SPEECH

BY

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RECTOR: POLYTECHNIC OF NAMIBIA

ON THE OCCASION OF MINING ENGINEERING STUDENTS PRESENTATIONS

26 JULY 2013

08H00

AT

KALAHARI SANDS HOTEL, MORINGA ROOM

WINDHOEK
Director of Ceremonies
Honourable Isak Katali Minister, Ministry of Mines and Energy
Government officials from various Ministries
CEO of Chamber of Mines, Mr Veston Malango
Namdeb CEO, Mrs Inge Zaamwani-Kamwi
MD for Epangelo Mining Company, Mr Eliphas Hawala
Dean School of Engineering, Dr Samuel John
Director of the Centre for Cooperative Education, Mr Carva Pop
Captains of Industry and Distinguished Guests

It is my honour and privilege to welcome you to this inaugural event, which celebrates our first stream of Mining Engineering Students at the Polytechnic of Namibia. Today this cohort is presenting their final-year Work Integrated Learning Projects.

Namibia is a resource-based economy. It is a world class producer of rough diamonds, uranium, gold, zinc, acid-grade fluor spar, copper, lead, salt, dimension stone and other minerals, which are big contributors to the gross domestic product.

But the mining industry is faced with tremendous challenges ranging from the technical skills shortage, declining ore grades, water quality and supply to the ever escalating energy costs and sustainability amongst others. Innovation is required to address some of these challenges. The sustainability of the minerals' industry is heavily reliant on continuous
improvements to existing mining operations coupled with building a relevantly specialised human resource base. Without such improvements or developments, the optimum value from resources may not be realised.

It is well known that the mining industry worldwide is facing a tremendous shortage of engineers in various fields of specialisation (Moudgil, 2006). For instance, in Australia the skills shortage in the mining industry was identified as one of the top risks facing the Mining Industry (Minerals Council of Australia, 1998; Ernest and Young, 2012).

A study conducted by the Namibia Chamber of Mines (2007, 2012) found that locally there is a shortage of mining and metallurgical engineers. But the shortage is not unique to Namibia. Nevertheless, if this critical skills shortage is not addressed it will have adverse consequences for the country.

The Polytechnic of Namibia introduced the Mining Engineering degree programme in 2009 and is also developing curricula for other professional degree programmes to meet future industry needs. This has been made possible with the collaboration of the Government of Namibia, through the Ministry of Mines and Energy, The Geological Survey of Namibia, the mining companies, international experts and many partner universities internationally. This has ensured relevant curricula and a steady flow of expertise into and out of Namibia.
However, since these institutions such as the Polytechnic are still fairly young and we continue to rely on the support of government and industry and all the other players to overcome challenges and become sustainable. Some of these challenges include generally high student dropouts, shortage of academic staff, challenges in sourcing funding, little support from industry, low student enrolments, low pass rates in high school science and mathematics subjects and inadequate infrastructure.

Literature studies reveal that currently no in-depth studies have been done to determine the factors which influence sustainability in Science and Technology education in Africa and in particular Namibia. Fricker (1998) states that the sustainability concept has captured many people’s imaginations and aspirations but it has also eluded many as a tangible and identifiable goal.

In these opening remarks, sustainability of minerals education in the Namibia context will refer to the combination of the following seven parameters:

1. Funding covering the essential needs of the institutions,
2. The number of graduates matching the needs of the country,
3. The quality and quantity of students enrolling for the programmes,
4. Alliances & partnerships of the educational institutions, government and industry,
5. The quality and quantity of academic staff,
6. Sound Infrastructure
7. Well developed and dynamic curriculum.

All these seven factors need to be in place for us to achieve sustainable science and technology education. The Polytechnic has learnt to be innovative in the quest to produce the next generation of Namibian engineers - competent, qualified and competitive globally. The contribution of industry, government, local, regional and international partners cannot therefore be over-emphasised.

Work Integrated learning is a modern, student centred learning approach which helps students to reinforce the theoretical concepts studied during lectures with the practical aspects of the field. Some of the 3\textsuperscript{rd} and 4\textsuperscript{th} year students have been involved in assisting the Ministry of Mines and Energy in monitoring the some of the abandoned mines. These students spent a week at Berg Aukas abandoned mine in Grootfontein from the 6\textsuperscript{th} to 11\textsuperscript{th} of May 2013.

We will therefore, today listen to presentations from the first group of our Mining Engineering students who are just winding up their 4.5 years of study and will graduate in October 2013.

In conclusion, we appreciate the support from the Government of Namibia, the Ministry of Mines & Energy and the Mining companies in Namibia through the Chamber of Mines. I quote from one of the MDs for the mining
companies in Namibia; “I am passionate about proving to the world that Africa is on its way up and will reach its zenith, and this will only occur through quality education. Please feel at home at Okorusu at all times” But of course we are here at Kalahari Sands hotel, being hosted by the Polytechnic of Namibia and not at Okorusu, so still free at home.

To our first stream of Mining Engineering students, I would like you to reflect deeply on the words written by Marianne Williamson which were made popular by the great statesman, Tate Nelson Madiba Mandela: (Our Greatest Fear) Our deepest fear is not that we are inadequate. Our deepest fear is that we are powerful beyond measure. It is our light not our darkness that most frightens us. We ask ourselves, who am I to be brilliant, gorgeous, talented and fabulous? Actually, who are you not to be? You are a child of God. Your playing small does not serve the world. There’s nothing enlightened about shrinking so that other People won’t feel insecure around you. We were born to make manifest the glory of God that is within us. It’s not just in some of us; it’s in everyone. And as we let our own light shine, we unconsciously give other people permission to do the same. As we are liberated from our own fear, our presence automatically liberates others.

Once again, welcome, let’s deliberate and interact, and I thank you.

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