

Technology-assisted learning triumphs during disruptions

THE last quarter of the 2016 academic year for most universities was characterised by unprecedented uncertainty. Calls for free education reached a crescendo countrywide with a confluence of national and institution-specific demands stoking the fires.

Promises and concessions made by the government, through Higher Education Minister Blade Nzimande's statement on fees as well as responses by respective university management teams, seemed not to have convinced those who continued protesting.

The corollary to periods of shutdown was the denial of physical access to teaching, learning and research spaces. Contingency plans aimed at completing the academic year provide incontrovertible evidence that information communication technologies (ICTs) play a critical role in the business of higher education.

In fact, any 21st century-ready university does well to invest in ICT for the support of its core and other functions.

NMMU, for example, has made encouraging strides in mainstreaming blended learning as a feature in its pedagogical approaches. Blended learning is a combination of technology-mediated teaching and learning, and traditional contact teaching and learning.

The university also continues to harness ICTs in

In my View



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pursuing business process improvement opportunities in its administrative operations.

Following the shutdown of NMMU's South Campus in October, use of ICTs became a game changer in making sure we completed this academic year. One positive unintended consequence of this has been a rapid roll-out of the university's digital roadmap, which includes online information, and blended teaching and learning systems.

The shutdown, therefore, played a catalytic role in the university's adoption of technology-enhanced teaching and learning. NMMU has witnessed an upsurge in the number of

online course modules, and a corresponding increase in use of online learning management and academic collaboration platforms.

Looking back over the last quarter, the usual life of our academy was literally turned on its head. Overnight, the university's modus operandi had radically been altered – staff and students had to operate off campus, at home, in libraries, community halls and new spaces.

It can be argued that the shutdown also triggered the streamlining of some of the university's administrative processes.

The agility of staff was tested as they all had to adapt to digitised workflows, online teaching and

learning management systems (for instance, Moodle) and use of digital communication channels with their students to complete the year's curriculum.

Fortunately, we were not altogether taken by surprise. A collaborative project between the deputy vice-chancellor: institutional support and deputy vice-chancellor: teaching and learning enabled the university to embark on a roadmap aimed at leveraging the opportunities presented through ICTs.

NMMU has invested in ICT infrastructure, especially over the past 10 years. Factors such as the ubiquitous Wi-Fi across multiple campuses, digitally enabled lecture rooms, integrated systems and web platforms make the institution rank as one of the best in the rollout of ICTs in the higher education landscape in South Africa.

The challenges experienced during this year's shutdown may precipitate more innovative ways of operating. Whereas our strength as a contact institution will remain, going forward this will be positively augmented by digital modes of learning on a larger scale, as is happening in leading universities globally.

One of the advantages of the combination of face-to-face and online learning, which we call "blended" or "enhanced" learning, is that the learn-

ing experience is shifted closer to the student.

It goes without saying that many of our undergraduate students today live in a digitised world. For these so-called millennials, technology is first nature to them and this way, they have learning on tap, but at the same time they need to take re-

sponsibility for ensuring they attend the online lectures, complete the online evaluations or ask question during the on-line tutorials.

Of course, the criticism that repeatedly surfaces is that, in a world characterised by a worrying digital divide, excessive reliance on technology invariably exacerbates the plight of the digitally disadvantaged students. In essence, unless mitigation interventions are invoked, the landscape could be skewed in favour of those with access to the inter-

net and learning management systems.

To address the fact that many of our students do not have laptops or PCs, we have several general computer labs where the students have free access to PCs. The university also introduced a "bring

your own device" policy which reduces the pressure on the PCs in the labs.

Plans are afoot to increase access to connectivity and computing devices. For example, the university recently opened a 24-hour computer lab and free Wi-Fi at our Bird Street Campus for our students, as many of them live in the Central area of Port Elizabeth.

