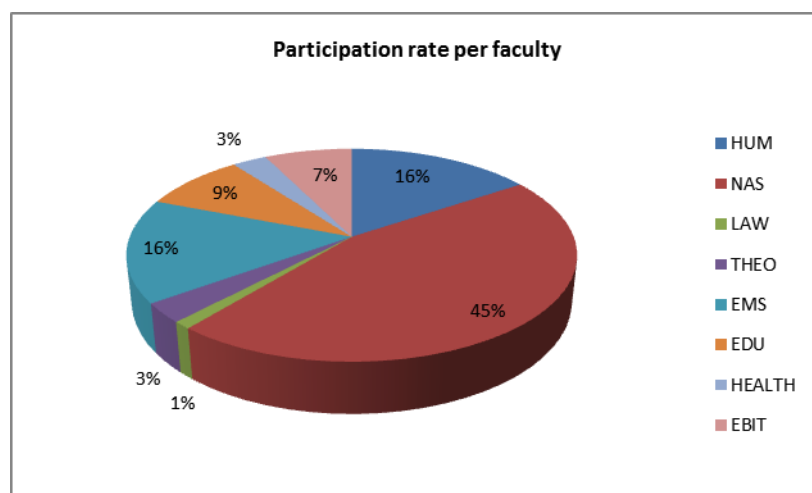

Figure 1: Participation rate per Faculty

EVALUATION OF THE PEER MENTORSHIP PROGRAMME

The peer mentorship programme run by Student Affairs was evaluated during 2015. Three criteria were used to select students, namely; first generation, students from rural and township home environments and students between the ages of 18 and 21. The purpose of the programme is to facilitate the transition from school to university in order to have students fully integrated into the university environment within the first quarter of the first year. At the end of the programme, mentees were asked to complete a survey on the mentor and the programme. Mentors also evaluated the coordinator and the coordinator had to evaluate the each mentor's performance. The triangulated data provided information on the effectiveness of the mentor as well as the mentee's satisfaction with their mentor. Focus group discussions were held with a number of mentees, mentors and coordinators to evaluate the effectiveness of the programme as a whole.

A total of 89 mentees assessed their mentors and 128 mentors assessed their faculty coordinators during the focus groups. The results of the evaluations shows that the mentorship programme is beneficial for both mentors and mentees, which was reflected in the feedback they gave during the focus group interviews as well as in the assessment forms. In both the focus group interviews and assessment forms it became apparent that the mentorship programme in itself forms part of the mentees support structure. Overall there seems to be consensus among the mentees that they were satisfied with their mentor's performance. Mentors also gave positive feedback on the performance of their faculty coordinators.

SURVEYS OF STUDENT ENGAGEMENT

Both the South African Survey of Student Engagement (SASSE) and the Lecturer Survey of Student Engagement (LSSE) were administered during August of 2014. HERI managed the project on behalf of the University, liaising with the University of the Free State, arranging meetings, making arrangements at UP and distributing the data. During 2015 the results were shared at the Senate Committee for Teaching and Learning and a roadshow undertaken to each of the nine Faculties to engage with their committees overseeing teaching and learning. During the roadhsow, the results were disaggregated at Faculty level. The presentations focused on effective teaching practices, which produced insightful evidence to make practical improvements on student engagement in 2016. The surveys will be re-run in 2016. Faculties have undertaken to encourage as many students and lecturers as possible to complete the survey to ensure reliable data on which they can act.

E-LEARNING AND MEDIA DEVELOPMENT

The Deputy Director responsible for this portfolio is Mr Dolf Jordaan. The portfolio comprises E-Education and Creative Studios and Communication Technology. Mr Jordaan played a leading role in strategic initiatives such as Analytics for Learn, the move to Blackboard Managed Hosting, the implementation of the hybrid model, the use of *clickUP* (the Blackboard Learn online learning management system) as a communication medium to students and so on. He also sought to facilitate the integration of e-learning and media design and development.

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E-EDUCATION

The E-Education group is managed by Ms Detken Scheepers and comprises e-learning project managers, instructional designers (IDs), an instructional author, an educational technologist and computer-based testing assistants. Staff members are distributed across the Hatfield, Onderstepoort and Prinshof campuses to support the use of e-learning. From 2015, one e-learning project manager was seconded to coordinate the Online Coursework Master's project.

The group provides a variety of services to assist lecturers and academic administrative staff with the use of the learning management system, *clickUP*, and the computer-based assessment system, *QuestUP*. These services include training and support in the pedagogically sound use of the systems, instructional design of online modules and multimedia products or apps, as well as the testing and implementation of new technologies within the University.

HIGHLIGHTS AND NEW INITIATIVES OF 2015
1. Two Flexible Futures conferences at the university about e-learning
2. Online coursework Master's project
3. Flipped classroom project of the BEd Hons programmes
4. Focus groups for BEd Hons Distance Education programme
5. A framework for the Professional Online Development course on Bovine Tuberculosis was built in *clickUP*
6. Pilot of 'Numbas' e-assessment system in Department of Civil Engineering
7. Redesign of the course 'eLearning for Academics' and presentation three times to a total of 58 lecturers
8. Development and presentation of the *clickUP* METRICAL course
9. Development and implementation of a *clickUP* module on 'Doing Diversity Differently' (3D), for first-year students
10. Implementation of new Blackboard Collaborate Ultra
11. Approval of Blackboard Managed Hosting project

DESIGN AND DEVELOPMENT IMPACT ON QUALITY OF TEACHING, LEARNING AND ASSESSMENT

INSTRUCTIONAL DESIGN

Extensive instructional design support was provided to lecturers from across the University in the following initiatives: two 'Flexible Futures' teaching and learning conferences; the online course work Masters' project; the international collaboration of the Albertina Sizulu Executive Leadership in Public Health (ASELPH) programme; and the flipped classroom initiative of the new BEd Hons contact programme and the BEd Hons

Distance Education programme. Smaller projects in departments also received instructional design inputs from the group.

INSTITUTIONAL 'FLEXIBLE FUTURES' TEACHING AND LEARNING CONFERENCES

The E-Education team participated in both institutional 'Flexible Futures' conferences that were held in January and November 2015. During the January conference, E-Education contributed as follows: conceptualization; development and management of the website and booking system; the technology aspects during the conference; organization of a panel; chairing a session and adapting infographics that were distributed at the conference. The November conference took on a hybrid format, with an online pre-conference week, as well as an online post-conference week. In addition to the support mentioned above, each ID of a Faculty assisted the Deputy-Dean or head of teaching and learning with his or her contribution to these online aspects of the conference in *clickUP*. Contributions during the contact day of the conference (9 November) included presentations by IDs on the development of online coursework Master's programmes and Professional Online Development courses. Two posters in which IDs were co-authors were also displayed.

ONLINE COURSEWORK MASTER'S PROGRAMMES

At the end of 2014, the Council of the University approved a hybrid delivery model. Most of 2015 involved discussion and debate around the meaning of hybrid and how it differed from the blended approach to teaching and learning. Part of the answer is that 'hybrid' includes fully online delivery. The University already had a number of long-running online Master's programmes, showcased at the 'Flexible Futures' conference in January 2015. The one Master's in Veterinary Science had just celebrated a year online. A limitation at undergraduate and Honours levels to offering programmes completely online is the funding formula that regards fully online education as distance education and thus penalizes universities by giving fully online programmes distance education subsidy. A decision was thus made by an Executive Cluster, including the Vice Principals Academic and Research and the Director of EI, to focus on Master's programmes. A preliminary investigation of all Master's programmes using Blackboard Analytics for Learn revealed the five programmes per Faculty with the most online activity in a blended mode, although in many cases even these programmes made very little use of *clickUP*. Faculties were asked to discuss the feasibility/ desirability of converting these programmes to completely online offering. They were also given the option of nominating other Master's programmes for this project. One ID project manager was 'seconded' to give dedicated attention to the development of the online elements of the programmes nominated.

The project manager used the analysis, design, development, implementation and evaluation (ADDIE) process to guide the work. The analysis phase started with guided interviews, analysing the needs and direction of 22 programmes. Where indicated, two ICT use and preference questionnaires for students and lecturers that were newly developed in collaboration with UNISA and Waikato University, were administered in eight programmes across five Faculties. The Community of Inquiry (CoI) survey was used to probe the instructional design and facilitation integrity of five established programmes for benchmarking and refinement purposes. Three completely new programmes are in the currication and accreditation phase for fully online delivery in the near future. A further limitation in introducing a different mode of delivery is that it needs to be approved by the Council on Higher Education and accreditation processes can be slow. The Academic Planning office was thus consulted.

Informed by analysis findings, selected modules from three contact delivery programmes were redesigned and delivered online (80% online) from November 2015 onwards. Most modules in other programmes made adaptations to use more online. Development of audio-visual materials for flipped learning is increasing, as this teaching style is highly successful in post-graduate courses, making optimal use of limited contact time. Capturing lectures by invited experts using video or synchronous software is also gaining momentum.

While there were expectations that hybrid delivery would allow growth in student enrolments, particularly in Africa, the reality is that numbers are primarily limited by the dissertation supervision capacity in departments. The focus is therefore on increasing the quality and relevance of the CWM, using hybrid delivery to provide more streamlined, up-to-date content and opportunities for meaningful collaboration and individual feedback.

The affordances of technology to prepare adult learners better for post-graduate programmes, accommodating language and workplace diversity, pose interesting challenges for 2016.

ALBERTINA SISULU EXECUTIVE LEADERSHIP IN HEALTH PROGRAMME (ASELPH)

EI assigned an ID to the ASELPH project to provide dedicated support to the programme for two days per week. This Programme, in partnership with the National Department of Health: Republic of South Africa (NDOH), Harvard T.H Chan School of Public Health, University of Fort Hare (UFH) and South African Partners, prepares students for executive leadership in Public Health, within a blended-learning environment.

During 2015 a few attempts were made to provide tailor-made *clickUP* training to the Faculty. This did not realize for various reasons: time constraints were one of the big challenges. Only a couple of members of the Faculty actually needed formal *clickUP* training. As a result, these academics were invited and encouraged to attend the priority *clickUP* training offered by EI.

The ID provided individual support to the lecturers to create their *clickUP* modules, following the ADDIE process. Each module was built by a module coordinator who could use *clickUP*. These coordinators had to manage the input from the visiting academics as well, to ensure the consistency of the e-strategy. Six modules were prepared, each one month in advance, and made available to students online. These modules were offered through a case-based method of teaching and learning.

Academics and Fellows of the ASELPH programme engaged enthusiastically with the *clickUP* modules. The Fellows were more technology skilled and grasped the concept of e-learning and blended learning in a very short time-span. Despite registration problems that prevented them having access to some course materials at the start of the year, they engaged enthusiastically with the online activities available. They expressed the need to receive pre-reading on *clickUP* prior to attending the modules. The comprehensive uptake in the activity on *clickUP* led to the availability of data within course reports and course analytics which can assist in the future improvements and the decision-making process of the sustainability of the programme.

An 'ASELPH & *clickUP* Support Group' on WhatsApp was created, which they used on a daily basis. It became an online space for collaboration and personal support to each other. It was decided that further *clickUP* training will be arranged for them to introduce and have them experience all the collaboration tools within the LMS.

A draft of the e-learning strategy was compiled and circulated to the academics in the programme for review and comments.

A poster entitled 'The ASELPH (UP) eLearning Strategy enhances Albertina Sisulu Executive Leadership Programme in Health to new heights during August 2014 and September 2015' was presented at the 'Flexible Futures' conference on 9 November. The ID also visited the Harvard T.H Chan School of Public Health in October.

FLIPPED CLASSROOM PROJECT OF CONTACT BED HONS PROGRAMMES

The E-Education group provided support to the development of the online aspects of the new BEd Hons curriculum. These programmes will be presented in 2016 with a flipped classroom approach.

The Faculty was supported through various workshops and instructional design consultation. The workshops included an experiential flipped classroom session in May, presentation of an extra 'eLearning for Academics' course to BEd Hons lecturers in August and two mornings with tailor-made short sessions in September on how to build different activities within *clickUP*. Instructional design input was provided by written comments on the e-learning aspects of each module's learning guide as well as through one-on-one consultations. Lecturers chose and built their course layout in *clickUP* based on one of three templates that were developed as examples.

The E-Education group conducted focus groups with current distance education students at ten teaching venues where they attended classes in July. The aim of the focus groups was to determine the level of support distance students in South Africa will need to be able to access and use the online student systems of the University of Pretoria optimally.

Teams consisting of two or three IDs/ project managers observed the students. Students from the following venues were included on a voluntary basis:

Table 8: Distance Education Students receive training

PROVINCE	TOWN	VENUE
Gauteng	Pretoria	Dean's Boardroom, Groenkloof
	Pretoria	Library, Groenkloof
	Johannesburg	Primrose High School
Limpopo	Thohoyandou	Tshedza Comprehensive Primary
	Makhado	Makhado crossing Wimpy
	Polokwane	Pietersburg High School
Mpumalanga	Nelspruit	Lowveld High School
	Hazyview	Numbi Primary School
Kwa-Zulu Natal	Durban	Durban La Bella restaurant – Library
	Richardsbaai	University of Zululand

A full report was provided to the Manager of the Unit for Distance Education (UDE) and contained the following recommendations:

1. ACCESS:

    a. The cost of the bandwidth that students will need to be able to complete each module should be made known to students. System requirements of devices needed to access the UP systems and course material must be communicated in advance to students, before they register for the programme. Laptops are preferable to other mobile devices as a primary device to enable students to complete their assignments (if typed assignments are required). Other mobile devices, e.g. smart phones or tablets, may be used as additional devices to access learning material or to participate in discussions/ blogs in *clickUP*.

    b. If a manual registration process is used, it should start early enough that student data can be captured in PeopleSoft before they start with any online activity. The registration process should ensure that distance students receive UP e-mail addresses and/ or capture their existing e-mail addresses. These e-mail addresses are essential for students to receive communication from the *clickUP* system, e.g. announcements, availability of new content, assignments, tests, etc.

    c. The UP Portal login page and pages for creating new users and changing passwords should be developed to be accessible to all mobile devices. The wording on the above-mentioned pages should be simplified to enhance understanding.

2. COMPUTER/ ICT LITERACY

    A computer literacy course over a period of time is necessary for students who lack these skills, to develop them. It is recommended that a course, similar to the AIM modules that first-year students attend, be implemented for these students. This course should include computer skills, how to use the online systems of UP (UP Portal, student centre, *clickUP* and Library) as well as information literacy skills essential for the research modules that are part of the curriculum. A summer/ winter school format that alleviates the travelling costs might be preferable.

3. *CLICKUP* MODULE DESIGN

clickUP modules will have to be developed with mobile and low internet access in mind. This include short menu and file names, small file sizes (not larger than 3 Megabyte/ file) and support documentation. Careful attention should be given to terminology and instructions in these documents to not confuse students.

OTHER INSTRUCTIONAL DESIGN SUPPORT

The use of resource CDs for modules has been reduced as the technology is aging and a new method for distribution had to be found. Most of the modules that made use of resource CDs are now distributing the content through *clickUP*. Updates were made to the existing MECI Case Study CD for the Centre for Augmentative and Alternative Communication. The 'Food for thought' multimedia product was built for the Department of Mining Engineering.

The move of technology towards apps led to a new need within UP to develop new apps and redevelop existing multimedia into apps. During 2015 the Maxillofacial Pathology Mobile App was further developed. The product has three menu structures and contains resources on more than 190 illnesses. Extensive quality assurance was also done on the product. This app will be marketed through Enterprises at UP once it is finished. The development of a new app on 'Applied meat safety hygiene Assessment of red meat abattoirs' for the Faculty of Veterinary Science was started during 2015.

Gamification was implemented in one module in the veterinary nurses' curriculum with an in-house created PowerPoint game, 'Wheel of Knowledge'. This game can be populated with questions and used in class to test students' knowledge as revision. Groups of students discuss the question on the screen, provide the answer and the marks are manually typed into the first slide. The wheel is then spun again to ask the next random question. This product led to the development of a first draft demonstration for another module.

