

basic education Department: Basic Education REPUBLIC OF SOUTH AFRICA

Keynote Address by the Minister of Basic Education, Mrs Angie Motshekga, MP, at the Hush World Career Youth Expo, held at Nasrec Expo Centre

29 June 2022

Programme Director

Ms Carol Xaba: Hush World: Career Expo Project Director

Learners

Distinguished Guests

Members of the Media

Ladies and Gentlemen

It is indeed an honour for me to address this very unique Career Youth Expo held here at the Nasrec Expo Centre.

This Career Expo for the youth is not an ordinary expo – as there are two sessions for the attendees: a piece of information and practical session in the morning and a fun-filled afternoon with games and sports. Thus, this expo is unique as it fuses the general career guidance principles with a particular focus on fun and games.

We know that young people learn faster through fun and games.

As we know, games build the character required for the long road to academic career success.

As they say, you simply can't buy a character; you must build it.

Thus this programme distinguishes itself from all other generic unique Career Youth Expos.

It is instructive that the brainchild of this programme is a private company run by young people who are moved by the plight of learners starved of career information.

As we always say, young people are the future of this homeland.

At the outset, I must congratulate Hush World for this great initiative.

Programme Director, South Africa is a better place to live today than pre-1994.

We hold credible, free, fair national and provincial elections every five years.

We are not a pariah of the world community but a source of envy because of our Constitution.

Our professionals – from nurses, teachers and aviation experts ply their trade overseas.

Our Constitution turned 26 years this year and is considered the most progressive in the world because it guarantees our fundamental human rights.

In its preamble, our Constitution says as a nation, we must 'heal the divisions of the past and establish a society based on democratic values, social justice and fundamental human rights.'

We celebrated 28 years of democracy, peace and liberty in April this year.

We have had a civilian government chosen by the people for 28 years.

Our army generals respect the Constitution, protect our democracy, and play a crucial role in mitigating disasters and advancing our international obligations around the continent to silence guns of war.

In today's South Africa, girls and boys stand a better chance to develop and prosper.

Yet, there's a growing chasm between black and white.

There's an increase in social ills.

There's no let-up in incidents of gender-based violence.

There's a growing social distance between the governors and the governed.

Inequality and poverty continue to grow unabated.

Poverty bears an imprint of a black woman.

Our economy has stagnated.

The majority of our youth are unemployed and unskilled.

It is you here who can lift the mood in the nation and reverse the rot.

Programme Director, I stand before you to tell our young people that our future is bound to be better than yesterday because you're world changers.

The strength of a people is not tested during the period of bountiful harvest but at times of enduring drought and/or stormy seas.

Yet, 'gloom and despondency have never defeated adversity. Trying times need courage and resilience,' so said our former President Thabo Mbeki.

As young people, you have courage and resilience in abundance.

Luckily, you are not alone.

There's a new resolve in this new Government, big business and civil society to redouble our efforts so that we may indeed free the potential of each young person in our homeland.

We have entered a period of Khawuleza (hurry up).

Firstly, I want to talk to you about aviation and the importance of Mathematics and Physical Science, generally about the Science, Technology, Engineering and Mathematics (STEM) careers.

Our policy lodestar, the National Development Plan (NDP), enjoins us to reduce poverty, inequality and ensure that all citizens have better working and living conditions by 2030.

To achieve this, South Africa needs to produce over 30 000 qualified artisans a year to meet the ongoing labour demand.

It is estimated that by 2025, as many as 80 per cent of all future jobs will require a Science, Technology, Engineering and Mathematics (STEM) education.

Yet, globally, only 14 per cent of the STEM workforce consists of females and only 7 per cent in South Africa.

STEM fields desperately need more girls and women, and the statistics prove it!

Women make half of all tech users make 85% of shopping decisions.

Yet, according to the research conducted by the consulting firm Accenture and the organisation known as "Girls Who Code," the number of women in STEM has decreased since the 1990s.

If we do not reverse this trend, the number of female computer scientists will fall from 24% to 22% by 2025.

For various reasons, teenage girls, even those who like maths in school, become discouraged from pursuing education and careers in technology.

With this in mind, efforts are being made by government and private sector firms to increase the profile of STEM fields among women.

This will allow the workforce to access a wealth of untapped potential and boost South Africa's gender equality in the process.

It has been recognised by the international aviation community that there will be an anticipated shortage of skilled aviation professionals shortly.

According to aviation experts, the aviation industry is one of the fastest-growing industries in the world despite the two-year turbulence caused by the Covid-19 global pandemic.

It has been reported that by 2030 air traffic volume will increase by 50%.

