

Department for Education Innovation Annual Review 2018



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Director's Message



'Provide vision and support towards optimising student learning and success'.

The department provides vision and support towards optimising student learning and success. In pursuit of our vision, we provide leadership in, and support for the implementation of innovative methodologies, teaching and learning technologies, and data driven solutions to actively support our lecturers to prepare students for their future workplace or for further studies. The department has a team of experts in the fields of education, assessment, community engagement, instructional design, graphic design, videography, photography, communication technology, educational research and student academic development. We provide leadership and expertise to academic staff in relation to innovative teaching and student success solutions.

The achievement of Education Innovation's (EI) vision in 2018 is highlighted in the reports of the different sections. The Department for Education Innovation did exceptionally well because of the work done by the different managers and their staff members under the excellent leadership of Professor Wendy Kilfoil, who retired as director of the department at the end of August 2018. I want to acknowledge the great work that Professor Kilfoil did for many years. The managers are as follows:

- · Professor Ana Naidoo, Deputy Director;
- · Mr Dolf Jordaan, Deputy Director;
- · Detken Scheepers, head of E-education;
- Dr Sanet Haupt, head of Education Consultancy;
- Almero du Pisani, head of Creative Studios and Communication Technology;
- Dr Juan-Claude Lemmens, head of Higher Education Research and Innovation;
- Gernia van Niekerk, Manager: Community Engagement; and
- Elize de Waal, head of the Operations Office.

Our department's goal is to provide vision and support in helping academic staff to prepare students for their future; we need to enhance the quality of student learning and success. It is therefore important that we move beyond the transmission of information (for example, rote memorisation of facts, the ability to do calculations and the effective use of procedures). Teaching is more than the transmission of information and learning is more than memorising facts. We need to create opportunities for students to build on their prior knowledge and develop their thinking skills. Combining the latest technological advances with good quality teaching creates new possibilities and the opportunity to develop authentic, flexible, individualised, adaptive, active learning environments. This is vital as such environments could enhance our students' knowledge, creativity and problemsolving abilities. Technology not only affects how we learn, but also what we learn. To catalyse teaching and learning

innovations, the fourth Flexible Futures conference was organised by Professor Wendy Kilfoil and hosted at the CSIR from 4 to 5 October 2018. The plenary speakers were Sir Peter Cochrane and Johannes de Gruyter of Portland State University in the USA. Approximately 180 people attended the conference. Of the 31 non-keynote presentations, about 90% were from University of Pretoria presenters. The conference has proven to provide an excellent venue to showcase some of the excellent work being done at UP in teaching with technology. The Department for Education Innovation also had a stall at which attendees could experience virtual reality.

The Department for Education Innovation (EI) provided institution-wide workshops and priority courses to develop the teaching, assessment and e-learning skills of academic staff members. The E-education team scheduled 42 sessions of priority courses, which were attended by 531 staff members. The courses enabled lecturers to use clickUP, Turnitin, QuestUP, and to create digital lectures. They also prepared students to use clickUP effectively. Approximately 1 870 students attended the 45 student orientation sessions. The Education Consultancy Unit presents many facultyfocused workshops and teaching and learning events, as well as the flagship Academic Induction programmes in January and June. The education consultants were also responsible for the training of all tutors and assistant lecturers. The role of the Education Consultant (EC) per faculty was to assist the nominees of the Teaching Excellence Laureate with the compilation of a teaching portfolio. The two Teaching Excellence Laureate winners were Dr Thiru Vandeyar (Faculty of Education) and Professor Martina Crole (Faculty of Veterinary Science). The Community Engagement Award winner was Dr Victoria Rautenbach (Faculty of Natural and Agricultural Sciences).

El continued to play a pivotal role in the development of analytics capacity in the University to enhance decision-making for the purpose of student success. Members of the department served on both the Task Team for Student Access and Success, and the Tshebi data analytics project team, with Dr Lemmens chairing the latter committee.

The Department also administered a number of grant funds in addition to its operational budgets. This includes grants from the Department of Higher Education and Training, the Michael and Susan Dell Foundation (MSDF), the MasterCard Foundation Scholars Programme (MCFSP), the Kresge Foundation's Siyaphumelela project funding, the Carnegie Corporation of New York grant for research into blended learning, and the Ikusasa Student Financial Assistance Programme (ISFAP). The Siyaphumelela grant of \$100,000 annually from the Kresge Foundation (2014-18) to use data to promote student success was managed by a small central team including the Director of EI, Dr Lemmens of the Higher Education Research and Innovation (HERI) unit in EI, and Mr Hugo Mouton of BIRAP.



Professor Kilfoil with the Department of Education Innovation

Achievements under Director: Prof Kilfoil (2008-2018)

Professor Kilfoil was appointed as a director in 2008 for the Department of Education Innovation. Under her leadership, the department grew in stature in its strategic role of supporting the teaching and learning strategies of the University of Pretoria. A summary of highlights within the period will not claim to do justice to the leadership of Professor Kilfoil but will rather serve as an indication of the impact of her leadership. It is for this reason that the report is supported by personal comments of colleagues within the Department for Education Innovation.

In 2008, the department received a commendation during an Institutional Higher Education Quality Committee (HEQC) of the Council on Higher Education (CHE) audit. The Department also hosted the Eduvate international conference. A strategic planning session focusing on the creation of a new vision in 2009 was followed by an external review of the department. Both events laid the foundation for the focus of EI for the next few years. In 2010, EI coordinated the bi-annual Education Innovation Awards. The positive feedback received from a service delivery satisfaction survey in 2010 verified the excellent service that the Department provided to clients to perform their work. The focus of the Department changed in 2011 with the integration of an additional Deputy Director responsible for the academic development of students. Taking ownership of the first-year orientation in 2012 and delivering a successful orientation programme again demonstrated the capacity of the Department under the leadership of Prof Kilfoil to provide excellent service to the University. The year will also be remembered for the introduction of a new version of clickUP, and the Computer-Based Testing system. The Department also received high-profile international visitors and provided support to 50 students through the Dell Foundation. The quality of work that the Department delivers was again visible through the excellent results achieved in the institutional client satisfaction survey.

The design and development of an extended University Preparation Programme (UPO 101) for online delivery to first-year students and the work with the external donors The Michael and Susan Dell Foundation (MSDF) and the MasterCard Foundation Scholars Program (MCF) increased the student support focus of the Department in 2013. Student success projects in 2013 were aimed at the early identification of student risk, the continuous monitoring of these students, and the evaluation of the programmes associated with the early warning and referral system. The endorsement of the Policy on Teaching Evaluation and the implementation of the revised Student Feedback Instrument associated with this policy were also highlights of 2013. The department also organised the first South African Higher Education Learning Analytics Conference in 2013, thereby demonstrating national leadership in the integration of data to support student success.

Student success continued to remain a priority focus in 2014. The University of Pretoria was one of four universities awarded the Kresge Foundation's Siyaphumelela Grant to improve the success of first-year students by using data analytics and the second SAHELA (South African Higher Education Learning Analytics) event was held, linked to LASI14 at Harvard and presented as part of the SA AIR annual conference. Prof Kilfoil's leadership in community engagement contributed to the development of a unique community engagement management system. The Teaching Excellence and Innovation Awards were also presented again in 2014. The year 2015 will be remembered for two Flexible Futures conferences hosted by the University and coordinated by Prof Kilfoil. She also started to administer national grant funds. The Department of Higher Education and Training Teaching Development and Foundation Provision Training grants was allocated to Prof Kilfoil for institutional management purposes. A significant institutional project branded as FLY@UP was launched to encourage

students to graduate on time. This project was supported by a stronger data-driven focus through the support that the department provided to Faculties in collaboration with other institutional stakeholders. The Education Consultants (ECs) also organised the Teaching Excellence Laureate awards in 2015.

Student unrest in 2016 contributed to numerous institutional teaching challenges. Prof Kilfoil and the department supported academic staff through innovative solutions and staff development opportunities and indirectly assisted in the completion of the academic year. The department also hosted in collaboration with the Vice Principal Academic a curriculum transformation conference. The Sikelela Scholars programme was added in 2016 to the list of grant funds already managed under the leadership of Prof Kilfoil. The growth in the uptake of hybrid Learning was celebrated by a Hybrid Fair organised in collaboration with the Faculty of Natural and Agricultural Sciences.

A third successful Flexible Futures conference was coordinated by Prof Kilfoil in 2017. The Department was tasked to administer a national Carnegie Corporation of New

York grant for research into blended learning focusing on the impact of the student unrest in 2016. Another grant, the Ikusasa Student Financial Assistance Programme (ISFAP) was added as a pilot grant to fund the 'missing middle' to the list of grants managed under the leadership of Prof Kilfoil in the department in 2017. A Hybrid Learning Marketing project was launched to create an awareness in students what they should expect of the integration of technology into their programmes in enhancing their success as students and graduates. Prof Kilfoil also continued in 2017 to project manage the Quality Enhancement Project of the Council on Higher Education (CHE) at the University in addition to the time she spent on the development of a plan for the University Capacity Development Grant (UCDG) for 2018-20 and the presentation of the plan to other national Universities for evaluation purposes.

Prof Kilfoil's official retirement at the end of September 2017 was postponed through a contract to remain in the position as director until a new director could be appointed. The impact of Prof Kilfoil's leadership was visible through the results of the institutional satisfaction survey of support departments in which El was rated the highest in the University on the professionalism and expertise of the staff.

Prof Kilfoil's institutional contribution was visible during all the years in her position as director of El through her work in assisting the Vice Principal: Academic and other Executive Management members of the University to implement numerous institutional projects and strategies. Also, added to this, the real measurement of Prof Kilfoil's contribution to the colleagues she worked with for more than 11 years is notable through the comments of El staff members shared during the official institutional farewell to Prof Kilfoil.

Flexible Futures Conference

The fourth Flexible Futures conference was held at the CSIR on 4 and 5 October 2018. Approximately 180 people attended. About 50% of the registrations were from UP staff members. The theme of the conference was Technologyenhanced innovation in teaching, learning, assessment and student success strategies', and the sub-themes were:

- · Applying artificial intelligence to education;
- · Learning science and pedagogy for online use;
- Achieving teaching and learning outcomes supported by technology;
- · Innovative student success strategies with technology; and
- · Technology and graduation.



Attendees at the Flexible Futures IV conference

Sir Peter Cochrane's keynote speech on the first day of the conference, 'Al – threat or promise?' was thought-provoking. Cochrane is currently Professor of Sentient Systems at the University of Suffolk, UK, as well as being a seasoned professional with over 40 years of hands-on management, technology and operational experience. Johannes de Gruyter of Portland State University in Oregon, USA not only delivered a stimulating keynote speech on the second day of the conference that highlighted the participation of students in the design and development of curricula, but added value by presenting a seminar at the Department for Education Innovation on 3 October.



Professor de Gruyter with UP staff and students

Thirty-one papers and demonstrations were presented, about 90% by University of Pretoria academic and professional staff, demonstrating the high degree of commitment to using technology to enhance teaching and learning at UP. The most highly rated of the presentations gives a flavour of the presentations:

- 'Achieving teaching and learning outcomes supported by technology' (panel discussion based on research funded by the Carnegie Corporation of New York with panellists from participating grantee universities: Johannesburg, Cape Town, Free State and Pretoria): De Wet, T, Haupt, V, Meintjes, A and Scheepers, D, and facilitator Kilfoil, W.
- 'Undergraduate students' access to social media related resources and the risk of tacit social exclusion: A South African case': Leith, K, Schmulian, A and Coetzee, S.
- · 'Learning design with technology': Amory, A.
- 'Radiography board game brings life to teaching and learning': Essop, H, Kekana, M, Sethole, M, Lovric, G and Ahrens, E.
- The "Groenkloof Campus Race": A mobile learning experience' (demonstration): Joubert, J and Callaghan, R.

The winning paper was 'EBIT Faculty Student Advisor appointment booking system goes online: Confidentiality and ease through Google Calendar' presented by Botha, A, Vinson, C, Naidoo, R and Van Meyeren, M.

The Department for Education Innovation also had a stall at which attendees could experience virtual reality. Virtual reality has great potential for experiential learning at university level. It has been used for some years already in mining engineering, where students can virtually experience being in a mine environment. In this case, Education Innovation showed how it could be used in health sciences and geography, amongst other subjects.

The conference, organised by the Department for Education Innovation, using funds from the University Capacity Development grant, was well-supported by the deputy deans for teaching and learning, who also encouraged their staff to attend and present.



Mr Almero du Pisani and Mr Johan Slabbert



From left to right: Professor Salome Human-Vogel (Education), Professor Birgit Kuschke (Law), Professor Marietjie Potgieter (Natural and Agricultural Sciences), Professor Alta van der Merwe (Engineering, Built Environment and IT), Professor Wendy Kilfoil (Education Innovation), Professor Ernest van Eck (Theology and Religion), Professor Gerrit Stols (Education Innovation), Professor Hennie Stander (Humanities), Professor Dianne Manning (Health Sciences) and Mr Dolf Jordaan (Education Innovation)

Academic Development

In 2018, the sub-directorate of Academic Development, headed by Professor Ana Naidoo, spanned the professional development of academic staff, institutional research into student success, as well as the academic development of students. In addition, the oversight of externally funded programmes that focus on student support is included in this portfolio.

The two EI line managers reporting to the Deputy Director were the head of the Education Consultancy and the head of Higher Education Research and Innovation. Separate reports from these sections are included in this annual report and thus no additional detail is given here. The academic support and development of students is described in more detail below.

Academic development of students

Faculties, academic departments and lecturers have the primary responsibility for the academic development of students. El works closely with them through their teaching and learning committees and on institutional committees such as the Tshebi data analytics group and the FLY Project. The Deputy Director: Academic Development in El also convenes the monthly meetings held with the Faculty Student Advisors (FSAs) appointed by the faculties in a community of practice to ensure that there is a common understanding of their role in academic development through the reinforcement of co-curricular skills such as study, time-management and test-taking strategies. El also trains tutors to facilitate learning effectively. El leads the FLY@UP campaign to promote minimum time to completion of studies. The first phase involves the Orientation Programme for first-year students during which FSAs and their services are introduced. They subsequently manage the fully online extension of student orientation, UPO. In addition, El houses some donor programme staff who provide wrap-around support to students whom they sponsor.

FLY@UP and UPO

FLY stands for The Finish Line is Yours. FLY@UP adopted UPO, the University of Pretoria's compulsory online orientation module, as its flagship programme and aligned the content and messaging of UPO with that of FLY@UP. All new first years are registered for the UPO module assigned to their faculty, which is developed by EI and administered per faculty by the FSAs. UPO had a 90% completion rate in 2018. The themes addressed in UPO are:

- An introduction to the FSAs, mentoring, tutoring, and finances and budgeting;
- · Time management and goal setting;
- · Academic reading and writing;
- · Note taking and study methods;
- Reflecting on adaptation (done in the middle of semester one);
- Motivation in the form of success stories of senior students; and
- · Examination preparation.

Training workshops

Various 'time management and goal setting' and 'examination preparation' training workshops were presented to student leaders to equip them to host similar sessions with the students in their care. In total, 43 student leaders attended these workshops.

Piazza activations

Eight Piazza activations were held with the aim of making resources accessible to all students to provide them with the necessary support to graduate in the minimum amount of time. FLY@UP, in partnership with Specsavers Hatfield, sponsored 24 students to receive reading glasses. A group of students were trained as FLY@UP ambassadors to support the FLY@UP initiative and to add more relevance to the activations.



FLY@UP activation at the Piazza

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Success story competitions

Students were invited to share their orientation and academic success stories through a competition launched by FLY@UP. One hundred and twenty-two students entered orientation success stories, while 365 students entered their academic success stories. These stories will be used in 2019 to motivate other students.



Students enjoying the entertainment at the FLY@UP success stories competition prize-giving

Roadshow

The FLY@UP team went on a roadshow to disseminate the message that student success is everyone's responsibility and similar visits were made to individual faculty student administration departments, who encouraged the efforts made for students to succeed.

To ensure excellent client service, FLY@UP offered breakfast/ lunch sessions to support staff (specifically secretaries and student administration staff). As they are often the first point of contact for many students, these sessions aimed to sensitise staff members to the challenges that students face. Staff members were encouraged to share positive anecdotes of how they assisted students.

Orientation

The University continued the new practice of getting students to register before being provided with face-to-face advice on the various programmes during the Orientation Week. The registration and the orientation programmes were split in terms of timing and location.

The first point of contact once a student is registered is engaging with an institution's Orientation Programme. Orientation is seen as the first institutional involvement in a student's life at university and thus it needs to be comprehensive. For 2018 the University reverted to the format of orientation that was similar to that implemented before 2017. The Orientation Programme for 2018 was organised by The Deputy Director: Academic Development.

While the actual programme was conducted over a week beginning on 29 January, the online module UPO is seen as an extended first-year orientation programme. Information was provided on university structures and services, as well as faculty information.

The main focus of orientation was students' understanding of the programmes and academic requirements once they were registered. In addition, generic topics such as Safety, Health Services and Student Counselling, amongst others were presented. The FSAs focused on the type of support that they each provide. The social aspect of orientation was covered by having a campus tour in the form of "The Amazing Race".

Faculty Student Advisors (FSAs)

EI has oversight of the FSAs who fall directly under the Deputy Deans Teaching and Learning. El conducts monthly meetings to support the 18 FSAs as a Community of Practice. Training and professional development sessions were conducted throughout the year for FSAs through the EI department. One example of a development session was the training through the Franklin Covey group with all the FSAs taking the 7 Habits of Successful People course. The role of FSAs was refined in 2017 and their job description was evaluated in 2018. An attempt was made to have all FSAs pegged at the same peromnes level for 2019. The roadshow was part of a comprehensive plan to integrate the advising services offered at UP. Strategic plans were developed to introduce this integration in 2019. The process to develop a curriculum for advising began with a benchmarking activity with respect to what FSAs do at UP.

Donor Programmes

The Mastercard Foundation Scholars Programme (MCFSP)

In 2018, the Mastercard Foundation Scholars Program (MCFSP) at the University of Pretoria entered its fifth year, and an additional 53 students from 12 African countries were selected to benefit from the scholarship. The programme was pleased to welcome a new manager in 2018, Dr Ololade Shyllon who started on 1 July. A new postgraduate academic coordinator, Dr Efe Iske, was appointed, as well as a staff member for recruitment, Mr Sifiso Khubani, both starting on 1 August.

The MCFSP once again recruited students from all over Africa to do their undergraduate and postgraduate studies at the University using MCFSP funding. Of a total 165 active scholars in 2018, 43 scholars graduated in that academic year. The following were some of the highlights from 2018:

 Thirty-two scholars graduated in April 2018 (four undergraduate, 19 honours and eight master's) having completed their degrees in the 2017 academic year.
 Fifteen of the honours graduates went on to enrol for master's degrees, and all four undergraduates have also enrolled for postgraduate studies funded by the MCFSP.
 Notably, seven of the graduating scholars (six honours and one master's) obtained an average of 75% or higher.

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- The Golden Key International Honour Society recognised 11 scholars for outstanding academic achievement at the University of Pretoria and extended an invitation for them to join the Society.
- Nineteen scholars received awards from the University of Pretoria in recognition of their excellent academic achievements. Of these, 12 received the UP Achievement Award, six received the UP Merit Award and one received the Vice-Chancellor's Discretionary Merit Award, which is awarded to undergraduate students who achieved 90% in their Grade 12 results prior to joining the University.
- A scholar received the top second-year mining engineering award for the 2017 academic year.
- An undergraduate scholar studying towards a degree in food science received the Amanda Minaar Award for outstanding academic achievement in the Department of Food Science.
- A scholar completed his Bachelor of Investment Management at the top of his class in 2018 with a final

- average of 81%. He is continuing as a scholar and has registered for his honours in investment management for the 2019 academic year.
- A second-year master's student in environmental management received a Green Talent Award for her master's research on renewable energy strategies for energy poverty alleviation. She was one of 21 researchers from around the world who received this award. In October, she attended a two-week science forum in Germany during which she received her award at a ceremony. The award honours young researchers from around the world for the outstanding academic achievement of making the world sustainable through their research.
- Another second-year master's student in project management from Kenya attended the 15th Skoll Emerging Leaders Conference on Social Entrepreneurship in Oxford, United Kingdom in April 2018. The forum brought together notable world figures.

Michael and Susan Dell Foundation (MSDF)

The Michael and Susan Dell Foundation directly funds two programmes focused on support for NSFAS students, viz., the Dell Young Leaders (DYL) Scholarship Programme and the Sikelela Scholars Programme (SSP). The two posts of managers were vacant from October 2018, which impacted the services that we could provide.



Dell Young Leaders 2018

The Dell Young Leaders Programme (DYL)

The Dell Young Leaders Programme took on the 7th cohort of 60 students at the University of Pretoria. This brought the total number of students awarded the Dell Young Leaders Scholarship at UP to 370. The Dell Young Leaders Programme saw a further 34 students complete their degrees at the end of 2018. This brings the total number of Dell Young Leaders who have completed their undergraduate degrees at the University of Pretoria to 136. Of these graduates, 100% have either gone on to postgraduate studies or have successfully been placed in the world of work. The DYL retention rate (qualified or active) continues to track above 90% as we strive to support our students towards graduation and going into the workplace.

Academic highlights:

- The programme at UP produced our first qualified medical doctors in 2018.
- A total of 63 of the 236 (~27% of DYLs) students who were active at the start of 2018 achieved a GPA of 70% or better.
- More than 46% of the total student body had a GPA above 65%
- The top achiever for 2018 was from the 2018 cohort and completed her 1st year in BCom Accounting Sciences with a GPA of 91%.

A total of R3,596,771.00 was disbursed from the available

Dell Young Leaders funds in 2018. A further amount of R4,651,565.45 was used to pay down the NSFAS loan amounts for 62 of the Dell Young Leaders graduates. This brings the total paid to NSFAS on behalf of 79 Dell Young Leader qualifiers to R5,838,013.45 since the inception of the programme at UP.

The Sikelela Scholars Program (SSP)

The Sikelela Scholars Program (SSP) was launched at the University of Pretoria in June 2016 and seeks to empower and reinforce the success of young South Africans, ensuring that they complete their chosen degree and are ultimately prepared to compete for meaningful employment post-graduation. A further 100 successful students received laptops, food and book incentives, mentoring, tutoring, skills development and online programme support. The aim of the programme is to determine if students who are provided with additional wrap-around services perform better than those who only have the university support services at their disposal.

