

Failed: South Africa needs to invest in STEM



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In October 2014, Adrian Schofield, Manager for Applied Research Unit of the Joburg Centre for Software Engineering (JCSE) told Fin24 that a lack of improvement in South Africa's basic education system is putting the country at risk. South Africa is set to slide behind its African counterparts in the information and communications technology sector (ICT) and this will have a knock-on effect when it comes to business, economy and growth...



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This commentary came about as a result of the sixth JCSE ICT Skills Survey, which found that 45% of corporates were negatively affected by the skills shortage, and 14% said it was threatening their organisation's viability. What also emerged from the survey was that limited numbers of matriculants and graduates are entering the Science Technology Engineering and Maths (STEM) disciplines, and delayed or failed government technology projects are contributing to the fact that South Africa is falling behind the rest of the continent.

With high unemployment and poor education and support, South Africa is running a dangerous game, one that could see an entire generation lose out if things do not change. STEM has the potential to be the great equaliser, an opportunity for unemployed youth to step into careers where their minds and abilities are sorely needed. This is only if we can get over the fact that even though the pass mark for maths and science is a paltry 30%, our failure rate is incredibly high.

Only 10% of students achieve a pass in these subjects across the country and 3% get over 50%.

Pure maths coming

In July of last year, the Education MEC, Panyaza Lesufi, was quoted as saying that, by 2016, maths literacy was to be phased out and replaced with pure maths, a subject that would allow them better career prospects and hopefully put the youth unemployment bulge on a significant diet. However, there are still so many gaps in education, ability and teaching capability - not to mention teachers who offer a speciality in this field - that it seems unlikely that this idea will take off. Instead it could well just place even more pressure on the system and potentially see even worse results at the end of the matric year.

The fact that the government has started to pay attention to the need for better education in STEM skills from school to university is definitely a step in the right direction - and one that is sorely needed. However, there is the risk that stringent rules will only cause more problems. Instead, there needs to be a plan to inspire our youths to step into STEM and to explore how engineering and maths and science can be the most exciting careers in the country. Business needs to support this by going into schools and educational institutions and capturing the imaginations of the students, showing them how a focus on STEM today can mean a great future tomorrow.

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