

8 wishes for SA education in 2019

By [Sharanjeet Shan](#)

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If you were asked to give an on-the-spot (no Google allowed!) definition of an algorithm, what would you say? From personal experience, most adults can't answer this question accurately. Which is worrying because every single discipline in daily life activity embodies an algorithm. The Fourth Industrial Revolution (4IR), which is already firmly underway, is also reliant on algorithms.



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The 2018 IMD [World Digital Competitiveness Ranking](#) positioned SA 49th out of 63 economies (a drop from 47th place in 2017). Breaking this down further, we dropped from 37th to 54th place for training and education. And we rank 60th for higher education achievements, which IMD highlights as an overall top weakness. With the New Year comes the opportunity to create an educational 'wishlist' of sorts. The transformations and trends we'd like to see in 2019. For me, a focus on digital literacy and improving values and connectedness to a challenging new world are imperative if we're to improve our competitiveness ranking and ready all our children to globally compete in [roles that currently don't exist](#).

At the Maths Centre – supported by Sanlam Blue Ladder Schools – 4IR is woven into all our programmes and resources for teachers, learners and parents and it's a pivotal part of our approach to STREAM (Science, Technology, Reading, Engineering, Arts and Math) subjects.

This is my educational wishlist for 2019:

1. **Support for homework and a longer school day:** Maths, science, technology and English are all core competencies that require increased, quality contact (teaching) time. Imagine homework as a part of empowering mechanism for learning in a longer school day. To ensure quality contact time, we'd need to focus on teacher development to help teachers to become masters of their subjects. How to do this? Through ongoing professional development opportunities and constant external monitoring and evaluation by appropriately qualified Department of Education facilitators.

2. **A global focus on mindfulness:** It's natural for young people to feel overwhelmed by emotions they can't always express. So, a growing international trend is for children and young adults to be taught about the amygdala (centre of emotions in the brain), in order to understand how to master mindfulness and meditation to cope with emotions. It would be great to see South African schools incorporating this and for young people to understand the intensity of a simple fact: Your thoughts should not dictate your actions. You should dictate your thoughts such that advantages for your present and future are built into a growing mind-set.
3. **Values:** Statements around values are vague and glib, while young people experience violence, corruption and devious doings. Values must connect to the realities of our young people as they face a dire consequence of poor education. The Department of Social Development must connect with the Department of Education to act speedily and collectively to prevent our children from having to walk to school, going hungry, lacking viable transport options, with poor subject choices, lack of access to bursaries, and often coming home to no support. These deficit-ridden circumstances burden the school-going child with an overt expectation that children should learn to cope with deficits and poverty. That's not acceptable. Additionally, corruption is pervasive, as is abuse in schools. In 2019, we need to rally all stakeholders across the public and private sectors to take a stand and focus on creating enabling learning conditions built on solid ethical foundations.
4. **Development of the school:** [McKinsey's](#) *How the world's most improved school systems keep getting better* report identified the systems that support the best sustained outcomes for schools, taking them from poor to excellent performers.
 - On-going teacher development is one powerful factor.
 - Connecting to communities. Schools should function as epicentres that entrepreneurship inevitably burgeons around, providing opportunities for reciprocal relationships that benefit the school and foster enterprise development.
 - Measures for correcting dysfunctionality include viable, time-framed, cost-supported school development plans, highlighting targets, teacher requirements, money management and civic engagement. Hit and miss activities produce incomplete solutions, which become a vicious cycle, embedding deficits.
5. **Knowledge and skills:** How do we make education relevant to the next generation? This is going to be a core focus for next year. Again, it'll require commitment and knowledge-sharing from all stakeholders, across all sectors of society. And we need to broaden the focus to see how our international education counterparts are getting I4 ready. For example, the [Ministry of Education in Singapore](#) (no. 2 in the World Digital Competitiveness Report) has identified core 21st competencies that underpin its holistic education systems in schools. These include cross-cultural skills, inventive thinking, and communication and collaboration capabilities. Of course, these learnings need to be made relevant in a South African context.
6. **Identity:** Another factor I wish we'd focus on in 2019 is young people and the formation of identity. We need to move to a place where every child feels safe to say, "I am a child of South Africa and my country is diverse." Language is a critical part of identity formation, and it's essential we start asking how to provide access to learning in more South Africans' home languages. The introduction of [Swahili](#) to the 2019 curriculum is a positive move in this direction.

7. **Parental involvement:** A renewed focus on parental involvement could be a most powerful trend in 2019. Maths Centre's [Parents Matter Parents Count](#) programme, run in partnership with Sanlam Blue Ladder Schools, provides regular listening sessions to empower parents to support their children. Ideally the government should initiate a structured support programme for parents, in every language. This should incorporate a countrywide roadshow informing parents whenever a change to the curriculum occurs. Regular parent meet-ups should also be orchestrated by schools.

8. **Algorithms:** Can you follow instructions to ice a cake? If you can, then you understand algorithms. To take away the fear factor, we need to use critical thinking and dialogue to check how algorithms are a part of everyday digital activities. Google, Facebook, fake news, cybercrime and Instagram are all controlling our attention every day using algorithms. The definition of an algorithm is: 'a process or set of rules to be followed in calculations or other problem-solving operations'. Problem-solving is a critical skill for 4IR. We must ensure the curriculum trains children to understand algorithms – not fear them. The introduction of coding is just one part of this. Every young person should understand the power of algorithms and how they trap us using a focus on our interests and intentions in every single sphere of life.

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