At the end of 2018, Juanitill Pettus left the Dell Young Leaders Programme. David Thompson, the Programme Manager opted to step away from the financial management and reporting responsibilities of the programme in order to better focus on the provision of direct support to the students in the programme. In addition, the Sikelela Programme Manager resigned at the end of September but after advertising, a suitable replacement could not be found. The programmes thus began 2019 with two vacancies.





ISFAP Engineering Students 2018

Ikusasa Student Financial Aid Programme (ISFAP)

The Ikusasa Student Financial Aid Programme (ISFAP) is a new programme designed to address the so-called 'missing middle' student – a student who does not qualify for NSFAS based on family earnings but who does not have adequate financial resources to register. In addition, funds were provided by the Department of Higher Education (DHET) to deliver wrap-around services as additional support to the 269 students studying Accounting Science, Actuarial Science, Medicine and Engineering. El provided advice and oversight of the programme and took responsibility for the disbursement of funds together with Programme Managers in the faculties. Some of the activities included in the wrap-around services were tutoring, mentoring, counselling and social events.

Tutoring took the form of small learning communities that were developed among the students. Leaders were chosen by group members to guide students on academic and social issues. These communities established a platform to share goals and dreams on a personal level. The students met either face to face or on WhatsApp groups depending

on the time and place that suited them. The weekly learning community programme, which was led by paid tutors from a year ahead of each cohort, proved to be helpful and students have requested that the programme continue. The tutors were also contracted for individual students who were struggling with specific modules.

The first-year students received mentorship from older, experienced students in the same degree and similar backgrounds. The new first years (2018 cohort) met with their mentor once a month for coffee, which was managed through vouchers.

Psychological workshops were presented to students to develop soft skills and emotional intelligence. Pre-examination motivational sessions gave students that extra boost and confidence before examinations, especially focusing on self-care. Social events were hosted with professionals in the field presenting on career planning, expectations, preparation and the future.



ISFAP Launch event Testimonials from previous cohorts 2018



ISFAP Welcome Back Function 2018



ISFAP Spring event Sept 2018



ISFAP Launch event New Cohorts 2018

Education consultancy

The Education Consultancy group was headed by Dr Sanet Haupt. The Education Consultants (ECs) are responsible for assisting academics in their pursuit of teaching excellence. Their services include curriculum, teaching and assessment development. These services were founded on strong relationships that have been built in the faculties. These were negotiated with the Deputy Dean: Teaching and Learning/ Education or head of teaching of each faculty and are aligned with the strategic initiatives of the institution. 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. The ECs were assigned as follows in 2018:

- Elmien van Amerom and Sanet Haupt: Economic and Management Sciences (EMS)
- · Senoelo Nkhase: Education (resigned)
- · Adriana Botha: Built Environment and IT (EBIT)
- · Irene Lubbe: Health Sciences
- · Marena Lotriet: Humanities
- · Faith Mathibedi: Law
- Ina Louw: Natural and Agricultural Sciences (NAS)
- · Carol Gossmann: Theology
- · El-Marie Mostert: Veterinary Science

Sanet Haupt: Mamelodi Campus Continuing Professional Development to Enhance University Teaching

Opportunities for academics to access professional development activities are considered to be a lead indicator for improving the quality of teaching. El's teaching development activities therefore have an impact on the quality of teaching at UP. Certain priority programmes are the ECs' flagship training events and attendance is reflected in Table 1.

Table 1: Priority training offered by the Education Consultancy group, 2018

UP Academic Induction	78 + 39 = 117
INNOVIL	54
Tutor Training (including ISFAP tutors)	544

INNOVIL, the new training model, as refined during 2017 with all assistant lecture coordinators, was successfully implemented in 2018. As the Academic Induction is a flagship programme, the feedback from the participants on the 2018 programmes are given in Table 2 below. Feedback is, however, collected on all training to improve the quality of the programmes.

Table 2: Response rates and feedback of the participants on the 2018 Academic Induction Programmes

	January 2018	June 2018
Response rate	60,0%	66,7%
Stated objectives achieved	93,6% felt they were achieved, 4,3% felt they were partially achieved and 2,1% not achieved.	92,3% felt that they were achieved and 7,7% partially achieved.
Coverage of subject matter	53,2% felt that it was covered excellently and 46,8% adequately.	69,2% felt it was covered excellently and 30,8% adequately.
Suitability of Programme Material	59,6% felt that it was well suited and 40,4% adequate.	61,5 felt it was well suited and 38,5% adequate.
Level of Difficulty	93,6% felt that the level was appropriate and 6,4% too elementary.	84,6% felt that the level was appropriate and 15,4% that it was too elementary.
Applicability to Work	42,6% felt it was significant to their work, 55,3% felt that it was adequate and 2,1% felt it was insignificant.	46,2% felt it was significant to their work and 53,8 adequate.
Length of programme	76,6% felt the length was adequate, 21,3% it was too long and 2,1% too short.	53,8% felt the length was adequate, 42,4% felt it was too long and 3,8% too short.
Induction programme recommendable or not	51,1% felt that the programme was highly recommendable, 46,8% recommendable and 2,1% not recommendable.	50% felt the programme was highly recommendable, 46,2% felt the programme was recommendable and 3,8 not recommendable.

The Faculty-based training was implemented according to Faculty or departmental needs and included the following: assessment; curriculum development and review; teaching methods; student engagement; hybrid teaching and learning; teaching portfolios; marking skills training; use of clickers, amongst others. The training was mostly funded by faculties or departments, but coordinated and/or facilitated by the education consultant. The numbers below reflect the training coordinated and facilitated by the EC.

Table 3: Number of attendees at faculty-based training for 2017 and 2018

Faculty	Number of attendees
Economic and Management Sciences (EMS)	450
Engineering, Built Environment and Information Technology (EBIT)	90
Education	19
Health Sciences	542
Humanities	94
Law	46
Natural and Agricultural Sciences (NAS)	782
Theology	16
Veterinary Science	69
Mamelodi	40
TOTAL	2148

It is clear from the numbers that a significant proportion of the academic staff attended faculty-based training in 2018.

Scholarship of Teaching and Learning (SoTL) and Institutional Research

In Veterinary Science, a longitudinal research project to determine the experiences of veterinary students and working veterinarians has been running since 2009. The study was extended to the DVN students in 2017 as well as the newly qualified veterinarians during their compulsory community service (CCS) year. The results from this study are used to identify trends and enhance the teaching and learning in that faculty.

Two SoTL studies in the Faculty of Veterinary Science are:

- A Collaborative Study with the University of California, Davis, School of Veterinary Medicine and University of Pretoria, Faculty of Veterinary Science titled "Mental Health and Wellness Issues facing Students in Veterinary Medicine". The results of this study will be published and a conference paper/papers will be presented.
- A secondary data analysis study about the teaching practices of Law and Ethics in Veterinary Science in preparation for publication in the Journal of Veterinary Medical Education.

In EMS, a second Qualtrics questionnaire was sent to all of the students in the faculty, through the Faculty House, as part of the faculty's transformation strategy. From the results, it is expected to gain a better understanding of the students' experience and perception of transformation in the faculty. This information contributed to the renewal of pedagogy and classroom practices as part of the faculty's transformation strategy.

In NAS, four SoTL projects were supported and SoTL funding was obtained for a new project to be submitted for publication. A platform SCIBER Space (Science Based Education Research) was created to support colleagues who are interested in scholarly research about the teaching of their discipline. Five meetings were held and 69 people attended.

The EBIT faculty as part of UP's Curriculum Transformation Drive embarked on a two-phase initiative for administering two surveys in 2018, one for students and one for staff. For phase 1, survey 1 is designed to identify general themes. Survey 2 was more specific and was based on what was learnt from the responses in Survey 1. Ethical clearance was granted for this initiative. In 2018, the data of the 687 student survey responses were analysed by a subcommittee of the EBIT Transformation Committee. The 108 staff responses received will be analysed and reported on in 2020. The focus of the surveys was to gain a better understanding of the students' and staff's experience and perception of the EBIT Faculty with relation to: Teaching and Learning; Diversity; The University in relation to its Social Context; Transformation; and Institutional culture. The staff survey included the theme Human Resources. This committee submitted an abstract on the research results

of the student survey, which was accepted for presentation at the 2nd Biennial SOTL in the South Conference / Annual CUT SOTL Conference, 9–11 October 2019 at the Central University of Technology in Bloemfontein.

The EBIT Faculties had a faculty wide "Interactive curriculum" visualisation mapping project" SoTL project. This project was piloted in 2017 with the department of Mining Engineering and in 2018 included the departments of Electric, Electronic and Computer Engineering, Informatics, Information Science and the Department for Construction Economics. This project will continue in 2020 with Architecture and programmes that have gone through a curriculum review process. The goal of this project is to ensure that all programmes and modules across EBIT will have an interactive curriculum map by 2020 that will be available in the ClickUP modules, on the departmental websites and will be used for school visits and orientation days. In addition to this SoTL project, various research outputs were achieved for the SoTL on the "iPeer online tool" in clickUP in 2018. These have been implemented in EBIT since 2017 as a form of formative assessment 'as learning' for group participation evaluation. Fourteen modules are involved and ethical clearance was received to continue with the administration of a student feedback form on the use of iPeer in 2019. Permission was also granted to analyse the compulsory comments in the iPeer evaluation events to enable the research team to develop a clickUP module in 2019 on the fundamentals of teamwork that can be introduced in any module in EBIT that has teamwork as a component and outcome of their module.

Curriculum Review

During the beginning of 2018, the Faculty of Economic and Management Sciences applied for institutional accreditation with the Association to Advance Collegiate Schools of Business (AACSB). In preparation for this accreditation process, an Initial Self Evaluation Report (ISER) needs to be submitted proving adherence to the 15 identified AACSB standards. During 25–26 June 2018, Prof Chris Wert from Pôle Universitaire Léonard de Vinci was invited to orientate lecturers in the AACSB Accreditation process, as well as to provide a two-day workshop on how to conceptualise and formulate learning goals, learning objectives and rubrics. Three representatives from eight academic departments in the Faculty of Economic and Management Sciences (referred to hereafter as FEMS) attended the workshop. The eight academic departments were then grouped into three streams, namely, the Management stream (represented by the Departments of Business Management, Human Resources Management and Marketing Management), the Financial stream (represented by the Departments of Accounting, Financial Management, Taxation and Auditing) and the Economics stream (represented by the Department of Economics).

On 7 November 2018, a task team of seven members was established, i.e. the education consultant as task team leader, the Deputy Dean: Teaching and Learning, and five lecturers representing the three streams. The task team was mandated by the Dean, Prof Elsabé Loots, to spearhead the development of the learning goals, learning objectives and rubrics based on all feedback received from the AACSB mentors. The EC facilitated the development of learning goals (hereafter referred to as LGs), and learning objectives (hereafter referred to as LOs) by means of guiding workshops. Four workshops between 12 November and 4 December 2018 were presented by the EC, providing task team members guidance on how to write programme-level outcomes using the 10 NQF SAQA level descriptors, as well as Bloom's Taxonomy. The outcomes of the workshops were the development of four generic LGs and 17 generic LOs spanning all learning programmes in FEMS from B.Com up to PhD levels. The application process for AACSB Accreditation is still in progress and will be continued in 2019 where the focus will be on developing the 17 assessment rubrics for the 17 identified LOs, as well as the completion of documentation to prove adherence to AACSB's 15 standards.

The AACSB Accreditation process has challenged FEMS lecturers to pursue excellence and continuous improvement throughout all learning programmes. The four identified programme learning goals and 17 identified learning objectives answer the questions of what students are expected to learn and how it should be learnt. The question of how FEMS lecturers will know whether students have learned anything will be answered in 2019 by means of the development of assessment rubrics and the collection of data as evidence.

The spin-offs from embarking on the AACSB Accreditation application process in 2018 were:

- A revision of the exit level outcomes of the B.Com Marketing Management, B.Com Honours Marketing Management, M.Com Marketing Management and PhD Marketing Management learning programmes, as well as the learning outcomes of core marketing management modules.
- A revision of the learning outcomes of BEL200 and BEL300 as core modules in the Department of Taxation.
- A re-alignment and revision of the learning outcomes of modules in the B.Com Business Management learning programme.

The Department of Business Management attended four training sessions during November 2018 to finalise various aspects of teaching and learning and specifically module content development. These workshops were critical for the AACSB process on which the faculty had embarked. The sessions covered topics such as learning outcomes

and constructive alignment, rubrics and computer-based assessment.

The curriculum activities in NAS were the normal module changes and credit changes, but a deliberate transformation drive was undertaken and each programme had to identify modules where the SDGs would be best included in the curriculum. That process has been completed. Study guides are reviewed as part of the compulsory peer review system followed for probation and promotion candidates. Follow-up discussions afford the EC the opportunity to improve on the quality of the study guide. Many departments carried out curriculum alignment activities.

Thirty workshops were offered in the Faculty of Health Sciences. Six were general and focused on curriculum, assessment, teaching, learning and facilitation; 24 were school or department specific and had a wide variety of topics, including curriculum transformation, study guide revamping and alignment, teaching, assessment and clinical teaching, as well as ethical aspects related to all topics.

Themes:

- Teaching philosophy
- · Roles and responsibilities of the lecturer
- · Domain competencies
- Flipped classroom: Teaching strategies and approaches
- · Curriculum mapping
- Programme competencies
- Evidence/assessment
- STATA
- Curriculum alignment and learning objectives and outcomes
- · Assessment from Bloom to Blueprinting

For 2018 and 2019, the faculty has a study guide drive to ensure that the study guide and curriculum aligns, and to renew and transform the curriculum as seen fit.

There were departmental requests for training from the Law Faculty, predominantly in terms of curriculum design and development. The requests included the following: curriculum development and review; assessment; teaching methods; content and level, credits and notional hours, hybrid model teaching and learning, the inclusion of Transformation Framework Drivers and Study Guide review. In addition, the consultant in the faculty coordinated the following: a faculty workshop on the LLB 2020 curriculum, which was facilitated by the Dean, Professor A. Borraine; a faculty seminar on the LLB 2020 curriculum following the attendance of year group meetings by the visiting Professor N. Huls from the University of Leiden (Netherlands); and

the LLB 2020 curriculum review workshop (123 attendees) facilitated by Ms M. Lortiet (Faculty of Humanities Education Consultant), supported by Dr S. Haupt (Head: Education Consultancy).

Following the workshop and the seminar, lecturers mapped their modules on a Curriculum Mapping Framework, which was aimed at providing an overview of the module and its place in the LLD 2020 curriculum. Individuals, teams and departments interrogated the submissions and forwarded comments to the Deputy Dean, Professor Kuschke, and these informed the processes and content of the faculty's LLB 2020 curriculum review workshop. The outcome of the workshop was two curriculum proposals, which will be tabled and discussed at the 2019 Faculty Board meeting.

During the LLB 2020 curriculum review workshop, departments mapped the LLB programme reducing redundant module content and identifying duplication, as well as aligning the modules for coherence and relevant scaffolding, considering the allocation of credits an articulation between levels.

Dr Nagel (Project Manager: e-learning) coordinated a two-day workshop on designing the e-learning component of the LLM Disability Rights in Africa, a multi-disciplinary programme facilitated by Dr Brown. In attendance were the Director of the Centre, Professor Viljoen, eight module lecturers, Mr Kriel (Instructional Designer), and Ms Lotriet (Humanities: Education Consultant), who supported the lecturers in the planning of courses as some of the students enrolled are Humanities graduates with no law background.

Over a period stretching from May to September (comprising a number of work sessions and meetings), lecturers from the Fine Arts division in the Department of Visual Arts reimagined and reframed the entire undergraduate curriculum for the Bachelors in Fine Arts. The education consultant for Humanities guided this process.

Curriculum transformation was the focus of the first Faculty Teaching and Learning Discussion for the year. On 3 May, colleagues from three departments (Historical and Heritage Studies, Speech Language Pathology and Audiology, and Music) shared their efforts and achievements in terms of transforming their curricula and the way in which these changes were received by students and other stakeholders. The presenters were:

- · Ms Phuti Sepuru (Music);
- $\bullet\,$ Dr Ian McQueen (Historical and Heritage Studies); and
- Ms Renata Mosca and Ms Shabnam Abdoola (Speech-Language Pathology and Audiology).

The response and open discussion was led by Dr Nisa Paleker (Chair: Transformation Committee) and Dr Ndukuyakhe Ndlovu (Archaeology and Anthropology). A total of 38 lecturers and students attended.

The other faculty sessions focused on student success and support:

On 22 May, Prof Lilli Pretorius from UNISA (an expert in the area of reading ability, vocabulary and academic language proficiency) gave a presentation on the factors that impact students' reading ability. During the session named "How much reading to assign?" some ideas were shared on the types and amount of prescribed reading at different university levels. The session was attended by 40 lecturers.

The above presentation inspired interest in the Faculty of Humanities. Later in the year, on 25 October, nine lecturers from the faculty attended a workshop facilitated by Prof Lilli Pretorius on how to design possible reading research projects.

ON 7 August, Ms Jacomien Muller, a guest lecturer in the Department of Psychology, presented a session on "Teaching and the Brain (Neurocognitive psychology in the classroom". From a neuropsychological perspective, she shared understandings of how the brain functions during a process of learning. She furthermore critically considered how various lecturing approaches in the classroom could possibly enhance student learning. Fifteen lecturers attended the session

During a very insightful session on 21 August, a panel of four successful first-generation 2018 students shared their experiences at the University of Pretoria giving a few ideas on how lecturers could possibly support their learning and their academic experiences. A short opening presentation was given by Ms Marena Lotriet. Ten lecturers from the faculty attended the session.

In the Faculty of Veterinary Science, the curriculum development of the BVetNurs programme was finalised throughout 2018 for implementation in 2019. A project to review the Veterinary Professional Life curriculum for all year groups was launched with all relevant stakeholders – academic staff, faculty student advisor, student representatives, education consultant and guest lecturers. The curricula for two newly developed PGDip modules were also finalised, namely, the Veterinary Legislation, and Policy and Animal Welfare.

Various curriculum review activities took place in the EBIT faculty in 2018, which were as follows:

- ENGAGE Programme: suggestions from the external quality review panel were implemented in 2018 following an intensive curriculum review and re-curriculation process done in 2017.
- The Department of Construction Economics: the department, as a collective, went through an intensive programme review and re-alignment of all their undergraduate and post-graduate programmes in

Construction Management, Quantity Surveying and Real Estate in preparation for accreditation visits in 2018 and 2019. Mrs Botha conducted various curriculum workshops and consultation sessions were held with the different programmes and with the department as a whole during 2018. Nine programmes were prepared for submission to the Teaching and Learning Committee and Faculty Board at the end of 2018. The department takes pride in the curriculum documentation that was created and worked on during 2018 in a departmental Google Team Drive. These documents included the CHE and SAQA forms, as well as PQM documents, curriculum maps, assessment maps, and study guides.

- The Department of Information Science: various workshops were held with the three programme coordinators and their staff on Multi-Media, Publishing and Information Science as part of the department's three-year curriculum review and renewal plan. During this process, the department, together with Informatics, were able to submit CHE and SAQA documentation to the Academic Planning office at the end of 2018.
- The School of IT: as part of SIT's improvement plan, the school had a workshop titled: Implementing a Programme and Institutional Assessment Initiative for SIT in EBIT Faculty (UP), using Blackboard's Assessment and Learning Analytics Technologies (Goals Area), in August 2018.
 This workshop was facilitated by the principal education consultant of Blackboard International, Dr Ruth Newberry.
 The Department of Informatics, together with Mining Engineering and Construction Economics, are the pilots for this project, of which Mrs Adriana Botha is project leader.
- Continuous workshops and quality assurance of the study guides were provided to modules on a needs basis. Mrs Botha was intensively involved in the review and re-curriculation of the BSS310 module, a service module that is offered to all engineering programmes by the Department of Industrial Engineering. Other service modules that were also reviewed were MOW217, MGC110, NMC113/123, and NPM321.

Assessment

A three-year project aimed at constructively aligning the faculty's module content was initiated in collaboration with the Deputy Dean in 2017. This culminated in the presentation of four "How to write Learning Outcomes using Bloom's Taxonomy" workshops to the Departments of Marketing Management, Accounting and SPMA. The outcomes achieved were:

 The development of a maximum of five to eight broad outcomes per module that aligned to the revised exit level outcomes.

- The removal of redundant learning material from the modules.
- The resequencing of topics in the modules.

The Department of Business Management established an assessment quality process to review the quality of assessment in the department. In the Faculty of Health Sciences, assessment is embedded in all of the workshops on teaching and learning. The focus is on alternative assessment, and lecturers from the faculty presented on their alternative approaches at the faculty research day, flexible futures, Alternative Assessment seminar and SAAHE. Assessment documents need to be included in the peer review process in NAS and the EC uses that opportunity to advise colleagues on good practice. However, assessment practices were not a focus in 2018. After wide consultation in the faculty, the Humanities Assessment Guidelines and Regulations document was approved by the Faculty Board. The education consultant coordinated this process through the Teaching and Learning Committee of the faculty. The use of objective assessment has increased over the past few years in the Faculty of Veterinary Science, and lecturers received training on setting good objective items on different levels of Bloom's taxonomy. This training included the use of QuestUP for continuous assessment. Following the CHE report, the faculty of Law's Teaching and Learning Committee members embarked on reviewing the Assessment Policy, which was last reviewed in 2010. This exercise resulted in a revamped Faculty of Law Assessment Guideline that is aligned to the university's Assessment Policy. In EBIT, assessment support was provided as an integrated activity in alignment with the outcomes to be achieved with all the programmes and modules that underwent curriculum review and renewal during 2018.

Support to Lecturers

In this section, in addition to other support, mention is often made of supporting lecturers to complete teaching portfolios. This is not a technical exercise. Reflective practice lies at the heart of teaching improvement and the scholarship of teaching and learning. In compiling a portfolio, the lecturer is guided to reflect on past and present teaching practices and influences on that practice. Lecturers are also encouraged to adopt an evidenced-based approach to demonstrate the claims in their narrative reflection. In itself, a portfolio might be regarded as a teaching publication as it opens up practice to public review and gives others an opportunity to build on what they can learn from that practice. Portfolios often include reviews by peers and students as evidence. Peer review by an EC is a common formative practice giving a lecturer access to informed input in a low-stakes environment.

