Higher Education in the Fourth Industrial Revolution (4IR): Lessons and Trends for South African Higher Education Institutions (HEIs) (Dawchund. B. Jarbandhan and Abiel Mahlatsi)

The world has undergone a quiet technological revolution that has impacted on every facet of human life. The introduction of smart technology such as three dimensional (3D) printing, autonomous vehicles, new forms of currency (for example, Bitcoin), robotic and drone technology and quantum computing, has changed the way in which societies live, work, communicate and operate. Higher Education Institutions (HEIs) themselves have not been isolated from these rapid changes. Online technology driven teaching and learning has become fashionable, and the use of data digital analytics to monitor student throughput and reporting has taken centre stage recently. A perusal of the literature indicates that limited research has been undertaken on the impact of the Fourth Industrial Revolution (4IR) and measuring its impact on HEIs. Consequently, this paper identifies the trends and international experiences that HEIs have adopted in placing themselves at the forefront of this revolution. HEIs cannot use antiquated methods of teaching and learning. Furthermore, HEIs would have to proactively retrain and recruit employees who could prepare students to be active participants in the 4IR. Preparing an adequately trained graduate who is capable of participating in, among other things aspects of social life in the 4IR, is a crucial mandate for HEIs. This paper used an exploratory research design to aggregate all existing evidence to address the following research question: What are the best international practices that South African HEIs can build on to produce competitive graduates in the 4IR?

The full paper is available on the following link:

https://www.dropbox.com/s/7cayf5juxsnyx64/Higher%20Education%20in%20the%204IR%20Lessons%20and%20Trends%20for%20South%20African%20HEIs.pdf?dl=0
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