Two e-books were started for the Faculty of Veterinary Science, one as a YouTube guide for the AfriVIP YouTube channel, and the other for the General Nursing module in the veterinary nurses' curriculum.

Projects linked to specific modules were mainly supported in *clickUP* (see Table 9). This support was provided by IDs allocated to Faculties as well as through the e-support helpdesk *via* e-mails and telephonic support. The Hatfield helpdesk provided support to 1,900 requests received *via* e-mail from staff members and students. The newly established helpdesk at Health Sciences supported 380 staff members and 513 students with the use of *clickUP*. Based on findings in the PhD of one of the IDs, the training team introduced a questionnaire after each training session in which participants indicate how soon they need follow-up support. Reaction on the contact from IDs after the sessions was very positive about this high level of client support.

Table 9: Modules on *clickUP* 2011-2015

	2010	2011	2012	2013	2014	2015
UG modules	1,737	1,767	1,857	1,936	2,488	2 570
%UG modules	63.33	68.03	75.16	75	81.95	83.77
PG modules	980	992	980	929	945	946
Number of departments	120	120	126	118	118	115
Students accessing e-learning	38,591	38,201	38,984	39,671	35,881	40,737

Projects beyond the normal *clickUP* support scope included:

1. Siyaphumelela project – increase of blended learning: IDs conducted qualitative analysis of the HIMS modules included in the project. Many of the modules already made extensive use of a blended approach. Additional work was done within the Faculties of Economic and Management Sciences and Theology to enhance the blend.

2. A framework for the Professional Online Development (POD) course on Bovine Tuberculosis in the Faculty of Veterinary Science was built in *clickUP*. The project could not be completed owing to the work pressure of the lecturer.
3. The instructional design and development of a *clickUP* module on 'Doing Difference Differently'. The module was opened to all students in July and students could voluntarily self-enroll and participate in it.
4. A prototype was built for the Department of Maxillofacial Surgery, School of Dentistry to repackage their multimedia into *clickUP*.
5. The UPO 101 course was adapted and implemented as a separate course for each Faculty.
6. A prototype for the 'e-Dent curriculum management system' was built in *clickUP* for the School of Dentistry.
7. A *clickUP* environment was created for the Faculty of Humanities blended learning task team, which served as an area for discussions on blended learning.
8. A module was developed for the 'Flexible Futures' November conference to allow academic staff to engage in pre- and post-conference online activities

E-ASSESSMENT

QuestionMark Perception, known as *QuestUP* at the University, is used for summative objective assessment. The CBT team that supports the use of the system experienced a very difficult year in 2015, owing to technical problems after the upgrade as well as the resignation of a staff member in June.

Problems in February and June with the Hatfield server, a multi-node installation, led to the rescheduling of tests in the AIM module. A work-around was found for some of the other tests, by re-routing them to the Groenkloof server. These problems were due to internal UP problems, not to the new version. They were fixed and the server was operational for most of the year.

Despite the problems experienced, the team managed to provide excellent service which again led to an increase in the number of tests administered through the *QuestUP* system (Table 10). The growth from 2014 to 2015 per campus is as follows: Hatfield 9%; Onderstepoort 9%; Groenkloof 14%; Prinshof 10 %. The quality of the questions was also addressed by departments who reviewed their question databanks. Major reviews were conducted by the Department of Family Medicine and Block 17 in the MBCHB curriculum.

Table 10: Computer-based Testing (CBT) 2011-2015

	TESTING CENTRE	2011	2012	2013	2014	2015
Number of tests	Hatfield campus CBT	116	111	108	82	87
	Hatfield campus IT labs	15	19	18	21	26
	Hatfield campus IT labs (SAM / *CompAssess*)	11	13	20	17	19
	Prinshof campus	503	472	671	645	717
	Prinshof campus (ppt)	56	83	95	97	54
	Onderstepoort campus	86	127	147	125	138
	Onderstepoort campus (ppt)	4	6	9	6	2
	Groenkloof campus	61	68	62	55	64
	Groenkloof campus (SAM / *CompAssess*)	5	0	11	10	12
	Mamelodi	-	6	9	6	6
	Mamelodi *(Comp Assess)*	-	-	5	6	7
	clickUP tests**	3 648	1 071	2 322	2208	2957
	Total	**4 810**	**1 976**	**3 477**	**3 278**	**4086**
Number of tests taken by students	Hatfield campus CBT	25 328	22 496	24 507	13 308	13592
	Hatfield campus IT Labs	28 758	22 854	24 054	23 240	21827
	Hatfield campus IT labs (SAM/ *CompAssess*)	16 532	30 252	25 420	30 647	30025
	Prinshof campus	31 387	29 232	40 185	45 030	44178
	Prinshof campus (ppt)	2 252	5 291	3 162	3 878	1631

	Onderstepoort campus	4 081	5 895	7 141	11 216	12027
	Onderstepoort campus (ppt)	418	693	697	501	56
	Groenkloof campus	14 988	13 405	14 505	13 144	21018
	Groenkloof campus (SAM/ *CompAssess*)	3 216	0	3 334	3 729	5445
	Mamelodi	-	2 531	4 488	2 659	2860
	Mamelodi (*SAM / Comp Assess*)			2 509	2 637	3523
	clickUP tests **	292 886	38 44	385 890	451 544	562308
	Total	**420 071**	**170 993**	**535 892**	**601 533**	**718490**

** Includes self-assessment.

clickUP contributes to e-assessment by allowing for the grading of various online activities, e.g. discussions, blogs, wikis, assignments, and tests. The use of *clickUP* supports effective management and (online) marking of assignments, detection of similarity of assignments with other documents (Turnitin Similarity report), peer assessment (Turnitin PeerMark), as well as objective assessment through the tests. The use of *clickUP* tests for formative assessment increased by 25% from 2014 to 2015, possibly owing to more lecturers using quizzes within a 'flipped classroom' approach.

CONTINUING ACADEMIC DEVELOPMENT RELATED TO TEACHING, ASSESSMENT AND USE OF TECHNOLOGY

PARTICIPATION IN NATIONAL COMMUNITY OF PRACTICE – UP2U

Thirteen members of the E-Education group attended the UP2U meeting at the University of Johannesburg on 21 May. A presentation entitled *The use of data as a starting point to improve the quality of existing blended modules* was presented by the Deputy Director of EI. Nine IDs attended the second UP2U meeting at the Tshwane University of Technology on 18 September. Two IDs presented the results from the BEd Hons focus group initiative during this meeting. The meetings provided not only a valuable benchmarking opportunity but also enabled colleagues to network with IDs from other national Institutions.

STAFF TRAINING IN WEB-SUPPORTED LEARNING

The E-Education group employs various strategies to develop lecturers' ability to use the e-learning environment, *inter alia* priority courses, Faculty or departmental training sessions based on requests, as well as individual just-in-time training.

PRIORITY COURSES

The 'eLearning for Academics' course was totally redesigned to incorporate most of the needs within the UP environment: undergraduate and postgraduate students, small and large classes as well as methodologies that might assist online work in the different Faculties. The course was scheduled and presented in June and November. Based on request from the Faculty of Education, a third course was presented in August. A record number of 58 participants attended the course.

The new *clickUP* METRICAL (**Me**asure and **Tr**ack for **I**mpa**c**t through **A**na**l**ytics) was adapted to a case-study methodology to illustrate how the data available in *clickUP* may answer questions lecturers may have on student engagement within their own modules. It could only be presented in November for the first time, as technical problems with Analytics for Learn prevented us from presenting the course earlier. The 'Mobile Learning and Web Technologies' course was updated by including information on audience response systems that might apply to UP, such as Socrative and Kahoot.

Financial constraints of the Division Talent Management, Department for Human Resources, led to annual requests to reduce the number of priority courses scheduled for the next year. The scheduled sessions were

therefore reduced since 2012 as follows: from 2012 to 2013 there was a reduction of 57.7%; 2013 to 2014 a reduction of 9.6% and from 2014 to 2015 a reduction of 10.6% (Table 11). Table 11 also shows that the number of sessions cancelled during each year owing to insufficient registration of participants has also increased annually. These two factors contribute to the lower attendance numbers reported in Figure 5.

Table 11: No. of *e-Learning* training sessions scheduled, presented and cancelled

	Scheduled	Presented	Cancelled (Insufficient no. of participants)
2012	222	157	65 (29%)
2013	94	68	26 (27%)
2014	85	56	29 (34%)
2015	76	44	30 (39%)

The scheduled priority courses were presented throughout the year on three campuses. Data on attendance of the various courses are available in Table 12. Based on the attendance data, the decision was made to present future courses on the Hatfield and Prinshof campuses only.

Table 12: E-Education training 2015, No. of participants per training workshop:

Workshop	Hatfield	Prinshof	OP	Total
clickUP Overview	54	22	4	80
clickUP Content	48	13	0	65
clickUP Assessment	45	10	4	59
clickUP Collaboration	31	4	4	39
clickUP METRICAL (From Nov 2015)	12	0	0	12
clickUP Assist	45	3	-	48
clickUP Grade Centre	25	-	-	25
Turnitin	37	-	-	37
QuestUP	22	9	0	27
Mobile Learning	34	-	-	34
eLearning for Academics	58	-	-	58

"-" Indicates a course is not presented on a particular campus

Figure 2 provides an overview of the attendance of the E-Education priority courses the past five years. The high numbers in 2011 and 2012 were due to the implementation of the new version of *clickUP*. The numbers gradually declined as more staff was trained in the system. The sudden increase in the attendees for the 'eLearning for Academics' in 2015 is attributed to the strategic drive for more hybrid programmes and the implementation of the flipped classroom in the new BEd Hons programme, which resulted in an extra workshop being presented to the Faculty of Education.
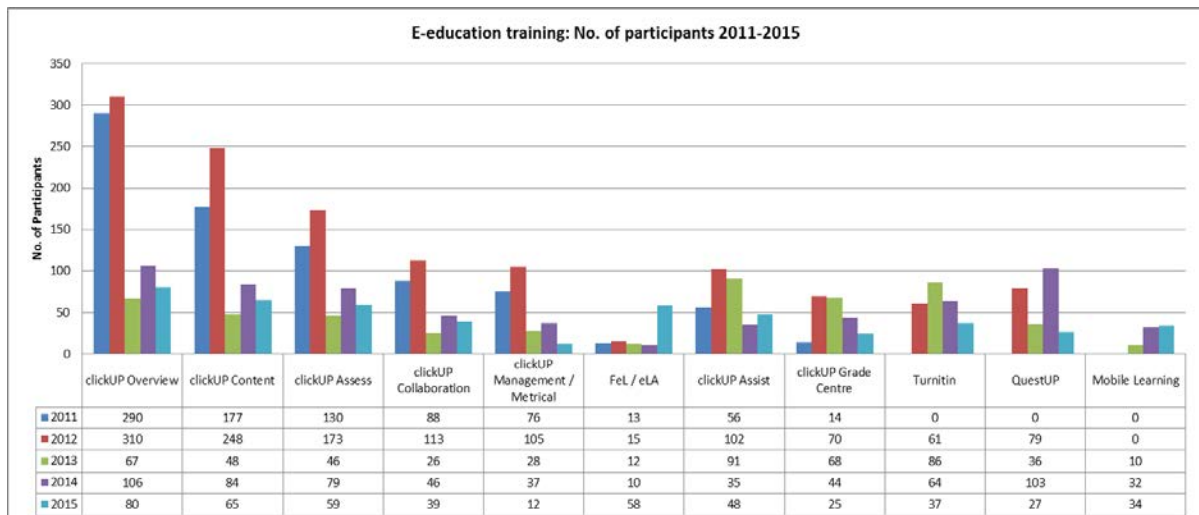
Figure 2: E-Education training 2011-2015

	clickUP Overview	clickUP Content	clickUP Assess	clickUP Collaboration	clickUP Management / Metrical	FeL / eLA	clickUP Assist	clickUP Grade Centre	Turnitin	QuestUP	Mobile Learning
2011	290	177	130	88	76	13	56	14	0	0	0
2012	310	248	173	113	105	15	102	70	61	79	0
2013	67	48	46	26	28	12	91	68	86	36	10
2014	106	84	79	46	37	10	35	44	64	103	32
2015	80	65	59	39	12	58	48	25	37	27	34

Figure 6 provides an overview of the reaction of attendees to selected items of the PeopleSoft feedback received on the priority courses. These items were selected as they represent indicators that point toward the quality of the interventions. Feedback rates to the different courses were as follows: Overview (45%), Content (40%), Assessment (56%), Collaboration (59%), Metrical (8%), eLearning for Academics (33%), Assist (56%), Grade Centre (36%), *Turnitin* (57%), *QuestUP* (100%) and Mobile Learning (68%). The 8% response rate on the Metrical course represents one individual. Results are reported in percentages and the need for action to better the quality is set at 40%. The results indicate:

1. The majority of the participants felt the coverage of the subject material was excellent but there is room for improvement in this regard in the *Turnitin* and *QuestUP* courses.
2. The course material provided is seen as excellent in all courses.
3. The effectiveness of presenters overall is seen as excellent but there is room for improvement in the *Turnitin* and *QuestUP* courses.
4. The application of the courses to the work of the attendees are overall seen as significant but attention should be paid to the *clickUP* Assessment and Collaboration and *QuestUP* course to move beyond adequate. (The higher choice of 'Adequate' for this aspect of the *QuestUP* course might be due to the fact that the course was primarily created for lecturers but was also attended by administrative staff who support academics departments with typing the questions.)
5. Almost all participants would recommend or highly recommend the courses. The very few attendees who would not recommend the courses to peers were tutors and administrative staff who attended courses that were developed for lecturers.
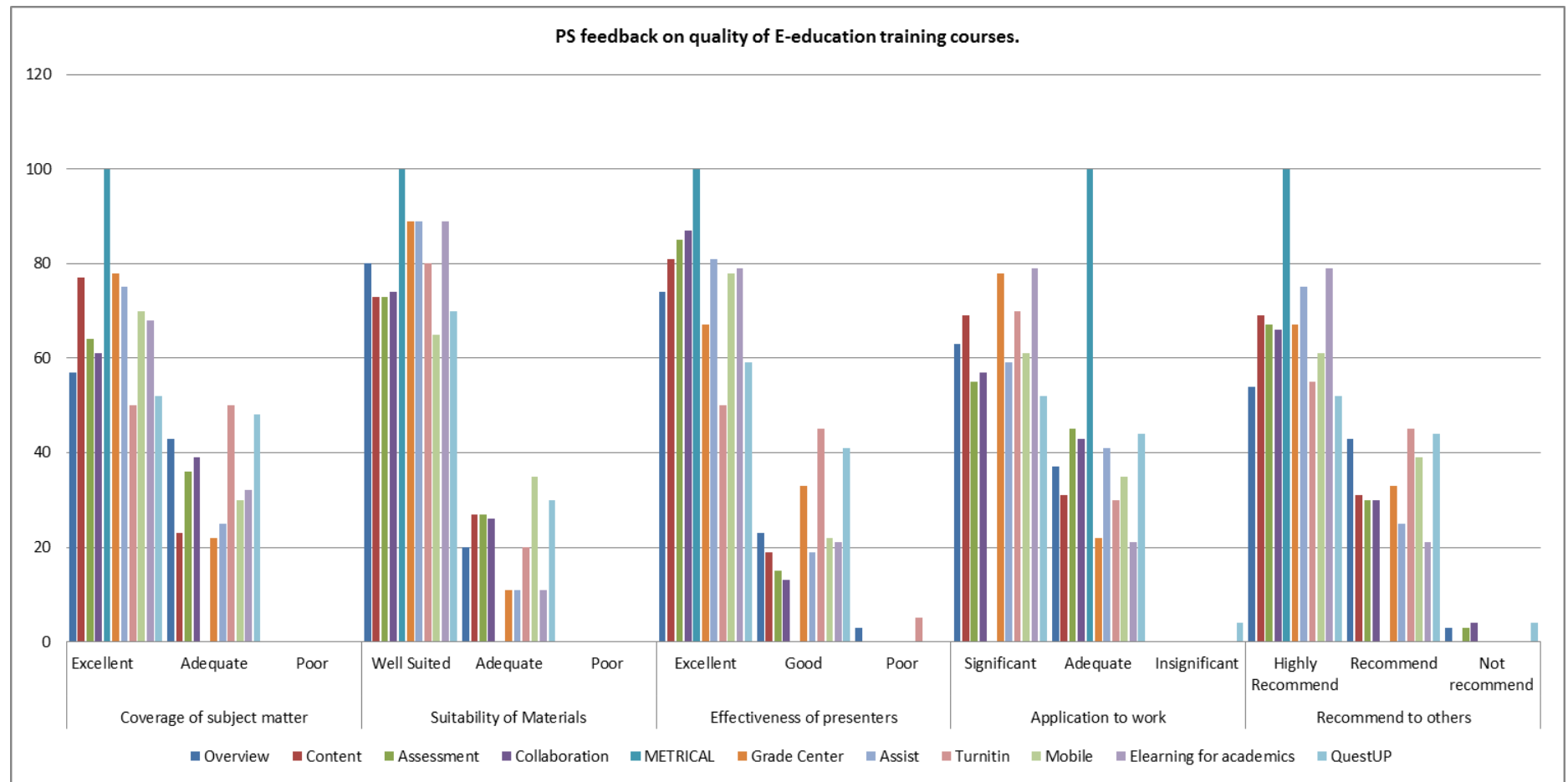
PS feedback on quality of E-education training courses.