In EMS, two lecturers (from the Department of Taxation,

Communication Division) were successfully supported regarding their submissions for promotion to Associate Professor, one lecturer from the Department of Auditing for promotion to Senior Lecturer, and one lecturer from the Department of Accounting for promotion to Full Professor.

Two nominated lecturers from the Department of Auditing and SPMA were supported with the preparation of a teaching portfolio, evaluation of their teaching philosophies, compilation of a report on their teaching and assessment practice for their application for the Faculty of EMS Teaching Excellence Award. The lecturer from the Department of Auditing was the winner of the Teaching Excellence Award and a lecturer from Natural Sciences was the winner of the Community Engagement Award.

One nominated team from the Department of Accounting were supported with the preparation of a complete teaching portfolio, the evaluation of their teaching philosophies, and the compilation of a report on their teaching and assessment practice for their application for the UP Teaching Excellence Award in 2018. They were announced as winners during March 2019.

A total of 31 class visits were conducted by the EC to evaluate the instructional classroom practices of lecturers for professional development purposes. The lecturers assisted were from the Departments of Financial Management, Auditing, Taxation, Accounting, Human Resources Management, Marketing Management, and Business Management.

The Department of Business Management reviewed the teaching practice of all lecturers that teach in the first year (OBS 114). Each of the seven lecturers were peer reviewed and the report was presented to the HOD. Two lecturers from the Department of Accounting were peer reviewed for their applications for the Faculty of EMS Teaching Excellence Awards.

In the Faculty of Health Science, support to staff was provided in the form of individual consultations, class visits and assistance with creating a teaching portfolio. Thirteen lecturers were supported and guided in compiling and submitting a teaching portfolio for either promotion or probation. A template was created for Health Sciences in order to ease the process for the lecturers and initiate a degree of standardisation in lay-out. Twenty-two individual class visits were conducted. This was done for novice and newly appointed lecturers, as well as for promotion purposes. A few of the visits were for lecturers who wanted to create a baseline for themselves and to work from there (self-improvement). Seventy-five individual consultations were mostly related to teaching, facilitation and assessment practices, and often served as a sound-board activity for current or new approaches to teaching and assessment.

In NAS, 45 peer reviews were done in 2018. Sixty NAS colleagues were trained to construct their portfolios, and the EC supported 20 candidates who were applying for promotion. NAS had a focus in 2018 on the cognitive psychology of learning; the FLY@NAS events in Semester 1 all involved that theme. The first event had Ms Jacomien Muller (n=52) as speaker and the topic was cognitive psychology in the classroom. The second FLY@NAS session was also aimed at learning and Ms Ruth Liprini spoke about motivation and learning (n=44). This series was concluded with a session by Dr Ina Louw about the growth mindset and how that influences students' approach to learning (n=45). In the second semester, the sessions were aimed at providing colleagues an opportunity to share their practice. In August, Prof Chetty shared his approach with a small 3rd year module titled: The practical teaching of Quantum Mechanics (n=41). In September, Professors Schrader and Van der Laan shared how they use social media and multi-media modes to get students to do projects (n=26). In November, Prof Potgieter shared her plenary talk from ICCE2018 with participants: "Lessons Learnt from online Teaching and Learning during Disruptions" (n=40).

Apart from involvement in faculty-wide training on peer evaluation and the development of teaching portfolios (22 lecturers and 12 assistant lecturers attended six sessions), the education consultant for Humanities supported more than 30 lecturers on an individual basis. Individual support comprised one or more consultations per lecturer. The topics covered included: module/study guide development, improvement of teaching or assessment practices; teaching portfolio support for the purpose of promotion, confirmation or receiving the teaching excellence award. Teaching evaluation activities furthermore included 21 peer evaluations. Comprehensive evaluation reports not only included feedback on class visits or online facilitation, but also on study guides and assessment practices in the related modules.

In general, there were 23 lecture observations, which resulted in their module study guides being reviewed and discussed during the feedback session following the observation. In addition, two lecturers of Procedural Law and Business Law requested a review of their study guides. Individual support was provided to lecturers from Private Law (7), Mercantile Law (12) and Jurisprudence (4), Procedural Law (2) and Public Law (2). This support included peer review (as a follow-up to the attendance of the Academic Induction/for promotion/ professional development); a study guide review; the evaluation of assessment and its alignment to teaching and outcomes of the module; plagiarism policy discussion, portfolio compilation and promotion support. Training on the compilation of a Teaching Portfolio was conducted on a one on one basis with four lecturers who applied for promotion, and one who applied for the faculty's Teaching and Learning Award. Marking Skills training was conducted for Academic Assistants at the Departments of Mercantile (8) Law and Private Law (7).

In Veterinary Science, 16 class visits were done after which feedback and a written report were provided. These visits included a clinical learning opportunity and a practical presented in the skills laboratory. Support was provided to the 2018 Teaching Excellence Laureate winner by assisting in the development of an online Qualtrics questionnaire, a portfolio of evidence, and a presentation for the panel of judges and for submission to the national HELTASA Teaching Awards. Support was provided to individual lecturers from different departments with regard to the perusal of online assessments, outcomes and assessment criteria, the block system, group work, and recognition of prior learning.

Apart from the various class visits as a compulsory component of the Academic Induction Programme, support for lecturers who are applying for promotion and support to lecturers who applied for teaching excellence awards, there is one highlight of the support provided by the EC to a lecturer in the Department of Informatics since 2017-2018. Apart from being the EBIT winner of the Teaching Excellence Award, awaiting the outcome of HELTASA, Dr Riana Steyn won the 2018 AIS (Association for Information Systems) award for Innovation in Teaching. She was selected as a winner based on a global call for nominations and a thorough evaluation process by the AIS Education Committee. The Committee was delighted to give her this award based on her highly innovative work at the University of Pretoria. They specifically thanked her for her important contributions to advancing Information Systems Education.

Other

The Mamelodi and ENGAGE staff were supported by presenting a T&L day at the Mamelodi campus. Further support was given to the campus by attending and contributing to the T&L meetings on the campus. A workshop was presented to all of the tutor co-ordinators and the tutors on campus. The outcome of the workshop was a suggested referral process to enhance the support provided to students at that campus.

Supporting the roll-out of the hybrid teaching and learning model in EMS, the EC was instrumental in coordinating and arranging Teaching and Learning Brown Bag sessions to improve and enhance the teaching and blended learning skills of staff. Six Brown Bags were presented by various lecturers on topics such as "How to use a very smart tool in true hybrid style", "AV Technology for lecturers", "Online lectures", and "Growth Mindset".

To assist lecturers with their professional development

journey as change agents of teaching, learning and assessment, Prof Johan Oberholster (Deputy Dean: Teaching and Learning) and Mrs Elmien van Amerom (Education Consultant/EC) conceptualised and implemented a Continuous Professional Development (CPD) programme known as the Teaching and Assessment Principles (TAP) Empowerment programme in 2018. The programme aims to empower lecturers with teaching/assessment related knowledge and skills through training embedded in the science of teaching and assessment, driven by the principles of how learning works.

The purpose of the TAP programme is to:

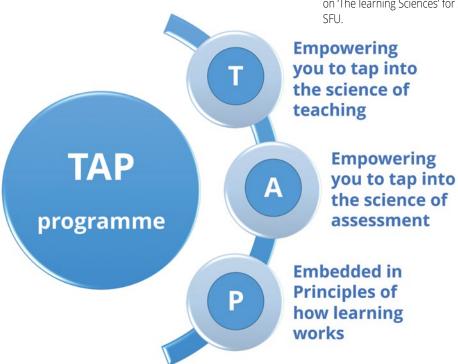
- Provide CPD opportunities to novice and experienced lecturers in EMS;
- Empower lecturers with knowledge on how learning works so that they can help their students learn; and
- Empower lecturers with "how to" knowledge on teaching and credible assessment.

The TAP programme covers seven key themes, which are presented bi-weekly during 10 two-hour workshops during both Semesters 1 and 2. In Semester 1 and 2, newly appointed lecturers are trained, but in Semester 2, seasoned lecturers are also given the opportunity to join sessions of their choice for CPD purposes. The presenters include Mrs van Amerom and other education consultants from the Department of Education Innovation, as well as exceptional lecturers from the Faculty of Economic and Management Sciences.

In NAS, a number of colleagues were supported to compile Qualtrics surveys as part of improving their modules by hearing the students' voices or as part of research data. Three lectures were supported in obtaining ethical clearance for the SoTL projects. On 1 August, the Teaching and Learning Bulletin@NAS was launched. The publication aims to support lecturers by sharing innovative projects done by others. The first volume had many technology contributions and the "story" was accompanied by a "step sheet" to share the "know-how". It was met with great enthusiasm and the second volume appeared and subsequent volumes are planned. A workshop was facilitated between lecturers in Geography and the colleagues from the Faculty of Education to assist education students in their progress in the geography subjects.

In Law, in addition to the various workshops facilitated/co-facilitated, the consultant provided input in the mapping of LLM Disability Rights in Africa modules during their planning and content conversion to clickUP; a law teaching article was reviewed and a talk on the Curriculum Mapping analysis for the HoD Committee at the request of the Deputy Dean, Professor B Kuschke, was presented.

A series of Faculty Transformation Talks was held to inform the review of the LLB 2020 curriculum in including the four transformation drivers. An information session was presented to all tutor coordinators in Veterinary Science to ensure that tutors are utilised to enhance student success. A workshop was held for the Department of Education Psychology on credits. After attending a short learning programme at the University of the Free State on 'Academic Advising', the content was presented to the Faculty Student Advisors at UP. They then organised and hosted a workshop on The learning Sciences' for support staff from Wits and SELI



Higher Education Research and Innovation (HERI)

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 2018

HERI continued its collaboration with the Siyaphumelela Project at the University of Pretoria in 2018. The objectives of the project are to enhance UP's ability to make evidencebased decisions to increase student access, throughput and diversity; to build high-level data analytics capacity with advanced statistical analysis of individual student data, and to identify trends in student academic readiness, needs and success indicators. As part of the Siyaphumelela project, a new initiative was started, namely, the Nudging campaign. Nudging is an approach that steers people in particular directions, but it also allows them to go their own way (Sustein, 2014[1]). According to Desouza and Smith[2] (2016) the concept behind nudging and nudge theory centres on prompting individuals to modify their behaviour in a predictable way (usually to make wiser decisions) without coercing them, forbidding actions, or changing consequences. During the 2018 registration process, the total credits of first-time entering students registered for three- and four-year Bachelor's programmes from selected faculties were download and the students identified that either over or under-prescribed their credit load. These students were contacted to "nudge" them to make changes to their programme load to the optimal level. After the first semester, the credit-fail-ratio of all first semester modules registered was calculated. From the credit-fail-ratio, five groups were identified for the nudging campaign. Depending on the nudge category, students received a message with a "call to action". The content of the messages advised students to consult with a Faculty Student Advisor, use online self-help material (UP0) or a message of encouragement to continue with the good work. Both activities promise to lead to improved progression rates to the second academic year.

Assessment and profiling of first-year students

HERI uses many sources to determine the factors associated with the retention or attrition of undergraduate students. This includes academic performance in high school, creditload and various dimensions of a structured questionnaire to assess this phenomenon; for example, the Student Academic Readiness Survey (STARS). Institutional information (for instance, on high-risk modules), from BIRAP, is used to determine 'risk' on individual, module and programme level.

The UP data-analytics committee

The Vice Principal: Academic established an analytics team, Tshebi, in 2016, which focused on undergraduate student success. Tshebi is composed of Faculty representatives (mainly Deputy Deans for teaching and learning), Education Innovation, ITS, Enrolment and Student Administration, Institutional Planning (sub-department Institutional Research and Planning), and Student Affairs. The focus of the committee has been presentations using the PowerHEDA dashboards to build knowledge on how to use faculty data that are already accessible through PowerHEDA to all faculties. The first set of presentations yielded extremely sensible but also creative uses of the dashboards, so the training seems to be having some impact. These were in addition to the standard focus on the differential success rates of students, including graduation rates, progression, determinants of drop-out and student engagement. The intended purpose of the data presented at this committee was to allow for knowledgeable discussion and decisionmaking. Various systems were used to produce reports for this purpose, such as the Higher Education Data Analyser (HEDA), Blackboard Analytics for Learn and various statistical models like Bayesian models, and Cluster and Survival analyses. Qualitative research into student well-being and the characteristics of successful students was also launched.

The Career App.tizer

The Career App.tizer was developed in 2015 and became operational in 2016. In 2018, the application was upgraded and relocated to a dedicated host. The Career App.tizer is a career exploration tool aimed at high-school learners. As the name suggests, the application aims to get learners to start exploring different courses and careers offered by UP. The Career App.tizer introduces learners to their career interests with an online career interest survey; maps their interests to courses offered by UP; and links courses to careers. The application was developed by staff from the Department for Education Innovation together with students from the Department of Informatics at UP with funding from the Kresge Foundation: Siyaphumelela programme. The career guidance software has a web-based interface and an Android app on the Google Play store, available at https:// careerapptizer.co.za/Login.aspx. The application formed part of clickUP through the UPO programme in 2018.

The first-year experience

The first-year experience from an academic perspective is measured by three different research sources of information (STARS; drop-out evaluation; and the Cluster analysis). The information from the three sources is primarily used to identify students who could benefit from additional

academic development, as provided by FSAs. The first of these instruments is the Student Academic Readiness Survey (STARS), a baseline test that identifies students with a need for academic, psycho-social (for integration into the University environment) and financial support. Most new students are surveyed during orientation week using STARS.

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. Cluster analysis is a primary statistical method used to find relatively homogeneous clusters of cases based on measured characteristics. The K-means algorithm clustering method was used to analyse the data. The variables that were used were the ratio of credits registered versus credits failed; the average mark for the first semester; and the ratio of modules registered versus modules failed. The data set was also split into sciences and non-sciences groups and the K-means cluster analysis was performed on these two groups separately. The at-risk students were required to consult the FSA and join extra tutoring during the second semester, especially if they were enrolled for high impact modules (HIMs).

The STARS results showed that over 8800 new students completed the survey in Orientation Week, with 58% of participants being female; 47% African; 3% Coloured; 7% Indian and 44% White. This is shown further in Table 4 below.

Table 4: STARS participation across faculties

Faculty	Percent
Economic and Management Sciences	22%
Education	11%
Engineering	20%
Health Sciences	5%
Humanities	14%
Law	2%
Natural and Agriculture Sciences	22%
Theology and Religion	1%
Veterinary Science	2%

The cluster analysis revealed that 10% of the first-year students were at-risk after the first semester results and 23% were identified as being borderline. This is presented in Table 5 below.

Table 5: Risk profiles based on cluster analysis

Cluster status	% Credits failed	First semester GPA	Student headcount
At risk	87,6	34,5%	10%
Border line	41,1	53,6%	23%
Not at risk	3,4	66,5%	67%
Total	20,6	60,3%	100%

A survey, based on the exit interviews that HERI performed annually, was uploaded on Qualtrics and sent to students who had either changed their course or discontinued their studies in 2018. The survey was used to ascertain the main reason for students changing their courses, within their current faculty or between different faculties, or discontinuing their studies. The results of the survey show that the majority of the students that participated in the survey changed their courses. The survey had a low response rate, therefore, to substantiate the results, a trend analysis was conducted using People Soft data.

The main reason for discontinuation (Table 5 below), of the students that actually dropped out, is abandoned programme (40%). These students did not return to the University of Pretoria the following year and did not provide any formal notification or reason. Incorrect study choice makes up 20% of the reasons for discontinuation, followed by course change (9%) and financial reasons (7%). Students who discontinued but returned ("In progress") cited course change as the main reason for discontinuation (68%), whereas 16% of the students who initially abandoned their programme returned to UP. Six percent of the students who discontinued their studies due to study choice reasons returned to further their studies. Faculty and Institutional discontinuations were the major reasons for dismissal in both groups of students (dropout and returning in progress).

Table 6: Main reasons for discontinuation and dismissal by registration status

		Registrat		
PSCS Status	Main reason	Dropout	In progress	Total
	Unknown	1%	5%	3%
	Abandon programme	41%	16%	30%
	Academic	%	1%	5%
	Accommodation	1%	0,1%	0,7%
	Change course	9%	68%	34%
	Completed	0,02%		0,01%
	Death	0,3%	0,1%	0,3%
pe	Diverse reasons	0,6%	0,1%	0,4%
Discontinued	Faculty decision		0,3%	0,1%
scon	Family responsibilities	4%	0,4%	2%
ΞĞ	Financial reasons	7%	0,7%	4%
	Health reasons	4%	1%	3%
	Language encumbrance	0,02%	0,03%	0,03%
	Social	2%	0,2%	1%
	Student's choice	0,1%	0,6%	0,3%
	Study choice	20%	6%	14%
	Suspension lifted	0,1%	0,1%	0,1%
	Work obligations	2%	0,4%	1%
	Unknown	0,1%		0,1%
eq	Dismissal - no appeal	2%	2%	2%
Dismissed	Faculty discontinued (D2)	62%	56%	61%
Dis	Institutional (D3)	36%	42%	37%
	Student's choice	0,1%	0,1%	0,1%

South African survey of student engagement (SASSE)

Student engagement research has been popularised by the launch of the National Survey of Student Engagement (NSSE) in the US since 2000, which resulted in the formulation of the National Benchmarks of Effective Educational Practice (Kuh, 2001[3]). Both the South African Survey of Student Engagement (SASSE) and the Lecturer Survey of Student Engagement (LSSE) was administered in 2018 at the University of Pretoria for the third time. Unfortunately, the participation rate remained low in 2018, with 6% of all undergraduate students and 15% of all lecturers teaching undergraduate modules. A feedback workshop will be facilitated by UFS in April 2019 after receipt of the institutional reports.

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 investigated 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 project concluded in 2018 with a feedback session by Umalusi staff on the findings of all the participating institutions.

Evaluation of the orientation programme for first-year students

The Academic Orientation Programme (AOP) for first-year

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students took a different format for 2018. It concentrated on certain aspects of the academic programme only related to FLY@UP. It changed back to being offered over a full week instead of one day only as it was in 2017. The aim of the questionnaire was to determine whether the programme attained the expected outcomes - to obtain information about how the students experienced the AOP and to collect suggestions about how the programme can be improved. The survey was administered with a paper-based survey as part of the orientation programme to all students who attended the AOP.

At the end of the orientation week, 5039 first-time registered students in the nine faculties surveyed had responded, accounting for a 52% response rate. The results show that the AOP achieved its overall objectives, even though there were areas that would need improvement, such as advice on the choice of modules and compiling a timetable. Table 7 below is a representation of the participation rate per faculty from the lowest to the highest represented faculty. Two Faculties, EMS and EBIT, were significantly more highly represented compared to other faculties: 22.4 % and 21.4% respectively. These faculties were followed by NAS and Humanities, which were represented by 17.1% and 14.5 % in the sample. Theology (3%) and VET (1.1%) were the least represented faculties in the sample of respondents.

Table 7: Participation by faculty

Faculty	UP headcount	Survey count	Response rate
EBIT	1 904	1 129	59%
EDU	1 204	448	37%
EMS	1 601	853	53%
HEALTH	804	341	42%
HUM	1 244	535	43%
LAW	549	379	69%
MAMS	897	558	62%
NAS and VET	1 387	735	53%
THEO	91	61	67%
Total	9 681	5 039	52%

A large portion of the students appreciated the academic and faculty-related sessions and found these useful, although some students experienced some dissatisfaction. The students suggested more assistance with choosing modules. Choosing the wrong modules may negatively influence the motivation of the students, slow their performance and increase the administrative burden when changing their modules at a later stage in the semester. A suggestion for the 2019 AOP was to consider the sequencing of programmes, for example, registration should only happen after career advising sessions are provided by faculty staff.

Evaluation of the peer mentorship programme

The peer mentorship programme run by Student Affairs was evaluated during 2018. Three criteria were used to select students, namely, first generation, who have enrolled for their second programme choice and have high financial needs, and students between the ages of 18 and 21. The programme also accommodates those students who voluntarily sign up to be a part of the programme. 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, focus group discussions were held with a number of mentees, mentors and coordinators to evaluate the effectiveness of the programme as a whole.

Three hundred and forty-seven students, consisting of both mentees (89) and mentors (258), participated in focus group discussions. The results of the evaluations show that the mentorship programme is beneficial for both mentors and mentees. The finding suggests 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.

Siyaphumelela Project

Part of the Siyaphumelela grant was used by the Department for Education Innovation to implement the student success matrix from the Predictive Analytics Report Framework (PAR), a division of Hobsons, Inc. The department held group interviews with faculties and various support departments to collect their interventions. These interventions are captured on the SSMx and can be used in 2019 to understand the ranges of services that are offered to students within faculties and institutionally, including unnecessary duplication or the need for new interventions where there are gaps.

E-Learning and Media Development

Mr Dolf Jordaan is the Deputy Director: E-Learning and Media Development. As a result, he is involved at a high level in the successful implementation of the hybrid model of teaching and learning. He plays a leading role within the University at a strategic level in moving the University forwards in terms of virtual learning and assessment environments.

The online learning management system, clickUP, based on the commercial product Blackboard Learn falls under his portfolio. Continuous engagement with Blackboard, including Blackboard executive members, improved the partnership of two decades between the University and Blackboard. The strategic input of Mr Jordaan and members of the E-education group contributed to significant Blackboard product developments. About half of the computer-based testing at the University is conducted on clickUP. The rest uses the commercial product, QuestionMark Perception, which is branded as QuestUP at the University. Through the E-education Unit, Mr Jordaan ensures that the department regularly interacts with QuestionMark.

The national Instructional Designers community of practice, UP2U, founded originally by UP, celebrated its 11th year with a historical first successful meeting hosted by the University of Stellenbosch and attended by more than 40 colleagues in March 2018.

Mr Jordaan is responsible for the integration of the use of clickUP data through learning analytics in the strategic drive to improve student success. Media is central to online and hybrid environments and therefore Creative Studios and Communication Technology also fall within Mr Jordaan's portfolio.

E-education

The E-education group is managed by Detken Scheepers and comprises e-learning project managers, Instructional Designers (IDs), 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.

During 2018, Ms Kweyama went on extended maternity leave from July to December, and Mr D Tive resigned at the end of September to take up a position in another faculty.

Mrs Scheepers appointed a contractor for 3 months to assist the computer-based testing team with the removal of Afrikaans from Health Sciences CBT questions and other basic support. D Gokool was appointed on a learnership to assist with students' clickUP requests at Health Sciences to continue some of the service delivery while Mr Tive's position was being filled.

