

Inauguration speech of Ms Santie Botha – Tuesday, 12 April 2011

Today, as I stand here before you, I am humbled by this momentous occasion. It is indeed a great honour to have been nominated and elected as Chancellor and I would like to thank the Council, Senate, Institutional Forum and wider university community for their confidence in placing this important role in my hands for the next four years. In accepting the opportunity to serve our country as the Chancellor of this fine university, Nelson Mandela Metropolitan University, I am not only privileged to share in the joy of achievement and celebration of every graduate in this room, but am also deeply aware of the great responsibility that we all share for a sustainable future.

People with relevant and cutting-edge knowledge and a competitive spirit, create a sustainable future through science, technology and innovation. And that is the challenge for this university. To create a critical mass of people with the expertise, skills and knowledge that can actively participate in the global technology and knowledge economy.

I have often thought about the selection criteria that I used when I was 18 years old to choose the university at which I would further my studies.

The selection criteria that were relevant to me at the time were quite simply the university that was:

1. Best in tennis facilities and coaching
2. Best in class in economic and business education and
3. Best in location.

In 2011, I believe that the selection criteria are vastly different. Not simply the order of priorities, but the number and scale of priorities are far greater. We operate in a global economic ecosystem, in which our contemporary world is far more inter-connected and inter-dependent than at any other time in human history. This means that we now have to compete and cooperate on a planetary scale, for jobs, for wealth creation, for human security. Our universities must therefore prepare current and future generations to think and function on multiple levels and global scales. As such, our universities cannot be looking inwards and only focus locally. And they cannot only look at the past for answers; they must also look to building a new future starting now.

A successful university of the 21st century must therefore be very different from 20th century institutions of higher education. It is not just about location (be it physical or electronic) but how it turns that location and its unique attributes into a distinctive educational experience, providing the best possible preparation for a changing world that is still unfolding before our eyes.

The big question is therefore ... what is the unique educational experience offered by NMMU and why would the best scholars, best researchers, best academics and students want to have Nelson Mandela Metropolitan University on their CV? What sets NMMU apart from their peers?

Firstly, the name of the university itself. Nelson Mandela Metropolitan University. The name of the first, all-inclusive democratic President of the Republic of South Africa, Mr Nelson Mandela. A global icon of the 21st century who was born in the Eastern Cape. A name that needs no explanation wherever you are in the world. And with the name also comes a huge responsibility to live up to what the name represents for anyone who has been touched by this university.

Secondly, Nelson Mandela Metropolitan University is a new generation university. It came into being in 2005 with the merger of UPE, PE Technikon and Vista University. As a new institution, it might not have a long history to draw on, but this is also an advantage – a chance to make new history, to build a new future. While we should never ignore our history and its impact on the present, we should also not be held its prisoner. We must transcend it to build a common and better future for all.

Thirdly, NMMU has an excellent geo-strategic location – its principal location being in the Eastern Cape's most important industrial city – Nelson Mandela Bay. The city has been, and continues to be, a major port for global trade, industry and investment. And NMMU can play a leading catalytic innovation role in providing high level knowledge, technology and skill by rapidly expanding its global reach and importance, particularly in the context of the shifting global economic power between East and West in recent years already, almost 10% of our students are from outside the borders of SA and that number is growing.

Fourthly, NMMU has the right size and shape to make a major impact in the regional and national economy and broader society. We have six campuses in Port Elizabeth and George and seven large faculties covering virtually every major area of study ... Engineering, the Built Environment and Information Technology, Science, Health Science, Law, Education, Arts and Business and Economic Sciences. NMMU has a massive portfolio of over 1500 qualifications ranging from diplomas to doctoral degrees, and covering vocational type, professional, career oriented and academic formative programmes. It is the biggest and most prolific higher education player in the Eastern Cape region.

