



## The uprising of the Youth



Although this edition is for the month of July, at the time of writing we are approaching the public holiday of Youth Day.

As we should all know, Youth Day in South Africa, celebrated on 16 June, is a public holiday that commemorates an event which resulted in a wave of protests across the country, known as the Soweto uprising of 1976. On this day, between 3000 and 10 000 protestors mobilized by the South African Students Movements Action Committee, and supported by the Black Consciousness Movement' marched peacefully to demonstrate and protest against the government-of-the-day's directive to make the Afrikaans language alongside English the compulsory medium of instruction in schools in 1974.

The marchers, on their way to Orlando stadium, were met by heavily armed police who attempted to blockade the march, and then opened fire on the protestors. In this conflict, 13 year-old Hector Peterson was one of the first to be shot dead, and the image of him being carried by Mbuyisa Makhubo has become the tragic and pathetic symbol of the uprising. Consequential to this day, police estimated that 150 protestors were killed, but other estimates escalate this number to as many as 700.

This dreadful day in South African history has its roots in the Bantu Education system developed by the apartheid regime that came to power in 1948 and which culminated in the Bantu Education Act of 1953, which created a separate education system for 'blacks', as designed by H.F. Verwoerd who postulated 'There is no place for (the African) in the European community above the level of certain forms of labour. It is of no avail for him to receive a training which has, as its aim, absorption in the European community'.

In retrospect, one can but marvel at the courage of the protestors, who felt with deep conviction, the need to dictate their own future, as opposed to it being dictated to them. One can also only feel a sense of national shame that such a thing could have happened.

Obviously, our South African Youth Day must continue to reflect on the events of 1976, because, as Marcus Garvey stated, 'A people without the knowledge of their past history, origin and culture is like a tree without roots'. Michelle Obama said 'You may not always have a comfortable life, and you will not always be able to solve all of the world's problems at once, but don't ever underestimate the importance you can have because history has shown us that courage can be contagious and hope can take on a life of its own'.

However, we must also use the day (and every day) to ensure our youth are, on the one hand given a sustainable world to live in, while at the same time afforded the opportunity to shape their own future, and that of the world. The dues that we, as a society, have to pay for the past need to be invested in the future of today's youth.

International Youth Day is celebrated on 12 August, and is an awareness day designated by the General Assembly of the United Nations in 1999. It serves as an annual celebration of the role of young women and men as essential partners in change, and an opportunity to raise awareness of challenges and problems facing the world's youth.

This year's theme is 'Transforming Education' to highlight efforts to make education more inclusive and accessible for all youth, including efforts by youth themselves. This is a far cry from the events and causes of the 1976 uprising in South Africa, as it calls on the youth themselves to create their own future. The theme is rooted in Goal 4 of the 2030 Agenda for Sustainable Development which is 'to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'. The aim of the day is to examine how governments, young people, and youth-led and youth-focused organizations, as well as other stakeholders, are transforming education so that it becomes a powerful tool to achieve the 2030 Agenda for Sustainable Development.

This is all against the reality that there are currently 1.8 billion young people between the ages of 10 and 24 in the world, which is the largest youth population ever. However, one in ten of the world's children live in conflict zones, and 24 million of them are out of school. Political instability, labour market challenges, and limited space for political and civil participation have led to the increasing isolation of youth in societies.

In South Africa, our youth unemployment rate, according to Stats SA, stands at a staggering 55.2% as at the end of March 2019, with the overall official unemployment rate at 27.6%. Stats SA estimated graduate unemployment in 2018 to stand at 33.5%.

Closer to home, there are various unconfirmed estimates that, in the mining industry in South Africa, there are up to 300 qualified mining engineers who are unemployed. A similar situation exists with geologists.

So what can we take away from this, apart from deep depression, and how can we as an Institute and an industry support Goal 4? Let's consider this firstly from the supply and demand side, for the mining industry.

Firstly, on the supply side, there seems to be a dichotomy in that we have so many young people, many of whom are competent and capable of embracing Industrial Revolution 4.0, and qualified, but whose qualifications may not be appropriate for the modernized industry. This could either be because the qualifications are out of date and irrelevant, or because the industry is not ready for change in terms of the skills and development programmes it will require.