The following initiatives were added to the group's tasks without inclusion in their output agreements:

- · Residence clickUP training.
- UP 3D module integration into HAS 120 module.
- UP3D integration into HR professional development modules.
- Lynda.com.
- Human Anthropometry App.
- · Rubric for online courses.

The booth at #ChooseUP day.

- · Highlights and New Initiatives of 2018.
- Carnegie Corporation of New York grant for research into the impact of #feesmustfall in 2016 on the uptake of blended learning – in collaboration with the University of Cape Town, the University of the Free State and the University of Johannesburg.
- · QuestUP NextGen OnPremise project.
- · Alternative Assessment Seminar.
- Doing Difference Differently pilot within HAS 120 module.
- · International visitors.
- · Celebrating 20-years of partnership with Blackboard.
- · ClickUP move to Software-as-a Service (SaaS).
- · A small-scale pilot of Blackboard Predict.
- · Blackboard Hybrid readiness and predict consultation.
- Visits from Educational Technology vendors executive managers.

The University of Pretoria has good relationships with various international educational technology and publishing companies. The VP of International Technology and Vice-President International for Cengage, as well as the Director of Higher Education Cengage Learning for the EMEA region of Cengage visited the Department for Education Innovation in 2018. They discussed their new business model in the USA and suggestions were made to continue to support UP academic staff. A specific focus of these and future discussions is the need for publishing companies to support the development of their services to be Caliper ready to integrate learning activity data gathered from learner activity

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From Left to Right: Mr Lee Blakemore: Blackboard President Global Client Operations and Success,
Prof Norman Duncan: Vice-Principal: Academic, University of Pretoria, and Mr Mark Gruzin: Blackboard President, Global Markets

across multiple learning environments. The IMS Global Learning Consortium and Blackboard aim to push for the international standard.

In 2018, Eiffel Corp invited UP, as an extensive user of the Turnitin program, to share our use and challenges using Turnitin with the Regional Director for the EMEA region. The value of the meeting was reflected in the ability of UP to upgrade its current license with 5000 student seats. Meetings were also held with Blackboard executives during the Flexible Futures conference held at the CSIR.

In preparation for the move of clickUP from managed hosting to SaaS, a meeting was arranged with Mr Jan-Willem van der Zalm, Blackboard Director International Cloud Services Blackboard International. The meeting clarified the roadmap of the move to Bb SaaS and subsequently to Ultra. The move to SaaS was scheduled for December 2018. A contract was signed to prepare for the move to SaaS.

Blackboard hybrid readiness consultation

The University of Pretoria contracted experienced consultants from Blackboard to evaluate its hybrid teaching and learning strategy in 2018. The following paragraphs provide a summary of the report submitted to the University.

The University of Pretoria (UP) is currently in the process of increasing its hybrid approach, where teaching and learning

will become more technology-based. As part of this process, in 2018 Blackboard consulting undertook an assessment of the opportunities to increase Hybrid Learning at UP and the institution's capabilities and capacity to achieve the proposed transformation. The analysis was based on Blackboard's Hybrid and Online Learning Programme Framework (5 by 5) and draws on a subset of Blackboard's proprietary set of 100+ rubrics spanning 24 Effective Practice Areas.

This consultation aimed to understand the effective practice areas for developing and delivering hybrid learning programmes at UP, documenting strategic goals and objectives for hybrid learning, and assessing current capabilities and capabilities within the institution to meet objectives. The consultants identified approaches to closing the gap between the desired strategic goals and the current capabilities and capacity.

The key findings of the consultation were as follows:

- There is a lack of clarity within UP on defining Hybrid Learning, the target (KPI), how to monitor and report progress against the target effectively.
- There is an alignment with the drivers for Hybrid Learning being based on improving student success for all students, which would be evidenced through higher achievers, improved pass rates, throughput rates and graduate employability.

- There are examples of excellent practice within UP; however, these are not at scale.
- The support and development models and the curriculum innovation model are more focused on supporting individual academics.
- The devolved nature of UP creates challenges for the surfacing and dissemination of good practice and standardising enablement models.
- Internal communication is limited regarding volume and effectiveness to engage and promote a Hybrid Learning initiative.

The Blackboard Consultants identified the current approach being unlikely to result in the institutional adoption of Hybrid Learning to account for 25% of teaching time being delivered online in short to medium term (two years). Therefore, some recommendations have been positioned to move to the desired state, and a recommended implementation

plan has been suggested.

Some of the recommendations included the appointment of additional human resources to manage and support the Hybrid strategy as a concern was raised about the additional work associated with the project and its allocation to the existing EI Executive who already maintain a broad service portfolio. If this occurred, the Hybrid Learning transformational change programme would not be as effective owing to limited capacity within the Department for Education Innovation. Other recommendations, such as the development of a detailed communication and marketing strategy for Hybrid Learning, will be implemented in 2019. Other recommendations included the development of an online resource that aligns Hybrid Learning and career progression, institutional discussions focusing on Hybrid Learning and innovative teaching as a strategic research theme, and the development of a Hybrid Learning Big Data Strategy.

Celebrating a 20-year partnership with Blackboard

The University has the longest history of using a learning management system in South Africa, and in 2018 it celebrated 20 years of its use with the current provider, Blackboard, at a function at the CSIR on 5 October.

At the dinner, the Blackboard representatives announced that the company would sponsor two technology education scholarships over two years to celebrate its 20-year partnership with the University of Pretoria. The funds will be awarded to two postgraduate students for the BEd Hons degree in computer-integrated education, housed in UP's Department of Science, Mathematics and Technology Education in the Faculty of Education.



UP and Bb Partnership Dinner

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Professor Salome Human-Vogel, Deputy Dean: Teaching and Learning, Faculty of Education, receiving the bursary from Lee Blakemore of Blackboard. From left to right: Mr Dolf Jordaan, Professor Wendy Kilfoil, Professor Salome Human-Vogel, Lee Blakemore (Blackboard), Professor Norman Duncan (Vice Principal: Academic) and Professor Gerrit Stols.

Alternative Assessment Seminar

The Vice-Principal Academic hosted an alternative assessment seminar on 5 May 2017, organised by El. Lecturing staff from different faculties showcased innovative assessment strategies to a broad audience in the Senate Hall.

The second alternative assessment seminar took place on 17 May 2018 and was attended by 126 staff members from UP. Prof Norman Duncan hosted the event in the Sanlam Auditorium with the support from the Department for Education Innovation (Video: https://youtu.be/DwPRFG-rYow). Five lecturers from different faculties showcased their assessment practices:

 Dr Maximus Sefotho from the Department of Educational Psychology introduced the hybrid practices in the Faculty of Education's student learning communities. (https:// youtu.be/vOocfNHozGg)

- Dr Elzette Korkie discussed the use of video essays as an alternative assessment method in the Department of Physiotherapy, Faculty of Health Sciences. (https://youtu.be/qV8_fuVbskA)
- Dr Rhoda Leaks, Department of Production Animal Studies in the Faculty of Veterinary Science presented their use of open resources during assessment (https://youtu.be/ owEJKP0KV7c), and
- Mrs Madelyn Cloete and Mrs Corlia Joynt from the Department of Accounting (EMS) illustrated their growth in online assessment in accounting (https://youtu. be/ekncKr k28c).

#ChooseUP Day

The E-education team participated for the first time in the #ChooseUP day on 4 August 2018. We created three posters for the booth and distributed Z-folds with information about hybrid learning on the day. The Z-fold also contained information about the "At the Starting Line" SPOC for new 2019 first-year students and was used to launch the SPOC. The booth also had a computer set up with an online mock assessment, which a few students enjoyed doing. The hybrid videos on the UP website played throughout the day on a screen. These videos did not get much attention as people walked past and rather interacted with the six staff members who manned the booth. In preparation for 2019, we created and printed our own pop-up and shark-fin banners to replace the Blackboard and Turnitin banners we borrowed from Eiffel-Corp for the 2018 exhibit.



ChooseUP Day

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: the online coursework Master's project; the development of apps and the development of the UPO SPOC (Special/ Small Private Online Course). Smaller projects in departments also received instructional design inputs from the group.

Online Coursework Master's Programmes

The Department of Education Innovation, through Dr Lynette Nagel, supported the development of new Coursework Master's (CWM) degrees in 2018. Continuous support was provided to existing CWM degrees. The support included staff development, student training and support, as well as project management through the use of the ADDIE design and development model for online facilitation. Involvement in CWM degrees accentuated the implications of institutional policies and support mechanisms to allow students to complete their degrees in the minimum amount of time. Ongoing internal consultation is still required to overcome these barriers.

The Online Coursework Master's Programmes Outputs in 2018 were as follows:

- Customised hands-on training courses were developed and presented to Coursework Master's Degrees (CWM) students and lecturers. These courses included advanced training in the use of Turnitin as an anti-plagiarism tool, and Blackboard.
- MPhil Auditing: the development of sophisticated online activities. An online questionnaire was developed that was distributed online to all professionals following a request from SAICA (a professional body).
- MIT in Big Data Science: assisted with the development of an introductory online module in the multi-departmental multi-disciplinary MIT in Big Data Science in the Faculty of EBIT.
- LLM/MPhil in disability rights in Africa: provide support to the development of the curriculum of this joint venture between the faculties of Humanities and Law wherein each faculty presents numerous modules. The application of the ADDIE design and development process enabled synergy between Humanities and Law academics.
- MSc Geography: provided training to lecturers involved in this programme.
- · NAS: Master's in Ecology and Climate Change: this is a

partly new UP programme in collaboration with the BRICS University network. Funding has been obtained to develop two new modules for online delivery as part of this programme, with other local modules presented by UNISA and Rhodes, who provided orientation to lecturers in the use of the LMS to facilitate modules.

- African Tax Institute: this is a new programme (new delivery mode, 2020). Initial planning discussions were held in 2018.
- AERC/CMAAE Master's programme: a current degree with a new delivery mode - provide support for the changes required for the UP module in Agriculture Management, which is currently hosted and presented by UP staff within this multi-African degree programme.

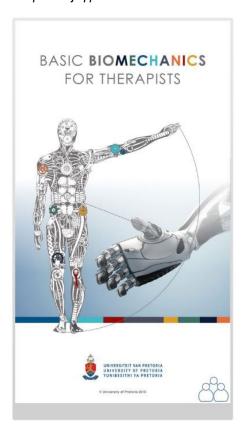
Lecturers, students and the Department for Education Innovation benefitted in a variety of ways:

- Students and lecturers received customised hands-on training courses.
- Students' engagement in the LMS improved owing to familiarity with the environment and an increase in the level of lecturer facilitation of online modules.
- Faculty of Education: MEd: Students completed their studies in the minimum amount of time. Several of these Master's students had done the B.Ed Hons and were thus familiar with the online environment, which contributed to their success in using the online resources in their Master's.
- MPhil Auditing: a programme change will potentially result. The results from the questionnaire distributed online to all professionals will form the basis of changes in the South African curriculum and delivery mode of the qualification at universities, and particularly at UP. The SAICA professional questionnaire was completed by 3,378 professionals. Lecturers in the department have analysed the data.
- MIT in Big Data Science: students benefitted from the improved alignment between module outcomes and assessment, and notional hours. This online module represented a breakthrough in instructional design and course delivery in the degree and provided a pedagogical foundation for other modules.
- MSc Geography: the department benefitted from the online development but nearly had to terminate their CWM owing to a lack of capacity. Fortunately, they received external (non-DHET) financial support and were able to continue.
- MCom Financial Management: the lecturer and students are making satisfactory progress using the e-learning tools as envisaged and without problems.

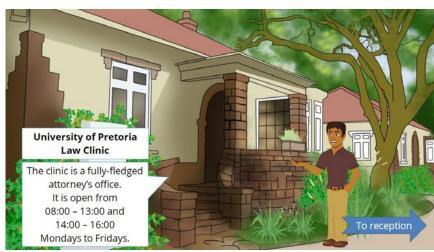
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- Education Innovation and lecturers learnt valuable lessons about the impact of the profile of students enrolling in CWM degrees and the assistance they need.
- Lecturers in some of the CWM degrees received training on writing and aligning outcomes. A recording of these sessions created a UP resource for the group-design of e-learning in an academic programme.
- LLM/MPhil in disability rights in Africa: the staff members involved in the development of the modules increased their awareness of the W3C design criteria required for accessibility. Technical specifications were developed for designing in Blackboard for the indicated disabilities. Fifteen students were admitted into this new innovative degree and the first cohort of students will register in January 2019. Only 10% of the students are from South Africa, and most students have a non-law background. A few of the students have visual or hearing disabilities. A paper was presented at the 6th Annual Disability Rights Conference in November 2018 in Pretoria.
- AERC/CMAAE Masters' programme: UP and other academic staff involved in this degree improved the quality of their course design and facilitation skills. A high-level questionnaire was administered by the AERC to evaluate the hybrid delivery.

The Development of Apps







The move of technology towards apps led to a need within UP to develop new apps and redevelop existing multimedia into apps. During 2018, members from the E-education group developed seven mobile apps, of which three were finished.

The success of the 'Discovering Animal Diversity – a practical experience' mobile app that was deployed in 2017 led to the development and implementation of two extra chapters for the app. All of the themes of the practical sessions within ZEN 161 are now represented in the app. The Department of Zoology uses the app to replace certain components of the practical sessions of the module.

During 2018, instructional designers solved the technical problems experienced with the generation and export of a report that needed to be written from the 'Applied meat safety hygiene assessment of red meat abattoirs' app after students completed certain fields. The mobile app was completed in 2018 and the lecturer conducted quality assurance on the product.

The Law Clinic Simulation was completed and is used to familiarise students with the operations of the Law Clinic when they start their practical work there. Students need to see their first clients and apply all of the theory that they have learnt for the first time when starting, and the aim is to minimise the information overload and stress thereof. It also allows the staff to spend less time orientating the students. The reaction from the students was positive and they noted that the use of familiar graphics based on reality helped them orientate themselves.

The redevelopment of the existing multimedia on 'Soil' into an app continued in 2018. This app will be used in the Department of Plant Production and Soil Science, Faculty of Natural and Agricultural Sciences. Content and quiz questions were changed, and development continued throughout the year. Three themes were completed.

The E-education team was also involved in the redevelopment of the existing 'Biomechanics' multimedia into a mobile app for the Department of Occupational Therapy, Faculty of Health Sciences. The product was reconceptualised for distribution via a mobile app and a new 'look and feel' was created by Creative Studios. Four instructional designers worked together to develop this product in record time using the prototype template. By the end of 2018, all of the content was packaged and the quality assurance process started.

Another existing multimedia that was redeveloped into a mobile app is 'Practical anthropometry' for the Department of Human Nutrition, Faculty of Health Sciences. What made this project unique was that part of the product was developed and will be used by a Masters' student for her research.

Extra seed funding was allocated to employ GrovelS to repackage the Maxillofacial Pathology Mobile app for commercial distribution through the Google PlayStore. This process was, however, delayed due to technical issues with the different versions of the Articulate Storyline that was used to develop it.

Other Instructional Design Support

Doing Difference Differently pilot within the HAS 120 module

One of the specific interventions of the UP Teaching and Learning plan 2018 required "Introducing the UP 3D

(University of Pretoria Doing Difference Differently) module, developed by Professor Christi van der Westhuizen of the Faculty of Humanities, as a compulsory component of the curriculum in all faculties, starting with the Faculty of EBIT in 2018". The envisaged outcome was the "Inclusion of the UP 3D module in EBIT's first-year curriculum and developing plans for all other faculties for the inclusion of this module in their curricula post-2018".

The UP 3D module was developed in 2015 as a voluntary online course with no assessment. The course was presented from 2015-2017 in this manner. It was completed by less than 100 students per year and resourced by the lecturer (Prof Christi van der Westhuizen), four tutors who facilitated discussions, and the completion of the final assignment, as well as an instructional designer. The ID assisted with building the course in clickUP and annually trained the tutors to facilitate the course.

In 2018, the course was integrated into the Humanities and Social Sciences 120 module for the first year Engineering students (1 183 students). This required the integration of the UP3D content and tests into the HAS 120 clickUP module, as well as the replacement of one HAS 120 assignment with the final assignment of UP2D. As no extra staff were available/appointed to help with this implementation, except the lecturer, one tutor and the instructional designer, the decision was made to use peer assessment for this final assignment. The marks were automatically drawn into the clickUP Grade Centre. The following challenges arose:

- Finding a way to align the outcomes of the module with that of the UP3D module in order to ensure a valid assessment
- 2. The large group resulted in a number of manual processes to sync students, groups and marks between clickUP and iPeer.
- 3. Students were not diligent in:
 - a. Enrolling into their groups on time.
 - b. Making arrangements with their partners to conduct the interview.
 - c. Completing the assignment on time.
 - d. Assigning the correct marks to their partners.

These issues resulted in much additional work for the instructional designer and tutor as they had to sort out each case on merit. In order to make this module implementable and sustainable across UP, the following suggestions need to be considered:

1. The choice of a module to be used for the integration of the UP3D content:

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Touchscreen self-help terminals at Merensky 2 Library

- a. Alignment between the outcomes of the module and that of the UP 3D module,
- b. Replacement of some of the chosen module's content with the UP3D module to ensure that the credit hours remain the same.
- 2. If it is to be implemented in its current format, more tutors will have to be appointed to alleviate the administrative toll on lecturers and instructional designers.
- 3. The removal of the final UP3D assignment and the use of the marks from the objective assessment tests in the

- three other modules. No additional resources will be necessary to implement this way of assessment.
- 4. The appointment of a replacement for Prof Van der Westhuizen as the academic owner of the UP3D module content.

clickUP

Instructional designers provided continuous support to lecturers with their clickUP modules. Table 8 provides statistics on the number of active clickUP modules for the past five years.

Table 8: Modules on clickUP 2014-2018

	2014	2015	2016	2017	2018
UG modules	2,039	2,153	1,834	2,405	2,460
%UG modules	81.95	83.77	87.67	94.13	94,43%
PG modules	945	946	977	1,213	2245
Number of departments	118	101	122	122	122
Students accessing e-learning	35,881	34,452	37,169	37,384	37,584

Open Educational Resources

Dr Pienaar continued to support the Open Educational Resource (OER) project in the Faculty of Veterinary Sciences, entitled OER AfriVIP. He supported the production of an OER that was produced by Dr Erick Kandiwa of the University of Namibia and assisted L Poggenpoel with video conversion software for OER videos. He also assisted Prof Holm (Deputy Dean: Teaching and learning, Veterinary Science) and Prof Taljaard from African Languages (Humanities) with the integration of veterinary terms into the OER Term Bank (OERTB) of the Faculty of Humanities. During 2018, he transferred 1 100 words starting with "A" into the relevant documentation. The project will continue in 2019.

Library modules

Mr A Smart provided support to the library with their initiatives to use clickUP for student training. He assisted the Information Specialist for EBIT to create a self-enrol clickUP module for 3rd year Engineering students who did not attend the AIM module in their first year to introduce them to the necessary information literacy skills. He also supported M Mushaisano and G Ehlers to digitalise their theme in the AIM module. This new online component of the AIM module was designed to be implemented in 2019 for all first years as the library does not have the necessary resources to facilitate the contact sessions for a week during the AIM modules.

E-Assessment

QuestionMark Perception, known as QuestUP at the University, is used for summative objective assessment. The Computer-Based Testing (CBT) team provides a service to lecturers to enable tests administered through the QuestUP system (Table 10). There was a decline in the use of the

QuestUP system from 2017 to 2018. The year on year growth per campus for this period is as follows: Hatfield, -15%; Onderstepoort, -3%; Groenkloof, -17%; Prinshof, -7%; Mamelodi, -83%. At Onderstepoort, the decline was due to fewer supplementary exams in 2018. Some lecturers also combined tests to rather have one bigger test than two or three smaller ones. Many departments also revisited their assessment practice and are implementing many other different assessment methods than in the past. The decline at the Prinshof campus is due to the Anatomy Department moving most of their assessments to the 'Riddle' system developed in Toolbook. It is difficult to pinpoint the reason for the decline in CBT assessments at Hatfield and Groenkloof. Possible reasons may be the fact that most faculties pay more attention to advice from Education Consultants with regard to good practice in their curriculum design, as well as assessment practice, and realised that using only objective assessment is not good practice. The regulation also changed - previously at first year level, the final mark could consist of 50% objective assessment – now, the regulation advises a maximum of 40% for all assessment. The fact that clickUP assessments worked well for many departments in 2016 may also play a role if you look at the increased usage of clickUP tools to replace QuestUP tests.

clickUP also contributes to e-assessment through the grading of various online activities, e.g. discussions, blogs, wikis, assignments, and tests. The use of clickUP supports effective management and the (online) marking of assignments, the 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 assessment remained stable from 2017 to 2018. The data for computer-based testing at UP is displayed in Table 9 and Figure 1.

Table 9: Computer-based testing (CBT) 2013-2018

	TESTING CENTRE	2013	2014	2015	2016	2017	2018
	Hatfield campus CBT	108	82	87	66	95	82
	Hatfield campus IT labs	18	21	26	17	28	25
	Hatfield campus IT labs (CompAssess)	20	17	19	12	23	18
	Prinshof campus	671	645	717	698	672	628
	Prinshof campus (ppt)	95	97	54	63	75	74
tests	Onderstepoort campus	147	125	138	178	252	245
Number of tests	Onderstepoort campus (ppt)	9	6	2	2	2	1
Num	Groenkloof campus	62	55	64	72	98	84
	Groenkloof campus (CompAssess)	11	10	12	3	11	9
	Mamelodi	9	6	6	2	11	6
	Mameldi (Comp Assess)	5	6	7	3	9	6
	clickUP tests**	2,322	2,208	2,957	4,428	5,383	5389
	Total	3,477	3,278	4,086	5,478	6,564	6485
	Hatfield campus CBT	24,507	13,308	13,592	7,412	12,609	11900
	Hatfield campus IT Labs	24,054	23,240	21,827	14,338	22,882	25585
	Hatfield campus IT labs (CompAssess)	25,420	30,647	30,025	17,903	25,185	30329
S	Prinshof campus	40,185	45,030	44,178	48,491	48,435	45241
by students	Prinshof campus (ppt)	3,162	3,878	1,631	2,205	2,212	2883
	Onderstepoort campus	7,141	11,216	12,027	11,751	16,219	19707
ts take	Onderstepoort campus (ppt)	697	501	56	169	8	6
of tes	Groenkloof campus	14,505	13,144	21,018	14,594	18,243	16043
Number of tests taken	Groenkloof campus (CompAssess)	3,334	3,729	5,445	755	2,224	3785
Z	Mamelodi	4,488	2,659	2,860	837	2,663	3276
	Mamelodi (Comp Assess)	2,509	2,637	3,523	1,519	2,663	3285
	clickUP tests**	385,890	451,544	56,2308	695,633	864,932	1020844
	Total	535,892	601,533	718,490	815,091	1,018,275	1182856

^{**}Includes self-assessment.

