

From the Pen of...

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The impact of COVID-19 and 4IR on educational practice

Now and again, we are confronted by developments whose impact can be either revolutionary or epoch making. These developments are revolutionary in the sense that they require a 'fundamental change in the way of thinking or visualizing something'. The advent of the severe respiratory coronavirus disease in 2019 (COVID-19) is such a development. The adjustments that had to be made were far-reaching to the extent that we can talk of life before and after COVID.

COVID-19 comes also within the context of rapid and unrelenting technological breakthroughs brought about by the Fourth Industrial Revolution (4IR). Klaus Schwab, the business leader credited for introducing the idea of 4IR, argues that

We stand on the brink of a technological revolution that will fundamentally alter the way we live, work, and relate to one another. In its scale, scope, and complexity, the transformation will be unlike anything humankind has experienced before.

COVID-19 and 4IR have altered how people live and work. Of interest is how both COVID-19 and 4IR impact on educational practice. COVID-19 has forced us to move quickly into the digital space. Universities and schools have had to quickly revamp their online and digital platforms in an effort to save the academic project and human lives. In doing so, they found themselves redefining what learning and teaching entails. Multimodal teaching and learning has become the 'new normal'. This calls for a redefinition of what constitutes a 'classroom', 'student', and/or a 'teacher'.

At the same time, the ongoing information explosion and the ubiquity of technological gadgets that characterise the 4IR is beginning to impact on the objectives of education. This is critical given that about 60% of the new school entrants will find themselves in jobs and/or occupations that currently do not exist. The fundamental concern facing policymakers and education designers is how one prepares the young people for a future whose characteristics is largely unknown.

This concern upends how the purpose of education has been defined for time immemorial. The purpose of education is aptly captured by Richard Shaull's foreword in Paulo Freire's *Pedagogy of the Oppressed*. Shaull¹ writes:

¹ Foreword. In Freire, P. *Pedagogy of the Oppressed*, Continuum International Publishing Group (NY)

Education either functions as an instrument which is used to facilitate the integration of the younger generation into the logic of the present system and bring about conformity or it becomes the practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world.

Hitherto education has tended to focus on integrating the younger generation into the logic of the prevailing system. Changes in the system were minimal and glacial in pace. The future was relatively predictable. The skills and knowledge required could easily be packaged.

The context of 4IR is very different. It is defined by volatility, uncertainty, complexity and ambiguity (VUCA moment), to borrow a recent addition in the lexicon of business. This is the context of rapid and unrelenting technological breakthroughs that alter how we make sense of reality.

4IR upends almost everything. It demands new thinking and new visualisation. To appreciate what such a visualisation entails, a reflection of higher education in the past hundred odd years is instructive. This journey can arguably be defined by a period before and after 1994 (courtesy of Kirti Menon & Gloria Castrillón, 2017²). Prior to 1994, and in accordance with the dictates of apartheid, higher education was tailored and 'driven by parochial conceptions of labour market needs, premised directly on race, gender and class assumptions.'

Post 1994, the sector embarked on a number of systemic and structural shifts. The shifts were designed to give effect to the broader political transformation agenda, to ensuring equitable access to higher education, and to providing skills to students which would – it was assumed – inevitably lead to employment opportunities. The prevailing argument was that without employable and skilled graduates the 'South African economy would not succeed'. The broad policy thrust placed emphasis on the development of 'a skilled and capable workforce to support an inclusive growth path'.

Before and post 1994, education largely served as an instrument to integrate the younger generation into the dictates and logic of the prevalent system. Emphasis has been on linking education with skills development and the economy.

This conceptualisation of education is unlikely to equip students for a world as characterized by Schwab. The context of 4IR requires a rethink if education is to meet the future demands and challenges. The approach to education, which was suited for addressing the country's challenges at the dawn of South Africa's democracy is arguably ill-equipped to meet the demands of a future that is fast unfolding. As if to anticipate the future of work, some leading companies are recruiting people without degrees. Being 'book smart' is inadequate.

What is required is an approach that places emphasis on education being, to use the Freirean description, 'a practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world.'

What is needed is that 'a disruption of the spaces of teaching and learning has to occur if universities are to contend with the needs of current society and future societies. In order to teach for an 'unknown future'³

2 Reimagining curricula for the Fourth Industrial Revolution. *The Independent Journal of Teaching and Learning* 14(2) pp.6-19.

3 Ibid

A way forward is to focus on 'human qualities and dispositions' to knowledge as opposed to simply possession of knowledge and skills. What matters is the student's own engagements with knowledge – in other words his or her knowing'.

Sir Albert Einstein was arguably prophetic when he observed that 'imagination is more important than knowledge. Imagination is everything. It is the preview of life's coming attractions.' And perhaps for that reason he argued that education should not be about 'learning of facts, but the training of the mind to think.'

We are not there yet!