



Innovative results require innovative strategies

Janine Smit

The role played by academia cannot be underestimated in the generation of new ideas. It is these ideas that lead to the chain of events – including research and development – that is so essential for the country's economic development and the wellbeing of its people.

As a research-intensive university, the University of Pretoria acknowledges the importance of providing its students with the support that is necessary to develop into well-rounded individuals who are able to address the needs and challenges of society and the economy.

The socioeconomic development of any country depends on the different parts of the system working in synergy to achieve a common goal. This includes the academic domain. Effective teaching and learning are vital in producing knowledgeable and high-level skilled graduates, and play an important role in the University's endeavour to develop individuals who can think and act innovatively to generate employment and promote economic development.

In an interview with the University's outgoing Vice-Principal responsible for teaching and learning, Prof Nthabiseng Ogude, *Innovate* discovers the

innovative strategies that are in place to promote teaching and learning at the University of Pretoria and ensure that the institution is able to deliver well-equipped graduates to the workplace that can respond to the changing demands of the marketplace in the 21st century and beyond.

Prof Ogude, who had been a member of the University's Executive Management since 2006, was appointed as the new Vice-Chancellor of the Tshwane University of Technology from 1 August 2012. At the University of Pretoria, she was responsible for providing strategic direction to undergraduate and continuing education, and

steering these core activities towards local impact and international competitiveness.

The University's strategic initiatives related to teaching and learning at undergraduate level are focused on ensuring quality provision and improving the overall quality of students' life experiences. The aim of these initiatives is to ensure not only equity of access, but also equity of success for all students enrolled in its contact and distance learning programmes.

According to Prof Ogude, universities in South Africa tend to concentrate on the high end of the innovation chain when it comes to developing human capital and generating the knowledge and skills required to address the many

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challenges related to socioeconomic development. Quality teaching at undergraduate level lays the foundation for postgraduate study and research, which is necessary for the technology and application development that underlies the commercialisation and market development of new tools and practices that will enable South Africa to compete internationally, while improving quality of life on the subcontinent.

While this is crucial and desirable, South Africa also needs to focus on increasing the number of candidates with technical qualifications and widen the base

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of technically competent graduates and diplomates, as well as high-level professional qualifications for increased economic development and prosperity. The latter will be Prof Ogude's primary focus at the Tshwane University of Technology.

In terms of her role at the University of Pretoria over the last six years, the crux of teaching and learning activities in the University's Strategic Plan is to deliver independent graduates who fit the profile of a research-intensive university, wherever their future career trajectories may lead. Recognising the importance of supporting students to obtain an initial qualification that can provide critical thinking skills and the foundation for further postgraduate study, and also prepare them for the challenges of the workplace, Prof Ogude highlighted some of the challenges she has been able to address during her tenure at the University of Pretoria in the quest to achieve this goal.

The main challenge facing undergraduate education, as she put it, is the underperformance of the schooling system, which results primarily in mathematical and language proficiency problems that impede learning. It is widely acknowledged that the articulation gap between school and university eventually gives rise to high dropout rates, as well as low pass and throughput rates. This scenario was further complicated by uncertainties around the National Senior Certificate (NSC), which was introduced in 2008. The initiatives that Prof Ogude launched with her colleagues in the academic and support service departments at the University of Pretoria took this state of affairs into account.

Establishing an environment that is conducive to learning

The University of Pretoria has prioritised a number of strategies

to ensure that its undergraduate programmes are responsive to the local context and continuously strive for national and international recognition and standing. These include providing an institutional policy environment that is conducive to improving teaching and learning, providing a mechanism for the institutional review of curricula, incorporating graduate attributes in curricula, and sharing and recognising good practice.

Prof Ogude believes in the centrality of an excellent undergraduate programme for a research university, using the rationale that good undergraduate education is a prerequisite for excellence in research by providing a pipeline of postgraduate students and feeding research results into curricula. Undergraduate education therefore has to be managed as systematically as research through the development of appropriate institutional systems, policies, processes and incentives.

Students receive support through various methods of technological innovation. The University's online learning management system, ClickUP, has become an indispensable part of students' academic life. This Blackboard-based learning management system (the latest version has just been implemented), is an online learning environment that gives students access to study guides, learning content and resources, discussion rooms and blogs, notifications, as well as projects and assignments, among many other things. The University has also incorporated a computer-based testing system, which is core to the assessment

strategy in some faculties. It is in the process of being replaced by a new system that is better suited to the e-learning system. The systematic review of curricula is enhanced by curriculum mapping software.

