University of Pretoria:
Educational Technology Opens Door to Organizational Change
With seven campuses, nine faculties, a business school, and an academic hospital, the University of Pretoria (UP) is at the forefront of tertiary education in South Africa and collaborates with world-class partners to ensure continued excellence in teaching and learning. Hybrid and Inquiry-based learning, assessment & accreditation, and learning analytics are just some of the areas in which UP has focused on in recent years, with the goal of promoting higher levels of student success.

“The implementation of our learning management system in 1998 laid the foundation for the current level of maturity in the use of educational technology at the university. In 2018, we celebrate two decades of partnership with Blackboard,” says Dolf Jordaan, deputy director of E-Learning and Media Development at University of Pretoria.

At UP, academic staff can count on the assistance of the Department for Education Innovation, a centralized academic support unit which provides numerous services to help professors and instructors with inter alia the implementation of educational technology.

“In line with University of Pretoria's vision and mission to excel in the teaching of its students, the vision of the department is to create synergy towards innovative education environments for student engagement and success,” says Jordaan.

Each faculty at the university also has a dedicated education consultant (EC) to promote best practices in teaching, learning and assessment. “The goals of the ECs are to identify, assess and disseminate new developments and good practice which serve to enhance the learning experiences of students,” says Adriana Botha, head education consultant within the Faculty of Engineering, Built Environment and Information Technology at the university.
Fostering LMS Usage

The university has been investing in training to increase and facilitate the use of the digital learning environment. According to Jordaan, a decade after its adoption, research in the use of clickUP—their branded name for Blackboard Learn—showed that the majority of modules used only the basic Blackboard Learn functions, with a limited number of modules using the system to its full potential.

“Other results indicated that our initial training strategy focused on the technology and the use of the tools with limited pedagogical attention, which may have hindered the implementation of the system to its full potential,” says Jordaan.

That’s when the e-education group within the Department for Education Innovation decided to drastically change its training strategy, with the goal of transforming teaching and learning by promoting a more pedagogically sound use of the digital learning environment. This change took place in 2011, at the time when Blackboard Learn 9.1 was implemented.

“Our whole staff development strategy is designed to employ Theory U, a change management method created by researcher Otto Scharmer to support lecturers in their personal change journey to reflect on appropriate educational use and their own practice, while
learning to use the new system,” explains Detken Scheepers, head of E-learning at the University of Pretoria.

In order to do that, they hold five half-day workshops, with the first session as a requisite to attend the other four. “The first workshop introduces the concept of blended/hybrid learning to familiarize participants with the idea of carefully considering the mix of online and contact environments in a pedagogically sound way,” says Scheepers.

Lecturers then decide which of the other four workshops will address their needs and only attend those sessions. Active learning, assessment, collaborative learning, and measuring of student engagement and student success are some of the subjects.

“Only after the participants discuss the educational aspects do we provide them with information on the functionalities within the digital learning environment that can address the educational needs of the students – thus shifting their thinking to first evaluate the educational needs before considering the technology,” explains the head of E-Learning.

*Since 2011, when the new training strategy was implemented, LMS usage increased from 68% to 94,1% among lecturers.*

According to Scheepers, the university’s hybrid learning strategy was put to the test in the second semester of 2016, when violent campus disruptions forced the institution to implement alternatives to on-campus lectures from October onwards, in order to conclude the academic year.

“This choice was possible at the time because 83,7% of undergraduate modules had an active Blackboard course,” says Scheepers.

This use of blended and 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. The experience was positive to most lecturers and students, leading to growth in digital tools usage in the following year.

### Assessment & Accreditation

In South Africa, the Council for Higher Education is an independent statutory body that plays the role of Quality Council for Higher Education, in terms of the National Qualifications Framework Act. Through its permanent committee, the Higher Education Quality Committee (HEQC), the Council is responsible for quality assurance and promotion in higher education.

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<td><strong>3.</strong> To foster and sustain a transformed, inclusive and equitable university community.</td>
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According to Dolf Jordaan and Adriana Botha, the Department of Institutional Planning’s quality unit manages the external evaluation and professional bodies accreditation — both national and international — at the university. Both processes involve panel formation, self-evaluation reporting, site visits, and formal reporting. Faculties, departments or programs are expected to develop improvement plans and progress reports for the external evaluation process.

Currently the institution work towards a process of self-reflected internal review that is more effective and meaningful to the faculties and the programmes they offer. This review process will afford departments to capture data for critical dialogue on student learning performance and continuous programme improvement that can manifest into planned interventions and accountable actions, according to Botha. “Over the years, many Departments are using their own initiatives to manage and report on program review and assessment,” she explains.