Fifthly, within this context, NMMU has in recent years begun to assert its prowess as a new centre of innovation in a growing number of areas. I will give you 10 examples:

- Our Engineering Faculty is South Africa's foremost leader in the field of mechatronics, particularly tailored to supporting the motorcar and allied industries in the Eastern Cape (VW, Ford, Mercedes Benz, GM) – long known as the “Detroit of Africa”, an industry valued at over R200 billion by current estimates and growing. Here we train the next generation of engineers, technologists, technicians and design specialists. Currently, the university is in the process of constructing a brand new R50 million mechatronics complex to promote greater future research and development.
- In atomic physics – the science of the fundamental building blocks of all life – NMMU is a leader on the African continent with its work in high-resolution microscopy. Currently, a brand new R125 million atomic physics complex is being completed on South Campus, that will host the world's most advanced high-resolution microscopes to do particle analysis in anything from industrial diamonds, precious metals(e.g. platinum), synthetic materials, to name a few applications. The facility opens doors for developing nano-science capabilities in the production and design of new types of synthetic and novel materials – key to the quest for renewable resources in the 21st century.
- NMMU's Centre for Energy Research is home to the best outdoor research facility for solar energy research of all universities in SA and holds the record for the highest efficiency solar cell produced. If we think about the energy crisis facing our nation and the world, this work surely can and must make a profound contribution to providing the science and technology for the production of cheap, green energy for civilian and industrial use.

- African conservation and restoration ecology – NMMU scientists have gained an international reputation for their pioneering research on balancing human co-existence with animal species in the greater Addo Elephant National Park ... work is currently being done in restoring degraded landscapes in the Southern Cape, with local communities, through carbon-sequestration Spekboom planting projects empowering local communities and securing carbon credits.
- Chronic disease treatment – NMMU is the leading university conducting research and drug development in diabetes research – a major lifestyle threat to South Africans today and one of the most vexing challenges in the modern world. Using anti-diabetic properties of indigenous plants found in the Eastern Cape, NMMU scientists have developed a revolutionary new drug therapy which they are currently preparing for clinical trials.
- In academic training, NMMU's professional programmes are some of the best rated in South Africa. For example, the Thuthuka Accounting Programme has consistently received national accolades for achieving exceptional pass rates for historically disadvantaged students. In turn, the School of Architecture, historically, has enjoyed a solid reputation in the wider profession and produced some of the leading architects and designers in South Africa.
- In the creative arts (ceramics, photography, art design) NMMU students and staff have been winning national honours for two years running, including, most recently, having no fewer than 12 of its students selected for the prestigious Absa Atelier Competition.
- In the social sciences, NMMU's Centre for the Advancement of Non-Racialism and Democracy – the only centre of this kind at a University in SA today – is playing a prominent role in promoting multicultural diversity in schools and civil society through research, training and engagement.
- In Technology innovation, NMMU has earned a reputation for pioneering research and development through for example, the revolutionary new Weldcore technology for preventing catastrophic failure in high-pressure steam pipes without losing downtime – a world first, invented by scientists in eNtsa, formerly known as the Automotive Components Technology Station (ACTS), and now used by Eskom, Koeberg and other major industrial companies.
- NMMU also holds SA's first Tetra Academy – based on the introduction of a new generation technology used by law enforcement agencies worldwide, bringing advanced radio network management, encrypted communications and other advantages to communication infrastructure. We played a key role in providing high-tech support for all the communication networks of the SAPS during the 2010 FIFA World Cup.

These 10 examples illustrate to me that this university already has many of the driving forces and energy it requires for realising the ideals of its new vision – VISION 2020 – to become a dynamic African university, recognised for its leadership in generating cutting-edge knowledge for a sustainable future.

Its commitment to “innovation” and ‘sustainability’ is a clear illustration of a university in tune with the major challenges of the early 21st century and why Nelson Mandela Metropolitan University stands apart from its peers. This is also why some of the best students, best researchers and best academics already select and should select the NMMU as their university of choice in the future.

I referred earlier to people with relevant and cutting-edge knowledge and a competitive spirit. Our challenge is to produce people with more than mere knowledge but who also have the ability for entrepreneurial and critical thinking. Simply put ... "innovation-fit" people. Today, when I reflect and ask myself the question whether I was ready for the world of business after four years at university, my answer is as follows ... in theory, yes. In confidence, yes. In competitive spirit, yes. But in creative, entrepreneurial thinking, no. The question is WHY not?

Because I was taught to listen and learn and not to always question. As a typical Baby Boomer, it was about working hard and living with the results of other people's thinking, theories, opinions. However, after a few years in business, I started questioning the status quo, questioning how to do things better, how to do things differently, with the future in mind , but it could have started a lot earlier.

