

**KEYNOTE ADDRESS BY THE PRINCIPAL AND VICE-CHANCELLOR, PROF
MZUBANZI BISMARCK TYOBEKA VICE-CHANCELLOR'S SCIENCE DAY 2025**

Theme: "Science, Technology and Innovation are for Everyone"

Date: 6 August 2025

In today's world, the true measure of any society lies in how it empowers its people through knowledge, equity, and opportunity. A nation that invests in science gives back to its future.

Protocol:-

Honourable MEC for Education, Mr Abraham Vosloo

Honourable Executive Mayor

The Esteemed Executive of Anglo American

Members of the North-West University and Senior Management Committee

Members of the House of Traditional Leaders – Magosi a Rona

Representatives from the Northern Cape Department of Education

Distinguished Guests from Industry and Academia

Dear Educators and School Learners

Members of the Media, Esteemed guests

Good morning. Or perhaps, considering the vibrant energy of our young scientists in the making with us here this morning, I should rather say, a bright and brilliant morning to everyone on this Women's Month.

It is both a privilege and a profound pleasure to see you all at the third annual instalment of the NWU Vice-Chancellor's Science Day, an initiative that reflects the heartbeat of our institution: taking the university to the people.

This year's theme as prescribed by the Department for Science, Technology and Innovation, ***"Science, Technology and Innovation are for Everyone"***, is a rallying cry. A declaration that science is not confined to pristine academic walls or the ivory towers of elite institutions. It lives in our communities. It solves everyday problems. It inspires every child who looks at the stars and wonders: how? We benefit from science even before we are born until we die.

And speaking of stars: how marvelous it is that some of you had an opportunity to witness the brilliant telescope demonstration last night by our very own astrophysicist, Professor Rodney Medupe. The sight of our young learners craning their necks to peer through a telescope into the galaxies is more than a scientific moment, but it is also a spiritual one. It is a moment of hope.

Some of you have seen magic unfolds with robotic demonstrations from our Science Centre, where sensors beep, mechanical arms wave, and learners (with eyes as wide as planets) exclaimed, “Wow, it moved!”

According to the World Bank, South Africa’s economy continues to face a grim reality: over the past decade, **GDP grew at an average of just 0.7% per year**, leading to declining real incomes and stagnating living standards. Today, **unemployment stands at around 32.6%**, with **approximately 8 million people without work**, while **extreme income inequality persists**—the **Gini coefficient sits at about 63**, placing South Africa among the most unequal countries globally. The bottom **40%** of the population earn only **11.5% of national income**, whereas the top **20%** earn nearly **60%**. We all know people in our families or in our villages and townships who have lost their jobs and have been trying to get jobs without success. The situation is not good but we must, as a country, continue to work harder to address these problems. This is why we need you to study science and be innovative and entrepreneurial.

The Organisation for Economic Co-operation and Development (OECD), views science, technology and innovation as central to addressing major global challenges, from climate change to pandemics. But at the same time, the OECD cautions that inclusivity in science, technology and innovation remain uneven, especially in under-resourced communities. That’s why today matters.

These macro-economic conditions have direct relevance for equity, excellence, and inclusion in education. They illustrate how poverty and unequal resource distribution prevent many learners, especially from marginalised communities, from reaching their academic potential. The slow economic growth and high inequality further undermine investments in quality education infrastructure, teacher quality, and learner support, thereby entrenching exclusion rather than remedying it.

Honourable MEC, all of these show the urgent need for tailored policies that allow innovation to flourish outside metropolitan areas; in rural villages, townships, and semi-urban settlements.

We believe that the NWU and its partners can make a greater impact by helping to build an enabling, inclusive and innovative ecosystem. Reflecting on my earlier comment: one telescope, one robot, and one inspired learner at a time.

Let us be honest: the learner in Kathu, Kuruman or Kimberly is no less curious than their peer in Cape Town or Cambridge. But access to scientific tools, mentorship, and exposure makes a world of difference.

Recent literature on rural innovation has shown the need to integrate community-led innovation into our national development plans.

This shows that there is a need for greater participation of marginalised voices in science policy development.

Bagaetsho, the simple truth is that, it is not enough to aim high if we leave others behind. Around the world, learners from poorer backgrounds are still far more likely to struggle at school, not because they lack potential, but because the system is not always built for them.

It is therefore my view that, real progress means making sure every child, no matter where they come from, has a fair shot at success, and that the education they receive is truly worth something.

And so, our gathering serves as a deliberate act of national rebalancing. It says, “we see you, we hear you, and we believe in your capacity to innovate.”

Why it matters for Our Youth?

Let me say this directly to our learners present today:

You are not too young to invent.

You are not too rural to innovate.

And you are certainly not too poor to dream big.

When you see an App, a drone, or a telescope; do not just use it. Imagine how to improve it or create your own. Do not just admire a scientist. Envision becoming one. There is a young girl in this audience today who will become the first astrophysicist from her village. A young boy who will engineer a water purification system that saves his community. That is the power of exposure. That is the power of this event.

As we look ahead, I invite you to join us in celebrating National Science Week that is taking place from 4–9 August 2025, and it is an annual initiative that aims to bridge the gap between science and society. Across the country, learners, educators, and ordinary citizens will engage in science schools, exhibitions, research dialogues, and technology demonstrations under the same theme: ***“Science, technology and innovation are for everyone”***.

Let us use this week to spark new conversations, dismantle old assumptions, and plant seeds of wonder and hope in the minds of our youth.

Please allow me to take a moment to thank and acknowledge our strategic partner, Anglo American Iron Ore, whose vision aligns with our very own. Through their generous support and shared purpose, this year’s Science Day has reached even more learners, educators, and communities. This is corporate citizenship at its finest, going beyond business to build futures.

This day would not have come to life without the collective efforts of our colleagues, especially the organising team, schools, traditional leaders, industry exhibitors,

government departments, and academic institutions. I thank each and every one of you. It takes a village to raise a scientist.

Colleagues, learners, partners and friends, when the dust of today settles, let it not only be remembered as a day of speeches and selfies. Let it be remembered as the day when science came home. To our communities. To our children.

Let me close by saying:

We are not just building a smarter nation. We are building a fairer one. A nation where science does not speak to people, but with them.

So, to our young aspiring scientists: go home and ask your parents: "Did you know robots can dance?"

To our educators: keep igniting those classroom sparks.

And to all our partners: let us continue to walk this journey together. Because, truly, science, technology and innovation are for everyone.

I thank you.