An e-resource has also been developed for sharing good practice across the University, particularly, in the challenging area of teaching large classes. This includes a teaching and learning corner with resources for teaching improvement. Investigations into mobile devices for teaching and learning are ongoing.





→ The academic support of students is crucial to the successful completion of their studies.

A Senate Committee for Teaching and Learning was established in 2007. To facilitate the work of the Senate Committee, a steering committee for student success was formed in 2008 to develop a concerted approach to improving student success. This committee comprises deputy deans of the University's nine academic faculties, the directors of academic support departments and student representatives. The constitution of this cross-institutional team to address student success was an important breakthrough in modelling a solution to the problem, as it represented an end to working in silos and the need to place the focus on academic issues.

"Good ideas are incubated when students' co- and extracurricula activities are incorporated into teaching and learning," says Prof Ogude. "It is important to focus on the bigger picture, as learning does not only take place in the classroom. Many of the distractions that impact on learning are outside the classroom, and developing

the student as an individual, and ensuring engagement outside the classroom has a major effect on study success."

High academic standards

Teaching and learning committees have been established in each faculty to ensure that all departments adhere to high academic standards. In addition, an instrument has been developed to measure the quality of learning. It includes a student survey and a complementary lecturer survey. Excellence in teaching and learning is promoted and recognised at undergraduate level, and a strategy is in place for the professional development of part-time and full-time academic staff. Three tutoring models, prioritising students at risk, have also been implemented.

Monitoring risks and taking corrective action

Teaching and learning risks are carefully monitored and corrective action implemented to ensure the sustainability of undergraduate

programmes, and the teaching and learning enterprise in general. Strategies that have been implemented in this regard include the incorporation of risks in faculty agreements and the institution of a mechanism to assist in developing and implementing action plans. The implementation of extended programmes is monitored and an institutional support mechanism has been developed for the academic staff members involved in these programmes. This mitigates the risk of inadequately prepared students from the secondary school system and its questionable quality of teaching and learning, which results in an unsatisfactory throughput rate.

Advancing excellence in undergraduate teaching and learning

Following on the firm foundation for improving undergraduate teaching and learning that she established during her first term of office at the University, Prof Ogude continued to focus on advancing excellence in undergraduate teaching and

learning, and benchmarking the University of Pretoria nationally and internationally when she was reappointed for a second term of office in 2010.

According to Prof Ogude, there was a great need for an integrated approach to teaching and learning. This included a greater interface with academic support units, such as Student Affairs, Information Technology, the faculties, and the Bureau for Institutional Research and Planning (BIRAP) at the University, as well as research and community engagement, to ensure the holistic development of graduates.

She subsequently identified the following dimensions that would determine whether the overall student experience would be a positive one:

- The institutional philosophy and orientation to teaching and learning
- The academic readiness of students
- Emphasising academic development and excellence, and not academic support alone
- Systematically evaluating and measuring all efforts to ensure quantifiable progress

[An integrated approach to the holistic development of students](#)

The University of Pretoria's new strategic plan, *University of Pretoria 2025*, was launched in November 2011 to provide the roadmap and navigational markers for guiding the University to achieving the vision and strategic goals it has set for itself for the next 15 years. In line with this plan, the objectives for undergraduate education were geared towards the institutionalisation of a model for student academic development and excellence.

This model, aimed at improving student retention and success at the University of Pretoria, was documented by Prof Ogude and her co-authors in the Department for Education Innovation in an article published in the March 2012 edition of *The International Journal of the First Year in Higher Education*. The model, known as the Student Academic Development and Excellence Model (SADEM), was the result of a concerted institution-wide approach to improving student outcomes at the University of Pretoria.

The motivation for the development of this innovative model for study success was the desire to develop an instrument that would enable the strategic management of student success, enhance a quality undergraduate experience and improve performance indicators.

While several initiatives were already in place at the University to address this challenge, these were primarily housed in faculties, and focused on problems experienced in the classroom. The Senate Committee for Teaching and Learning proposed that initiatives for student success should address the entire student life cycle, from preregistration to graduation. The focus is on the first year. These initiatives should be

aligned with the strategic drivers of excellence, diversity, sustainability and relevance.

High-impact modules were identified as a focal point for student success initiatives. These are modules that have a potential impact on performance owing to their large enrolment numbers (more than 200), the fact that they cater for a number of programmes across faculties, because they are associated with academic programmes of national significance, and due to their high dropout and high failure rates.