The Airlines Association of Southern Africa (AASA) says it needs around 60,000 new pilots, technicians and engineers as of yesterday.

Globally, some 480 000 additional technicians will be needed to maintain the growing aircraft fleet by 2026.

Over 350 000 pilots will also be needed to fly them.

Airlines and the entire aerospace industry are dependent on a pipeline of young, appropriately educated talent who they can prepare, with bridging training, for careers in the sector.

The Gauteng Province recently launched the Aviation School of Specialisation, amongst others.

Presently, around 140 000 grade 12 students each year complete the matriculation examination with a bachelor's pass, and of these, only about 50 000 students pass mathematics with a score higher than 50%.

The pool of students who can potentially access university and science-based TVET programmes is tiny compared to the country's skill demands.

We have begun to work on solving this conundrum using programmes to reach out to our young people and encourage them to take STEM careers seriously. In this regard, we have taken a bold step by introducing Coding as a subject in South African schools.

Apparently, Coding is our new green gold.

Some thinkers go even further and consider Coding skills as a new form of literacy.

As a result, we have already trained 43,774 teachers in computer skills and will shortly start training new ones in Coding pedagogy.

The number of schools offering Coding and Robotics since 2020 is 1000 Primary schools in Grade 7

An additional 569 Secondary schools will pilot Coding and Robotics in 2023 (grades 8 and 9) and 200 schools in Grade R to 3

Plans are also afoot to introduce a robotics curriculum for Grade R-9.

One of the largest universities on this continent, the University of South Africa (UNISA), has partnered with us by making available their 24 ICT Laboratories throughout the country to train 72,000 teachers in Coding.

Our partners, including giants such as Google, Teen Geeks and other businesses, are also supporting us in developing a Coding platform that uses Artificial Intelligence and Machine Learning to customise teaching and learning. The curricula will ensure that our schooling system produces learners with the foundations for future work and equip them with skills for the changing world.

We call this the Three-Stream Model.

The number of learners who wrote the NSC 2021 Examination in the following Technical subjects is increasing steadily.

The following technical subjects are available up to matric Civil Technology (Civil Services), Civil Technology (Construction) 4 474 and Civil Technology (Woodworking) 2 366.

Yet only a few learners of 627, 4474 and 2366 sat for the final NSC examination on these subjects last year.

We also offer Electrical Technology (Digital Systems), Electrical Technology (Electronics) and Electrical Technology (Power Systems). Again the uptake is deficient at 371, 1143 and 5675 in these subjects, respectively.

The uptake in Mechanical Technology (Automotive) stands at 3 330, Mechanical Technology (Fitting and Machining) at 1 991, and Mechanical Technology (Welding and Metal Works) is at 2 308.

We are impressed that Engineering, Graphics and Design has a sizeable number of 37 131 who sat for the final examination last year.

Although new, it is also encouraging that Technical Mathematics notched up 13 403 matriculants last year, and so did Technical Sciences at 14 642.

Interestingly, the demand for skilled artisans such as carpenters, toolmakers, fitters, joiners or mechanics has grown in South Africa, despite the impact of the Covid-19 pandemic.

This is according to Arjun Khoosal, co-founder of Kandua, an online home-service marketplace.

However, he noted a scarcity of individuals trained and qualified to meet that demand.

In 2020 alone, there's a 750% increase in demand for home services, with the most need for: Carpenters; Plumbers; Renovators; Landscapers; Handymen; Panel Beaters; Welders; and Builders.

Trade and vocational professions are also set to receive increased focus over the next five years as part of a new Department of Higher Education and Training initiative.

My dear children, today's careers aren't fixed to being lawyers, nurses, doctors and teachers any longer.

The world has opened up just for you.

Centuries ago, people who could read and write were in a position of power and controlled both the present and the future.

Now, when our world relies on technology, people with tech-related skills have more options to be successful and shape their future instead of being passive consumers of technology.

This career expo aims to ignite a fire inside each one of you. Don't be discouraged.

As a country, we have made a substantial push towards digitisation and technology in South Africa's education sector in recent months.

In his 2019 February State of the Nation address President Cyril Ramaphosa said that over the next six years, Government will provide every school child in South Africa with digital workbooks and textbooks on a tablet device.

The President said the Department of Education would also expand the training of both educators and learners to 'respond to emerging technologies, including the Internet Of Things, robotics and artificial intelligence.

Our future as a people hinges on accelerated performance by our learners in Science, Technology, Engineering and Mathematics.

Let us grab opportunities in these fields and build the South Africa of our dreams.

I thank you.