Figure 3: Feedback on quality of E-Education priority courses 2015

OTHER TRAINING

The E-education Unit also provided training on Faculty level:

1. EBIT: *clickUP* training and individual session during the INNOVIL course (40 participants).
2. Faculty of Humanities: Blended learning workshops.
3. Faculty of Veterinary Science: In support of the Open Educational Resources (OER) project, the ID in the Faculty drafted an OER capacity-building plan, presented a workshop on narrating and recording a PowerPoint presentation, and trained five administrative staff members to do the recording of lectures/guest speakers' presentations. Two clicker training sessions were also presented in the Faculty.
4. Faculty of Education: In support of the new BEd Hons curriculum, an experiential flipped classroom experience was developed and attended by 28 staff members; an extra eLA course was presented to 15 staff members; and two four-hour sessions of *clickUP* training sessions were presented to 19 BEd Hons course coordinators and module writers.

Departmental training sessions on different aspects of e-education were provided to Departments of Mining Engineering (9); Public Health (9); Nursing (10) Nursing facilitators – staff in hospitals; Surgery (15); Family Medicine (14); Sport and Leisure Studies; Social Work and Criminology; as well as Modern European Languages

Just-in-time training was also provided to individual lecturers who cannot attend training sessions in QMLive, *clickUP* and *Turnitin*.

The training team created and presented short lunch hour sessions to update *clickUP* users with new and upgraded functionalities within the system. These sessions were presented on the Hatfield and Prinshof campuses as a pilot. Only seven lecturers attended, resulting in the decision to discontinue the initiative.

STUDENT TRAINING AND SUPPORT IN WEB-SUPPORTED LEARNING

Student orientation sessions on the use of the *clickUP* system were provided to 1,240 undergraduate students in the Faculties of Veterinary and Health Sciences. Ten sessions across various faculties were also provided to 350 post-graduate students.

There was in increase in the use of e-tutoring in Faculties during 2015. IDs provided training to academic staff and tutors in the Departments of English, Ancient Culture Studies and Statistics on how to use the *clickUP* discussion tool to support students. Tutors who were appointed to facilitate the new *clickUP* module on 'Doing Difference Differently' were also trained.

Other support to students included *clickUP* support with the use of the UPO modules, as well as support to 513 Health Sciences students through the new *clickUP* help desk. The Department of Student Affairs also used *clickUP* to communicate with students and manage different initiatives.

Faculty student advisers were also supported in the use of *clickUP* through training sessions and individual support from the IDs of the Faculties.

THE EDUCAUSE ECAR STUDENTS AND INFORMATION TECHNOLOGY SURVEY

The University of Pretoria participated in the EDUCAUSE Center for Analysis and Research (ECAR) Study of Lecturers and Information Technology, 2015 Survey. The main purpose of the research was to gather lecturers' experience about technology of specific interest to teaching and research. The Educause ECAR Students and Information Technology survey was also again administered to UP students. A summary of the results of both surveys in the form of info graphs as well as a full reports were published in the ECAR online library.

UP was the only South African institution to participate in the survey while there were respondents from 139 institutions in 10 countries including the United States. Permanently appointed UP academic staff members were invited to participate in the survey but only 131 completed it. The UP response rate was 13.4%. The

overall response rate for all participating institutions was 12% of the population surveyed. The quantitative findings in this report were developed using the 12,070 survey responses from academics at U.S. institutions. The large number of international survey respondents yielded a 1% margin of error and allowed ECAR and UP to make generalized statements about the findings. The survey respondents were from different ranks, including professors, associate professors, senior lecturers and lecturers. The survey was completed by staff members from various Faculties and departments.

The official report and UP specific data state that International and UP lecturers expressed considerable satisfaction with campus technologies, especially with learning management systems (LMSs), *clickUP* in Pretoria's case. UP lecturers expressed a significantly higher percentage of overall dissatisfaction with classroom technologies than their international peers.

At the same time, UP lecturers expressed much lower reservations about mining student data than their international peers, especially academic data about students' performance in individual courses compared to the performance of others that could promote student success. UP lecturers rated the ITS department services and privacy and security policies relatively similar to international lecturers although UP lecturers indicated that the institutional support for Faculty technology needs is insufficient and that UP does not have an agile approach to IT infrastructure that can respond to their needs. The results of the 2015 study are consistent with the results of the first study in 2014.

In 2015 the Students and Technology survey was sent to approximately 970,000 students at 161 institutions, yielding 50,274 responses across 11 countries and 43 U.S. states. The UP reported sample size was 2,031. The response count was 1,647 which give and estimated margin of error of 2.4%.

The full reports are available online on the [EDUCAUSE](#) web but the official report summarizes the findings as follows:

- Technology is embedded into students' lives, and students generally have positive inclinations toward technology.

- Students own more Internet-capable devices than ever.

- Students and faculty have similarly high levels of interest in using mobile devices to enhance learning but the actual use of these devices in academics remains low, despite their increased prevalence.

- Although students use technology extensively, there still remain questions if technologies are achieving their full potential for academic use.

- Most students support institutional use of their data to advise them on academic progress in courses and programmes.
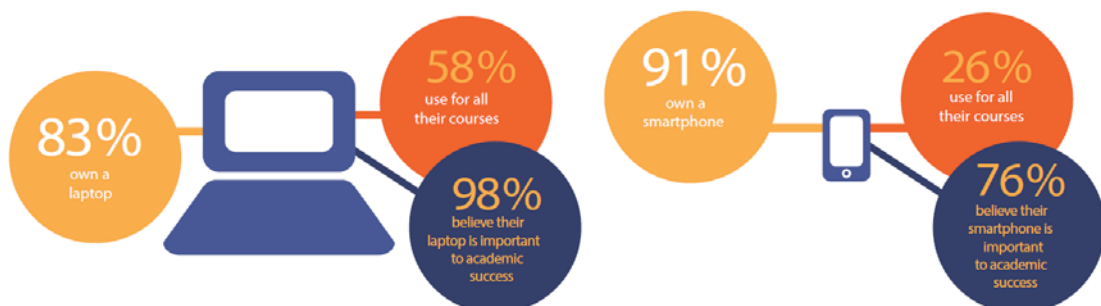

Figure 4: UP student access to technology and their perceptions of its importance to academic success

SUPPORT

All instructional designers, and in particular the e-support office, provide administrative *clickUP* and *QuestUP* support to lecturers and administrative staff in academic departments. The *clickUP* help site is another avenue used to support users of the *clickUP* system.

During the first semester, support was also provided to assist colleagues in Academic Administration to solve student registration problems. The e-support office provided support in response to more than 4 258 e-mails. Data on the amount of telephonic support provided is not available but the call volume is high.
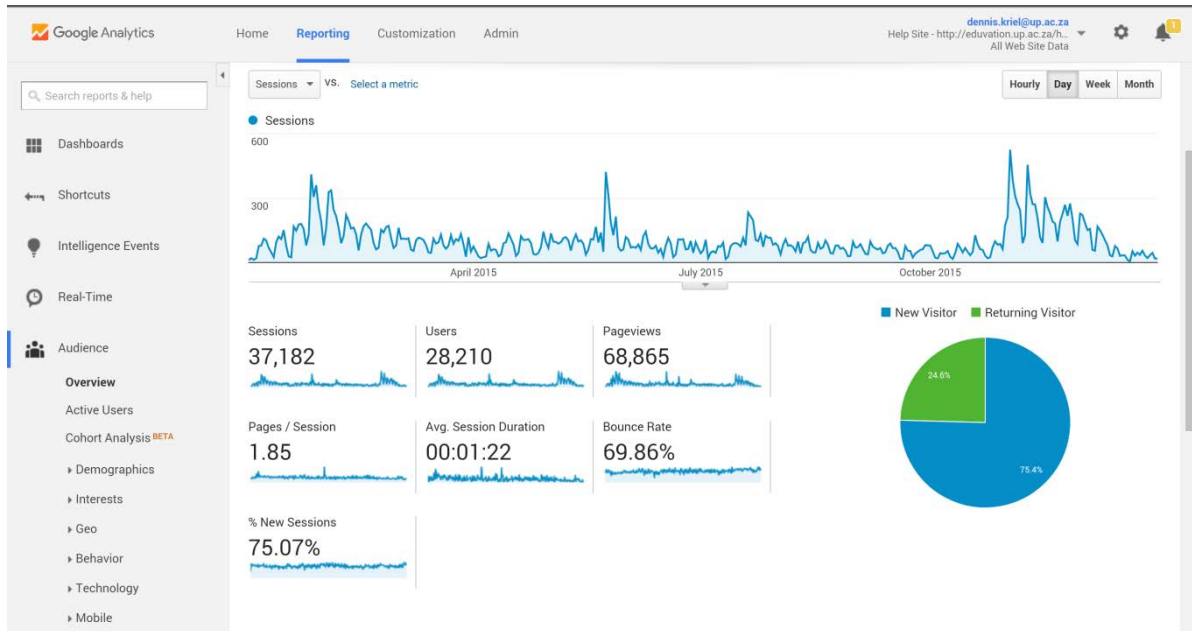
Page Title	Pageviews	% Pageviews	
1. Home	28,960		42.05%
2. Student Help	11,650		16.92%
3. Search	4,323		6.28%
4. Home page	3,168		4.60%
5. Students: Email Addresses	1,675		2.43%
6. Contact Us	1,632		2.37%
7. Turnitin	824		1.20%
8. clickUP Help	817		1.19%
9. Training	808		1.17%
10. clickUP Mobile Support	798		1.16%

view full report

Figure 5: Use of *clickUP* Helpsite in 2015

NEW INITIATIVES

INVESTIGATING NEW TECHNOLOGIES

Investigation into new technologies often starts with a demonstration of a particular system. During 2015, members of the E-Education team attended the following:

1. Introduction to the DRS e-Marker system: answer scripts are scanned in page by page, distributed to markers and the marks managed within e-Marker®, the integral electronic marking system. The logistical requirements, requirement of all lecturers to mark every script online, and the cost of the system did not seem to provide a sustainable solution to UP.
2. Online demonstration of RemoteProctor Now – an online proctoring system. This system requires that a student who is being invigilated has a connection speed of least 125 Mb/sec. This is not a viable option in the South African environment. The costs also make it a very expensive option: 25 USD per Exam/License for one hour exam, additional 5 USD for storage of exams for 5 years; 30 USD per Exam/License for 2 hour exam, additional 5 USD for storage of exams for 5 years (Prices quoted May 2015).
3. Meeting with S Ivins (Sales Executive – eLearning) and E van Vliet (Sales Executive v-Learning) from LRMG, accredited provider of SkillSoft content in sub-Saharan Africa. Their content is mostly aimed at skills that the priority training at UP addresses. Documentation and login details were sent the division Talent Management of the Department of Human Resources for evaluation.
4. A small team evaluated available mobile applications that can be used as personal response systems during lectures. A rubric was developed for evaluation purposes and systems were ranked according to the criteria.

NUMBAS

Special needs within the School of Engineering made it impossible for them to use the *clickUP* system for formative tutorial tests. An online product, 'Numbas', was identified, tested internally and then provided to lecturers of the Department of Civil Engineering to pilot to determine its usefulness. This system was developed by the School of Mathematics and Statistics at Newcastle University. A member of the E-Education group developed a handout and instructions for UP students to guide them in the use of the system. This initiative may alleviate the marking load on tutors and lecturers considerably and may lead to an international collaboration between UP and the University of Newcastle, UK.

GOALS TOOL IN *CLICKUP*

Two IDs from the department were part of the Bb Goals Tool product evaluation team, one of whom decided to do her PhD on the implementation of the tool. This resulted in the following:

1. consultation with senior education consultants of Blackboard, with regards to the Goals implementation and possible frameworks at universities in USA;
2. introduction of the tool as possible pilots to chairs of the curriculum committees of the School of Dentistry and the Faculty of Veterinary Science;
3. a workshop conducted by a Senior Product Manager of Blackboard in December with members of the E-Education team.

MAKERSPACE IN MERENSKY LIBRARY

The MakerSpace in the Library was up and running in 2015 with a steady increase in students using the space for projects related to their fields of study and beyond. The ID involved in the conceptualization and implementation of MakerSpace provided ongoing support to the Library through the development of more courses to be presented at the MakerSpace including 3D design tools like Design Spark. He also supported Chemistry lecturers to use the MakerSpace 3D printers to produce physical models on enzymes as teaching tools for 3rd year students who need to design and test new medicines. He presented talks on the use of a

Makerspace in educational institutions at the AESOP International Conference, Maragon Private School, to international information specialist students.

WIFI IN LECTURE HALLS PROJECT

The Wireless for lecture halls project had the aim of stress testing the WiFi technology installed in a large lecture hall. The data collected enabled the University to assess the model of rollout of WiFi in the lecture halls across campus.

It was conducted on the 10th of March 2015 at Groenkloof Campus in the Aldoel 1 lecture hall. Dennis Kriel presented a session on *Gamification in Education* during which more than 300 students accessed online videos and quizzes simultaneously. The installed system was able to handle almost all interactions and devices without fail.

PILOTING NEW TECHNOLOGIES

BLACKBOARD ANALYTICS FOR LEARN™

The *clickUP* (Blackboard Learn™) system that UP uses to enhance teaching and learning in a blended mode, gathers extensive data about user activity, course design and student grades within the online classroom environment. The reports in Blackboard Analytics for Learn (AL) can provide information on the use of *clickUP* at course, Faculty and institutional level as well as the impact of course design on student activity and engagement. The reports available provide an overview of the possible correlation between the design/ use of *clickUP* and student engagement. The data indicate the role of *clickUP* in supporting teaching and learning.

E-Education continued in 2015 to determine the impact and value of such a system for the University. Data from the AL system were used to provide feedback to Faculties about the role of the LMS in their teaching and learning strategies. A report was also submitted to relevant stakeholders in the investigation of the use of *clickUP* at Master's Degree level. AL reports were also provided for ten at-risk undergraduate modules for reviews as part of the Siyaphumelela project. The system also provided valuable data for the Six Weeks' project in the Faculty of Economic and Management Sciences for a second year running. A Blackboard consultant provided training in the use of AL in July 2015. We unfortunately lost all our data due to a technical problem in November. We were able to restore a backup of August but had to rebuild all the reports.