Lecturers in high-impact modules form a community of practice and meet each semester in an action research cycle. Students in these modules receive comprehensive academic, psychosocial, financial and other support using proven high-impact practices. These include tutoring, supplemental instruction, peer mentoring, academic advice and psychological counselling. These activities are integrated and supervised by faculty-based student advisors in most faculties.

In order to be successful, concerted faculty-based interventions need to be supported by organisational interventions that are aimed at providing an environment

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that is conducive to learning. Institutional, faculty and student readiness projects constitute the input dimension of the SADEM. Institutional readiness initiatives include a teaching and learning charter and ideas for an early warning system; faculty readiness projects include rethinking the educational model and developing resources for large classes; while student readiness projects include collaboration with feeder schools and the design of survey instruments to determine academic readiness, as well as effective mentoring and tutorial support.

Initiatives aimed at developing students' non-cognitive skills encompass issues such as time and conflict management, test-taking skills, and providing psychosocial support to prepare them for optimal learning in the classroom. The emphasis on academic development, on the other hand, entails the

development of critical thinking skills, information and computer skills, and writing and reading skills, among other things.

The SADEM acts as a strategic management tool for modelling student success initiatives institutionally, and offers a systematic and systemic approach, supported by resourcing and a performance management system. The key to its success lies in harnessing and aligning existing institutional initiatives for staff and student development around mainstream academic modules or programmes.

Enhancing undergraduate success

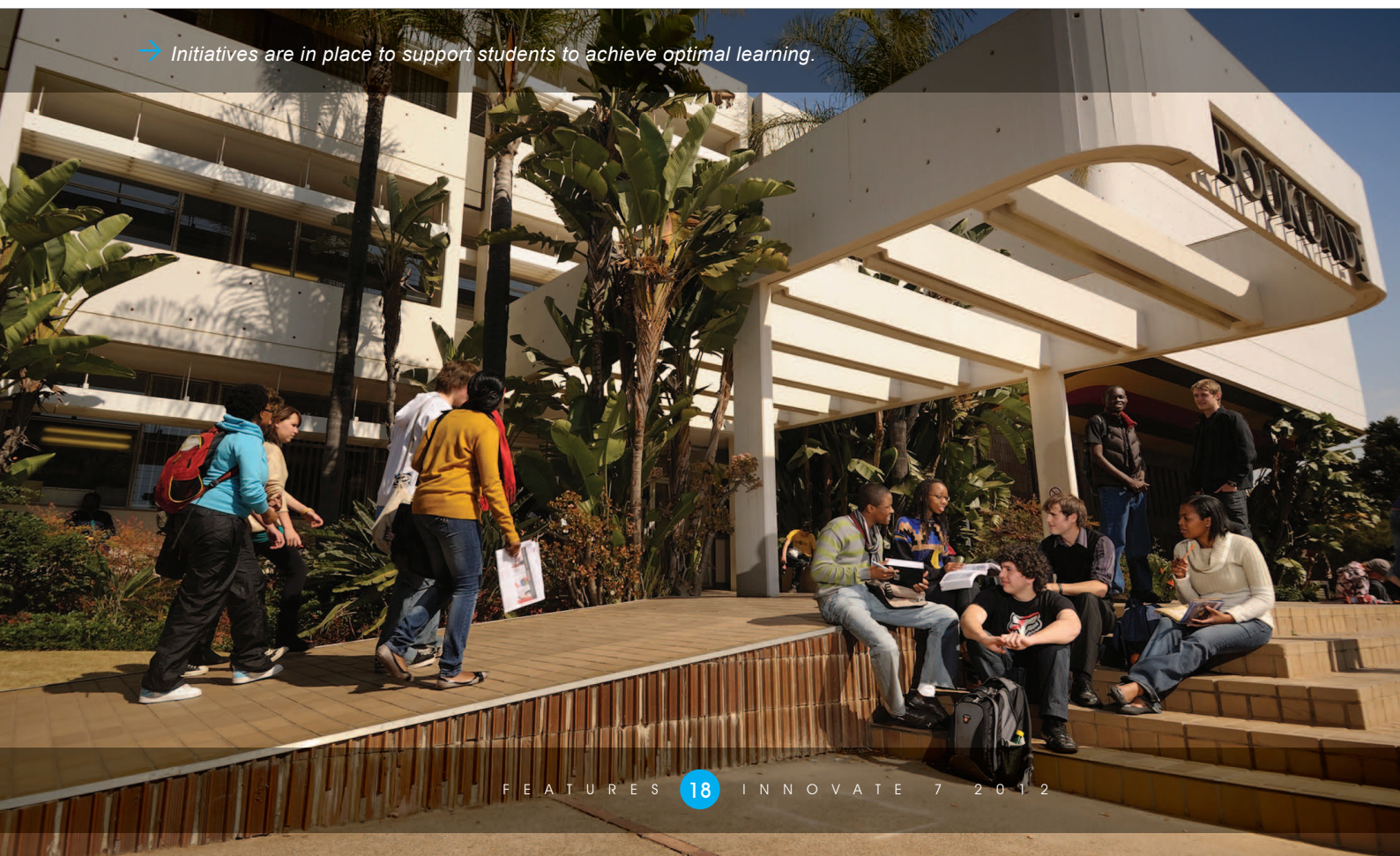
The implementation of this innovative model for student academic development and excellence is supported by a framework and implementation plan for an integrated approach to undergraduate education