Although they have technology available to ease this critical process, such as the Blackboard Learn Goals area, it is not centrally institutionalized yet. However, they do see its potential. The university has recently approved the School of IT Improvement Plan, which will serve as a pilot project for UP program assessment. “Apart from various strategies and activities they had to implement for 2018/2019, there is one specific school-wide implementation plan in preparation for department accreditation visits for all the programs in the departments of Informatics, Information Science and Computer Science,” says Botha.
FLY@UP INITIATIVE

FLY@UP is one of the initiatives UP implemented to support the strategic goal of student success. “FLY is the acronym for the Finish Line is Yours. It aims to create awareness among students about the value of completing their degrees in minimum time.” Jordaan explains. The student orientation in the beginning of the academic year is the first introduction to the FLY campaign, followed by an online module available to all first-year students via Blackboard clickUP. Another FLY initiative was launched in 2017: a free online university preparation course is available through Blackboard Open Education. Provisionally accepted students are invited to complete the module before the beginning of the academic year.

Developed in collaboration with the Department for Education Innovation, the pilot will help UP decide on future implementation and roll-out of the Goals area across the university, as part of an institutional assessment and accreditation solution.

The School of IT committed to an annual program review process and the implementation of the Blackboard Learn Goals area. Botha affirms that the initial focus is to use the Goals tool for reporting on the assurance of learning using summative assessment data collected from the Goals tool reporting options.

“This is the first time that the School of IT, as a unified approach, will review their programs with such rigor. We believe the implementation of an annual program review in the school, through the use of Blackboard Learn Goals area, will have a positive impact on our educational offering to students,” says Botha.

Assessment Workshop

In order to assist the institution in this high-level implementation strategy, Blackboard has recently presented a three-day workshop at the university.

“The overall scope of this high-level intervention was to assist the School of IT with implementing an effective strategy for the use of the Blackboard Learn Goals area for program assessment and ABET —

UP STRIVE FOR BEST PRACTICE IN ASSESSMENT AND ACCREDITATION:

› Ensure a clear and mutual understanding of the objectives and aims of and for program assessment. Governance and workflow structures for assessment should be reviewed and if not in place, get implemented.

› Create a culture of curriculum dialogue among academics and collaboratively reflect across programs on teaching, learning and assessment practices, and also the challenges and opportunities for program assessment.

› Get a clear understanding between assessment versus grading and the tools that are used to measure it. Investigate the existing role of your digital learning environment and invest time to explore how your LMS tools for assessment can be utilized.

› Employ proper constructive alignment and course design to ensure that your efforts in the LMS reflect how your teaching and assessment address your outcomes.
Accreditation Body for Engineering and Technology — accreditation and exploration of current Blackboard Learn course reports, and our institution’s Analytics system,” says Botha.

According to her, one of the key outcomes of the workshop was to assist the School of IT to build an effective Goals structure for efficient and effective assessment reporting in alignment with National Quality Framework Standards, internal program review processes and accreditors.

In Botha’s opinion, the workshop assisted lecturers to reflect on their teaching, learning and assessment practices, and empowered them with knowledge and implementation strategies to improve on current practices based on quality-assured data deriving from Blackboard Learn.

“This collected data will inform actions to be taken to improve the educational offering to students, which we believe will subsequently manifest in enhanced student learning and success,” explains Botha.

To Botha, the university has the technology available, but still lacks the institutional framework for its implementation. “We came to learn that to be able to facilitate program assessment with technology, we need to realize that 80% is about academic decisions, processes and structures, and only 20% about the technology. This is what Blackboard consultancy assisted us with,” she affirms.

“From a program assessment point of view, if we want to have return on investment of our LMS features, we should first ensure that
2017 Student Data

› 81.6% Success rate  
› 65% Undergraduate  
› 34.4% Postgraduate  
› 56.5% Female  
› 51.2% Black African

institutional policies and guidelines in this regard are available, and secondly, that the necessary framework structures and resources are in place to assist academic staff. It is also important that lecturers embrace the pedagogically-sound use of the LMS to gather the necessary data within the system,” she believes.

Results and Future Challenges

Although it is still early for the university to provide feedback on their experience in adopting the solution — the School of IT pilot program has a two-year timeline — Botha believes that they can learn valuable lessons, should the initiative be considered in the future to be rolled-out for other faculties or, ultimately, across the entire institution.

In their investigative journey to see how the university can include the Blackboard Learn Goals area in the bigger picture of their hybrid approach for teaching and learning, UP realized that if they can get all academic staff to effectively use the LMS to its full potential, the Goals area can allow the institution to associate all learning outcomes to course activities, including formative and summative assessment.

“That way, student performance can be monitored and tracked on these learning outcomes as they progress through their qualification. Lastly, it can report on which learning outcomes and where in their academic career path they are performing well, and where students are experiencing academic challenges. This will result in better constructive alignment of the hybrid learning experience of students,” says Botha.

In conclusion, they perceive the Goals area and its reporting functionalities not merely as a tool for compliance, but to assist lecturers to monitor and track student learning and success against the set outcomes, and to be able to identify struggling students early on, in order to implement interventions for support based on clean and quality assured data.

“We strongly believe that the Goals area is one of the building blocks to support effective learning design,” says Jordaan. “Learning design impacts student engagement, which impacts the value of data from the LMS to support student success.”

Sources