The quality of use of *clickUP* slightly increased at undergraduate level in some of the Faculties while it decreased in other Faculties, as indicated by the data from Analytics for Learn in the Figures 6 and 7 below

	Term	Prior Term	% Chg Prior Term	
% Courses Using Assessments	83.3%	96.7%	⬇	-13.9%
% Courses Using Content	77.8%	96.8%	⬇	-19.7%
% Courses Using Course Items	83.4%	96.9%	⬇	-13.9%
% Courses Using Grade Center	33.2%	25.5%	⬆	30.2%
% Courses Using Tools	60.5%	47.7%	⬆	26.7%
% Courses w/ Activity	79.4%	68.5%	⬆	15.9%
% Faculty w/ Activity	97.2%	97.1%	➡	.1%
Avg Course Accesses	38.0	31.7	⬆	19.9%
Avg Assessments	24.0	20.5	⬆	17.4%
Avg Content	44.1	36.5	⬆	20.7%
Avg Submissions	7.1	5.9	⬆	19.3%

Figure 6: AL dashboard: Key Performance Indicators for undergraduate modules in 2015 (Term) in comparison with 2014 (Prior Term)

Figure 9 indicates the Key Performance Indicators that can be used to provide a high level overview of the use of *clickUP*. Each indicator is measured against the previous year (prior term). The KPI data indicate an improvement in the level of course design on *clickUP* use as indicated by the percentage of courses with activity, average assessments and courses that are using tools. Student engagement as measured through the average course accesses and average submissions also indicates a possible correlation between improved course design and student engagement. The percentage difference between the two terms with regards to content and course items indicates a decline but it may be a positive indicator as lecturers may have reduce the use of *clickUP* for pure content sharing purposes and it may also be linked to an improved level of use and course design.
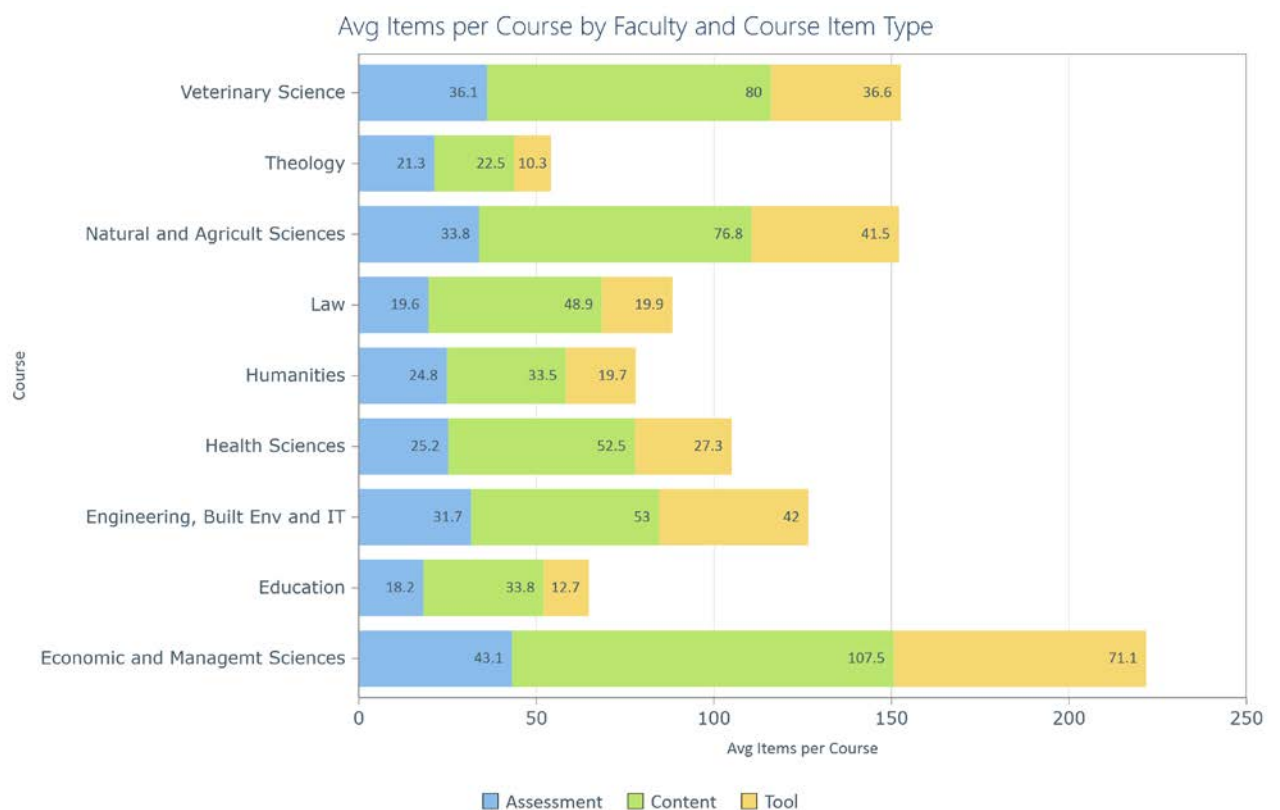

Figure 7: AL dashboard: Average content items by type in all undergraduate *clickUP* courses in all Faculties for 2015

Figure 7 illustrates the use of *clickUP* based on the average item types per course (module) for undergraduate modules. The three item types include the use of the assessment possibilities in *clickUP* such as assignments or tests, the provision of content to students and the use of tools such as the discussion tool. The dashboard answers the question of whether *clickUP* is used to present content or to facilitate student engagement. It must be viewed within the context of the blended learning model within the University and Faculty as well as within the context of the size of each Faculty as linked to student enrolment. The Assessment indicator includes columns that were created automatically when a *clickUP* course was created but that may not be used.

It is a clear that the predominant use of *clickUP* is for content sharing purposes. This needs to be viewed within the context that *clickUP* is predominantly being used to supplement face-to-face lectures in a blended approach.

SOUTH AFRICAN HIGHER EDUCATION LEARNING ANALYTICS (SAHELA) EVENT

The organizers of SAHELA from the University of Pretoria, in collaboration with the University of the Free State, presented a full day, hands-on training opportunity in learner analytics as a pre-conference workshop at the SA AIR conference in Cape Town. The workshop consisted of four modules using an action-inquiry framework. A keynote was presented by the Predictive Analytics Reporting (PAR) Framework Framework's CEO Beth Davis Beth Davis, whose attendance was supported by the Kresge Foundation.

The workshop was attended by more than 75 participants from 20 National Higher Education Institutions (HEIs), one African HEI, one International HEI and three education governing bodies or departments. The two lecturers from EMS who were responsible for the module which data we used, also attended the SAHELA workshop. Beth Davis from the PAR framework visited the University before the SAHELA workshop and had meetings with the Vice Principal: Academic as well as staff from EI.

UPGRADING/ CHANGING EXISTING TECHNOLOGIES

CBT SYSTEM

Version 5.7 of QuestionMark Perception was installed in December 2014 to resolve previous problems. Subsequently, the system could not generate the student feedback that is automatically created and provided after a test. This defect forced the team to add feedback manually to each question that was used in an assessment, effectively tripling the workload. In order to alleviate the workload we appointed a contractor to assist with loading the manual feedback. This problem was resolved in July 2015 when Service Pack 2 was installed. This installation also resolved other problems, e.g. with duplicate fields in the reports.

UP MOBILE APPLICATION

EI used the Blackboard mobile framework, called Mosaic, to develop a new version of the UP mobile app in 2015. The Mosaic framework allowed us to update our own data and add new applications to the UP mobile application. It also enabled UP to release new iPad versions of the UP mobile application in 2015. Staff from EI is continuously working on updates of the UP mobile application.

Table 13: UP mobile Application Run Data: January 2015 – December 2015

Platform	Average Runtime per Session	Total App Runs	Average App Runs per Day	Total Active Users	Average Active Users per Day	New Users	Average New Users per Day
iPhone	00:00:23	44,113	121	8,748	103	4,487	12
Android	00:00:23	98,243	269	10,543	167	3,896	11
iPad	00:00:27	11,534	32	1,589	28	671	2

CLICKUP MOBILE

There was an increase in the use of *clickUP* through mobile devices. A notable trend in 2015 was the decline in Blackberry users and an increase in the use of IOS devices. More than 103,500 unique students/ lecturers accessed *clickUP* from mobile devices since July 2012. The increase of available Wi-Fi access points on campus during 2015 contributed to an average use of 10,000 – 35,000 logins per day.
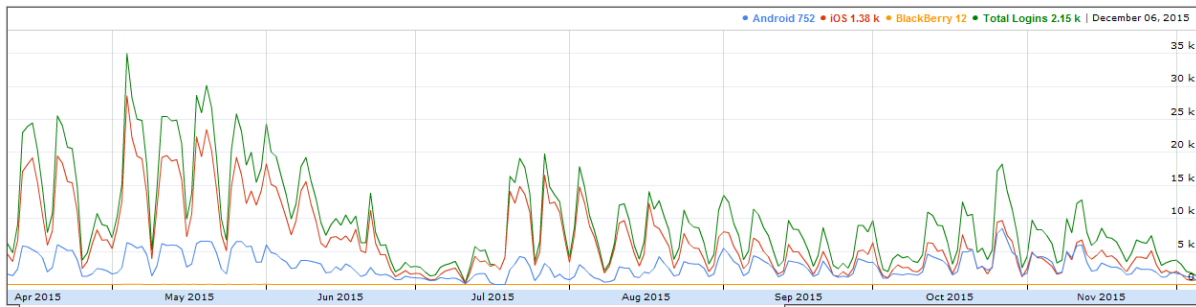
Figure 8 Student use of the *clickUP* mobile learn application: April – December 2015

CLICKUP

Blackboard provides regular service packs to upgrade functionalities in the system. Two service packs were installed in July and in December. The new service packs addressed technical issues and provided a number of new features and enhancements. Figure 9 provides an overview of *clickUP* use through data provided in Google Analytics.
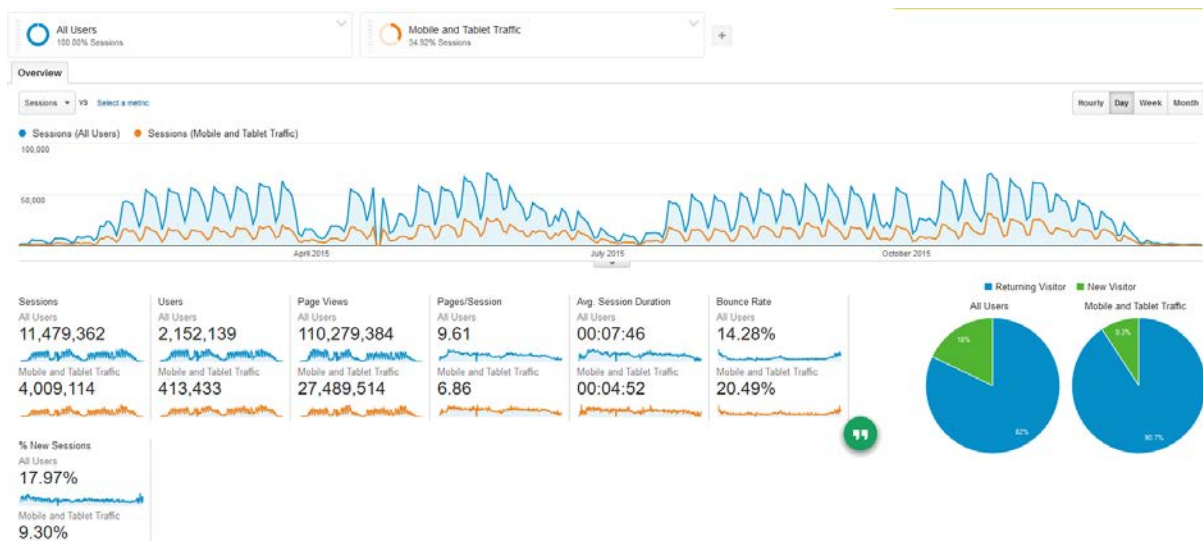

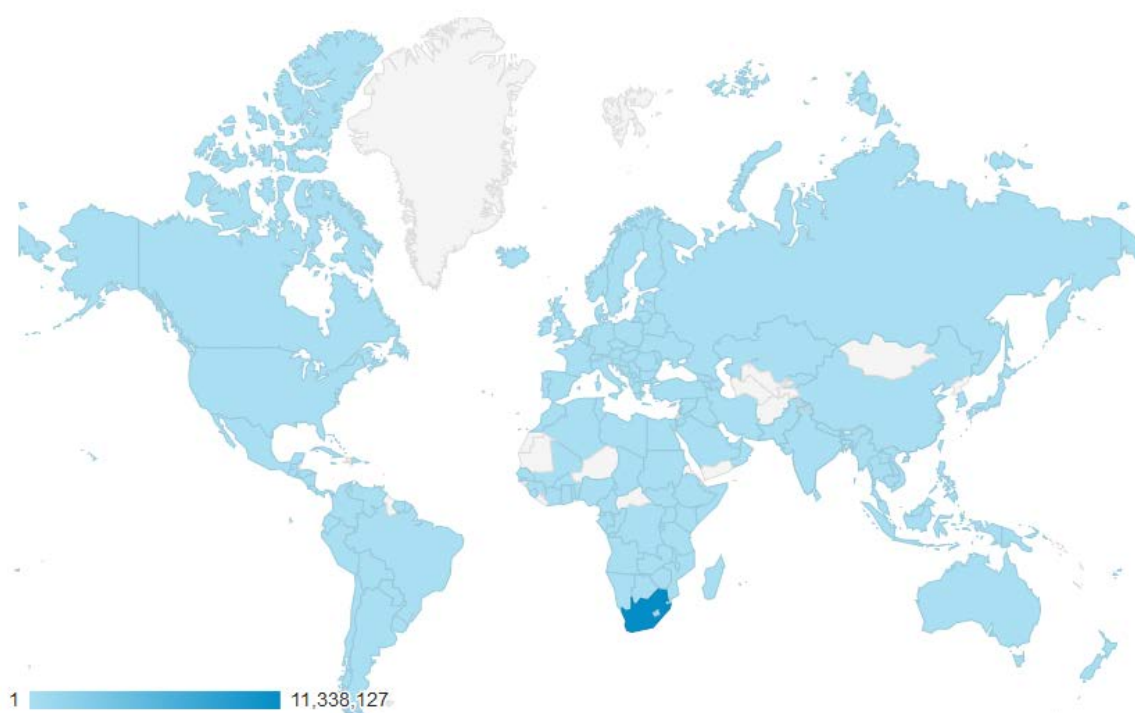**Figure 9: Google Analytics: *clickUP* use January – December 2015**

Figure 10: Google Analytics: *clickUP* location access from January – December 2015

BLACKBOARD MANAGED HOSTING

The University of Pretoria implemented a learning management system (LMS) in 1998 to improve opportunities for students to engage with their subjects, their peers and their lecturers outside the classroom. The LMS is branded as *clickUP*. The uptake of the system has grown significantly over the years, more so since the implementation of Blackboard 9.1 in 2012. The Blackboard-based *clickUP* has become a mission-critical system to support teaching and learning. Since the implementation, the University has supported teaching and learning through a self-hosted environment: that is, the LMS is hosted on servers on campus. Students access *clickUP* through the UP Portal. Planned and unplanned down-time have a negative impact on students' and lecturers' willingness to rely on the LMS for crucial engagement as well as use functions such as submitting assignments and recording assessment marks. The growth in the use of *clickUP*, as well as new institutional hybrid strategy (including fully online programmes), necessitates a stable and scalable system, with adequate staffing, that is accessible 24/7/365.

In 2015 the Department for Education Innovation (EI), in collaboration with Information Technology Services (ITS), investigated Blackboard Managed Hosting. Blackboard hosts the system at an off-campus site (currently in Europe). Blackboard Managed Hosting has multiple levels of redundancy that will increase *clickUP* availability. A report was submitted to the IT Prioritization Committee and a decision was taken to appoint an ITS project manager to investigate managed hosting and complete a study as well as to develop an Executive Proposal to take the request forward. The investigation concluded that the estimated annual cost of managed hosting is more expensive than local hosting but that the additional costs could enable UP to provide more consistent availability of *clickUP* to students and lecturers.