and the holistic development of students, which has been included in the University's Strategic Plan leading up to 2025. The next step is to institutionalise the model and embed and customise it to faculties and departments. Regular quarterly meetings are held with deans, and all faculties understand the value of the model.

The framework provided by the SADEM and the enabling environment that has been established for individual academics to develop innovative methods for teaching and learning will promote the holistic development of students.

Furthermore, the support provided by the Department of Student Affairs ensures that students' non-academic lives are no longer separate from the academic enterprise. This includes support related to academic development (study methods, stress and time

→ Initiatives are in place to support students to achieve optimal learning.



management, and career planning), potential development (conflict management, communication skills, goal setting and problem solving) and individual and relationship counselling (interpersonal problems, stress, depression, eating disorders, life trauma, emotional problems and the development of life skills). The consolidation of a student's academic and non-academic skills contributes to enriching the University's intellectual environment and improving graduate outcomes.

International recognition

There is emerging evidence that the University's academic support model for undergraduate education and its general approach to student success, which targets the whole student life cycle, are unique and effective. Independent evaluations of a paper presented at the 24th International Conference of the First Year Experience reflect on the quality of this work.

The model has also been well received by funders, resulting in the Dell Foundation providing bursaries to a cohort of 50 students from July 2012; and funding from the Kresge Foundation for a conference to be held in January 2013. The proposed joint conference between the University of Pretoria and the Kresge Foundation will serve to position the University nationally and internationally.

This external validation of the University of Pretoria's innovative approach to teaching and learning at undergraduate level reinforces the fact that it is on the right track in its endeavours to develop the intellectual resources that are required to produce well-rounded graduates, populate its postgraduate and research capacity, and contribute to the transformational needs of South Africa. 🌐



Profile: Prof Nthabiseng Ogude

Prof Nthabiseng Audrey Ogude was Vice-Principal responsible for teaching and learning at the University of Pretoria since 2006. From 1 August 2012, she is the new Vice-Chancellor of the Tshwane University of Technology.

Prior to her appointment at the University of Pretoria, she was Deputy Vice-Chancellor at the Nelson Mandela Metropolitan University in Port Elizabeth.

She obtained a BSc degree at the National University of Lesotho in 1979, majoring in Biology and Chemistry, followed by an MSc in Analytical Chemistry at the University of Nairobi in 1984 and a PhD in Chemistry at the University of the Witwatersrand in 1992.

She has almost 30 years' experience in tertiary education, 13 of which were in strategic leadership positions. She was the first black woman to hold such positions.

Her research interests are in the areas of science, chemistry education, women in science, higher education policy and academic management leadership.

She is a 2006/07 American Council on (Higher) Education Fellow, a member of several professional organisations, and serves as chairperson and member of a number of university committees, as well as external councils and boards, such as the Council of the University of Botswana, the Judicial Education Institute Council, the National Advisory Council on Innovation and the Higher Education Quality Committee, to name but a few.

During her tenure at the University of Pretoria, she succeeded in consolidating several disparate views on undergraduate teaching and learning into a cohesive whole around the holistic development of students, and provided direction on how the University can develop well-rounded graduates that are attuned to and can operate within both the local and global contexts. She also succeeded in positioning undergraduate education and student success at the University of Pretoria nationally and internationally by delivering presentations at conferences, publishing in international journals and networking at appropriate higher education forums.

Innovate wishes her success in her position as Vice-Chancellor of the Tshwane University of Technology. The foundation that was laid at the University of Pretoria through her involvement in its student success initiatives has provided the impetus for continued creativity and innovation.