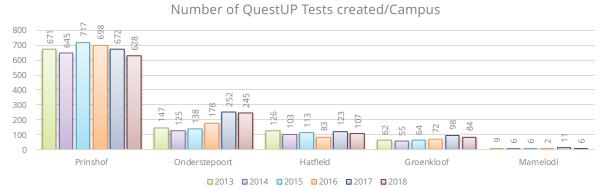


Figure 1: Computer-based Testing (CBT) 2013-2018 per campus

Computer-based-testing requires the use of printed test slips to keep a non-electronic backup record of students who wrote the assessments and the marks they received for the assessment. In the past, this practice has resolved issues that arose with students disputing their presence or marks after a CBT assessment. El carried the cost of these test slips across the institution from their operational budget in the past. Continuous budget cuts and an increase in printing costs led to a decision by Professor Duncan that the cost should be borne by the faculties. EI, in collaboration with ITS, will continue to organise the printing and delivery of these test slips to the relevant venues if required, but the cost will have to be carried by the faculties. To streamline the financial process, the Faculty Accountant for the Department for Education Innovation will do a transfer of the cost through a journal entry from the faculties' cost centres to that of the Department for Education Innovation annually at the start of the new academic year. A letter in this regard was sent to all Deputy-Deans: Teaching and Learning in 2018.

Groenkloof campus

During 2018, power failures at the Groenkloof campus impacted four QuestUP assessments due to faulty generators. One test had to be changed to a paper-based test, another required students to travel to the Hatfield campus to take the test, one could not be completed and a sick test had to be rescheduled.

Mamelodi campus:

A power failure on the Mamelodi campus on 25 May 2018 affected the AIM semester test. The Mamelodi campus hired a backup generator. Thereafter, the server was rebooted by ITS and students could continue with the test, despite being upset about the delay.

Hatfield campus:

M Thukane and G Pretorius assisted Dr H Wiggins (mathematics) to create a Maths Readiness test and survey that he wanted his first-year students to do online during orientation. Extensive testing of both QuestUP and clickUP capabilities revealed that neither system will provide the data and statistics in the required format. He will keep using optical

mark reader – it provides simpler administration and the more exact results and statistics that he requires.

Prinshof campus:

The Department of Anatomy, Faculty of Health Sciences decided not to use QuestUP in 2018, but to do all their assessments on the Riddel system created by Dr Ackerman at Sefako Makgatho University. Mr AJJ Jordaan wrote a letter to the department and faculty to alert them of the aspects that need to be considered when such a system, which was not tested by either ITS or EI, is implemented.

The ETL at Prinshof campus had to be re-built by ITS frequently. We mapped all our processes for each campus to determine if our processes caused the problems. The discussion with the Bytes consultant about the processes indicated that El's processes were not causing the errors in the reports. Her further investigation revealed that the errors were due to data that was drawn from the legacy Umfundi system.

E de Bruyn at the Prinshof campus completed an evaluation of all MBChB rotation blocks' assessment results and question banks after the CBT computer laboratory staff at Prinshof alerted us that a particular hour-long assessment was repeatedly completed by all students within five minutes. The investigation was done to determine the average time students took to complete the test, the average mark the group achieved, and the number of questions in the question bank. Her investigation revealed that the marks of the students increased over the years that the particular assessment was used. It became clear that if students do not receive feedback after a test consisting of only a few questions, the marks remain the same across the years. However, if the students do receive feedback, the marks increase every year until the majority of the students know all the questions of the test. It is therefore advisable that tests with small question banks refrain from providing feedback to students to keep their question banks secure. The results of the investigation revealed that only the particular assessment was compromised and a report was sent to the contact person of the particular block to alert them of the problem and to advise that they create new questions for the particular assessment.

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

Grant from the Carnegie Corporation of New York



The Carnegie Corporation of New York awarded a grant of \$200 000 to the University of Pretoria and three other South African universities to research the impact of the educational technology strategies that were deployed during the #feesmustfall disruptions in 2016. During the investigation, the perspectives of students, academic staff, instructional designers and other stakeholders were considered. The research will culminate in case studies on blended learning that might enrich the South African higher education sector's use of hybrid/blended learning. The overarching aim of the research was to develop a useful blended/ hybrid model of teaching and learning that will enhance successful student learning in South African institutions of higher learning, as well as in the collaborating universities.

Ubora Research Solutions was appointed to conduct the research at UP. They used a sequential mixed-methods research design to collect data during 2017 to describe and explain various stakeholders' experiences with the use of technology when classes were disrupted during the second semester of 2016. Lecturers, students and instructional designers from the Faculties of Economic and Management Sciences, Education, Engineering, Built Environment and IT, Humanities, Law, Natural and Agricultural Sciences, and Theology participated in the study.

The grant was also used to develop the case writing skills of six instructional designers during a case study writing workshop at GIBS. The IDs interrogated the data through the Activity Theory framework of Cole and Engestrom. This

workshop was followed up with a second, two-day writing workshop on campus.

The data revealed that the use of blended/hybrid learning to complete the academic year was an institutional success story that allowed 83.18% of the students to complete their modules and 89.74% of students to successfully complete their examinations in 2016. Most lecturers (83.13%) and students (67.93%) were positive about the use of blended/hybrid learning. Both lecturers (77%) and students (57.85%) agreed that the use of blended/hybrid learning contributed substantially to the completion of the academic year in 2016. Lecturers and students emphasised that contact classes should remain an essential part of teaching and learning at UP.

D Scheepers presented the UP case study at the National Blended Learning Case Studies Symposium at the Birchwood Conference Centre, Kempton Park on 1 June 2018 and a written report was submitted to the Carnegie Corporation of New York at the end of June 2018. A Smart and G Pretorius presented faculty case studies on the results from the EBIT and Humanities faculties at the Flexible Futures conference. During this conference, Prof W Kilfoil chaired a panel discussion where the national co-workers from the four participating universities discussed the perceptions of blended learning at their institutions during the #FeesMustFall campaign. The project will continue in 2019 with the development of products that will guide the use of hybrid learning at the University.

National Community of Practice (UP2U) and Other Participation

The E-education team participated in the National UP2U community of practice meeting at the University of the Stellenbosch on 16 April 2018. The website and bookings of the meeting were again managed and hosted by the UP E-education team. Seven members of the E-education team attended the meeting and Dr L Nagel presented a paper entitled "Why include simulations and games in blended learning, and who benefits?" The colloquium was attended by 42 delegates, representing eight universities. The themes of

the presentations included the use of videos for assessment, the making of videos for teaching and learning, gamification, and the move to fully online courses or MOOC's.

The UP2U meeting preceded the two-day African Digital Universities Network (ADUN) colloquium held by the University of Stellenbosch. Ms Scheepers and Mr Jordaan's presentation focused on the value of data and support provided through staff development to academic staff to use the available data in clickUP. More than 80 delegates, representing 12 universities attended the colloquium. Mr Jordaan also facilitated a panel discussion.



Colleagues who attended the UP2U colloquium at US: Mr Johan Slabbert, Ms Detken Scheepers, Dr Lynette Nagel, Dr Hannelie Untiedt, Ms Gaby Pretorius, and Mr Phillip Mthembu.

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Staff Training in Web-Supported Learning

The E-education education group employs various strategies to develop lecturers' ability to use the e-learning environment, among others, priority courses, faculty or departmental training sessions based on requests, as well as individual just-in-time training.

Priority courses

The scheduled priority courses were presented throughout the year on the Hatfield campuses. Figure 2 provides an overview of the attendance of the E-education priority courses over the past five years. The high numbers in 2017 were due to the preparation of lecturers for possible disruptions in 2017. The decline in numbers in 2018 for some courses may be due to the simultaneous presentation of the Education Induction and clickUP workshops in the same week in January. The increase for the clickUP Grade Centre course reflects the strategic drive for more use of the clickUP Grade Centre in UP. Figure 3 provides an overview of the attendance of the courses per faculty for 2018.

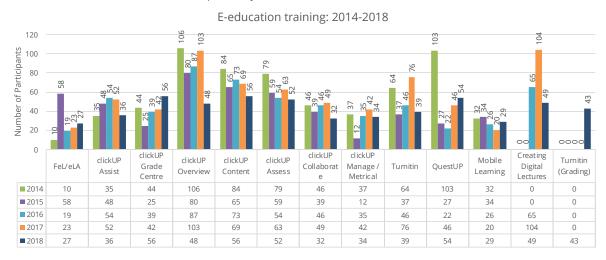


Figure 2: Attendance of E-education training 2014–2018

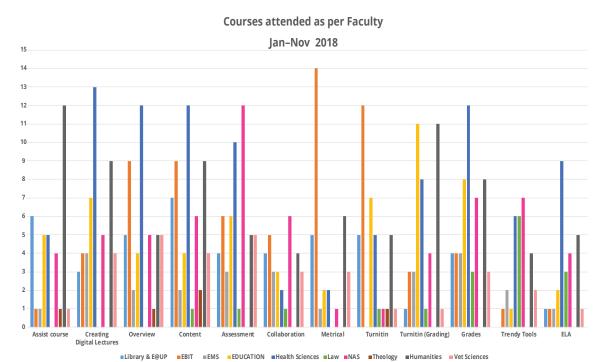


Figure 3: E-education courses attended per faculty

Other training

The E-education Unit also provided training on faculty and departmental level:

Faculty wide: Table 10: Faculty-wide Training

Presenter	Faculty	Training	Attendees
A Smart	EBIT	INNOVIL AIM Assistant lecturers: clickUP induction	25
A Smart	EBIT	INNOVIL Comp Science ALs: clickUP training	15
M Pienaar and E Mostert	B Vet nurse programme	Hybrid teaching & learning @UP workshop	7
TOTAL			47

Departmental training: Table 11: Departmental Training

Presenter	Topic (s) covered	Faculty and Dept (s)	Campus	Number of attendees
J Maroga	clickUP Basics/Assist	Part time lecturers Humanities Education	Groenkloof	11
	Curricular programme	Student Affairs	Hatfield	9
G Jacobs	Turnitin (basic)	Theology	Hatfield	10
J Maroga	Turnitin consultation	Information specialists/lecturer	Groenkloof	5
A Smart, H Untiedt	clickUPs Introduction	Residence Training	Hatfield	3
A Smart, H Untiedt	clickUP Introduction	Residence Training	Hatfield	10
E de Bruyn	clickUP Grade Centre	Dept Human Nutrition	Prinshof	6
A Smart, H Untiedt	clickUP - Introduction	Residence Training	Hatfield	6
N Ngcobo	QuestUP	Dentistry	Prinshof	3
J Maroga	Turnitin Grade Mark	Early Childhood Education	Groenkloof	10
A Smart, H Untiedt	clickUP Introduction	Residence Training	Hatfield	8
E de Bruyn	Narrated ppt, collaborate, e-portfolios	Human Nutrition	Prinshof	4
E de Bruyn	Question analysis and interpretation of stats	Psychiatry	Weskoppies	6
E de Bruyn	Evaluating own objective assessment questions	Psychiatry	Weskoppies	6
M Thukane	Bb Collaborate Ultra	Microbiology & Plant Pathology	Hatfield	5
G Pretorius	Introduction to QuestUP	Early Childhood Education	Groenkloof	5
N Ngcobo	Discussion forum Bb Collaborate	Interdisciplinary TD Knowledge group	Prinshof	5
A Smart, H Untiedt	clickUP - basics	Residences	Hatfield	36
E Drysdale, M Thukane	Grades	LST lecturers	Mamelodi	9
Total				157

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Other online UP staff development

During 2018, the E-education group also became involved in the support of other online staff development programmes.

Doing Difference Differently for UP staff

During 2018, the Doing Difference Differently module was also implemented in various UP staff development courses. Mrs G Pretorius assisted Dr L Botha from HR to create UP3D clickUP courses for:

- Diversity and Transformation programme of Christi van der Westhuizen (11 Oct 2018);
- · Diversity and Transformation programme for the Library;
- Diversity and Transformation programme for Faculty of Law lecturers;
- Diversity and Transformation section of the Academic Head of Department Induction Programme 2018; and
- Diversity and Transformation section of the Management Development Programme 2018.

J Slabbert provided support to Dr L Botha with the implementation of Lynda.com as an alternative professional development strategy within UP. He was responsible for setting up the LTI integration between clickUP and Lynda. com in a very short timeframe during January to enable Single Sign-on between clickUP and Lynda.com. He also created the Lynda.com clickUP course and enrolled about 3800 UP Staff members into the course. Throughout the year, he had to give access to staff members as requested.

Student Training and Support in Web-Supported Learning

Student orientation sessions

The student orientation clickUP manual was reviewed and expanded. The general trend of higher computer literacy among students led to the decision to create an online self-help clickUP orientation module. The development of this module was completed in 2018 and is ready for implementation in 2019. D Scheepers contacted DESA to place a link to this online module on the UP website for 2019.

Ms Scheepers and Dr Nagel again presented clickUP training sessions during the MEd 800 student orientation of the Faculty of Education's Master's students in October 2017. These students will be part of the 2018 cohort. They again were not registered at the time of the training. Students who were busy with their Honours courses could access the resources, but students from other universities could not benefit from this initiative until their registration was finalised in 2018.

Table 12: Student training

Service	Student orientation sessions		
	2016	2017	2018
Number of sessions presented	47	34	45
Number of students	2,008	1,706	1,874

Tutor training

clickUP Training was done for tutors in the Faculties of Humanities, EMS and NAS. Tutor training courses were developed in clickUP for NAS and EMS. Table 9 provides data on the sessions provided during 2018.

Table 13: E-tutors trained

	2016	2017	2018
Number of e-tutor training sessions presented	5	9	6
Number of tutors trained	54	155	106

UPO and student success

The UPO modules were restructured during 2018 for implementation in 2019. Mr A Smart assisted Ms H Byles and the FSAs during this process and copied the master module into 10 faculty UPO modules. J Slabbert assisted with enrolment problems in the 10 modules and the capturing of marks in PeopleSoft. A Smart provided continuous support to the FSAs during the year with question/problem solving, set up FAQs to be sent to students regarding regular issues, and investigated special request emails. He continued to provide general support for the UP3D module and trained and equipped the new UP 3D tutors.

FLY@UP

The FLY ONLINE presentation was completed and narrated by D Kabwa. It was loaded into the UPO modules and added to the FLY@UP website in time for orientation. D Scheepers provided slides pertaining to the online part of Hybrid Learning to Prof Naidoo for presentation in 2019.

Other Student Support

The Helpdesk at Health Sciences continued to provide support to students of the Faculty in 2018 as indicated below.

Table 14: Support provided to students by Health Sciences clickUP Help Desk

	2016	2017	2018
Number of students supported	1,319	1,120*	1076

^{*}Data incomplete owing to computer crash in May. Some data irretrievable.

The integration between clickUP and PeopleSoft was working much better in 2018. Although most of the students are enrolled automatically into clickUP via an integration process with PeopleSoft, he had to manually load the following students:

- 9 000+ students into the 222 non-PeopleSoft Programme Modules – Faculty/ Programme – undergraduate and postgraduate;
- 20 cases where the student enrolments in clickUP were not correct;
- 50 students on clickUP and some on PeopleSoft (temporary registration) as some barriers (administrative and study visas) exist that delay students' registration, and therefore their enrolment into clickUP. Cases also exist where students need access to a clickUP course but do not need to register for it. This is done on request from lecturers only.
- 20 postgraduate students as TEMP access in clickUP (specifically for Veterinary Science); and
- More than 2100 Enterprise University of Pretoria (EUP) students into the 223 EUP clickUP courses.

ClickUP E-Support Office

The e-support offices on the Hatfield and Health Sciences campuses provide administrative support and just-in-time training to lecturers and administrative staff in academic departments. The clickUP help site is another avenue used to support users of the clickUP system.

Table 16 provides information on the number of e-mails received and just-in-time training provided by the e-support offices. The JIT training at Health Sciences was only available from January to September as the post became vacant when Mr Tive resigned. NOTE: This does not include the support provided by the rest of the IDs.

Table 16: Support provided by clickUP e-support offices

	E-mail responses	JIT training
clickUP e-support (Hatfield)	5 305 (Include emails from students)	235
clickUP e-support (Health Sciences)	298 (staff only)	55

New Initiatives

UPO SPOC: At the Starting Line: Gearing up for Tertiary Education

The University launched its first-ever Small Private Online Course (SPOC) in December 2017 to all provisionally-

accepted first-year students for 2018. The course, entitled 'At the Starting Line: Gearing up for Tertiary Education' is an entirely online student preparation course that assists prospective students to develop a range of skills to meet the demands of tertiary studies. The content of the course is focused on skills such as goal setting, time management, note taking, study skills and academic reading. Information also includes tips on how to prepare for university, administrative information on UP, as well as the full scope of expenses students have to keep in mind when planning their university careers. The mode of delivery held other benefits for the students: the non-facilitated, stand-alone online course demonstrated to the new students that they would have to take full responsibility for their learning at university, while the use of Blackboard OpenEducation as the delivery platform prepared them for their use of clickUP.

Each learning unit was structured to contain an introductory video; information sites and sheets; a quiz; a practical activity; and a review of the learning unit. The students had to complete the quiz, practical activity and rate the theme to receive a badge for that theme. Students could decide on the sequence in which to do the learning units.

The university invited 8400 provisionally accepted first year students to participate over the holiday period (December 2017 – 31 January 2018). A total of 1 636 students enrolled in the module, of which 14.43% received the final badge (i.e. completed the whole course). This completion rate is higher than is usually expected from Massive Open Online Courses (MOOCs). The completion rate of the different units are shown in Table 17.

Table 17: Measuring 'throughput' in each learning unit as percentage of students that received a badge compared to those who wrote the test

	Unit 1 Setting goals	Unit 2 Managing time	Unit 3 Note taking	Unit 4 Study skills	Unit 5 Academic reading
Completed quiz	644	499	419	356	316
Completed survey	413	351	291	270	249
Receive badge	340	274	233	230	236
% of students received badge in relation to those who completed quiz	52.8	54.91	55.61	64.61	74.68
Ratio quiz to badge	0.53	0.55	0.56	0.65	0.75

A total of 233 students completed the end of course survey. The feedback indicated that it was the first ever fully online course that 85.4% of the students completed. The majority (94%) agreed that they felt more prepared for their studies after the completion of the course and that they plan to implement what they have learnt. General comments on the course ranged from students who thought they already knew most of the content, "I felt that it bored me and did not add value to my learning experience at all", to others who indicated the course added value to their preparation for university: "Great preparation course", "I enjoyed this course. it help me to start focusing again and help me improve myself and my study surroundings.", "Thank you for the opportunity to learn and improve.", "Overall it was a truly enriching experience. Thank you."

Students who completed the course, and enrolled at UP for their degree, received recognition for their efforts and were exempted from parts of the 2018 UPO course that overlapped with the SPOC content.

The module was presented again at the end of 2018. It was rebuilt into clickUP as the Blackboard Open environment moved to the Bb Ultra environment and an automatic enrolment process was created that registered all provisionally accepted students into the module. The module was opened on 5 August 2018 to coincide with #chooseUP day. No marks will be transferred to the UPO modules in 2019, as the UPO modules were redesigned during 2018 and there is no longer a direct relationship between the topics in the two courses. Table 18 below gives an indication of the number of students who accessed the course from August to December 2018.

Table 18: Month of last access

Month of last access	Number of students per month	Cumulative total: down	Cumulative total as % of total access: counting down
Aug-18	152	152	6.9
Sep-18	24	176	8.0
Oct-18	69	245	11.1
Nov-18	35	280	12.7
Dec-18	168	448	20.4

Integrating New Technologies

Clicker support

During the last few months in 2018, the Department for

Education Innovation had numerous discussions focusing on the continuous use of clickers in the Faculties. The concern was about the absence of a budget to centrally fund the payment for the required licenses for instructors and to pay for the seat license costs for students. During a meeting with the vendor in November, a solution was proposed that academic departments acquire the instructor's licenses from their respective faculty IT accounts. This alternative solution to pay per faculty IT account seems to be the only short-term solution to continue with clickers in 2019. The challenge of paying the required amount for the student seat license was also solved. With the implementation of Wi-Fi in most of the lecture venues, some lecturers have indicated their willingness to pilot the mobile component of the clicker technology in 2019. The aim is to evaluate its related implications, such as the quality of Wi-Fi in the lecture venues and students' access to smartphones. During the pilot, lecturers must consider the practical impact of using mobile devices in class such as battery life, and as a possible distraction to the students. The use of the mobile solution implies a cheaper option for the students which will enable us to shift the seat license cost to the student instead of the full price of a clicker device.

Blackboard Analytics for Learn™: Descriptive and Predictive data

The Department for Education Innovation (EI) worked with the Executive, Deputy Deans, HoDs, FSAs and students on what dashboards they require from Analytics that provide the most informative and motivating data for decision-making.

El consulted Blackboard for support for Analytics for Learn and Blackboard Predict, and piloted Predict with departments in EBIT as one of the challenges experienced across all faculties is the identification of students at risk so that they can be provided with the necessary support to ensure academic success. Following the identification of several high-risk modules in the School of Engineering, the University's Department for Education Innovation was approached for assistance.

Blackboard Predict is an analytics application integrated into the Learning Management System (LMS), ClickUP. This application generates predictions about student risk using historical data from the LMS. Its success depends on lecturers' effective use of ClickUP as it is influenced by the accurate alignment of learning activities with student outcomes, as well as good programme design and facilitation.

To create the model, data is first organised and fed into a machine-learning algorithm. The model uses a variety of features to provide a risk value. These include elements such as the students' current mark, programme level, date of enrolment, number of students enrolled in the programme, whether the student is enrolled full-time or part-time, and

whether it is an undergraduate or postgraduate module. The resulting risk value is given as a percentage that indicates the probability that a student will pass or fail a certain module. The pilot in 2018 showed a strong to a very strong positive relationship between the prediction in week 8 of the course and the final semester mark.

The limitation of this model is that while it is very effective in predicting student risk, this comes at the expense of explaining why a student will fail a certain module. However, the value of the model does not lie in the predictions, but rather in the interventions and support that can be provided to students to ensure their academic success.