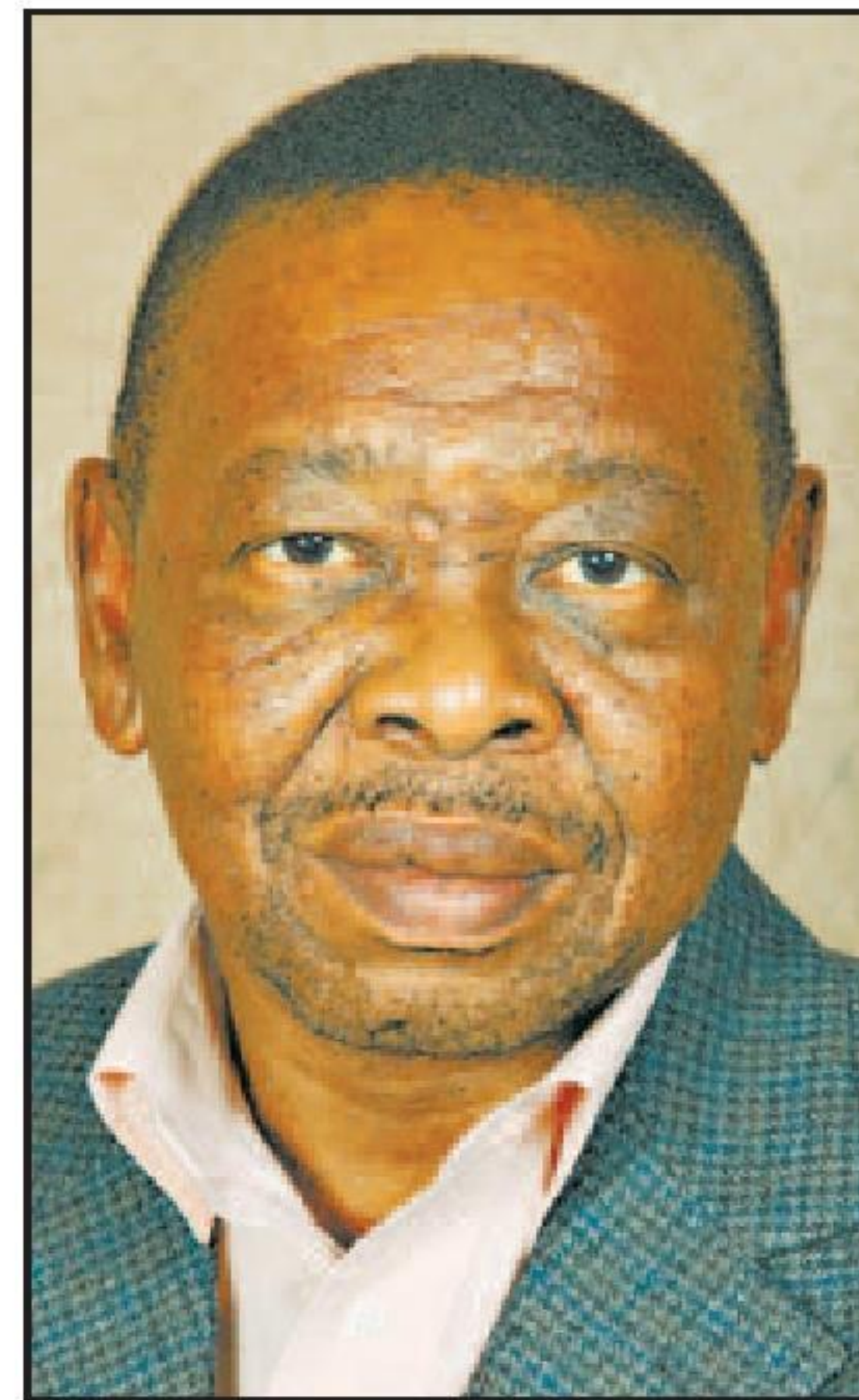
In addition, over the past two years, NMMU has given tablets to more than 400 financially needy students.

NMMU is also extending its footprint to disadvantaged areas in the metro and the rural areas of the Eastern Cape through digital literacy programmes, such as those led by the university's director of the Centre for Community Technologies (CCT), Prof Darelle van Greunen.

What we need to accept wherever we find ourselves is that technology is changing and disrupting traditional approaches to higher education globally, but I am confident that it can also play a huge role in advancing equity in higher education in South Africa. We

need to seize the opportunity that this unintended consequence of FeesMustFall has provided us, and be proactive about change for the benefit of our province and all our staff and students.

Dr Samuel Bosire is NMMU's chief information officer.



BLADE NZIMANDE



DARELLE VAN GREUNEN