Today, the world is very different. We live in the world of Generation C. The Connected Generation. The generation that is globally informed and connected. The opinion formers of this generation are primarily the 16 to 24 year old age group. The generation that sees it as their birthright to question everything. They do not go to university to study computer science to be proficient with any form of technology. They are brought up with technology. It is part of their lives. Being connected around the clock will be the norm in the near future ... indeed, it will continue to be the pre-requisite for participation in society. Currently there are 4.6 billion mobile phone users in the world and 1.7 billion Internet users globally. By 2020, the number of people using mobile phones will reach 6 billion and 4.7 billion will access the Internet, primarily through their mobile phones.

It is about blogs, social networks, voice channels and having as big and diverse a set of personal relationships as possible. The rapid increase of fast moving political and business pressure will continue or even escalate ... think of the Middle East at the moment with the initial catalyst in the spread and organisation of the recent revolts being ... social media..

Today, any company can set up shop and trade, so long as it has an internet connection. We live by a totally new set of rules. Where you can create your own. The days of a job for life are long gone. Competition is global and the war for the best talent is intense. And therein lies both the opportunity and the challenge for this university. We live in the "right brain" society. Where it is about problem-solvers, creative "out-of-the-box" thinkers, entrepreneurs, true innovators. People who question the status quo. Irrespective of the type of discipline that you are in. To always ask critical questions and improve on the answers. If we truly meet the challenge of producing entrepreneurial and critical thinkers with deep knowledge, there is no reason whatsoever why the next Einstein or Mark Zuckerberg of Facebook fame, should not come from NMMU!

The protection of intellectual property and the legal framework for the commercialisation of science, technology and innovation is a catalyst for ensuring progress. If I may turn directly to our law graduates for a moment ... we depend on your skills and critical thinking for ensuring that the work of our scientists, innovators and entrepreneurs will flourish in an ordered society in the 21st century.

My final question for today is why is science, technology and innovation so important for us in Africa? Quite simply because Africa is the last great growth frontier of the world. Having travelled the breadth and width of our continent, Africa, and having seen and experienced the impact of investments from China, India and South Africa in telecommunications, infrastructure, banking, retail et al...it is clear that we have enormous untapped potential on this continent.

Between 2000 and 2008, the continent's annual GDP rose by nearly 5%, more than twice its pace in the 80s and 90s. Africa's collective GDP reached \$2.67 trillion in 2009, according to the IMF, compared to \$16.3 trillion for the EU - small in relation to Africa's geographic size, but still a very large market.

It is predicted that by 2020, Africa's consumer facing, agricultural, natural resource and infrastructure sectors will collectively represent an additional \$2.6 trillion in annual revenue opportunities for domestic and foreign companies. And as the African markets continue to create greater stability, privatize state owned enterprises, reduce trade barriers and bolster regulatory systems, this Afro-investment positivity will only get stronger.

I would like to give you a brief reminder of the 2010 FIFA World Cup, hosted here in South Africa, what we called Africa's World Cup. I am sure that you can also recall the odds that were stacked against us initially. And then the enormous success of it all. Why, because we had a dream, we had a goal, we wanted to prove that we could do it and we wanted to do it better than it had ever been done before. It galvanized us as a country and as a continent.

When Sepp Blatter gave South Africa a 9 out of 10 for hosting one of the most successful World Cups ever,..one of my FIFA team members said to me: "Santie, it's not the fact that we did it, but it was HOW we did it." Not only did we build the most beautiful stadiums but we also upgraded our national road and transport system in preparation for the World Cup. Nearly 27 billion people cumulatively around the globe watched the World Cup and watched South Africa for a month and we rose to the occasion with a spirit of *ubuntu* never seen before. And *ubuntu* is also one of the core values of NMMU.

Finally, you might ask what my personal vision for this fine university is over the next four years:

1. For NMMU to be on track in its quest to become a leader in science, technology and innovation in the Southern Hemisphere.
2. For our research and innovation to become even more cutting edge with major breakthrough findings with global consequence
3. To attract the very best local and global academics and students
4. For the leadership team to be viewed as the benchmark as to how 21st century universities should be led.
5. And lastly, when anyone says that I have studied or lectured at Nelson Mandela Metropolitan University, wherever you are in the world, no-one should ask where it is or what it stands for.

Ndiyabulela Nangomso.