

Challenge for HIGHER EDUCATION

The Polycrisis, the Skills Revolution and Higher Education in a highly disruptive world.

FROM SOUTH AFRICA



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Humanity at large seems to be lurching from one major crisis to another with little or no ability to predict the outcomes or where things will land.

With the onset of the Covid 19 pandemic, the ensuing economic shock and technological, environmental and political pressures have converged to shape an uncertain terrain of recurring crisis – which the 2023 WEF meeting referred to as “polycrisis” or “permacrisis”. A not-for-profit think tank, The Cascade Institute, describes a global polycrisis as being ‘when crises occur in multiple global systems and become entangled in ways that significantly degrade humanity’s prospects.’

A cursory reflection of the past decade or more proves the absolute assault on the mindset and confidence levels of organisational leaders. One can argue that it started with the dramatic aftermath of the global financial crises in

2008. Volatile financial markets, lingering high unemployment, widening debt crises in economies globally, and eroding consumer confidence combined to create what is widely being termed as the ‘new normal’. This was followed by the significant development and shifts in disruptive and exponential technologies that, in recent years, have become known as the Fourth Industrial Revolution. With the recent global health emergency and the resulting crises, organisations across the globe entered into an era that the WEF now terms as polycrises or permacrises.

Beyond the large-scale and fundamental changes unleashed by the Fourth Industrial Revolution, global leaders continue to argue that disruptive and exponential technologies also raise difficult questions about the broader impact of automation and AI on jobs, skills, wages, and the nature of work itself.

Amazon currently employs more than two hundred thousand physical robots across its enterprise. This excludes the plethora of digital applications and ‘bots’ used in the course of running one of the world’s largest ‘platform’ businesses. Amazon may be the leader in a pack of global enterprises that has such a formidable hybrid workforce of humans and machines; but, there are tens of thousands of organizations across the globe, in every sector of human endeavour, that are deploying digital and technological resources alongside humans. The first key challenge in this context is: what human capital and skills development strategy is required to fuel this tectonic shift in the new world of work?

NEW LEADERSHIP LITERACIES

A recent study by the Sloan Business School at the Massachusetts Institute of Technology concluded that new leadership literacies and capabilities are required to succeed in this new digitally transformed world of work. This involves conceptualising in a virtual world, handling ever-increasing cognitive complexity,

thinking divergently about new ways of doing things, managing through large, geographically-dispersed virtual teams and making decisions with loads of ambiguity and incomplete information.

In the midst of these complex dynamics, vexing skills training and development questions remain, for example, what are the implications of these profound changes for training and development of graduates for the current labour market? What are the characteristics of the leader who has to navigate the organisation through the era of mass disruptions? What kind of skills and competencies must a Human Capital leader possess in order to effectively manage the talent pipeline of a post-modern business?

For a millennium, higher education institutions have been considered the main societal hub for knowledge and learning and the basic structures of how universities produce and disseminate knowledge. They have survived sweeping societal changes brought upon mainly by technology and previous Industrial Revolutions.

Today, though, higher education institutions seem to be as susceptible to the latest round of technology disruption as other information-centric industries. The transmission of knowledge does not have to be tethered to a fixed location or campus. The technical affordances of cloud-based computing, AI-based learning platforms, massive open online courses (MOOCs), high-quality streaming video, and ‘just-in-time’ information gathering have pushed vast amounts of knowledge to the ‘placeless’ Web. This has sparked a robust re-examination of the modern higher education institution’s mission and its role within society.

Indeed, higher education institutions are being disrupted by a wide variety of social and technological forces. Developments including the globalisation of services work, the increasing value of domain expertise, rapid developments in educational technology and the rise of online open courses are creating both challenges and opportunities for incumbents as well as new entrants. The unbundling of research, educational delivery, content,

and blockchain certification means that new business models and ways of engaging students will be at the heart of a prosperous future for higher education institutions. With the world in a state of major transition there are implications for nearly every aspect of society, not least for higher education institutions.

DECAY OF KNOWLEDGE

Education in its broadest sense is so critical in this seismic shift in the world because the transitions we are experiencing are centred on two essential elements—knowledge and skills. The pace of the decay of knowledge is increasing significantly. A few decades ago, university students would study for a degree, graduate and then live off the fruits of that study for the next 10 years or more. Today, by the time a credential is achieved, the knowledge is already out of date. By just about any measure, the pace of decay of knowledge is increasing.

One of the implications of this rising pace of knowledge decay is that we must be specialists. If we do not have world-class expertise in our domain, we are commodities. As we connect together these pools of deep knowledge around the world, we are seeing the emergence of the notion of collective intelligence. While this idea

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is not new, it is only in the last decade that we have become so richly connected that it is moving from a dream to reality. This is a shift in who we are, our human identity, and absolutely in how we learn.

A former director of Xerox PARC laboratory, John Seely, wrote a few years ago that the half-life of a skill is five years (and shrinking). This means that half of what we learn today will become obsolete five years from now. This idea is getting a lot of attention among higher education leaders, who must plan for a future in which students will need to keep learning new skills ever more frequently after they graduate.

THE TRIPLE CHALLENGE

The advent of triple challenge of reskilling, upskilling and new skilling (RUN) will be felt most acutely by the graduate professional education segment, which has traditionally been structured around traditional one- and two-year master's degree programmes. Many are of the opinion that workers will likely consume this lifelong learning in short spurts when they need it, rather than in lengthy blocks of time as they do now, when it often takes months or years to complete certificates and degrees.

The most important challenge involves a shift in the way students consume higher education. Participation in tertiary education will increase further, albeit in new formats and types of educational products and services. New information technologies could open the doors to new knowledge for a wider audience, if the current social stratification of access and usage patterns could be overcome.

Consequently, higher education institutions are learning to be more nimble, entrepreneurial, student-focused, and accountable for what students learn. New learning styles and mounting financial and sustainability pressures are impacting the education landscape. Almost every day leaders at these institutions are developing new strategies to leverage these developing challenges and opportunities.

There is no doubt that the world finds itself in a precarious situation where constant

change is ubiquitous and responses are slow. Equally, there seems to be a very large number of trends, pressures, and concerns that society and its political and economic leadership are imposing on higher education institutions. A cacophony of voices, a diversity of expectations, and contradictory requests are all evident.

TRAIN AND RETRAIN

In today's job market there is an increasing need for training and retraining of individuals. Thus, a focus on job-oriented education and on economic participation is driving an emphasis on relevance or on what can be called vocationalism—and thus changing the demand structure for higher education with profound effects on the support of, demand for, and appropriate preparation of participants for a rapidly changing job market that requires 21st century skills and competencies.

In the Fourth Industrial Revolution the number of jobs mostly involving routine skills is shrinking and increasing automation at all workplaces is rapidly replacing them. Artificial intelligence technologies like machine learning are permanently eliminating low-skill jobs in offices, too. Many world economies, especially in the advanced world are turning from manufacturing to service, in which most new jobs do not require advanced education.

Finally, we have to concede that education and training in general, and higher education institutions in particular are incessantly on the brink of huge disruptions. Three big questions, which were once so well-settled that we ceased asking them, are now up for grabs: What should young people be learning? What sorts of credentials indicate that a graduate is ready for the workforce? How will higher education remain relevant in the 21st century as the cycle of job destruction and job creation continues unabated? You be the judge! ■

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Learn about racism,
Talk about it,
Speak out against it,
and Act to stop it.

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