In December the Executive approved the implementation of Blackboard Managed Hosting (BBMH) to support the implementation of the hybrid learning model and to provide a 24/7/365 service to *clickUP* users. The planned date for migration from local to managed hosting is July 2016.

BLACKBOARD COLLABORATE

The increase in the use of Blackboard Collaborate, a synchronous online conferencing tool, can be contributed to specific use cases. The following case studies provide an overview of how Collaborate was used to support teaching and learning:

- In the Faculty of Economic and Management Sciences it is used to stream and record lectures.
- Lecturers have integrated collaborate as part of a 'flipped classroom' approach where they provide content with voice recordings to their students to watch before attending lectures.
- Lecturers in the Faculty of Natural and Agricultural Sciences used Collaborate to support students before they wrote a test or for virtual tutorials, consultation and postgraduate support.
- Students in the Faculty of Engineering, the Built Environment and Information Technology used Collaborate to do project presentations.
- Keynote speakers presented during conferences through Collaborate.
- Post-graduate lectures were conducted.
- Education Innovation used Collaborate successfully to stream conferences and workshops based on requests.

E-Education participated in the technical evaluation of the new Collaborate Ultra, released in 2015. Blackboard Collaborate has been redesigned using new WebRTC browser based technology to make anytime web conferencing between students and educators simpler, easier, and more reliable. It has a simpler intuitive interface and allows virtual meetings with high quality video and audio. It makes online teaching and learning much easier through its redesigned interface. Recording and playback of session are made easy and it integrates seamless with the new Blackboard Student application. The only current limitation is that it can accommodate currently only 100 simultaneous users in a session. This will be extended to 250 and later even to more simultaneous users in 2016.

More information is available in *clickUP* under the *clickUP* Support tab in *clickUP* or on the Collaborate Ultra help site. A training course for academic staff will be developed in 2016.

THIRD PARTY CONTENT IN CLICKUP

Blackboard has extended the services they are offering through agreements with publishing companies. Various academic departments are already using the advantages of these agreements with international publishers. The following publishers have already provided support to lecturers in order for students to have access through *clickUP* to their content:

- McGraw-Hill : McGraw-Hill Connect and Create
- Pearson: Pearson's MyLab / Mastering
- WebAssign / Cengage / Mindlinks
- WileyPLUS

GRADE CENTRE INTEGRATION

EI continued in 2015 with the investigation to centralize the capture of marks for all undergraduate courses into *clickUP's* Grade Centre. The first aim of the project was to investigate the integration of the *clickUP* grade centre with PeopleSoft Campus Solutions (Student) system (ongoing since 2009, with periodic input from Blackboard). The second aim has become to support the UP CARES (continuous alert, referral and engagement system) project by accessing a progress mark of a student through Blackboard Learning Analytics to provide an indication of students at risk. Some progress has been made. The results of the technical investigation into the integration in 2015 were positive. The technical testing of the integration will continue in 2016.

CREATIVE STUDIOS AND COMMUNICATION TECHNOLOGY

Creative Studios and Communication Technology (CS&CT) is represented on three UP campuses. These facilities are managed by Marizanne Booyens (Prinshof studio), Estelle Mayhew (Onderstepoort studio) and Hettie Mans (Hatfield studio), all of whom report to Almero du Pisani. The video conferencing, Skype and other communication technologies are managed by Hennie van der Merwe (Hatfield Campus) and Anton van Dyk (Prinshof campus) and they support all UP campuses.

Creative Studios consists of three sections: graphic design, videography and limited photography. Creative Studios help lecturers create engaging audio and visual material for teaching and learning. This material assists students with different learning styles to engage more meaningfully with the curriculum content and ensures a deeper learning experience. 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.

During 2015 CS&CT focused their attention on projects related to teaching and learning and projects are therefore are linked to a module or programme code.

HIGHLIGHTS AND NEW INITIATIVES OF 2015

INTERNATIONAL COLLABORATION

Video conferencing is used as a teaching medium.

- During 2015, UP students doing the module LEK 83 attended weekly video conferences over a period of seventeen weeks. A lecturer at the University of Minnesota presented the classes.

- A team of Radiologists, Radiology elective students, instructional support services and Information Communication Systems from the University of Michigan and the University of Pretoria conducted a combined, online and interactive series of Radiology Seminars that started in October 2014. This continued during 2015. The teaching and videoconferencing seminars are hosted by Professor Leslie Quint from the University of Michigan and their team. This was a pilot project for global videoconferencing and teaching, to evaluate the impact of videoconferencing on the international student experience. The University of Michigan conducted 'practice seminars' with their medical students prior to the sessions with the University of Pretoria.

  Information technology data were analysed and adapted by Anton van Dyk and Eric Smith from University of Pretoria and Todd Austin and Philomena Meechan from the University of Michigan. Special platforms, including Bluejeans, Polycom, Webconference and Skype, were experimented with. Although there were initial firewall and network issues, eventually all of the issues were resolve.

  Subsequently, the project was deemed a great success and commenced in 2015.

  Once again, UP medical students had guest access to the University of Michigan Radiology Lectures, which for the sessions focused on Contrast Media, Paediatric Radiology, Abdominal Radiology and Emergency Radiology. The students went through the lectures and tutorials prior to the interactive sessions, in their own time. On the scheduled dates and times, and taking into account the time zone differences between Michigan and Pretoria, the joint seminars were conducted at the individual university sites. The students were assigned to teams and, for the first half (45 minutes) of each seminar, the teams worked through six to eight case scenarios on their own, answering questions that the faculty had structured. The students had access to the internet, books, and video lectures. For the second half of the seminars there was a whole class discussion of the cases, facilitated by the University of Michigan faculty member. Questions and discussions were encouraged. Students were

also advised to submit questions after the lectures and tutorials, which were addressed at the seminars.

The University of Michigan and University of Pretoria are continuing these videoconferencing teaching seminars with collaborative interaction and participation in the future.

The monthly video conference linkups with the universities of Fort Hare and Harvard in the USA also continued during 2015 to develop the 'South African Executive Leadership Program in Health (SAELPH)', a partnership of three academic partners – Harvard School of Public Health, University of Pretoria and University of Fort Hare – and other South African partners.

TRAINING AND BENCHMARKING

The three video producers continued to develop their professional skills and attended Adobe After Effects training. In February 2015 five staff members had the opportunity to attend the Design Indaba Conference in Cape Town, to engage with some of the industry's best national and international designers.

A new video conference platform called Vidyo was introduced to all universities in South Africa. All servers are maintained by TENET and this new technology makes video conferencing from mobile devices much easier. A training session for all universities in SA is planned for January 2016.

CS&CT also began to align more with the e-learning section of the department. CS&CT attended CoP meetings with the IDs on a regular basis and are now involved in the initiation stage of all new projects.

FACILITIES

The new office block south of the BMW building on the Prinshof campus was completed in December 2015 and will house Education Innovation staff from 2016. The building is unfortunately rather removed from many of the academics with whom the CS&CT works.

DESIGN AND DEVELOPMENT IMPACT

The expertise of CS&CT is used to design and develop media to support teaching and learning. The impact of the expertise is professional products designed for an educational environment. The impact of the media would have to be researched by the academic using them. In some cases the impact is wider than UP so the media might be used for teaching here but also shared with other universities or communities.

THE USE OF VIDEO TO ENHANCE TEACHING

CS&CT supported the Department of Family Medicine at the University of Pretoria, starting in 2014, to produce and extensive series of short videos for educational purposes. The aim was not to educate UP students only but also to inform Community-Health Care workers as well as Social Workers on how to approach and identify possible medical issues within their respective communities. The concept behind the project is that the first step towards patient care should happen within the communities as health care practitioners cannot afford to wait for patients to arrive at clinics before treatment can commence. Patients must be identified at earlier stages before a whole household is adversely affected.

There are multiple advantages. The videos will serve as a method of translating vital medical information to the different stakeholders. Misconceptions surrounding all aspects of health care exist within the communities and the videos will address the issues in a sensitive manner. What UP students had been taught will be reinforced. They will be able to formulate a better understanding and could share information with their patients by showcasing the videos.

The first COPC (Community Oriented Primary Care) video production was completed with great success and ultimately received good feedback from the Department's global partners. The Department of Family Medicine

continued to produce more videos in 2015 with the help of CS&CT. Topics ranged from 'Maternal and/or Child Death and Disease' to others that would discuss diabetes, HIV, TB and/or other chronic diseases.

YOUTUBE USED AS AN AID TO TEACHING MEDICAL STUDENTS

The University has a YouTube channel as have individuals and projects at the University. A project is underway to see if we cannot link the individual channels to the UP channel. This project is ongoing. As a way of saving time and simplifying the method of training medical students, the Skills Lab at the Faculty of Health Sciences approached the Video Unit of the Department for Education Innovation to re-produce a large number of procedural videos. These videos were placed on YouTube in order to make them readily available to the medical students. The videos are accessed through *clickUP*. The videos can be watched at the student's leisure. This would ensure that there will be no misunderstanding as to what is expected of them during the testing phase. By attending one training session, they sometimes miss valuable information but, by having access to the videos, they can study procedures any time of the day or night. The fact that they are also now connected to YouTube allows them to watch other relevant videos if they need more information. CS&CT also assisted lecturers in Health Sciences to adapt YouTube videos for their teaching. This open resource can thus also supplement other teaching content.

OTHER VIDEO PRODUCTIONS

Some teaching and learning video productions that were produced on the Hatfield Campus and that impacted on large numbers of students include the following:

- *Sheep anatomy* – Faculty of Natural and Agricultural Sciences

  An Anatomy series of dissections on sheep carcasses filmed and edited to be used for the benefit of current and future Agricultural and Veterinary Science students.

- *Procedures in Law* – Faculty of Law

  Examples of law cases presented by practicing advocates and lawyers

- *Genetics Lab/ Rhino sampling* –Faculty of Veterinary Science

  This production was made to train students to sample DNA material of rhinos in a scientifically and forensically sound manner.

- *Accounting presentations* – Department of Accounting

  Problematic accounting cases being explained in detail

- *Mechanical Engineering community project* – Department of Informatics

- *Primary School - Classes* – Faculty of Education

- *Museum Conservation*– UP Museums

- *3D Medical Animations* – Faculty of Health Sciences

- *Veterinary Theatre Procedures* – Faculty of Veterinary Science

  A range of theatre procedures filmed as reference material for current and future students

- *Research Commons* – Groenkloof Library

- *Daspoort Clinic Multi-Disciplinary Team* – Professor Anita Rautenbach from the Department of Family Medicine.

- *Orthodontics – Procedural Demonstrations*

- *Neurology Events* – Four Multi-Media products were developed.

- *Appropriate Technologies* – Department of Family Medicine

- *Diabetes*

VIDEO CONFERENCING, SKYPE AND OTHER SYNCHRONOUS COMMUNICATION TECHNOLOGIES

A total of 78 events took place during 2015 where video conferencing or some other sort of real time technology was used for lectures, examinations, interviews or some sort of meeting. Below is a graph illustrating the percentage of the different events that took place:
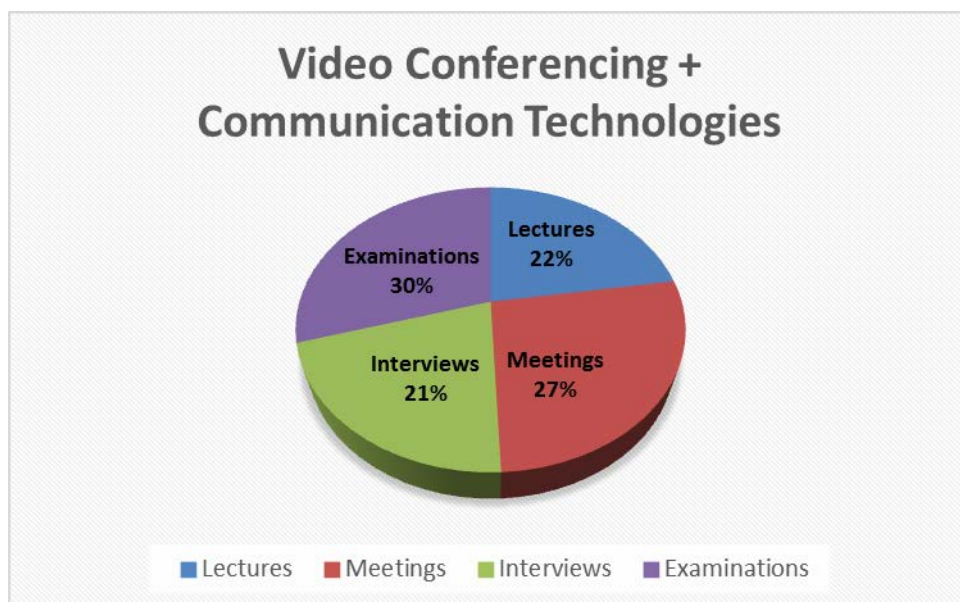

Figure 11: Use of video-conferencing and communication technologies 2015

GRAPHIC STUDIOS

Graphics on all the campuses were involved in 558 projects for teaching and learning.
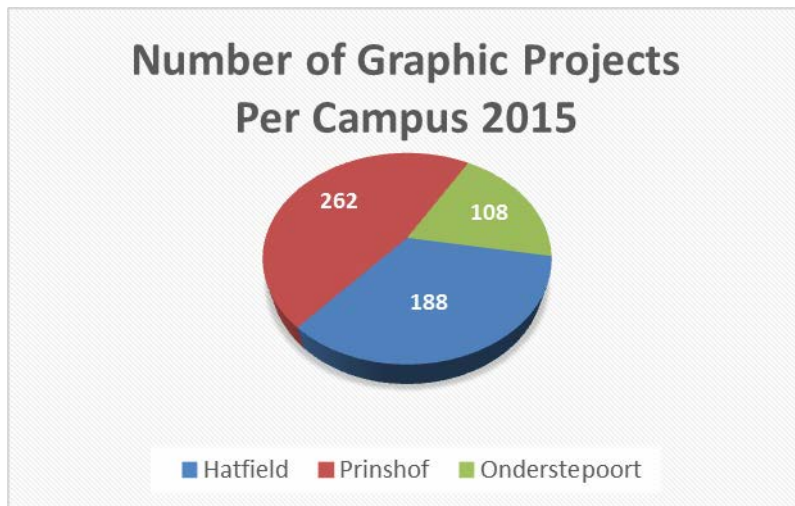
Figure 12: Teaching and learning projects for graphics: 2015

Projects are regularly distributed to other campuses if necessary when there is a high demand at one campus but some capacity at another. The design and development of posters or PowerPoints contribute to the research success of lecturers as well as to their teaching and learning. The posters are displayed at conferences or open days but subsequently used as part of the teaching – all projects are linked to a module code. The following are examples:

- Faculty Day:

  Quality of life and dietary diversity of adults living with HIV/AIDS in Abeokuta, Nigeria

  T.K. Bello, G.J. Gericke & U.E. MacIntyre, Department of Human Nutrition, University of Pretoria

- IADR Conference: 1st (Colgate Postgraduate)

  Effect of various polishing systems on roughness of two composites

  D. Kritzinger, Department of Odontology, University of Pretoria

- IADR Conference: 2nd (Materials)

  The effectiveness of a custom made light guide tip for curing composite resins

  S. Arnold, V. Bookhan, F.A. de Wet & R. Ballyram, Department of Odontology, University of Pretoria

- RuDASA Conference: 1st

  Clinical Associates: a Cost Effective Strategy?