On the other hand, it may merely be an oversupply of qualified people into a market that is not hungry for these skills, because of the state of the industry. This reflects an out-of-synch situation between the pipeline of graduates created in upswings in the cycle and the reduced requirements of offtake because of downswings during the creation of the pipeline. While the industry is at the behest of the commodity cycle, this means that either the cycles need to be better matched, or that alternative career paths be made available, either in manufacturing, research, or entrepreneurship.

In terms of qualifications, there are numerous examples of where this is definitely the case, where Certificates of Competency in particular require modernizing to take account of digital developments and technologies, and where syllabi at tertiary institutions and training organizations require updating. In some cases, such as at Wits, this has already started, but in the case of certificates and TVET qualifications, there is an urgent need for attention.

Developing this change is a tedious process, which requires dedicated volunteers on the one hand to step forward and say 'I will help with that', while on the other hand requiring that bureaucratic processes do not stand in the way of progress.

The SAIMM established the Scholarship Trust Fund, in 2002. Since 2004, contributions of R3 million have been dispersed to needy university students who do not have bursaries – unfortunately, an increasing number year-on-year. This helps them with tuition, meals, supplies, travel, accommodation *etc.* Members are encouraged to continue to support this needy cause, and the Institute will continue to find ways in which more funds can be raised.

Clearly, the area of basic education requires urgent attention in terms of relevance, accessibility, affordability, and quality, but that is a matter which requires a collective will to prioritize and fix, in a national discussion.

On the demand side, industry readiness for IR4.0 and the kind of training and development, and career paths that are required is an area requiring attention, where new work structures and career pathways need to be developed so that these are relevant, value adding, and lead to retention of skills.

In these areas, it is pleasing that the Young Professionals Council of the SAIMM has been active, both in terms of university course modernization and with the origination of a new graduate development programme, which still is to be rolled out to Council and industry.

Our industry is facing many challenges in terms of productivity, cost, profitability, and health and safety. Additionally, it faces ever-increasing pressure to create a sustainable post-mining landscape that embraces the surrounding communities and identifies opportunities for local industrialization and agri-business development.

These challenges demand many new skills sets, including social sciences, economics, data science, and information management. They also require effort in research and development, and innovation,

and the resources to effect this. Significantly, this requires the industry to identify new and appropriate career paths in these areas, and the development of a hunger to utilize these skills to allow the mining companies to become the modern corporate citizens that they aspire to be.

In the R&D space, we need to engender a culture of innovation and change, and there are no better people to drive this than our inquisitive millennials, who should be encouraged to challenge the status quo every step of the way. This can be done either by examination of the internal culture of organizations, or through structures and processes that allow these ideas to flow through to real change and implementation.

Companies, whether mining and mineral processing companies, universities, research institutions, equipment manufacturers, financial institutions, and consulting companies operating in the mining space should embrace the youth through establishing internships and creating opportunities for innovation and development.

As a practical example, it would be wise for the Mining Qualifications Authority to divert monies currently allocated to undergraduate studies to the funding of internships and research, to be conducted by the very people who were funded to study at undergraduate level, but who now are unemployed.

A further area where the YPC is active is that of entrepreneurship and leadership. Despite their aspirations, not all young mining professionals can become mine owners or CEOs. Alternative opportunities for young people with entrepreneurial appetites should include establishing new companies in the mining supply chain, an area strongly supported by the Mining Charter 3 requirements and by the Departments of Labour, Science, Technology, and Higher Education, and Trade and Industry. While the YPC has driven this vision through the Entrepreneurship in the Minerals Industry Conference series (with this year's event on 31 July), they should be encouraged through wide support, but also driven by a collective effort to encourage and develop entrepreneurs through incubation processes and facilities. This collective effort should include mining companies, mining equipment manufacturers, MEMSA, SAMPEC, and the state departments mentioned above, all in the name of enterprise development.

The SAIMM will continue to support the YPC, but even more so, and every member of the Institute is encouraged to support them, their mentorship programme, the scholarship trust fund, and in any way that will make a difference.

Our youth are the leaders of the future. One thing is for certain, and that is that the future will be very different from the present. We must now prepare the ground so that, together with our youth, we can co-create the future while embracing their vision of the future.

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