The pilot project was supported by a strategic review. The primary deliverable of the consultation was to assess institutional, operational readiness for implementing Blackboard Predict and to create an operational plan for the long-term implementation. Blackboard Consulting worked with the University to create an operational preparation plan, which aimed to maximise the institution's use of Blackboard Predict during the pilot phase, strengthen student satisfaction and enhance the overall student experience, and ultimately lead to improved student outcomes.

The primary deliverable was to assess institutional operational readiness for a Predictive (Blackboard) Institution Service and create an Operational Plan. Operational readiness is classified as either: (i) Ready, (ii) Ready with recommendations, (iii) Not ready with recommendations. This was within the context of (i) An institution-wide implementation, (ii) A large-scale pilot (40% student coverage), or (iii) A number of small-scale pilots. The decision is informed by four pillars of readiness: culture, people, processes and technology infrastructure[1].

Based on the information shared by the University through the document review, pre-visit questionnaire, findings from the earlier institutional readiness for Hybrid Learning engagement (2018) and the onsite discovery sessions, Blackboard Consulting's assessment is the following: "the University of Pretoria is not ready for an institution-wide service, and needs to focus (i) on the "go – no go" decision for Blackboard Predict, and if positive (ii) the next 18 months on delivering a number of pilot projects building on the wider recommendations and lessons from the pilot projects (Semester 2, 2018) to enhance their operational readiness." The Operational Plan was developed with UP to provide a roadmap for this initial pilot phase.

Figure 4 summarises the outcomes of the readiness assessment. The analysis identified the two main constraints to the University of Pretoria implementing a Student Success and Attainment Service using Blackboard Predict as the institutional culture. This feeds into inconsistencies around the implementation of the required processes and procedures by departments and individuals.

	Not Ready with Recommen- dations	Ready with Recommen- dations	Ready for Institutional Service
Culture	X		
People		Х	
Policy and Process	Х		
Technology Infrastructure		X	

Figure 4: Operational readiness to implement an institutional wide service in the immediate term (now)

It is important to acknowledge that this outcome does not suggest that the University of Pretoria is not capable of deploying an institution-wide service in the immediate term. There is a clear vision of the requirements; there are pockets of excellence around student success and attainment; the required capabilities and capacities do exist within the institution; and the technical infrastructure is adequate. However, it was the Blackboard Consultant's opinion that these aspects need to be further developed and coordinated for an immediate institution-wide deployment. Therefore, if it is deployed, it is unlikely to deliver the desired outcomes at the institutional scale.

This Bb Predict model was piloted in six high-risk modules at the University in 2018, four of which were in the Faculty of Engineering, Built Environment and Information Technology. It will be extended to other faculties in 2019. Reports were developed after each test series and the results given to both the lecturers and the Deputy Dean: Teaching and Learning to determine which interventions or support mechanisms can be provided to students. The prediction data of week 8 of the semester showed a strong to very strong (r 0,55 to r 0,79) correlation with the final semester grades of students. The data of the pilot project provided evidence of the value of the prediction data for early intervention.

Positive feedback was received from the faculty student advisors, who indicated that access to the data in the faculty for students showed that the analytics gave them insight into academic risk factors. It also provided them with a tool to track the success of an intervention and its eventual result on student performance.

The Department for Education Innovation continued to develop descriptive reports and dashboards for HoDs and provided training for the Faculty of Education HoDs. The dashboards provide descriptive data for HoDs to monitor students' formative progress as well as the level of LMS usage. The success of the formative tracking was

dependent on the level of usage of the grade centre in the LMS. Numerous reports about the use of the Learning Management System (LMS) were developed for faculties for reporting and planning purposes.

Technical changes were also implemented owing to the capacity of local Pyramid BI hardware to manage the data extraction, transformation, and loading (ETL) process. The successful move of the Pyramid BI analytics environment to Software as a Service environment provided UP with scalable hardware and dedicated 24/7/365 support.

Blackboard predict instructor reports and Faculty Student Advisor reports were delivered for the pilot instructors and the Faculty Student Advisors (FSAs) in EBIT. The institution, the executive and senior management benefitted from these projects. The analytics for Learn data show that first-year students in the top quartile of clickUP engaged users outperformed those in the bottom quartile by 16% on average in 2018. The data from the analytics program piloted prove this:

Table 19: Summary of the success difference between first-year students first and fourth quartile for minutes spent in clickUP, interactions while on clickUP and number of times clickUP was accessed

Minutes	Interactions	Access
2016: 12.8%	2016: 14.7%	2016: 17%
2017: 13.5%	2017: 15.5%	2017: 17%
2018: 15.5%	2018: 16.3%	2018: 17%

Daily access is the most significant indicator of success.

The faculties benefitted indirectly as data showed that the overall use of the grade centre in undergraduate LMS modules improved from 56% in 2018 to 66% in 2018. Feedback was received for improvement of the dashboards, which will be implemented in 2019. Lecturers and Faculty Student Advisors benefitted (and ultimately the students through targeted interventions). Positive feedback was received from the lecturers and FSAs. They indicated that the dashboard allowed them to monitor students in their faculty based on numerous specific criteria, including the breakdown of semester marks and the timeline of the marks. Additional biographical information allowed the FSAs to filter students based on, for example, Risk levels, High School GPA, degree programmes, majors, and academic level and status. Pilot lecturers provided additional support to students with high levels of risk. In one of the pilot modules, a small group of students received additional tutorials and all of them passed their final examination. Staff development also benefitted. The increasing availability of data in the LMS contributes to the development of a new staff development courses to support lecturers with the use of data within their modules for appropriate interventions.

The system benefitted. The move of the Analytics software to a SaaS environment improved the scalability of the system as well as the stability thereof. The ETL time was reduced from between 15-20 hours per day to only 8-10 hours. The ETL improvement contributes to an increase in the use of the embedded analytical reports in the LMS.

Mr Jordaan had numerous meetings with the USaF legal consultant in the development of a national guideline document focusing on the development of a guideline document for the use of data for student intervention purposes. The implementation of the European Union General Data Protection Regulation (GDPR) in 2018 enabled renewed attention on data privacy regulations.

Upgrading/Changing Existing Technologies

CBT System

In 2017, EI investigated the QuestionMark OnDemand functionalities to determine its suitability for the UP environment. It was decided that similar testing should be done in the OnPremise version during 2018 to ensure that all features are working as needed. D Scheepers compiled a motivation document for ITS to appoint an ITS project manager to oversee tender process for system evaluations. Dr W Beeken was appointed as project manager, and a project charter was drawn up and signed off by Prof Kilfoil and T Hadebe. A steering committee was formed to guide the project.

Three work packages were identified for the project: Review of Business processes; Testing NextGen OnPremise; and Request for Information from other systems

1. Review of business processes: ITS obtained three quotes for a Business Analyst from Britehouse, EpiUse and Datacentrix. The costs were expensive, and a decision was made to rather complete the analysis ourselves. D Scheepers updated the existing CBT process documents to reflect any changes that occurred within the last three years. She also created three flowcharts for possible support scenarios that might be possible in the NextGen OnPremise version. Lecturer and student surveys were created to obtain their feedback on satisfaction with current processes and how they would prefer to work. A total of 58 lecturers completed the survey and confirmed our initial insights into the processes they would prefer, i.e. some want to be autonomous with CBT, others partly autonomous and a group will continue to expect El to do everything in the system. They were positive about the service they receive from EI, but some complained about QMLive's slow response and the fact that they only have access to parts of their question databanks. The feedback from the students was used by ITS Student Computing to better their environment/services.

- 2. Testing NextGen OnPremise: ITS installed a version of NextGen OnPremise on a new staging environment. This work package was delayed for a few months due to the unavailability of QuestionMark resources to transfer the existing data from one campus to the new database. The EI team completed the functional testing in September, and a document was compiled with the issues that they experienced to inform decisions. The ITS team compiled the architecture requirements and it became clear that the new environment will be too expensive to implement on each campus. They propose the installation of the product on a centralised environment that will be linked via the new fibre links between campuses. Full implementation of NextGen OnDemand is therefore dependent on the completion of the fibre roll-out project.
- 3. Request for Information (RFI) from other systems: RFI documentation consisting of self-evaluation questions was compiled and uploaded as a tender is available on the Tenders@UP' website with the following link. Only three companies submitted information: Altron Bytes People Solutions, Seziwave and Speedwell Software. The outcome of the product evaluation process placed the product from Altron Bytes People Solutions (QuestionMark NextGen OnPremise) as the most suitable solution provided, followed by Speedwell Software and lastly, Seziwave as a fit-for-purpose CBT solution. A pricing comparison was not fully achieved as Seziwave and Speedwell Software only provided partial information as requested for the listed costing line items, however, indicative figures supply some indication on price ranges to be expected. The El

CBT team also conducted a full evaluation of Blackboard against the same functional criteria during October and a detailed report was submitted to Prof G Stols. It became clear that Blackboard will not be a suitable product to replace QuestUP.

ClickUP Mobile

Mobile applications enable engagement at any time while the users are mobile. The new Blackboard Student application is a persona application designed for students. It allows the student to view course activities and events, complete and submit assignments and tests, check grades and academic progress in real time, receive notifications and join virtual classes in Collaborate. A new Blackboard Instructor app allows lecturers to interact with students from their mobile devices. The current version of the application allows lecturers to preview assessments and content, facilitate discussions and create announcements. Integration with Blackboard Collaborate provides a seamless interface for lecturers to facilitate online sessions from a mobile device. Numerous new features and fixes were added to the Blackboard applications in 2018 every month. The University of Pretoria played a significant role in the development of offline features in the student mobile application. Students may download content and view it offline when they are unable to access the internet.

A quarter (25.2%) of user interactions on clickUP were from a mobile or tablet device. Figure 5 provides an overview of clickUP mobile tablet activities in 2018.

Users
Mobile and Tablet Traffic
391,689

New Users

Mobile and Tablet Traffic

359,075

Sessions

Mobile and Tablet Traffic

4,155,826

Number of Sessions per User Mobile and Tablet Traffic 10.61

Pageviews
Mobile and Tablet Traffic
29,024,633

Pages / Session

Mobile and Tablet Traffic

6.98

Avg. Session Duration
Mobile and Tablet Traffic
00:04:33

Bounce Rate

Mobile and Tablet Traffic

22.39%

Figure 5: 2018 clickUP mobile activity

A notable trend in 2018 of clickUP mobile activity was the balance between the use of IOS (2018: 49.89%) and Android devices (2018: 48.73%) use. The increase of available Wi-Fi access points on campus during 2018 supported the use of mobile devices to access clickUP.

Turnitin (NEED STATS)

The number of papers submitted to Turnitin increases year by year. While the use of Turnitin rose in 2016 in response to the #feesmustfall campus disruptions, it would not have been unusual if it decreased in 2017. Surprisingly, Turnitin use again increased in 2017, as shown in Figure 6. A concern is the limitations of the current Turnitin license as it requires the license administrator to frequently ask Turnitin to close active classes to manage the license. The submissions in 2017 followed the academic calendar as evident in Figure 6.

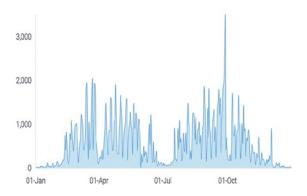


Figure 6: Turnitin submissions trend in 2017

Nearly half of the papers in 2008 had similarity scores of 25% and higher, corresponding to material published on the web or assignments submitted by other students. As high similarity scores might indicate the possible presence of plagiarism, UP started a drive to increase the originality of assessment papers through awareness campaigns and training. More UP lecturers use Turnitin to screen student assignments; they also use it for marking and providing feedback. Table 20 shows the similarity reports in 2017 and 2018, and how the majority of papers incline towards lower similarities with a slight increase in high similarity.

Table 20: 2017 and 2018 Turnitin use - Similarities

	Similarity Reports	Similarity 0-24%	Similarity 25–49%	Similarity 50-74%	Similarity 75–100%
Total (%) 2017	243,445	185,115 (76.0%)	38,320 (15,7%)	14,027 (5,8%)	5,983 (2,5)
Total (%) 2018	307,706	224,132 (72,8%)	53,566 (17,4%)	18,617 (6,1%)	11,391 (3,7%)

Lecturers are increasingly marking and providing feedback using Turnitin assignments, as the amount of feedback provided in 2018 is shown in Table 21.

Table 21: Turnitin feedback provided in 2018

Submissions with feedback	Scored with rubrics	Instructor feedback	ETS	Peer Mark	
86,3347	22,611	398,5745	1391,143	14776	

Instructor feedback (column 3) consists of summary text comments, voice comments, QuickMarks, bubble comments, inline text comments, strikethrough of text, and grading form marks. All feedback options and rubrics are seamlessly integrated and if used together, provide more in-depth feedback in less time. The ETS® e-rater® Grammar Check Technology that forms part of the Turnitin Studio is increasingly activated in assignment settings. It automatically checks submissions to an assignment for grammar, usage, mechanics, style and spelling errors. Students can use indepth feedback and integrated online tutorials to improve their English writing.

ClickUP

The University of Pretoria has been a client of Blackboard since 1998 and in 2018 celebrated two decades of partnership with Blackboard. In 2015, the University moved from a local hosted to a managed hosting environment. The quality of service that UP received as a managed hosting client convinced the Department for Education Innovation that the move to SaaS is the logical next step in our partnership with Blackboard. Early in 2018, Analytics for Learn was also moved to the SaaS environment, which improved not only performance but also stability.

Mr Johan Slabbert took responsibility for the project and completed the preparation work required, which included the deletion of around 8 terabytes of courses dated from 2011-2014 from the Blackboard Managed hosting environment. This process was managed after hours and during weekends. The full migration was completed in less than 24 hours in December 2018. The Department for Education Innovation was used to the professional service we received from Blackboard Managed Hosting team but the quality of service we experienced with our move to SaaS exceeded all our expectations.

The move to SaaS will significantly contribute to supporting our institutional teaching and learning and student success strategies as it provides users with an online experience with which they are familiar. Also, SaaS will further reduce downtime as continuous updates can be implemented with zero or minimal downtime.



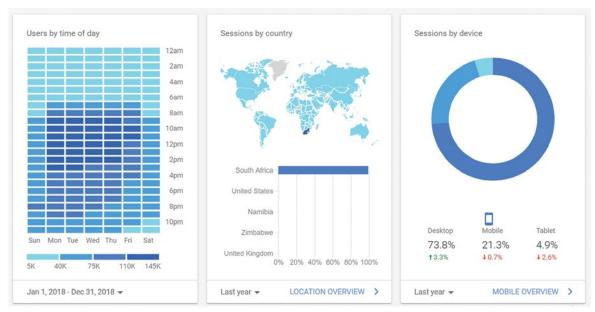


Figure 7: Google Analytics: clickUP use January - December 2018



Figure 9: Google Analytics: clickUP use January - December 2018 in comparison to January - December 2017

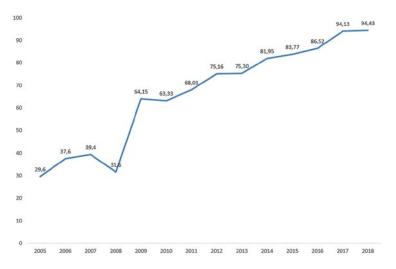


Figure 10: Trend of undergraduate modules' use of clickUP

The data indicate slight growth in the use of clickUP to support undergraduate teaching and learning, but more than two-thirds of clickUP student activity in 2018 focused on content and announcement engagement. Nearly 25% of undergraduate student activity relates to grades and assessments, which include assignments and tests.

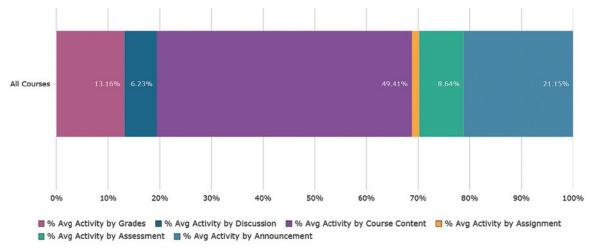


Figure 11: Percentage undergraduate student activity in clickUP

The Analytics for Learn data from UP provide correlations between undergraduate student engagement in clickUP and average final grades. Course accesses may not directly make a difference in student learning, but the learning and course design, course context, and role of the facilitator may impact its value to support student success. The following figures provide a notable trend. ClickUP engagement correlates with higher average final grades for undergraduate students.

Figure 12 indicates the correlation between first-year course access in clickUP and average final grade captured for all undergraduate modules in PeopleSoft. The Course Access Quartile dimension in AL distributes the course access into

four groups where the first quartile is the highest and the fourth is the lowest. Figure 12 displays this in correlation with the average grade for each quartile. It is interesting to note that in 2018, the highest course access quartile group of first-year students has a 17% higher average grade than the lowest or fourth access quartile group. Data from 2016 and 2017 confirm a similar grade point average difference. A similar trend is visible in Figure 13. Figure 13 compares the average final grade of all first-year undergraduate students in 2018 to the course minutes quartile and indicates that students who have spent less time in their clickUP courses achieved a lower final average grade.

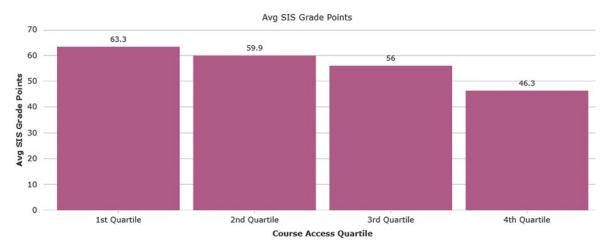


Figure 12: Course access quartile and average SIS grade



Figure 13: Average final grade compared to course minutes quartile

Blackboard Collaborate

The Blackboard Collaborate Ultra Experience is a synchronous video conferencing tool. It allows lecturers to add files, share applications, and use a virtual whiteboard to interact with students. Collaborate Ultra opens from a browser. Users do not have to install any software to join a session and can access it from their mobile devices on a browser or through the Blackboard student application as students. The current version integrates seamlessly with clickUP and the Blackboard Student mobile application and can manage 500 simultaneous users and include a variety of features that have been specially designed to support online facilitation. These functions include chatroom, whiteboard, interactive polling and high-quality sharing of audio and video. The development team releases either new features or improvements every month to the current features. Noteworthy progress was made in 2018 through the scheduler options, chat improvements, attendee reports and a recording report. In addition, a session timer was added as well as the ability to add captions later or replace existing ones in recordings. The increase in the use of Blackboard Collaborate is visible in the following data:

Category	Number
Sessions created:	940
Sessions time:	808 hours
Recordings	429
Unique number of attendees	19 064

Case studies of use include the following: in EMS, it is used to stream and record lectures and provide tutor sessions.

Lecturers have also 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 NAS used Collaborate to support students before they wrote a test or for virtual tutorials, consultation and postgraduate support. The students in EBIT and Public Health used Collaborate Ultra to carry out project presentations. Some lecturers invite guest speakers to expose students to industry leaders during lectures. Numerous postgraduate lectures were conducted using Collaborate. The Department for Education Innovation used Collaborate Ultra successfully to stream conferences and workshops based on requests and to have weekly meetings with Blackboard consultants.

More information is available in clickUP under the clickUP Support tab in clickUP or on the Collaborate Ultra help site.

Third party content in clickUP

Blackboard has extended the services they offer 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 and 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





Figure 14: Third party content links in clickUP

The value of third party content use is displayed in a Word Cloud format in Figure 14, which shows the average undergraduate student item minutes as size in relation to the average item interactions in the colour value for all the clickUP content item types in all faculties in 2018.

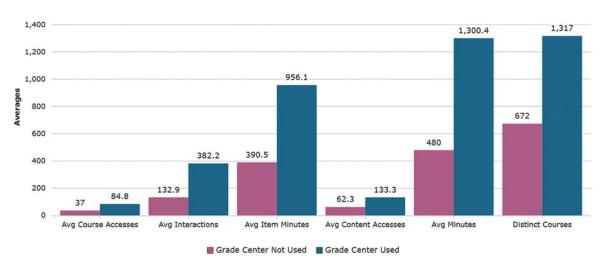


Figure 15: Grade Centre Effect

Grade Centre Integration

Ongoing development and testing sessions were done in 2018 to be able to implement a pilot test. The aim is the extraction of grade data from the clickUP Grade Centre (CGC) to PeopleSoft Campus Solutions (PSCS). The deployment of the grade centre integration process was impacted in 2018 as Blackboard announced the end-of-life support for the use of webservices to extract grades into PSCS while the move of clickUP to SaaS required ITS to upgrade the integration

software used for the integration between CGC and PSCS.

The use of the grade centre not only increases student engagement, as illustrated in Figure 15, but is also vital for the quality of the data in Analytics for Learn. The implementation of Blackboard Predict in 2018 may provide added value in capturing the grades in the clickUP grade centre.

Creative Studios and Communication Technology

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

Creative Studios consists of three sections: graphic design, videography and limited photography. The photography service will be terminated at the end of May 2019 when the photographer, Mrs Charmaine Vermeulen, will retire. The staff in Creative Studios help lecturers to enhance access and successful student learning through excellent teaching media. This is achieved by creating engaging audio and visual material for teaching and learning. This material assists students with different learning strengths or preferences 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 2018, CSCT focused their attention on projects related to teaching and learning and research.

Highlights and New Initiatives of 2018

International collaboration

Early in 2018, Prof Carin Huyser, Head of the Reproductive Biology Laboratory at The Faculty of Health Sciences, Dept. Obstetrics and Gynaecology, and team started a project whereby laboratory procedures, classroom lectures and training sessions were captured on camera and then edited for teaching material. The material was used at a workshop in Uganda, but teaching and learning material like this can readily be made available online for future use.

During the Flexible Futures conference that was held on 4-5 October 2018, Almero du Pisani assisted Prof Peter Cochrane, the first keynote speaker, with the technology to do his keynote address via Skype to an audience at the CSIR. The Graphic Studios designed a large number of posters for the conference and assisted in the branding and printing of posters for marketing.

The Video Unit at the Faculty of Health Sciences continued to be actively involved with International Video Conferences. Prof Eric Buch, from Health Policy and Management at the School of Public Health Systems, presented regular lectures to Harvard University during 2018. Further International collaboration comprised interviews where international

academics were interviewed and the international meetings that were held via video conference.

Training and benchmarking

In February 2018, six staff members had the opportunity to attend the Design Indaba Conference in Cape Town to network and engage with some of the industry's best national and international designers.