  M. Bac, M. Louw, J.M.A. Hamm & P.C. Hamm-van Bodegraven, Department of Family Medicine, University of Pretoria

- South African International Caritas Consortium Conference: 1st

  Making workplace culture in critical care visible: The 'Big 7'

  T. Heyns, B. McCormack, I. van Eeden, S. Rossouw, I. Coetzee, C. Filmalter and J. de Kock, Department of Nursing Science, University of Pretoria

At Prinshof campus, Creative Studios introduced the Aurasma App to lecturers and students. The app uses augmented reality to turn everyday objects, images, and places into new, interactive opportunities to engage

with their fans and customers through striking graphics, animation, video, audio, and 3D content. The app was launched at the Health Sciences Faculty Day in August. The idea was to create interactive posters, using video in printed posters. This also gave the designers a chance to work together with our video producer. We received great feedback and Professor A. Stoltz, from the Department of Internal Medicine, Infectious Diseases, used the Aurasma App to showcase videos on his poster: *Natural human-to-guinea pig model to test TB transmission in South Africa – Ten years later*. The videos were filmed at the tuberculosis facility in Witbank. To see how the Aurasma App works, follow the instructions below and then point your mobile device at the picture below:

INSTRUCTIONS

DOWNLOAD THE FREE *AURASMA* APP
from the App store or Google Play

Tap this icon on your screen

*Search for '***mbooyens***'*

Follow the channel
(click on the Channel tab at the top)

Point phone/device at image to frame
(hold your device over the images with the aurasma app icon, to view the videos)
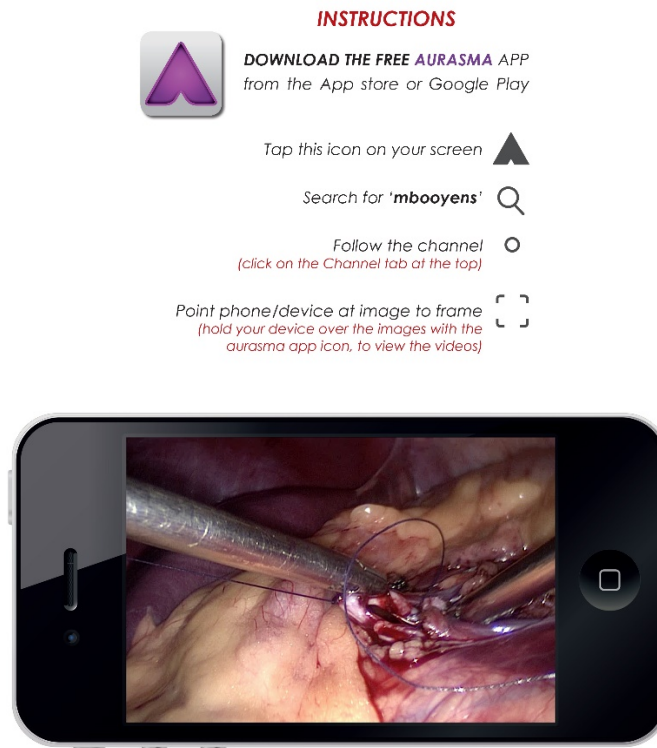
Figure 13: The Aurasma app

PHOTOGRAPHIC SERVICES

The only photographic service offered by EI is on the Onderstepoort campus. This is a half-day service and dedicated to the needs of Onderstepoort. The photographer also offers limited video editing services to the Faculty of Veterinary Science.
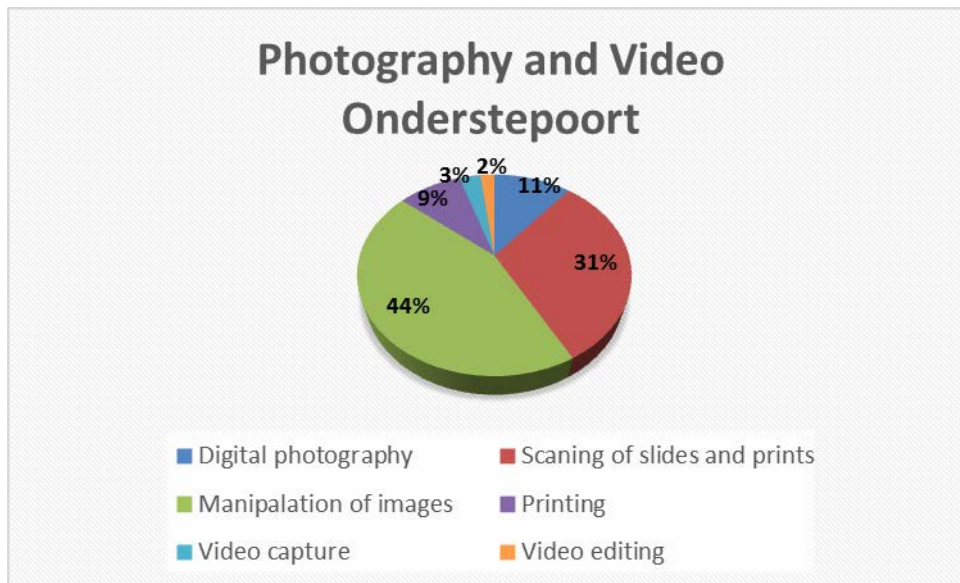
Figure 14: Photography and Video at Onderstepoort in 2015

INSTITUTIONAL SUPPORT

CS&CT continued to support Executive projects. Five videoconferences for the Executive were held and eight videoconferences and Skype conferences were supported and arranged. Members of the Executive also participated in appointment committees in various venues like the new Plant Sciences building and at Seminar Room 1 at EI.

COMMUNITY ENGAGEMENT

The Manager: Community Engagement is Gernia Van Niekerk.

All Faculties at the University participate in community engagement. Curriculum-related community engagement is credit-bearing towards degree attainment. Voluntary community engagement is done through the nine Faculty houses; TUKSRES; 119 student organizations and SRC/ TuksRAG. Community engagement at the University in its various forms creates opportunities for UP to confront the relevance of some knowledge; stimulates teaching and creates new teaching ideas; stimulates the learning process and impacts on academic programmes; opens up new fields for research and enables students to participate in community development and community building. It also allows students to change perceptions and to become change agents. Engaging in our local communities has become by now a given part of the curriculum for many students and also services as a way to give something back to society – let us call it their social responsibility. There is more to community engagement than just community service as there are reciprocal gains for the engaging party and the receiving group.

HIGHLIGHTS AND NEW INITIATIVES OF 2015

WORK-INTEGRATED LEARNING (WIL) AND PRACTICAL WORK

Curricular community engagement overlaps in many instances with work-integrated learning (WIL) and practical work as is the case with Health Sciences and Education for instance. More than 1,500 sites of learning were used for the purposes of community engagement, WIL and practical work. Often the same sites were used for all three in order to provide a more integrated service to the community. The same sites of learning are also shared by five or more Faculties to ensure sustainable community development takes place through their trans-disciplinary involvement.

In some instances, such as in EBIT, community engagement, WIL and practical work modules are well separated from each other. While the Community Engagement Office has for some years been involved with WIL activities in the Faculty of Health Sciences, where WIL intersects with community engagement, the office also took on responsibility for WIL in the Faculty of Education in 2014/15 and the Faculty of Engineering, Built Environment and IT in 2015. While the former at least involved many of the schools used for community engagement activities, the EBIT WIL entailed negotiations with companies for student placements.

For Table 14 please note:

1. In relation to curricular community engagement:
   1.1. The number is slightly up on the 2014 figures given that some modules are being phased out while others are being phased in, on the one hand, and the addition of WIL modules, on the other.
   1.2. The total number of projects for curricular community engagement as well as voluntary work done by students is approximately 4,000 and the students worked on 1,339 sites of learning in 2015. (The number of projects does not equal the number of sites because various Faculties work together on one site.)
2. With regard to voluntary community engagement, the following should be noted:
   2.1. TUKSRES and TuksRAG involve about 20% of registered members in voluntary community engagement, which brings the total for students involved with voluntary community engagement to 6,896.

Table 14: The scope and scale of community engagement, work integrated and practical work activities in 2015

Faculty	Curricular community engagement, work integrated and practical work	Voluntary students	
	Modules		Student numbers
EMS	7	119 Student organizations	2,570
EBIT	9	TUKSRES	2,483
Education	10	9 Faculty Houses	1,803
Health Sciences	52	SRC - RAG	40
Humanities	26	**TOTAL STUDENTS**	**6,896**
LAW	4		
NAS	27		
Theology	2		
Veterinary Science	22		
TOTAL MODULES	**159**		
TOTAL STUDENTS	**11,203**		

INSTITUTIONAL COMMUNITY ENGAGEMENT AWARDS

For the first time the University included a Community Engagement Award in the annual Academic Achievers' Event. The Community Engagement Forum assisted with adapting the Talloires criteria for the MacJannet Award for internal use and the Community Engagement Office designed an evaluation rubric. The four members of the Community Engagement office and four senior academics evaluated the nominations, one per Faculty. Dr Martina Jordaan of the Faculty of Engineering, Built Environment and IT won the inaugural award. She was then invited to be the moderator for the 2015/16 award and her nomination was prepared for the MacJannet international award. Once recommendation was that the rubric should be better aligned to the criteria. The Forum chair undertook the alignment and it was approved by the Community Engagement Forum. The call for the 2015/16 award was composed and distributed to Faculties.

INSTITUTIONAL, STAFF, STUDENT AND COMMUNITY SUPPORT AND IMPACT

The Community Engagement Office worked with academic in planning their modules and finding site of learning in communities. They were also involved in briefing students prior to their undertaking community engagement. The office is involved in the disbursement of funding for transport.

- The Community Engagement office:
    - is responsible for identifying sites of learning for community engagement, work integrated learning and practical work purposes;
    - is responsible for integrating voluntary community work with curricular community work for the purpose of sustainable development;
    - develops and sustain relationships with community partners; i.e. schools, orphanages, old age homes, companies, etc.;
    - resolves problems or conflict that might affect the relationship between the University and the community partners.

- The Community Engagement Office conducts follow-up courtesy visits:

- o   to monitor community engagement at the sites;
- o   to deliver and collect student placement forms during the visits since most sites do not have telephone services;
- o   to identify new opportunities;
- o   to assess community engagement as a practice;
- o   to assess and follow up on any problems encountered by Faculties or students during the year.

- The Community Engagement office:
  - o   works out the bus routes for the students/ department based on the budget and students' needs and adjustments are made as needed continuously.
  - o   obtains quotations for the bus routes;
  - o   provides for drivers for cars where students do not have drivers licences;
  - o   loads new sites of learning and opportunities on CEMS and registers students to the sites where they are working.

The Office also works with a variety of voluntary activities and briefs student leaders and residences before they organize activities. The voluntary projects overlap with curriculum-related projects to increase sustainability of projects and to contribute to sustainable community development. This practice also has the advantages as it insures that all students work at secure, supervised sites.

Credit-bearing and voluntary student engagement contributes millions to the local economy in terms of services rendered.

COMMUNITY ENGAGEMENT FORUM

The Forum is representative of groups on campus involved in community engagement. All Faculties are represented; there is student representation for the student society involvement and the following support services are members: Education Innovation, Student Affairs, Residences, Security Services, Junior Tukkies, DRIS, DSA and Library Services. The Forum met twice during 2015 – in April and July; the November meeting was cancelled. The Forum will in 2016 review the Community Engagement Policy. The Forum is chaired by the Director: Education Innovation and reports to the Senate Committee on Teaching and Learning.

At the April 2015 meeting it was proposed that the Forum study the impact of community engagement and a small task team was formed. The NRF was proposed as a source of funding but it transpired that no community engagement call for proposals was open for 2015. The Forum will try again in 2016.

The following were important issues discussed at the Forum:
- The community engagement management system (CEMS);
- Curricular related community engagement modules;
- Funding of transport;
- A security protocol;
- Community assessment of student activities;
- MacJannet Award;
- Compulsory security briefings (approved by the Senate Committee on Teaching and Learning);
- Academic conference on community engagement;
- Institutional voluntary programmes such as Mandela Day and Casual day;
- Capital Cities project.

EXTERNAL COMMUNITY ENGAGEMENT ORGANIZATIONS

SAHECEF

The South African Higher Education Community Engagement Forum (SAHECEF) (http://www.sahecef.ac.za/) is an organization representative of university staff responsible for a broad typology of community engagement expressions in higher education. Representatives of the Community Engagement Office attended three sessions of SAHECEF although generally the organization does not add value to institutional community engagement programmes.

TALLOIRES

The Talloires Network is an international association of institutions committed to strengthening the civic roles and social responsibilities of higher education (http://talloiresnetwork.tufts.edu/). Dr Jordaan of EBIT won a competitive grant from Talloires for her community engagement projects.

OPERATIONAL OFFICE

The Operations Office, led by Ms Elize de Waal, proactively uses skilled and experienced staff to support the Department for Education Innovation (EI) in terms of personnel, financial and logistical matters to ensure that EI can function optimally. The core mandate of this support unit within EI is to promote, encourage and sustain best administrative practices by consciously striving to increase effectiveness and efficiency. The group consists of five people with a solid knowledge base in their field (logistics, technology, human resources, relationship 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 provides a single point of control of entrances to EI, gives information for first-line enquiries and receives deliveries. A significant number of staff and students make use of Reception when coming to EI for tutor training, CPD or meetings. The area also provides entrance to computer laboratories for a few IT staff members. Unexpected clients are first-year students who see this very friendly reception as a source of information during their first few hectic weeks on campus. EI also has offices for Dell Foundation and MasterCard students, Kresge and DHET Grants.

The Operation Office successfully faced several challenges in identifying, aligning and complying with UP policies to PeopleSoft Oracle. The Operations Office ensured that business went on as usual within EI despite all the challenges and upgrading's.

FINANCES

The Department for Education Innovation has three mainstream budgets: operational, ITS and Facilities. In addition there is Skills Levy funding and external donor funding. The office assists with all the financial procedures, requests and forms as outlined on the Intranet.

In 2015 the Operations Office handled a combined operational budget of R1,166,194 (EI operational costs) and R687,475 (institutional costs, for training academics, for instance). The Operations Office had to manage a very complex Community Engagement set of budgets in addition to the operational funds: institutional transport fund for community engagement activities as well as additional funds from community and or foundation or NGO sources. In addition, the Ops Office managed processes around the expenditure of the ITS budget (R731,991), that is managed by a small committee. The Facilities Management budget is allocated to EI on paper but often there is no follow through. When some of the requested items were actioned, the Ops office followed up on outstanding matters and facilitated work with contractors.

Then there are HRDC allocations for skills development for EI staff (R51,480) as well as for priority training programmes such as INNOVIL and tutor training that must be managed. The Skills Levy HRDC funding for EI staff development is managed with the help of a committee representative of each section of the department. We strive to have at least 30% of the staff attend a development opportunity per year related to their job description. The Ops Office is the secretariat for this committee.

The office also manages cost centres related to external grants, with budgets totalling R4,499,915 (Michael and Susan Dell Foundation for the Dell Young Leaders' programme; MasterCard Foundation for the MCF Scholars Programme; Kresge Foundation for the Siyaphumelela project and the DHET Foundation Provision training grant).

Creative Studios and Communication Technology operations work on a cost-recovery basis to some extent. The office handled purchasing and cost recovery. The group has staff based at the Hatfield, Prinshof and Onderstepoort campuses. The following table lays out the procurement activities of the portfolio:

Table 15: Orders and service request

STATISTICS OPERATIONAL OFFICE – 2015														
		Jan	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Order		111	85	50	69	80	54	70	57	105	104	96	30
Invoices Cred.		68	108	60	46	60	48	28	40	109	40	62	47
EI Services	Invoicing Debtors	1	3	0	2	2	6	1	3	3	2	3	0
	Private income	1	2	0	1	1	1	0	3	0	0	1	1
Journals:	Graphics Hatfield	12	1	24	6	11	34	7	12	15	7	12	6
	Graphics Medical	7	14	17	16	17	13	13	63	27	30	11	7
	Graphics O/P	5	13	4	6	3	11	13	8	13	3	9	0
	Graphics Total	24	28	45	28	31	58	33	83	55	40	32	13
	Video Hatfield	3	4	7	2	3	3	0	1	3	0	0	0
	Video Medical	10	6	0	19	0	13	0	12	7	7	7	0
	Video Total	13	10	7	21	3	16	0	13	10	7	7	0
	Photographic O/P	2	6	8	2	3	2	3	3	3	2	0	1
	Photographic Total	2	6	8	2	3	2	3	3	3	2	0	1
	Studio Hatfield	0	0	0	0	0	0	1	0	0	0	0	
	Journals totals:	**39**	**44**	**60**	**51**	**37**	**76**	**37**	**99**	**68**	**49**	**39**	**106**

Drawing up the annual operational, HR and Facilities Management budgets for 2015, aligned with guidelines from the Director of Finance, the EI Operational Plan and UP strategies, was facilitated by the Operations Office in collaboration with the Director of EI and all line managers.

