

Get SA's youth future-ready by prioritising Stem learning

By [Langa Dube](#)

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The negative employment outlook actually means significant opportunity for Stem (Science, Technology, Engineering, and Mathematics).



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Globally, the technology sector is alive with possibility and opportunity, and South Africa is one of the countries all eyes are on despite a 35.3% unemployment rate in the fourth quarter of 2021. Based on this dire statistic, it is clear that as a country and specifically as a business sector, there is significant work ahead of us in efforts to educate and upskill the youth so that they choose careers in technology.

It starts with us

Though the solution appears laborious and lonesome, it needn't be – the answer lies in a three-part partnership solution: business; government and academia must link arms and work together in order to drive a digital culture which future-fits the youth for success.

We need to prioritise gender equality in the tech arena. Although women are notably impacting tech advancement, the industry remains largely male-dominated. We must also prioritise communities which do not have access to mobile, let alone internet connectivity. The corporate sector must mainly drive these conversations by challenging the status quo at present; as there remains much fear around Stem learning subjects amongst SA learners. It is up to us to stamp this out. For example, as an organisation, we recently introduced a TCS flagship Stem education programme called [TSC goIT](#). This is a student technology awareness programme which was designed to spark learner interest in Stem education. This is just one initiative we have in place to empower the digital innovators of tomorrow.

We achieve this key outcome by demystifying computer science and practicing design-thinking by means of a digital innovation and a career readiness project.

Career opportunities birthed from Stem education

A [recent article](#) revealed that the business arena has suffered a significant blow due to the Covid-19 pandemic, however, technology is booming. It noted that information and communications technology (ICT), financial services, and fintech companies are scaling up operations while other businesses transition to digital.

This has created a surge in demand for IT workers.

Some of the positions most in-demand are in cloud computing, artificial intelligence, machine learning, data science, and cybersecurity. From these findings, it is evident that we are living in a tech-charged matrix which moves at lightning speed. Digital tools are on the rise – manual has considerably phased out and customer needs have shifted drastically.

This means, that as a country, our focus should be on producing future-fit tech giants in the likes of Elon Musk and Steve Jobs. But, how do we achieve this?

The answer lies in encouraging a business-minded; tech-savvy youth even at Grade 1 level. Data science must become available at the most basic level – we already hold such promise as young South Africans now have access to social media platforms, gaming, mobile phones and other robotics – these tools are used without giving much thought or awareness to the tech behind it or the opportunities which lie in promoting tech-focused careers.

The school curriculum and pedagogy on the whole must be relooked

The business aspect of tech should be taught first to the learner prior to leaping into a theoretically-driven school curriculum. Here lies another notable opportunity for corporate South Africa to become involved in.

Efforts as portrayed in the recent news media by the Telkom Foundation are applaudable as it has brought to the fore the realisation that future skills cannot exist in isolation. Learners still need to acquire the basics of maths, language, technology and science in order for them to access these digital skills. Telkom has pledged a total of R200m over five years to drive the outcomes of its learning programme. The Foundation's approach is therefore multifaceted to ensure that the entire ecosystem of education and digital literacy is addressed. As an example, it is essential for learners to develop vital skills such as problem-solving, innovation and critical thinking in order for them to be future-fit. As a result, the Foundation has introduced more than 2,000 young learners to coding, gaming, programming and problem solving to help develop these skills. This is notable, and no doubt commendable, as a significant gap in learning has been bridged through these efforts by The Foundation.

By proactively employing these initiatives, we are sure to turn the unemployment tide in SA likely, within the next few years, partnership and investment are key in order for us to achieve this goal.

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