Design and Development Impact

The expertise of CSCT 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. 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 following are some of the projects undertaken: The Use of Video to Enhance Teaching.

The Department of Maxillofacial and Oral Surgery at the Faculty of Health Sciences, led by Dr Karl-Heinz Merbold, realised the potential of short training video clips. Videos on dental surgery, instruments, and procedures were produced to be used in 2019. These videos not only help regulate repetitive training sessions, but also offer well-rounded instructional media and give lecturers and students more time to concentrate on problem areas during their clinical and classroom sessions. More than forty videos were produced. The clips are from less than one minute up to ten minutes per video clips.

Creative Studios assisted Prof Ryan Blumenthal, Senior Specialist and Forensic Pathologist at the Department of Forensic Medicine, to produce a "Time since Death" video. This video is only the beginning of a whole range of educational media to follow. This media will be made available to students via links in clickUP.

Mr Andre du Plessis produced a video for the Department of Mechanical and Aeronautical Engineering on the "Cardiorespiratory effect of vehicle vibration on healthy term infants". This video illustrated the research on the influence of a vehicle on a new-born baby when it is transported on the first trip from the hospital to the baby's home.

Mr du Plessis also produced a series of videos for the faculty of Veterinary Sciences on different exercise methods to make veterinary science students physically stronger. It was realised that most of these students were not physically strong enough to handle large farm animals. These videos were incorporated in an app which the students use in their physical training programme.

YouTube Used as an Aid to Teaching Medical Students

The University has a YouTube channel for projects and the videos are accessed through a link in clickUP. More educational videos were placed on YouTube during 2018 in order to make them readily available to students. Thus, the videos can be watched at the students' leisure. This resource ensures that there will be no misunderstanding as to what is expected of them during the testing phase. By attending one training session, students sometimes miss valuable information, but by having access to the videos, they can study 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. CSCT 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 were produced on the Hatfield Campus which impacted large numbers of students. These include the following:

- Animations for Dental health Care: Dr Karel-Heinz Merbold.
- Assistance in setting up still photography "studio" for Consumer Science.
- · Audiology: assistance with Office Mix lecture.
- Department of Genetics: video production series on genetic laboratory processes.
- Department of Marketing Management: filming students' feedback on projects.
- Department of Production Animal Studies: video project: -Reproductive system of the dog.
- Education Innovation: filming/editing Assessment seminar.
- Education Innovation: doing research on Whiteboard animation software.
- Filming/editing video for Autistic Master's student: education.
- · HR Performance Management: role play videos.
- · Lecture filming: Dr Chris Broodryk Drama.
- · Library: filming /editing "Flashmob".
- Library: filming/editing lecture Reading in the South African university context.
- Department of Psychology: neuro-cognitive psychology in the classroom, video editing.

- Unit for Academic Literacy: photography, editing of photos.
- Marketing management: Prof Jordaan recording/editing of award function.
- Human Resources Management: motivating employees with disabilities to declare it.
- Business Management: studio recordings/editing for Prof Antonites.
- · Library services: video.
- Education Innovation: video on the use and application of Powersoft.
- Video production: Avervision document camera planning phase.
- Veterinary Sciences video production: practical training in virology.
- Video production: a day on campus with a person with autism spectrum disorder.
- Veterinary Sciences: video series on exercises in the Skill Lab.

Video Conferencing, Skype and other Synchronous Communication Technologies

A total of 230 events took place during 2018 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:

Video Conferencing + Communication Technologies

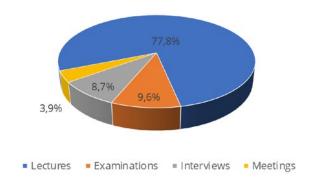


Figure 17: Use of video conferencing and communication technologies in 2018

Graphic Studios

Graphics on all the campuses were involved in 554 projects for teaching and learning.

Number of Graphic Projects Per Campus 2018

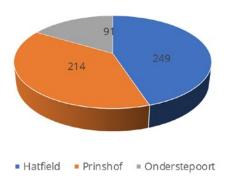


Figure 18: Teaching and learning projects for graphics in 2018

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, infographs and PowerPoints contribute to the research success of lecturers, as well as the success of their teaching and learning. The posters are displayed at conferences or open days but are subsequently used as part of teaching – all projects are linked to a module code. The following are examples of this.

Flexible Futures Conference

CS participated in the Flexible Futures Conference, which was held at the CSIR on 4-5 October 2018. The event focused on teaching and learning, and CS also played a vital part in designing posters and flyers for this conference.

Winning posters during 2018

Designed by Rita Dave

- First prize category, the "Studentesimposium in die Natuurwetenskappe", October 2018.
- R Grobler; C Visser; E van Marle-Köster. Department of Animal and Wildlife Sciences, Faculty of Natural and Agricultural Sciences.
- Poster name: Doeltreffende identifikasie van poenskop Bonsmara en Drakensberger vleisbeeste met behulp van DNA tegnologie.

Designed by Glenda Brits

• First prize, Wetland indaba 2018, October 2018.

- PG Radebe; BD Fibrich; B Madikizela; N Lall. Department of Plant and Soil Sciences, Faculty of Natural and Agricultural Sciences.
- Poster name: Fighting aging through elastase inhibition using South African wetland plants.

At The 2018 Faculty Day on the Prinshof Campus the following poster won an award.

Designed by Marizanne Booyens

- · Third Prize.
- PWW Meijer; P Soma; J Bester. Department of Physiology, University of Pretoria.
- Investigating the ultrastructural and viscoelastic properties of whole blood, with specific focus on erythrocytes, in poorly controlled Type 2 diabetes.

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 the Faculty of Veterinary Science. The photographer is going to retire at the end of May 2019 at which time the service will be terminated.

Photography and Video Onderstepoort

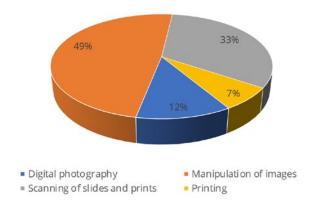


Figure 19: Photography and Video at Onderstepoort in 2018

Institutional Support

CSCT continued to support Executive projects. Fifteen video conferences for the Executive 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 El.

Community Engagement

The Manager: Community Engagement is Ms Gernia Van Niekerk, who works with a small staff of three. The work has expanded from straightforward community engagement and development to include work-integrated learning in some faculties (Health Sciences, Education and EBIT, for example). Negotiating with businesses and employers requires different knowledge and skills from negotiating with communities.

New Initiatives

Ethical clearance was obtained to pursue the impact study for Community Engagement. Ms Gernia van Niekerk did

a presentation on the institutional research project titled: 'A Longitudinal Observational Study: Process and practice of large scale community engagement'. Training of the interested participants will commence in early 2018.

Data on Community Engagement

The summary table below provides an indication of the scope of curricular and voluntary community engagement activities in 2017 up to date, the first forming part of students' formal programmes, and the second, activities and projects run by voluntary student groups.

Table 22: The scope and scale of community engagement, work integrated and practical work activities, 2017

Faculty	Curricular community engagement, work integrated and practical work	Voluntary students	
	Modules	Student numbers	
EMS	14	120 student organizations	250 (2,500)
EBIT	9	TUKSRES	2,500
Education	13	9 Faculty Houses	2,000
Health Sciences	56	SRC - RAG	20
Humanities	24	Other (bursary requirements, etc.)	1,000
LAW	4	TOTAL STUDENTS	5,770
NAS	24		
Theology	2	_	
Veterinary Science	23		
TOTAL MODULES	1699		
TOTAL STUDENTS	17403		

CURRENTLY MORE THAN 30% OF ALL STUDENTS ARE INVOLVED IN A COMMUNITY ENGAGEMENT RELATED ACTIVITY. MAINLY UNDERGRADUATES ARE INVOLVED.

90% of modules are part of undergraduate programs. All Faculties were involved in community engagement and community development, although the nature of their involvement varied. In some cases, curricular community engagement was mandated by the professional or accrediting bodies. The number of students undertaking community engagement modules increased owing to the increase in student intake. Community engagement modules include all Work Integrated Learning (WIL), as well as community-based learning and community-based practical work modules.

Institutional Community Engagement Awards

The institutional Community Engagement Award went to Dr. Victoria Rautenbach in the Faculty of Natural Sciences for the work that she have done on solutions for people victimised by crime in Mamelodi.

Community Engagement Forum

Three meetings of this forum were held. At the second meeting, changes to the current Policy on Community Engagement were discussed as part of cyclical revision. The policy was signed off for submission to the Senate through the Senate Committee for Teaching and Learning at the October meeting. In addition, Ms van Niekerk gave feedback from the ASL conference in Ireland that she attended as a speaker and workshop facilitator on the topic of large-scale community engagement.

The Anchor Strategy

The normal activities of community engagement have been slightly refocused since 2016 to support the University's anchor strategy. The project aims to address urban decay around campuses by stimulating the areas economically and addressing social issues as well. As a major role player in areas around campuses, UP can be the 'anchor' for urban development and renewal. Working in the precinct of each campus brings challenges not encountered in other communities. New partners have to be found, negotiating has to start afresh on a large scale, and students have to be redirected to particular areas around university campuses to help to upgrade those areas. Work escalated in 2017 on the Hatfield and Mamelodi campus precincts providing opportunities for curriculum-related community engagement based on community development principles.

Students did their community engagement in various ways around the campuses working in schools, the Hatfield court and veggie gardens, among others, stimulating entrepreneurship and addressing health issues, amongst other support efforts. A series of rehabilitation workshops was planned for the street people in consultation with Brooklyn Police Station. Most of the people subsequently left the street and returned home. A health hub was established with a particular focus on rehabilitating the more hardened drug users.

External Community Engagement Organisations

SAHECEF

This organisation is not very active, but their meetings were attended in 2017 by a member of the Community Engagement Office. The Executive has changed substantially due to resignations of members from their institutions. New members for the Executive will be elected in 2018.

Talloires

The winner of the UP institutional community engagement award in 2015, the Law Clinic, was nominated for the Mc Jannet Award. UP is always disadvantaged as they consider only student-led community engagement, not curricular community engagement.

Two students and Dr Martina Jordaan attended the conference in Mexico on invitation. Heavy security was experienced. It was noted that Mexican students at university are expected to do 480 community engagement hours, while medicine students do 1,000. It was great exposure for students who also received leadership training.

University Social Responsibility Network (USRN)

Engagement with the University Social Responsibility Network (USRN) has deepened. The University was visited in April by 12 member universities from the network (including universities from the USA, Australia, Brazil, China, UK, etc.) for a week's exposure to and training on different aspects that relate to university's social responsibility, including community engagement, civic responsibility, and so on. Since the University of Pretoria has a history of involvement in and commitment to university social responsibility, good practices covering the scope and diversity of its programme could be shared during this training week. UP is the board member for Africa. Two UP staff members, Prof. Cheryl de la Rey (Vice Chancellor and Principal) and Ms Gernia van Niekerk (Manager: Community Engagement) attended a USRN meeting and workshop hosted by PolyU, Hong Kong, China, where one of the main focus areas was identifying evaluation criteria for University Social Responsibility. The Vice Principal: Academic, Prof. Norman Duncan and Dr Martina Jordaan worked with online developers to create an online site for the University's activities. The Vice Chancellor and Principal, Prof. de la Rey worked with Ms van Niekerk and Prof. Kilfoil to produce a case study on UP's community engagement activities 'Evaluating Service Leadership Programs with Multiple Strategies' for a USRN publication, University Social Responsibility and Quality of Life, that was published in 2017.

Operations Office

The Operations Office, led by Ms Elize de Waal, proactively uses skilled and experienced staff to support the Department for Education Innovation in terms of personnel, financial and logistical matters to ensure that the El department functions optimally. The core mandate of this support unit within El is to promote, encourage and sustain best administrative and financial 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 co-operation needed to function means that the OPS office has to nurture relationships with many other departments at UP.

The Reception office at the Hatfield campus provides a single point of control of entrances to the Department for Education Innovation. It also provides information and guidance for first-line enquiries and receives deliveries. The Reception is a thoroughfare for a significant number of staff, students and visitors who come to El for tutor training, CPD, meetings and large numbers of students to visit the MasterCard Foundation, Dell Foundation, Sikelela Scholars and FLY@UP. The area also provides entrance to computer laboratories for a few IT staff members and students. 2018 was a challenging year with renovations being done to the IT Labs - students had to use the entrance through El Reception. 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.

El also provides, equips and maintains offices for donor staff from the Michael and Susan Dell Foundation (MSDF and Sikelela Scholars) and the MasterCard Foundation (MCF) and provides an office for the FLY@UP project manager, the ISFAP manager and occasional temporary students/ staff linked to these programmes. About 12 additional staff members have been added through these projects.

Finances

The office assists with all the financial procedures, requests and forms as outlined in the UP policies and procedures. In 2018, the Operations Office handled the combined departmental operational budget. In addition to EI operational, capital and IT budgets, the Operations Office managed a number of other budgets, some external, some

internal. Of the internal budgets, some related to funds for training from the Human Resources Development Committee:

- Skills Levy funding allocated to EI as part of the EI skills development. The manager of the Operations Office also serves as the secretariat for the EI Skills Development Committee.
- The CIL novice lecturers and tutor training budget.

Other cost centres that the Operational Office assists or manages:

- · First-year Orientation programme.
- · Allocation of Publication Funds to individual publishers.
- · Development fund.

The other internal sources of revenue that actually combine internal and external funding relate to community engagement activities: transport, precinct development, community projects and the support of a limited number of vulnerable students. Community Engagement with their campus and community-wide services has several complex budgets with additional community and foundation funds. The OPS office assists with all financial transactions relating to CE budgets.

The office handles the expenditure of budgets for the Michael and Susan Dell Foundation, the MasterCard Foundation, the Siyaphumelela project of the Kresge Foundation, a research grant from the Carnegie Corporation of New York, FLY@UP, First Year Orientation, CE and Excellence Awards, the Flexible Futures Conference, and the Umalusi Development.

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

As part of their regular work with the Creative Studios and Communication Technology section of EI, 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 23: Orders and service requests

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Order		35	54	56	49	75	70	56	123	67	74	54	8
Invoices Cred.		16	25	32	16	19	10	16	32	9	12	31	5
Voucher approvals		34	27	48	37	53	53	54	72	61	92	72	27
El Services	Invoicing Debtors	0	3	1	2	1	1	2	2	0	1	1	0
	Private income	0	1	0	0	1	1	0	0	0	0	0	0
Journals:	Graphics Hatfield	6	1	3	1	9	6	13	7	8	16	4	0
	Graphics Medical	8	8	5	15	19	11	13	32	13	6	12	0
	Graphics O/P	0	1	0	1	3	4	0	8	3	0	0	0
	Graphics Total	14	10	8	17	31	21	26	47	24	22	16	0
	Video Hatfield	0	0	0	0	1	0	2	3	0	0	0	0
	Video Medical	0	0	0	0	0	0	0	0	1	0	0	0
	Video Total	0	0	0	0	1	0	2	3	1	0	0	0
	Photographic O/P	0	0	0	0	0	0	0	0	0	0	0	0
	Photographic Total	0	0	0	0	0	0	0	0	0	0	0	0
	Studio Hatfield	0	0	0	0	0	0	0	0	0	0	0	0
	Journals totals	14	10	8	17	32	21	28	50	25	22	16	0

Drawing up the annual operational, HR and Facilities Management budgets for 2018, which were aligned with guidelines from the Director of Finance, the El Operational Plan and UP strategies, was facilitated by the Operations Office in collaboration with the Director of El and all line managers.

Human Resources

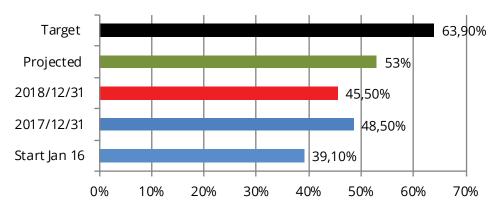
Some of the HR challenges that the portfolio had to face were assisting line managers and the Director to ensure diversity in the staff profile and recruiting new staff. El employs both permanent and contract staff. The Operations Office was effective in processing six permanent, several annual contracts and ad hoc appointments. Where possible,

vacant posts were filled by candidates from designated groups relevant to ensuring a balanced equity profile in the department. The department achieved an appointment rate of Black candidates higher than 50%.

Ms A Singh and Ms E de Waal are part of the new departmental Transformation Committee.

	Employment Equity Report Education Innovation 31 December 2018																						
		31 De	c 2015																1 Jan	2016 to	31 Dec	2018	
	Bla	ack	Wh	ite		Afri	can	Colo	ured	Ind	lian	Wh	ite		Black % Dec 2015	Black % Dec 2018	Projection 2020	App	ointme	ents	Tei	minatio	ons
Support	F	М	F	М	Total	М	F	М	F	М	F	М	F	Total				Black	White	Total	Black	White	Total
Grd 1-6	3	0	15	3	21	1	1	0	1	0	1	4	15	23	14,3%	17,4%	19,5%	2	1	3	2	2	4
Grd 7-9	10	1	12	7	30	5	11	0	1	0	1	8	8	34	36,7%	52,9%	63,8%	12	1	13	5	3	8
Grd 10-12	6	2	2	0	10	1	2	1	0	0	1	0	1	6	80,0%	83,3%	85,6%	2	0	2	4	1	5
Grd 13-19	Grd 13-19 2 1 0 0 3 1 2 0 0 0 0 0 0 <mark>3 100,0% 100,0% 1 0 1 0 0</mark>						0																
Support Total	21	Support 21 4 29 10 64 8 16 1 2 0 3 12 24 66 39,1% 45,5% 49,7% 17 2 19 11 6 17								0	3	12	24	66	39,1%	45,5%	49,7%	17	2	19	11	6	17

1. Targets, projection and progress over 3 years



2. Gender

	Grd	1-6	Grd	7-9	Grd ⁻	10-12	Grd 13	3-17
Gender	##	##	##	##	####	####	######	####
Male	##	##	##	##	####	####	33,0%	####
Female	##	##	##	##	####	####	67,0%	####

3. Rate of Blacks appointments and terminations over 3 years

	Rate
Appointments:	##
Terminations:	##

Figure 20: Equity profile 2018

Table 24: Vacant posts filled

Perm	nanent post						
1	Prof Gerrit Stols	Director El	12382	White - Male			
2	Dr Eugene Machimana	Head Education Consultant CE	5348	African - Male			
Cont	Contractors post						
1	E. Mphanda	Jnr Research Officer	S999 post	African - Female			
2	E. Law-van Wyk	Counsellor	MasterCard	White - Female			
3	M.K. Phalana	Snr Admin Officer	DHET	African - Female			
4	G. Ramafi	Project Coordinator	MasterCard	African - Female			
5	D. Thompson	Project Manager	Dell	White - Male			
6	A. Mawadza	Project Manager	MasterCard	African - Female			
7	A.W. Marthinus	Programme Manager	Sikelela	Coloured - Male			
8	S. Bam	Snr Administrative Officer - Finance	MasterCard	African - Female			
9	L. Sebiloane	Administrative Assistant	MasterCard	African - Male			
10	A. Vumazonke	Administrative Assistant	MasterCard	African - Female			
11	J. Pettus	Snr Student Advisor	Dell	Coloured - Female			
12	E. Drysdale	Contractor Instructional Designer	S999	White - Female			
13	M. Madiope	Clerical Assistant	S999	African - Female			
14	G. Maepa	Clerical Assistant	S999	African - Female			
15	H. Byles	Project Coordinator	Fly@UP	White - Female			
16	L. Molose	Snr Admin Officer	Orientation	African - female			
17	E Schaffner	Administrative Officer	ISFAP	White - Female			
18	J Versveld	Clinical Psychologist	ISFAP	White - Female			
19	E Isiki	Postgraduate Academic Coordinator	MasterCard	African - Female			
20	S Khuboni	Recruitment & Liaison Officer	MasterCard	African - Male			

The department was not allowed to register an overtime project for Video and Communication staff. The office also maintained and updated reporting lines for leave and performance evaluation on PeopleSoft. Visitor applications are done by the OPS office on PeopleSoft, as well as initiating, implementing, co-ordinating and finalising renovations to the Dell and MasterCard offices.

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

Logistics

Quality service is rendered in terms of internal and external client relations and links with the El department, UP Departments, services and divisions. The Operational

Office is responsible for all logistic and maintenance matters within El. That responsibility includes office spaces, building projects, the use of assets, IT related functions, occupational health and safety (ensuring wheelchair friendly parking and ramps around the IT building), security and key register, coordination of services needed from Facilities Management, Security, stationery, access control, golf car, photocopier machines, top cooler, plants and contracts.

The Operation office successfully co-ordinated and managed student access to the Labs via the El reception area during the construction of the IT Building's atrium. It was a high security risk during this time, however, no incidents occurred.

The office managed the EI operational facilities budget allocated to EI, following up on outstanding matters and facilitating work with contractors.

Research Activities

The table below summarises the research activities of the Department for Education Innovation for the five-year period from 2013 to 2017. It is followed by details for each section.

Table 25: Summary of research activities El 2013 - 2017

Summary of research activities ¹		2013	2014	2015	2016	2017
	Accredited	3	5	6	5	7
Number of publications (EI)	Non- Accredited	3	1	7	0	0
Conference papers precentors	International	6	6	6	8	15
Conference papers presenters	National	28	21	23	25	32
Destars presenters	International	0	2	0	3	2
Posters presenters	National	0	1	3	5	6
Conferences, workshops, webinars and colloquiums	International	7	14	16	5	6
attended	National	53	82	38	25	42
Research reports		14	14	16	11	23
Number of staff Serving on editorial boards		3	4	4	4	5
Active international collaborative projects		0	3	4	4	5
Vicita	International	3	3	5	2	5
Visits	National	0	3	4	1	0
Vicitors	International	3	30	14	7	6
Visitors	National	0	8	1	6	12
Depresentative for LID	International	3	0	0	0	0
Representative for UP	National	2	7	6	2	4

Publications in Accredited Journals and Books

Botha, A., Smuts, H., de Villiers, C. 2018. Applying Diffusion of Innovation Theory to Learning Management System Feature Implementation in Higher Education: Lessons Learned. In: Hao, T., Chen, W., Xie, H., Nadee, W., Lau, R. (eds). Emerging Technologies for Education. SETE 2018. *Lecture Notes in Computer Science*, 11284:56–65. Springer, Cham. https://doi.org/10.1007/978-3-030-03580-8_7

Botha, A., Steyn R., Weilbach, L., Muller, E. 2018. Using the iPeer LMS Feature to Evaluate Peer Participation in Teamwork for Assessment "as learning": Lessons Learned. In: Hao, T., Chen, W., Xie, H., Nadee, W. & Lau R. (eds) Emerging Technologies for Education. SETE 2018. *Lecture Notes in Computer Science*, 11284:46–55. Springer, Cham. https://doi.org/10.1007/978-3-030-03580-8_6

Johnson, E., Morwane, R., Dada, S., Pretorius, G. & Lotriet, M. 2018. Adult Learners' Perspectives on Their Engagement in a Hybrid Learning Postgraduate Programme". *The Journal of Continuing Higher Education*, 66:88–105. DOI: 10.1080/07377363.2018.1469071

Kritzinger, A., Lemmens, J. & Potgieter, M. 2018. Learning Strategies for First-Year Biology: Toward Moving the "Murky Middle". *CBE—Life Sciences Education*, 17(42):1–13.