HUMAN RESOURCES

Some of the HR challenges the portfolio had to face were assisting line managers and the Director to ensure diversity in the staff profile and recruiting new staff. EI employs both permanent and contract staff. The Operations Office was effective in processing contracts that we renew annually and *ad hoc* appointments.

Table 16: Equity profile 2015

P Levels	EI February 2016 filled posts (55 permanent, the rest contract) Vacant post 3 = 58 + 9 = 67	Contractors on Claims/ Invoice	Contractors: MSDF, MCF, DHET, HERI Intern 9 Post
1-6	B: 5.45%; WF: 29.10%; WM: 5.45%		
7-9	B: 16.37%; WF: 16.37%; WM: 10.92%; BFN: 1.8%		B: 33.34%; WF: 22.22%; WM: 11.11%
10-12	B: 7.27%; WF: 1.8%		B: 22.22%; WF 11.11%
13-17	B: 5.46%		
Total	B: 34.55%; WF: 47.28%; WM: 16.37%; B FN: 1.8% 1 person	3 African 1 White Female	B: 55.55%; WF: 33.34%; WM: 11.11%

Table 17: Vacant posts filled

1	E Engelbrecht (Instructional Designer)	White – female
2	Y Kweyama (Adm Assistant – CBT testing)	African – female
3	P Medupe (Snr Management Assistant A)	African – female
4	MD Mhlakaza (Snr Graphic Designer)	African – female
Other appointments		
1	MasterCard Foundation contract – Dr A Mawadza	African – female
2	MasterCard Foundation contract – E Law-van Wyk	White – female
3	MasterCard Foundation contract – L Molose	African – female
4	Dell Foundation contract – D Thompson	White – male
5	DHET appointment – M Phahlana	African – female
6	Several appointments (MasterCard Foundation) on claim basis (Ramollo, Olupona and Schoeman)	
7	Contractors: F Siebert (Snr Adm) M Hicks (Web designer) E Mphanda (Jnr Research Officer) L Mahlangu (CE Liason Officer) M Madiope, G Maepa and K Madiope (Claim-basis relief staff)	White – female White –female African – female African – female African – females

Table 18: Promotions

Promotion in Existing Post	**2**
Upgrading: Non Academic Post	**0**

The office registered an overtime project for Video and Communication staff. The office also maintained and updated reporting lines for leave and performance evaluation on PeopleSoft.

The Operational Office facilitated the drawing up the annual Human Resource budget, aligned with guidelines from the Director of HR, the EI Operational Plan and UP strategies, in collaboration with the Director of EI and all line managers. The Department has also to taken into consideration the abolishing of posts with end dates and S999 posts with the new legislation.

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

LOGISTICS

Quality service was rendered in terms of internal and external client relations and links with our department, UP Departments, services and divisions. The Operational Office was responsible for all logistical and maintenance matters within EI and that responsibility includes office spaces, building projects, use of assets, IT related functions, occupational health, security and key register, co-ordination of services needed from Facilities Management, stationery, access control, golf car, photo copier machines, top cooler, plants and contracts.

NATIONAL AND INTERNATIONAL RESEARCH ACTIVITIES

We had a number of research successes. Sanet Haupt completed her doctorate and will graduate in April 2016. Research reports were produced by HERI as planned (11 reports) and in addition Ms Haupt and Dr Mostert produced a report on the longitudinal research at Veterinary Science; Dr Louw produced a report on tutoring in NAS with Professor Potgieter and Ms Lotriet collaborated on the latest tutor report in Humanities. Dr Lemmens and Professor Naidoo had a joint article accepted; Dr Louw co-published two articles with international collaborators and Dr Pickworth co-authored an article with lecturers in Health Sciences. Dr Nagel co-published two articles. Dr Mostert presented three papers at international conferences, one of which was co-authored by Dr de Bruyn and Ms Pretorius. Dr Louw delivered a paper at an international conference. Mr Jordaan delivered a paper at the Blackboard World conference in Washington. Several papers were delivered at national conferences. Ms Scheepers attended the Gartner ITExpo in Cape Town, an international conference hosted locally.

The table below summarizes the research activities of the Department for Education Innovation for the five-year period from 2010 to 2014. It is followed by details for each section.

Table 19: Summary of research activities EI 2011 – 2015

Summary of research activities		2011	2012	2013	2014	2015
Number of Publications (EI)	Accredited	7	8	3	5	6
	Non-Accredited	1	2	3	1	7
Conferences, Workshops, Webinars and Colloquiums Attended	International	2	7	7	14	16
	National	39	17	53	82	38
Conference Papers Presented	International	6	7	6	6	6
	National	15	11	28	21	23
Visits	International	1	3	3	3	5
	National	4	8	0	3	4
Visitors	International	7	7	3	30	14
	National	0	0	0	8	1
Active International Collaborative Projects		3	1	0	3	4
Posters Presented	International	1	0	0	2	0
	National	2	1	0	1	3
Research Reports		11	18	14	14	16
Representative for UP	International			3	0	0
	National			2	7	6
Number of Staff Serving on Editorial Boards		4	5	3	4	4
Awards				1	0	1

Publications in Accredited Journals and Books

Delport, R., Krüger, C., van Rooyen, M. & Pickworth, G. (2015). Developing an outcomes-based charter to direct teaching and assessment of medical professionalism. *African Journal of Health Professions Educators*, 7(1):10-15. DOI:10.7196/AJHPE.223.

Nagel, L., & Venter, L. (2015). Mastering the blend: students' value of classroom and online components in a blended accounting course. *Proceedings of The European Distance and E-Learning Network Conference, Expanding Learning Scenarios - Opening out the Educational Landscape*, Barcelona. Editors: António Moreira Teixeira, András Szűcs, Ildikó Mázár. ISBN 978-615-5511-04-2. Pages 409-417.

Rust, W., de Beer, A.-M., & Nagel, L. (2015). Teaching French as a foreign language in South Africa: Incorporating the chanson africaine francophone. *French Studies in Southern Africa*, 45, 103-130.

Sujee, E., Engelbrecht, A., & Nagel, L. (2015). Effective digitizing communication with Turnitin for improved writing in a multilingual classroom. *Journal for Language Teaching*, 49(2), 11-31.

Van Wyk, B.J., Hofman, W.A.H. & Louw, I. (2015). Impact of Mathematics and Physical Science on the Success of South African Engineering Technology Students. *International Journal of Engineering Education,* Vol. 31(4):1158–1166.

Zuber-Skerritt, O.; Wood, L. & Louw I. (2015). *A Participatory Paradigm for an Engaged Scholarship in Higher Education: Action Leadership from a South African Perspective.* Rotterdam: Sense Publishers. ISBN: 978-94-6300-182-3 (paperback), ISBN: 978-94-6300-183-0 (hardback), ISBN: 978-94-6300-184-7 (e-book).

Publications in Non-Accredited Journals and Books

Jordaan, M. & Jordaan, A.J.J. (2015). Alumni and enrolled students' perceived value of the compulsory community engagement module in the undergraduate curriculum of the Faculty of Engineering, Built Environment and Information Technology at the University of Pretoria. *Conference Proceedings of South African Society of Engineering Education*, Durban. ISBN: 978-0-620-64763-2.

Jordaan, A.J.J. & Van der Merwe, A. (2015). Best Practices for learning analytics initiatives in higher education. In: Kilfoil, W.R. (Ed.). (2015). *Moving beyond the hype: A contextualized view of learning with technology in higher education*. Pretoria: Universities South Africa.

Kilfoil, W.R. (Ed.). (2015). Moving beyond the hype: A contextualized view of learning with technology in higher education. Pretoria: Universities South Africa.

Kriel, D. (2015). Gamification. In: Kilfoil, W.R. (Ed.). (2015). *Moving beyond the hype: A contextualized view of learning with technology in higher education*. Pretoria: Universities South Africa.

Naidoo, A. & Lemmens, J. (2015). Faculty intervention as support for first-year students. *Journal of Student Affairs in Africa*, 3(2):17-32; 2307-6267 (DOI: 10.14426/jsaa.v3i2.133).

Scheepers, M.D. (2015) Professional development for teaching with technology. In: Kilfoil, W.R. (Ed.). (2015). *Moving beyond the hype: A contextualized view of learning with technology in higher education*. Pretoria: Universities South Africa.

Van der Merwe, A., Bozalek, V., Ivala, E., Nagel, L., Peté, M., & Vanker, C. (2015). Blended learning with technology. In: W. R. Kilfoil (Ed.), *Moving beyond the hype: A contextualised view of learning with technology in higher education* (pp. 11-15). Pretoria: Universities South Africa.

Workshops and Colloquiums Attended (Including Webinars)

National

Add Powerful Interactive Dashboards To Your Application. Presented by Jaspersoft, 29 July: Lemmens, J.

Australian Teaching Criteria and Standards Framework. Presented by Prof D. Chalmers, University of Western Australia. Hosted by Wits' Centre for Learning, Teaching and Development, 20 May. Attended by Gossmann, C.

Benchmarking Performance of Academic Development Units. Presented by Prof D. Chalmers, University of Western Australia. Hosted by Wits' Centre for Learning, Teaching and Development, 19 May. Attended by Mathibedi, F. and Gossmann, C.

BlendKit2015 MOOC: E Drysdale, Kilfoil, W.R.

Contextual Approaches Towards the Professional Academic Development with Regard to the Teaching Role. Organised by HELTASA Academic Development SIG, Stellenbosch, 27 July. Attended by Mathibedi, F., Gossmann, C.

Data Coaching Workshop. Presented by Jan Lyddon, Data Coach provided by the Kresge Foundation as part of the Siyaphumelela Project. Pretoria, 2-3 February: Jordaan, A.J.J., Kilfoil, W.R., Lemmens, J., Naidoo, A.

Data Coaching Workshops. Presented by Jan Lyddon, Data Coach provided by the Kresge Foundation as part of the Siyaphumelela Project. Pretoria, November: Jordaan, A.J.J., Kilfoil, W.R., Lemmens, J., Naidoo, A.

Design Indaba, Cape Town, 25-27 February; Brits, G.D., Dave, R.A., Mayhew, E., Makhanya, M.

DRS e-Marker. Demonstration by S Jones from e-Marker, United Kingdom. Scheepers, M.D., Mostert, E., Haupt, S., Jordaan, A.J.J., Bosman, M., Steyl, E., Jankowitz, C., Harding, A.

High Impact Communication for Leaders. Presented by Futuristic Training and Development. 12, 19, 26 November and 2 December: Gossman, C., Haupt, S., Lotriet, M.,Louw, I., Mathibedi, F., Mostert, E., Pickworth, G., Van Amerom, W.P.C.

International Technical Evaluation Task Team for Collaborate Ultra. Blackboard. Bi-Weekly Collaborate sessions. Jordaan, A.J.J., Slabbert, J.

Learner Analytics Institute. Presented by SAAIR, University of Pretoria, Pretoria, 17 March. Lemmens, J., Kilfoil, W.R., Kebalepile, M.M., Dresselhaus, F.H.W. Mphanda, E., Naidoo, A.

Measuring the effectiveness of Academic Professional Development. Presented by Prof D. Chalmers, University of Western Australia. Hosted by Centre for Learning, Teaching and Development at the University of the Witwatersrand, 21 May. Attended by Gossmann, C.

Power Pivot 101: An Introduction. Presented by Dustin Ryan, 10 September: Lemmens, J.

QuestionMark Academic Users Forum. Bytes People Solutions. Midrand, 2 September: Mostert, E., du Bruyn, E., Pretorius, G.J. & Scheepers, M.D.

Rasch analysis workshop using the RUMM2030 software. Presented by RASCH 6 conference, University of Cape Town, Cape Town, 7-10 January. Lemmens, J.

RemoteProctor Now. Online demonstration presented by Software Secure, 6 May. Scheepers, M.D. & Nagel, L.

Why Smart Data is [sic] better than Big Data for Your Institution Webinar. Presented by Inside Higher Ed, 16 July. Lemmens, J.

Conference Papers/ Workshops Presented[1]

International

Jordaan, A.J.J. (2015). Implementing and using Learning Analytics at the University of Pretoria. *Blackboard World*, Washington.

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[1] The Department for Education Innovation presents scheduled priority courses multiple times annually as part of teaching development: Academic Induction Programme for new academic staff; Assessment workshop; variety of online workshops; workshops for tutors and assistant lecturers. In addition, *ad hoc* workshops are presented for particular Faculties or academic departments. Details are not included in this report as the sessions and presenters are too numerous to mention.

Louw, I. (2015). Celebrating 25 Years of ALARA: Developing a Learning Conference Culture. Plenary Symposium 5 November 2015. Convened by Ortrun Zuber-Skerritt. *ALARA International Conference*, St George Hotel, Nov 2015.

Mostert, E. (2015). Cooperative learning. *LINQED workshop*, Bangalore, India, 25-28 May 2015.

Mostert, E. (2015). Online Objective Assessment. LINQED e-Learning workshop. Presented online using WebEx., *Institute of Public Health*, Bangalore India, 26 October 2015.

Mostert, E., de Bruyn, E., & Pretorius, G. (2015). What should the perfect online assessment system look like? Paper presented at 24th *International Conference for the International Association of Management of Technology* (IAMOT 2015), Cape Town, 8-11 June 2015.

Nagel, L., & Venter, L. (2015). Mastering the blend: students' value of classroom and online components in a blended accounting course. Paper presented at the *Expanding Learning Scenarios - Opening out the Educational Landscape*, Barcelona. 9-12 June.

National

Dresselhaus, F.H.W. (2015). Data analytics and high impact practices: a proposed analytics framework for student success at the University of Pretoria. Paper presented at the *Siyaphumelela Conference*, 14-15 May.

Haupt, S. & Erasmus, H. (2015). Achieving success by marrying expectations and experiences: a first year case study. Paper presented at the *First Year Experience Conference*, South African National Resource Centre for the First-year Experience and Students in Transition, Johannesburg, 19-21 May.

Jordaan, A.J.J. (2015). Blackboard Learning Analytics. Durban University of Technology, *Teaching and Learning Workshop*. Durban.

Jordaan, A.J.J. (2015). Blackboard Learning Analytics. University of Johannesburg, *Teaching and Learning Workshop*. Johannesburg. 4 June.

Kebalepile, M.M. & Lemmens, J. (2015). First Year Experience trend analysis: Using STARS and FYES surveys to understand the variability of first year experience over a three years period at a South African university. Paper presented at the *First Year Experience Conference*, South African National Resource Centre for the First-year Experience and Students in Transition, Johannesburg, 19-21 May.

Kebalepile, M.M. & Lemmens, J. (2015). Indicators of Academic and Mentee risks among new-first year university students: a cross-sectional study at a South African university. Paper presented at the *Southern African Association for Institutional Research Conference* (SAAIR), Cape Town, 29 September – 1 October.

Kilfoil, W.R. (2015). Anatomy of student success. Paper presented at the *Siyaphumelela Conference*, Kempton Park, 13-14 May.

Lemmens, J. (2015). Data collection, analysis and use – the systems and people requirements and needs. Session convenor at the *Siyaphumelela Conference*, 14-15 May.

Lemmens, J. (2015). Student Evaluation of Teaching at UP. Invited presentation at the *Student Evaluation of Teaching Symposium*, Vaal University of Technology, Vanderbijlpark, 23 April.

Lemmens, J. (2015). UP Career App.tizer. Presentation at the *Flexible Futures Conference*, University of Pretoria, Pretoria, 9 November.

Lemmens, J & Henn, M. (2015). Learning analytics: a South African higher education perspective. Paper presented at the *Southern African Association for Institutional Research Conference* (SAAIR), Cape Town, 29 September – 1 October.

Lemmens, J., Jordaan, A.J.J., Henn, M., Davis, B. & Swart, L. (2015).From knowledge to action to intervention. Workshop presented at the *South African Higher Education Learning Analytics workshop*. Cape Town, 28 September.

Lemmens, J. & Moore, D. (2015). From Academic Analytics to Learning Analytics: A few steps on an analytics journey. Paper presented at *Institutional Research Institute, Southern African Association for Institutional Research* (SAAIR), 23 July.

Louw, I. & Wood, L. (2015). Pre-conference workshop for post-graduate students. *HELTASA conference,* NWU. 2-4 November.

Louw, I. & Wood, L. (2015). SoTL workshop presented to grant holders at NWU. 23-25 March, Johannesburg.

Mphanda, E. STARS Mentorship programme at the University of Pretoria. (2015). Paper presented at the *First Year Experience Conference*, South African National Resource Centre for the First-year Experience and Students in Transition, Johannesburg, 19-21 May.

Nagel, L. (2015). Coursework Masters' online. Paper presented at the *Flexible Futures Conference: Shaping a Hybrid Teaching Model for UP*, Pretoria. 9 November 2015.

Nagel, L. (2015). Home-grown post-graduate e-learning - the future is now. Paper presented at the *Flexible Futures Conference: Shaping E-Learning in Higher Education*, Centurion. 26-27 January 2015.

Naidoo, A. (2015). University Preparedness towards Student success. Paper presented at the *Siyaphumelela Conference*, Kempton Park, 13-14 May.

Potgieter, M. & Louw, I. (2015). Blended learning hotspots in NAS: showcasing diverse learning opportunities. *Flexible Futures Conference*, Royal Elephant, 26-27 January 2015.

Potgieter, M. & Louw, I. (2015). The hybrid conference experience: Impressions and reflections. *Flexible Futures Conference: Shaping E-learning for the University of Pretoria,* online and at CSIR, 2-16 November.

Van Amerom, W.P.C. & Louw, I. (2015). Effective Classroom Teaching workshop. Presented to Milpark Education Business School. Johannesburg, 23 May 2015.

Venter, L., & Nagel, L. (2015). Going full-circle with first-year success: from non-academic issues to learning and back. Paper presented at the *First-year experience and students in transition conference*, Johannesburg. Presented on 20 May 2015.

Conference Poster Presentation

Manning, D., & Scheepers, M.D. (2015). FLIP OR FLOP? Narrated PowerPoint for anywhere, anytime learning. Poster presentation at the *Flexible Futures: Shaping E-learning for the University of Pretoria*. Hosted by the University of Pretoria, CSIR, 9 November.

Mostert, E. & Pienaar, M. (2015). Student support in Veterinary Science teaching: Using clickers in the classroom. *HELTASA Conference*: Potchefstroom, 18-20 November.

Van Amerom, W.P.C. & Louw, I. (2015). Piloting clickers in the Faculty of Law. Poster presentation at the *Flexible Futures: Shaping E-learning for the University of Pretoria* conference. Hosted by the University of Pretoria, CSIR, 9 November.

Conference/ Workshop Attended without Reading a Paper (Including Webinars)

International
Achieving the Dream, Baltimore, US, 16 – 20 February: Naidoo, A.

Blackboard World, Washington DC, July: Kilfoil, W.R.

Data Mining: Failure to Launch: How to Get Predictive Modeling Off the Ground, and Into Orbit (Webinar). The Modeling Agency, 10 February: Lemmens, J.

Inside Samford University & USA School of Nursing's Successful Remote Proctoring System Rollout! Samford University, 4 November 2015 (Webinar): Mostert, E.

LINQED annual workshop. Institute for Public Health, Bangalore, India, 25-28 May 2015: Mostert, E.

University Teaching 101. A six week online course/ MOOC. Johns Hopkins University. Van Amerom, W.P.C., Gossman, C.

Toolsets to Streamline the Workflow for Today's Data Analytics Webinar. Presented by Webcast, 17 February: Lemmens, J.

Transformative Leadership – MasterCard Foundation Offices, Toronto 13-15 July: Naidoo, A.

LINQED annual workshop. Institute for Public Health, Bangalore, India, 25-28 May 2015: Mostert, E.

Gartner Conference and ITXpo - Cape Town International Convention Centre, Cape Town, South Africa 28-30 September: Scheepers, M.D.

European Conference on Technologies in the Classroom, Brighton, Great Britain, 1-5 Jul: Scheepers, M.D.

Assessment Institute Conference, Indianapolis, USA, 25-27 October: Botha A.J.M.

Questionmark Analysis, online webinar presented by QuestionMark, 11 June: Pienaar, M.

The Pedagogy in Blended Course Design, online course presented by EDUCAUSE, 28 July -5 Aug: Kriel, D.

Digging into Badges: Designing and developing digital credentials, online course presented by EDUCAUSE, 16 April – 8 May: Kriel, D.

Assessment workshop, Onderstepoort, presented by Professor P. van Beukelen & Dr. H Bok, Utrecht University, The Netherlands, 17 March: Pienaar, M., Mostert, E.

National

Decision Lab workshop, GIBS, Sandton, 27 October: Jordaan, A.J.J., Kilfoil, W.R., Naidoo, A.

Flexible Futures: Shaping e-learning for higher education. Royal Elephant Hotel, Pretoria, 26 and 27 January: Haupt, S., Jordaan, A.J.J., Kilfoil, W.R., Mostert, E., Naidoo, A., Botha, A.J.M.J.M., Cetywayo, M.N., De Bruyn, E., Drysdale, E., Jacobs, G.N., Kriel, D., Nagel, L., Ngcobo, N.F., Pienaar, M., Pretorius, G.J., Rammupudu, M.J., Scheepers, M.D., Slabbert, J., Untiedt, J.S.H., Gossmann, C., Mathibedi, F., Lemmens, J.

Flexible Futures: Shaping e-learning for UP. Flexible Futures: Conference, online and at the CSIR, Pretoria, 2-14 November: Botha, A.J.M. Haupt, S., Jordaan, A.J.J., Kilfoil, W.R., Mostert, E., Naidoo, A., Cetywayo, M.N., De Bruyn, E., Engelbrecht, E., Kriel, D., Ngcobo, N.F., Pienaar, M., Pretorius, G.J., Rammupudu, M.J., Slabbert, J., Untiedt, J.S.H., Gossmann, C., Lemmens, J.

HELTASA conference, NWU Potchefstroom, 18-20 November: Louw, I.

SAHELA workshop, Cape Town, 28 September: Jordaan, A.J.J., Kebalepile, M.M., Lemmens, J., Naidoo, A.

Siyaphumelela Conference, Kempton Park, 13-14 May: Jordaan, A.J.J.

First year experience Conference, South African National Resource Centre, University of Johannesburg, 19-21 May: Haupt, S., Lemmens, J., Louw, I., Naidoo, A.,

Student Life Legotla, St George Hotel, Centurion, 31 July: Kilfoil, W.R., Naidoo, A.

Higher Education in the 21st Century: how does professional development provide spaces for disruptive, creative practices? UNISA, August Seminar. 6 August 2015. Van Amerom, W.P.C., Gossmann, C., Mathibedi, F.

E-learning for Academics. 26-30 October. University of Pretoria. Presented by team of Instructional Designers headed by Mrs Detken Scheepers. Van Amerom, W.P.C.

Conducting Online Surveys with Qualtrics. University of Pretoria. Presented by Prof Arien Strasheim and Dr Sumari O'Neill. 2-3 November. Haupt, S., Van Amerom, W.P.C., Gossmann, C.

How to use the Goals Tool to potentially add value to T&L and Assessment in a structured and scientific sound manner. University of Pretoria. Presented by Mr Wade Weichel, Sr Product Manager Bb-Delegated. 10 December 2015. Botha, A., van Amerom, W.P.C., Haupt, S., Gossmann, C.

Curriculum Workshop Internal Auditing. Johannesburg. 29 September 2015. BEd Hons. Teacher Education and Professional development programme: Haupt, S., Samadi F.

Can scenarios change the future? REOS Soul City, Dunkeld West, Johannesburg. 31 March 2015: Haupt, S., Mostert, E.

SAICA Clerks Focus group. University of Pretoria. 11 September 2015 & 20 November 2015. Haupt, S., Samadi F.

Curriculum development in higher education. Presented by CHERTL, Rhodes University, Pretoria, 14-18 September. Botha, A., Engelbrecht, Haupt, S., E., Mostert, E., Pienaar, M., Mathibedi, F.

Representations in Science education. Presented by Prof Hsin-Kai Wu, SCITAL, University of Pretoria, 28 July: Haupt, S., Lotriet, M.,Louw, I., Mathibedi, F., Mostert, E., Pickworth, G., Van Amerom, W.P.C.

Curriculum mapping. Presented by Ms Adri Smith, AROS, 12 August: Gossman, C., Haupt, S., Lotriet, M.,Louw, I., Mathibedi, F., Mostert, E., Pickworth, G., Van Amerom, W.P.C.

BEd Hons. Teacher Education and Professional development programme: Haupt, S., Mathibedi, M.F.

EBIT Teaching and Learning Seminar and Workshop. University of Pretoria, 18 – 19 November 2015. Botha, A.J.M., Samadi, F.

Research Reports

Dresselhaus, F.H.W. & Lemmens, J. *Evaluation of the Student Feedback Instrument report*. Department for Education Innovation. Unpublished report.

Dresselhaus, F.H.W. & Lemmens, J. *The academic performance of student-tutors at the University of Pretoria*. Department for Education Innovation. Unpublished report.

Haupt, S. & Mostert, E. *Faculty of Veterinary Science: Longitudinal research report*. Department for Education Innovation. Unpublished report.

Haupt, S. & Erasmus, H. *Faculty of Economic and Management Sciences: Longitudinal research report*. Department for Education Innovation. Unpublished report.

Kebalepile, M.M. *Student Academic Readiness Survey: 2015 Institutional report*. Department for Education Innovation. Unpublished report.

Kebalepile, M.M. *Mini Cluster Analysis report: Comparing First and Second Semesters in 2014*. Department for Education Innovation. Unpublished report.

Kebalepile, M.M. *Evaluation of the First Year Experience: 2015*. Department for Education Innovation. Unpublished report.

Lemmens, J. *Evaluation of the NSC and NBT results*: 2014 and 2015. Department for Education Innovation. Unpublished report.

Louw, I & Potgieter, M. *Report on the tutor survey conducted in the Faculty of natural and Agricultural Sciences*. Education Innovation and Faculty of Natural and Agricultural Sciences. Unpublished report.

Mphanda, E., & Vilakazi, P. *Department of Speech-Language Pathology and Audiology: Student Feedback on Practical Modules: 2015 at the University of Pretoria: 2014 cohort*. Department for Education Innovation. Unpublished report.

Mphanda, E. & Vilakazi, P. *Evaluation of the orientation programme: 2015*. Department for Education Innovation. Unpublished report.

Mphanda, E. & Vilakazi, P. *Evaluation of the STARS mentorship programm*e. Department for Education Innovation. Unpublished report.

Mphanda, E., Vilakazi, P., & Masisi, I. *Exit interviews at the University of Pretoria: 2014 cohort*. Department for Education Innovation. Unpublished report.

Nagel, L. *Course Work Master's Degree Project Report*. Department for Education Innovation. Unpublished report.

Nagel, L. & Jordaan, A.J.J. *Coursework Master's Degrees Online - Use of clickUP to support Coursework Master's Degrees: 2014*. Department for Education Innovation. Unpublished report.

Sehlapelo, H.P. *Report on the pilot of the tutor student feedback survey conducted in the STK 120 module*. Department for Education Innovation. Unpublished report.

Service on Editorial Boards or as a Reviewer

Kilfoil, W.R.	*SAALT; Sajals; Progressio; Higher Education Research and Development; Language Matters; International Journal for Academic Development, Communication*
Nagel, L.	*Educational Technology Research and Development (ETRandD); International Journal of Learning Technology (IJLT); Internet and Higher Education, Journal of Online Learning Technologies (JOLT); Progressio; South African Journal of Education (SAJE)* NWU: SDL Academic Research book
Louw, I.	Reviewed 15 abstracts in the Education stream of ALARA conference in November
Lemmens, J.	*Journal of College Student Retention: Research, Theory & Practice*

Postgraduate M and D Students

Sujee, E. (2015). *The effect of computer technology on learning in a multilingual language class*. PhD. Supervisors: Dr A. Engelbrecht, Dr L. Nagel.

Active International Collaborative Projects

Kresge Foundation, Siyaphumelela Project	Kilfoil, W.R., Lemmens, J., Jordaan, A.J.J Naidoo, A.
Students' ICT use and preference instrument development in collaboration with UNISA and Waikato University	Nagel, L.
Michael and Susan Dell Foundation	Naidoo, A.
MCF Partner Institutions, Universities:	Naidoo, A.

Education Innovation Visits

International

Visited Michael and Susan Dell Foundation Head Office in Austin, 23 February	Naidoo, A
Stanford, Palo Alto, 17-19 June – Scholars Convening	Naidoo, A
University of Toronto, 6-9 October Partners Convening	Naidoo, A
Wade Weichel, senior product manager, BB Goals	Haupt, S., Jordaan, A.J.J., Botha, A.J.M.
Blackboard Managed Hosting Site, Amsterdam, 29 July 2016	Jordaan, A.J.J.

National

University of Cape Town: International Division – MasterCard Foundation collaboration	Naidoo, A.
Mr Pieter Ackermann, Sefako Makgatho Health Sciences University: CBT programme developed and implemented	Mostert, E., Pienaar, M.

Representative for UP

Council on Higher Education: Higher Education Quality Committee	Kilfoil, W.R.
Universities South Africa (USAf): Teaching and Learning Strategy Group	Kilfoil, W.R.
Advisory Committee for the Department of Mathematics and Statistics at TUT. (Elected as Chair of the Committee).	Louw, I.
Southern African Association for Institutional Research: Executive Committee	Lemmens, J.
South African National Resource Centre for the First-Year Experience: Advisory board	Lemmens, J.
Umalusi: Project to evaluation the predictive value of the NSC	Lemmens, J.

Visitors to Education Innovation

International

Rolf Dietrich, MasterCard Foundation, 4 & 5 November: Naidoo, A.

Faith Biyapo, MasterCard Foundation, 4 & 5 November: Naidoo, A.

Hsin Kai Wu. Representations in science education. Guest of EI and SCITAL from NAS. July 2015. Louw, I.

Beth Davis, PAR Framework, *USA*, 25 September: Jordaan, A.J.J. and Lemmens, J.

Javier Gergori, Blackboard consultation, 23 June: Jordaan, A.J.J.

Steve Bailey, Blackboard Consultation, 13-17 July: Jordaan, A.J.J.

Emmanuel Cemot, Jan Willem van der Zalm, Tony Shepherd, Blackboard executive meeting, 27 July: Jordaan, A.J.J., Kilfoil, W.R.

Andrew Robinson, Cengage Learning (EMEA) Ltd: 15 October: Jordaan, A.J.J.

Pulane Lefoka, Lehlohonolo Mohasi, Mafa Maiketso: National University of Lesotho, Centre for Teaching and Learning. February 2015.

Professor Sean Brophy, Purdue University, Botha, A., Scheepers, D., Mans, H., Du Pisani, A., Nagel, L., Slabbert, J., Jordaan. A.J.J., Pretorius, G. October 2015.

Group visit, University of Swaziland, University of Swaziland Institute of Distance Education & Department for Information Technology, March 2015. Jordaan. A.J.J.

Steve Bailey, Blackboard, 13-17: Jordaan, A.J.J.

Miriam Cunningham from Stockholm University. Adoption of Technology-enhanced Learning. August 2015. Nagel, L.

National

Verona Leenderts, North West University: Vanderbijlpark Campus, 17 February:	Lemmens, J.
South African Judicial Education Institute:	Jordaan, A.J.J.
C Pepper, Wiley Publishers:	Engelbrecht, E.,
	Jordaan, A.J.J.