DOI:10.1187/cbe.17-10-0211.

Louw, I. 2018. Reclaiming tutorials as learning spaces in the sciences. Mentoring & Tutoring: Partnership in Learning. [Online]. Available from: https://www.tandfonline.com/eprint/pCAHeya9WdhuJEk5sSBm/full

Postgraduate Programme. *The Journal of Continuing Higher Education*, 66:2, 88–105, DOI: 10.1080/07377363.2018.1469071

Steyn R., Botha A., Mennega N. 2018. Is a Picture Truly Worth a Thousand Words? Infographics for Undergraduate Teaching. In: Hao, T., Chen, W., Xie, H., Nadee, W. & Lau, R. (eds). Emerging Technologies for Education. SETE 2018. *Lecture Notes in Computer Science*, 11284:69–87. Springer, Cham. https://doi.org/10.1007/978-3-030-03580-8_8

Tekane, R., Louw, I. & Potgieter, M. 2018. #FEESMUSTFALL: Science teaching during student unrest. *Alternation*, 25(2): 161–180.

Wood, L. & Louw, I. 2018. Reconsidering postgraduate "supervision" from a participatory action learning and action research approach. *SAJHE*, 32(4): 284–297.

¹If more than one person is involved, each person is counted.

Conference Papers/Workshops Presented²

International

- Botha, A., Smuts H., de Villiers, C. 2018. Applying Diffusion of Innovation Theory to Learning Management System Feature Implementation in Higher Education: Lessons Learned. In: Hao, T., Chen, W., Xie, H., Nadee, W. & Lau, R. (eds) Emerging Technologies for Education. SETE 2018. *Lecture Notes in Computer Science*, 11284:56–65. Springer, Cham. https://doi.org/10.1007/978-3-030-03580-8_7
- Botha, A., Steyn, R., Weilbach, L. & Muller, E. 2018. Using the iPeer LMS Feature to Evaluate Peer Participation in Teamwork for Assessment "as learning": Lessons Learned. In: Hao, T., Chen, W., Xie, H., Nadee, W. & Lau, R. (eds). Emerging Technologies for Education. SETE 2018. *Lecture Notes in Computer Science*, 11284:46–55. Springer, Cham. https://doi.org/10.1007/978-3-030-03580-8_6
- Grove, L. & Kriel, D. 2018. The Law Clinic game: Making orientation and preparation fun. International Journal of Clinical Legal Education Conference, Melbourne Monash University, Melbourne, Australia, in 28–30 November 2018.
- Haupt, S. & Erasmus, H. 2018. *The student voice in curriculum transformation*. 12th International Technology, Education and Development Conference, Valencia, Spain, 5–7 March 2018. ISBN: 978-84-697-9480-7/ISSN: 2340-107
- Lubbe, I. 2018. Digital fluency of lecturers. *Presentation at the Online2018 conference Toronto, 16–18 October 2018.*
- Matsiliza-Mlathi, B., Moletsane, G., Van Averbeke, W. & Louw, I. 2018. Effect of gardening on nutritional knowledge, vegetable preferences and consumption among Grade 3 learners in Soshanguve. VII International Conference on Landscape and Urban Horticulture. Istanbul.
- Pilcher, L.A., Fletcher, L., Louw, I. & Potgieter M. 2018. Blended Learning: Enhancing learning for student success in Organic Chemistry. ICCE2018. Sydney.
- Steyn, R., Botha, A. & Mennega, N. 2018. Is a Picture Truly Worth a Thousand Words? Infographics for Undergraduate Teaching. In: Hao, T., Chen, W., Xie, H., Nadee, W. & Lau, R. (eds) Emerging Technologies for Education. SETE 2018. *Lecture Notes in Computer Science*, 11284:69–87. Springer, Cham. https://doi.org/10.1007/978-3-030-03580-8_8

National

Bothma, K., Harding, A. & Louw, I. 2018. Taking time out: Renegotiating the Didactical Contract in Tertiary Mathematics Education through the use of Personal Response Systems. *Flexible Futures III, CSIR*.

- Kilfoil, W.R., De Wet, T., Haupt, V., Meintjes, A. & Scheepers, D. 2018. Achieving teaching and learning outcomes supported by technology: *Flexible Futures 4, CSIR, Pretoria, 4–5 October*.
- Kritzinger, A., Lemmens, J. & Potgieter, M. 2018. Improving the quality of learning in a blended environment for first-year biology. *Siyaphumelela Conference, Johannesburg,* 12–14 June.
- Lemmens, J. & Mphanda, E. 2018. Nudging students to graduate on time! *Siyaphumelela Conference, Johannesburg, 12–14 June*.
- Lemmens, J. & Ntshabele, B. 2018. Intentionality on student success and its interventions: the case of uptake at two higher education institutions. Southern African Association for Institutional Research Conference (SAAIR), Durban University of Technology, Durban, Kwa-ZuluNatal, 13–15 November.
- Louw, I. 2018. Lecturer support towards pedagogical competence. *International Society of the Learning Sciences, Wits University, 12–13 February 2018.*
- Lubbe, I. Flexible Futures Conference (4-5/10) and presented a paper (ARS) and co-presented another with Prof Adam.
- Masango, M., Denewade, A., Mdluli, F., De Waal. A., Ntshabele, B., Lemmens. J., Muloiwa. T. & Kilfoil, W.R. 2018. Exploration of student academic performance and student biographical data using Bayesian network modelling: Case studies from the Universities of the Witwatersrand and Pretoria. Siyaphumelela Conference, Johannesburg, 12–14 June.
- Mostert, E., Pienaar, M. & de Bruyn, E. 2018. How to achieve faculty buy-in for new assessment and evaluation tools. EduTech Africa, Sandton Convention Centre, Johannesburg, 9–10 October.
- Mostert, E., Pienaar, M. & de Bruyn, E. 2018. How to achieve faculty buy-in for new assessment and evaluation tools. *EduTech Africa 2018 Conference, Sandton, 9–10 October.*
- Pretorius, G. & Scheepers, M.D. 2018. The effect of campus disruptions on lecturers and students in the University of Pretoria Humanities Faculty: 2016 case study. *Flexible Futures 4, CSIR, Pretoria, 4–5 October.*
- Sehlapelo, H.P. & Maroga, M. 2018. Exploration of first year orientation feedback to gain understanding of waves of change in the students' transition journey. HELTASA Conference, Nelson Mandela University, Port Elizabeth, 20–23 November.

²The Department for Education Innovation presents scheduled priority courses multiple times annually as part of teaching development: Academic Induction Programme for new academic staff; Assessment workshops; and a 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.

- Smart, A. 2018. The effect of campus access and assessment choices on teaching in an Engineering faculty: 2016". *Flexible Futures 4, CSIR, Pretoria, 4–5 October.*
- Tekane R.R., Louw, I. & Potgieter M. 2018. Improving Tertiary Teaching Practice: Demystifying STEM Disciplines. Southern African Association for Research in Mathematics, Science, and Technology Education. 26th Annual Conference hosted by the University of Botswana from 16–19 January.

Conference Poster Presentation

- Louw, I. 2018. Supporting lecturers to demystify learning in a science faculty. *HEAd2018. Valencia*, 20–22 June. The Full paper was published in the accredited proceedings.
- Nthontho, M.A., Mohlakwana, M.A.U. & Maroga, M. 2018. Digitising lecture space: Are lecturers ready for a ride? *Flexible Futures 4, CSIR, Pretoria, 4–5 October.*
- Sehlapelo, H.P. & Maroga, M. 2018. Exploration of first year orientation feedback to gain understanding of waves of change in the students' transition journey. *HELTASA Conference, Nelson Mandela University, Port Elizabeth,* 20–23 November.
- Tekane, R., Muller, J. & Louw, I. 2018. Resilience: riding the waves of teaching in a changing world. *HELTASA, Port Elizabeth, 20–23 November*.

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

International

- Botha, A. 2018. (Webinar) WATERMARK. Linda Suskie, former vice president of Middle States Commission on Higher Education. Title: Five Dimensions of Quality: A common sense webinar to accreditation and accountability. 5 November 2018.
- Botha, A. 2018. (Webinar) AALHE. Dr Charla Long. The Essential Role of Assessment in Competency-Based Education. 19 December 2018.
- Botha, A. 2018. (Webinar) AALHE. Dr. Catherine M. Wehlburg, Dean for the School of Sciences, Mathematics, and Education at Marymount University. Title: Fearing to fail-How common assessment practices cause stagnation. 11 December 2018.

National

Botha, A. 2018. ITSI - Digital Teaching Technologies. *Mind Brain Education Seminar*. *Emperors Palace*, *Johannesburg*, 23–24 May.

- Botha, A. & EBIT Faculty iPeer Collaboration Team. 2018. Flexible Futures, *iPeer in Action. 4–5 October.*
- Botha, A. & Singh, P. 2018. Flexible Futures. *Review and shape an Academic Information Management module for 9000 first year students: Incorporation LMS features. 4–5 October.*
- Botha, A., Haupt, S. & Louw, I. 2018. *Siyaphumelela Conference, SAIDE, The Wanderers Club, Johannesburg, 12–14 June.*
- Botha, A., Vinson, C., Naidoo, R. & Van Meyeren, M. 2018. Flexible Futures. *EBIT Faculty Student Advisor appointment booking system go online: Confidentiality and ease through Google Calendar. 4–5 October.*
- Haupt, S. 2018. Design thinking workshop. Presented by *Unleash Consulting, 6–8 June*.
- Haupt, S. 2018. Designing Learning material workshop.

 Open University in collaboration with UNISA and IDEAS.

 Groenkloof Campus, 12 April.
- Haupt, S. 2018. Academic Advising Workshop, University of the Free State, Bloemfontein, 1–4 October.
- Haupt, S. 2018. *Mind Brain Seminar, Emperors Palace Convention Centre, 23–24 May.*
- Jordaan, A.J.J., Slabbert, J., Nagel, L., Untiedt, J.S.H., Scheepers, M.D., Mthembu, P. & Pretorius, G. (2018). *UP2U meeting, University of Stellenbosch, Stellenbosch, 16 April 2018.*
- Kilfoil, W.R. (Conference chair), Jordaan, A.J.J., Kriel, D., Slabbert, J., Nagel, L., Ngcobo, N.F., Untiedt, J.S.H., De Bruyn, E., Scheepers, M.D., Jacobs, G., Mthembu, P., Pretorius, G., Thukane, M., Smart, A. & Drysdale. E. 2018. Flexible Futures Higher Education Innovation Conference and Expo. Hosted by the University of Pretoria. CSIR Convention Centre, Pretoria, 4–5 October.
- Lemmens, J. 2018. 31st Annual ITS Integrator User Group Conference, Emperors Palace, Johannesburg, 5–7 March.
- Lemmens, J. 2018. SAAIR SciSTIP authors writing workshop, Stellenbosch University, Cape Town, 25–27 September.
- Lemmens, J. 2018. Siyaphumelela Capacity Development workshop: Intervention Assessment Methods, SAIDE, Johannesburg, 10 May.
- Lemmens, J. 2018. USAf: Creating a university-wide student data and predictive analysis capacity, Irene, 7 November.
- Lemmens, J. 2018. USAf: design thinking workshop, Irene, 8 November.
- Mathibedi, F. 2018. Blended Learning Seminar 1 June 2018, Birchwood Conference Centre, Kempton Park.
- Mostert, E. 2018. *Item analysis for beginners*. Webinar presented by Questionmark, 26 July.
- Mostert, E. 2018. *Mindful assessment*. Webinar presented by ASCILITE, 7 November.

- Mostert, E. 2018. *Transforming Assessment*. Webinar presented by ASCILITE, 4 April.
- Mostert, E. 2018. Workshops presented by Prof Sarah Baillie Bristol University: Reducing contact time and promoting integration, Principles of curriculum design, development and implementation in context of the Veterinary Nursing degree at the University of Pretoria and Assessment drives learning. Faculty of Veterinary Science, University of Pretoria, Onderstepoort, Pretoria, 27–29 March.
- Mostert, E. & Haupt, S. 2018. *Blackboard Goals Workshop*.

 Presented by Dr Ruth Newberry in the Faculty of EBIT, 6

 August.
- Mostert, E. & Mathibedi, F. 2018. Flexible Futures Higher Education Innovation Conference and Expo. Hosted by the University of Pretoria. CSIR Convention Centre, Pretoria, 4–5 October.
- Scheepers, D. 2018. African Digital University Network colloquium, University of Stellenbosch, Stellenbosch, 17–18 April 2018.
- Scheepers, D., Jacobs, G., Pretorius, G. & Sias, M. 2018. QuestionMark Users Conference. Hosted by Bytes People Solutions, Midrand, 18 October.
- Scheepers, M.D. & Haupt, S. (organizers), Botha, A., De Bruyn, E, Drysdale, E., Gossman, C., Jacobs, G., Kilfoil, W.R., Kriel, D., Lotriet, M., Louw, I., Lubbe, I., Mostert, E., Mthembu, P., Nagel, L., Pienaar, M., Pretorius, G., Maroga, J., Smart, A., Thukane, M., Van Amerom, E. & Untiedt, J.S.H. 2018. Alternative Assessment Seminar, University of Pretoria, 17 May.
- Sehlapelo, H.P. & Mphanda, E. 2018. Flexible Futures conference. Pretoria, 4–5 October.
- Sehlapelo, H.P., Kebalepile, M. & Mphanda, E. 2018. SAAIR Learner Analytics Workshop, University of the Witwatersrand, 14–15 May.
- Van Amerom, E. 2018. Computer Interaction Research & User Experience Design: Successes & Challenges Seminar. Hosted by the Department of Informatics at UP. Presented by Prof Jennifer Preece and Prof Ben Shneiderman from the University of Maryland. 5 September 2018.
- Van Amerom, E. 2018. AACSB Assurance of Learning Seminar for the Faculty of EMS, facilitated by Prof Chris Wert, Dean for Accreditation and Quality, Pôle Universitaire Léonard de Vinci, La Défense, France. Hosted by the Faculty of EMS at UP. 11–12 June 2018.

Research Reports

Kebalepile, M.M. & Lemmens, J. 2018. *Student academic readiness survey: 2018 Institutional Report*. Department for Education Innovation. Unpublished report.

- Kebalepile, M.M. 2018. *Cluster analysis review, with intervention data: 2017 academic year*. Department for Education Innovation. Unpublished report.
- Kilfoil, W.R. 2018. Panel review, University of the Free State, Centre for Teaching and Learning, November.
- Kilfoil, W.R. 2018. SAALT; Sajals; Progressio; Higher Education Research and Development; Language Matters; International Journal for Academic Development, Communication.
- Lemmens, J. 2018. Department of Residence Affairs and Accommodation: Tshebi feedback (PowerPoint).

 Department for Education Innovation. Unpublished report.
- Lemmens, J. 2018. Siyaphumelela Nudging Campaign.

 Department for Education Innovation. Unpublished report.
- Lemmens, J. 2018. STARS: three-way comparison (PowerPoint).

 Department for Education Innovation. Unpublished report.
- Lemmens, J. 2018. *Umalusi report: Evaluation of NSC subjects* 2013–2016. Department for Education Innovation. Unpublished report.
- Mphanda, E. 2018. Department of Speech-Language Pathology and Audiology: Student feedback on practical modules: 2018. Department for Education Innovation. Unpublished report.
- Mphanda, E. 2018. Evaluation of the STARS mentorship programme: 2018. Department for Education Innovation. Unpublished report.
- Mphanda, E. 2018. *Retention and throughput analysis: 2018 Institutional report.* Department for Education Innovation. Unpublished report.
- Mphanda, E. 2018. STARS mentorship: 2018 First Quarter Report. Department for Education Innovation. Unpublished report.
- Mphanda, E. & Lemmens, J. 2018. STARS mentorship report: Three-way analysis of the STARS risk indicators. Department for Education Innovation. Unpublished report.
- Nagel, L. *Educational technology review and development* (ETR&D Springer). Internet and higher education (Elsevier)
- Scheepers, M.D., Kriel, D., Nagel, L., Pretorius, G., Smart, A. & Thukane, M. 2018. *Use of blended learning during #FeesMustFall 2016: University of Pretoria Case Study.*Carnegie Corporation of New York. Unpublished report.
- Sehlapelo, H.P. 2018. 2018. *Orientation Report (Executive Summary)*. Department for Education Innovation. Unpublished report.

- Sehlapelo, H.P. 2018. 2018. Orientation report: Faculty Houses & Student Helpers. Department for Education Innovation. Unpublished report.
- Sehlapelo, H.P. 2018. 2018 *Orientation report*. Department for Education Innovation. Unpublished report. Service on Editorial Boards or as a Reviewer.
- UBORA Research Solutions. 2018. *Implementing blended/ hybrid approaches to teaching and learning during disruptions on campus in 2016*. Department for Education
 Innovation. Unpublished report.

Service on Editorial Boards or as a Reviewer

- Botha, A. 2018. Three peer reviews for South African Society for Engineering Education (SASEE) and Research in Engineering Education (REES) 2019 Conference done submitted on 17 December 2018.
- Haupt, S. 2018. SA Journal of Accountability and Auditing.
- Haupt, S. 2018. Six peer reviews for the Common Ground Research Networks.
- Kilfoil, W.R. 2018. Panel review, University of the Free State, Centre for Teaching and Learning, November.
- Kilfoil, W.R. 2018. SAALT; Sajals; Progressio; Higher Education Research and Development; Language Matters; International Journal for Academic Development, Communication.
- Lotriet, M. 2018. Two peer reviews for the following journals: Journal for New Generation Sciences (JNGS) and South African Theatre Journal (Taylor and Francis online).
- Louw, I. 2018. Reviewed three papers for the monograph The Third Interdisciplinary Scientific Conference 'Mathematical Transgressions' edited by Peter Liljedahl, Simon Fraser University, Canada; Jacobus (Kobus) Maree, University of Pretoria, South Africa; Basia Pieronkiewicz, Pedagogical University of Cracow, Poland.
- Nagel, L. 2018. Educational technology review and development (ETR&D Springer) Internet and higher education (Elsevier).
- Van Amerom, E. 2018. Act as reviewer for paper to be delivered at the 2018 IBC Conference in Mauritius. Title of paper: "Decolonisation of the curriculum: progress in an academic department at the University of Johannesburg."

Postgraduate M and D Students

Kritzinger, A. 2018. Investigating Learning Strategies and Course Design in First Year Biology. Submitted and awarded in 2018 for a Doctor of Philosophy (Mathematics and Science Education). Prof M Potgieter (Supervisor) and Dr J Lemmens (Co-Supervisor).

Louw, I. 2018 Co-supervisor for K Bothma busy with a PhD in Mathematics Education.

Active International Collaborative Projects

- Kresge Foundation, Siyaphumelela Project: Kilfoil, W.R., Lemmens, J., Jordaan, A.J.J. & Naidoo, A.
- Michael and Susan Dell Foundation: Naidoo, A. & Lemmens, I.
- · MasterCard Foundation: Kilfoil, W.R.
- Carnegie Corporation of New York: Kilfoil, W.R., Jordaan, A.J.J., Scheepers, M.D. & Nagel, L.
- Digital stories project with Universities of Turku and Eastern Finland: Nagel, L.

Active National Collaborative Projects

- South African Higher Education Community Engagement Forum (SAHECEF), 29–30 March. Johannesburg. Van Niekerk, G.
- 29–30 November. Polokwane. Shibambu, 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.

Membership of Associations/Research Bodies

- Southern African Association for Institutional Research: Past President, Lemmens, I.
- Advisory Committee for the Department of Mathematics and Statistics at TUT (Chair), Louw, I.
- European Distance and E-Learning Network, member: Nagel, L.
- Advisory Committee for the Department of Mathematics and Statistics at TUT (Chair): Louw, I.

Visitors to Education Innovation

International

- QuestionMark: G Hargate & Mohammed I: Meeting with D Scheepers, E Mostert & E de Bruyn to discuss problems/ issues regarding On Premise version, 19 October.
- Dr Ruth Newberry, Principal Education Consultant for Blackboard International (Facilitated workshop for the School of IT: Implementing a Programme and Institutional Assessment Initiative for SIT (EBIT Faculty) using Blackboard's Assessment and Learning Analytics Technologies. August 2018.

National

- University of Fort Hare: D Scheepers met a delegation for a benchmarking meeting on how to implement technology in a university, 31 October.
- Academy for Facilities Management: E. de Bruyn met with
 J Eiselen and M Dimas, from the (A4FM) on 6 April to share
 UP CBT practices and discuss their needs. They bought 3
 of our "Guidelines for Objective Assessment" CDROMs to
 assist with the training of their lecturers, 6 April.

Awards

 Haupt, S. Certificate of Achievement from the Faculty of Economic and Management Sciences, Department of Business Management for contribution to the teaching and learning efficiency of the Department of Business Management, 11 May 2018.

References list

Desouza, K.C. & Smith, K.L. 2016. *Predictive Analytics: Nudging, Shoving, and Smacking Behaviors in Higher Education*, EDUCAUSE review: September/October 2016.

Kuh, G.D. 2001. Assessing what really matters to student learning inside the National Survey of Student Engagement. *Change: The Magazine of Higher Learning*, 33:3, 10–17, DOI: 10.1080/00091380109601795

A framework to assess institutional readiness for Learning Analytics (https://www.linkedin.com/pulse/framework-assess-institutional-readiness-learning-andy-ramsden/)

Sunstein, C.R. 2014. Nudging: A Very Short Guide. *Journal of Consumer Poly*, 583 (2014).

