# Editorial:
# Universities of Technology and Community Engagement in the Digital Age, for Social Justice and Epistemic Transformation

**Ivan Govender**
**ORCID iD: …**

Shortly before the advent of COVID-19, the Durban University of Technology and Rhodes University organised and hosted a very successful international conference on 'Community Engagement: Towards Social and Epistemic Justice' in Durban. In addition to some papers already published, following our review processes, it gives us great pleasure to publish these six seminal papers in this *Alter*nation Journal issue.

As will be clear from the few points below, these papers – and also those published elsewhere – are of continuing relevance, for at least two main reasons, on which we shall come back to at the end of this Editorial.

*Firstly*, critical reflection and research concerning the development and use of information and digital technology in HE has a substantial history at DUT. Our first paper by ***Abdool Haq Bhorat*** provides some background on this epistemic history, and then raises the matter of how it is extremely important at technical universities as well as higher education institutions in general, to continue to develop, master the use, and deploy and implement digital technologies optimally. The arrival and impacts of COVID-19 has accelerated the use of digital technologies and also social media in education. This is a dynamic that need to be carefully fostered and curated in the interests of the enhancing and advancing of quality teaching and learning, scientific research approaches as well as the articulation of the research-led institutions in our country with our communities in our vicinities, through relevant community engagement programmes, optimally.

*Secondly*, whereas the history of dominating and enforced social engineering by dominant regimes, usually only serve the few, social

entrepreneurship theories are more sensitive and subtle constructs that aim at the creation, fostering, and furthering of cohesive societies. Attuned to the conscious identification of the requisite values and value systems that serve social justice and socially just forms of transformation – also epistemically – socially just social entrepreneurship initiatives, especially among, but also with and for youth, may importantly contribute towards the enhancement of the communal upliftment and well-being of societies, as ***Anyway Mikioni, Livhuwani Nkondo, Vhuthu Mampheu*** argue. In this regard, it is especially universities of technology, who also closely interact with communities on the level of skills and career training, that they may play constructive socially entrepreneurial roles. Through specialised research-led learning experiences youth may initiate, but also benefit from planned and strategized opportunity-based entrepreneurship initiatives – socio-economic, socio-political, and socio-cultural (e.g. in community education initiatives). They may also help creating the economic conditions in a community, for the enhanced adoption and implementation and uses of emerging and new technologies. These may range from assisting in network development – introducing and facilitating the collaboration of relevant role players in win-win approaches, and also in collective dialogical bargaining that may serve communities optimally. Whereas educational entrepreneurship may lift the general knowledge-informed interaction of communities and families with their communities and environments, explicitly planned social entrepreneurship that aims at capability and capacity training and development of individuals and clubs, societies and communities, provide greater possibility for the further qualification and training of members to become earners or even a second and third breadwinner in, and for a family, and substantially contribute to community-, and family-focused resource as well as assets development and accumulation. By so doing, economic risk is also spread, and thereby reduced. To these ideas may be added, but our article on this matter raise important points that need to be pursued further, especially concerning ways and means to provide opportunities as well as realistic expectations for our youth in South Africa.

*Thirdly*, higher education institutions, maybe more than other institutions in the post-1994 era in South Africa, has suffered the most under the dearth or even absence of inclusive leadership. On the one hand so-called experts, which they certainly were due to certain knowledge, skills and expertise garnered under favourable but unequal racist conditions have continued to occupy positions at tertiary institutions that have stifled rather

than accelerated epistemic transformation. This period in our history is nearly over, since some of these personnel have left the institutions by now or have retired. So, now, after 30 years, it is important, beyond measure, to practice inclusive leadership approaches at our tertiary institutions, since it provides the space for our academic but also professional staff to creative contribute toward making our tertiary institutions substantial contributors to universal knowledge generation. As recognised national research-led institutions, the sky is the proverbial limit, in our international network for research capacity development and substantial contributions to knowledge generation. And our article, by ***Rosemary Mankinti Phumelele Zakwe*** lays the foundations for this, in so far as this vision can only be materialised through inclusive HE leadership, in all its dimensions.

*Fourthly*, ***Nkululeko PraiseGod Zungu*** and ***Lawrence Mpele Lekhanya*** raise a very, very important issue, viz., the expectations and experiences of *female* students in technical and vocational training prorgammes at technical universities. Given that 60% of our students are female, do we know what our female students' expectations are? Do we know what their experiences are? Do we know what their disappointments are? can we learn from these? The article raises these very crucial points and through appropriate date proffers some answers to the questions. The debate has not een settled through and more research needs to be done. Do we need our female students' needs at Technical Universities, i.r.o. their chosen technical vocational career paths, the requisite knowledge, and skills, as well as opportunities, or possibilities for potential innovative initiatives in their area of expertise?

*Fifth*, with regard to the matter of health services provisioning in South Africa, our medical institutions, like our training hospitals play a crucial role. Yet, as on many other fronts of social and epistemic transformation, realistic studies, analyses and initiatives need to be engaged constructively in phased ways so as to ensure that all our citizens receive the same quality of health and medicinal care across the board. On this score, ***Thabisile L. Mtshali's*** case study focuses on a rural hospital is helpful in so far as it identifies at least five seminal matters that need to be factored into our planning and transformation of the health services of South Africa, viz., available funding, trained personnel, working conditions and working hours, medicine, and motivated and inspired and committed personnel.

*Finally*, ***Obianuju E. Okeke-Uzodike*** and ***Emem O. Anwana*** raise the question of university rankings. The paper provides helpful analyses of a

sample of the ranking systems that are annually used to rate and rank universities internationally. Acknowledging that this is a complex matter, we also need to explore how we could not only identify relevant criteria to relatively young tertiary institutions in the global South, and developing world. We also need to identify, explore and engage viable opportunities to develop and even pioneer our technical university-led knowledge production in the service of innovative cutting edge vocational training.

The pre-COVID-19 Community Engagement 2017 conference was not only significant and timeous at the specific time it happened. It also laid the foundations for our tertiary institutions' pursuit of excellence in community engagement, focused on, the optimum development, adoption and use of IT; of the integration of social entrepreneurship strategies in tertiary programmes; of the using and fostering of integrated leadership practices; of a constructive focus on serving the needs and aspirations of not only male but especially female students, who are in fact in the majority at tertiary institutions internationally; of the optimum constructive support our hospitals – especially rural – and then, if we put the mosaic together for the strategic positioning of ourselves and our institutions, in lieu of tailor-made tertiary institutions rankings criteria, in the interests of social and epistemic justice. Done comprehensively and realistically, it shall constructively add to the acceleration of forms of social, and epistemic, justice, as well as the vitally important areas of optimal economic performance by enskilled and capable leaderships and workforce, at levels of trade and industry, but also for us, for local and rural economic development and well-being.

As usual, and drawing on the abstracts for the articles, we provide a brief summary of all the articles in this issue of Alternation.

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**In 'Artificial Intelligence: A Tool for Educators', Abdool Haq Bhorat** investigates the challenges faced by the millennial generation, known for their technological proficiency and their preference for visual learning, as they enter universities. The central focus is on enhancing students' learning skills by using artificial intelligence technology for repetitive and sometimes complex situations. Reference is made to a case study of a doctoral

investigation conducted by Bhorat in 2014[1] on the establishment of a curated multimedia portal at a University of Technology (UOT). Part of the investigation revealed that some academic staff within a programme tended to downplay the importance of using technology in teaching and learning. This preference conflicted with the technological preferences of the millennial generation. Additionally, these academic staff members lacked the advanced technical knowledge and expertise needed to prepare the new generation for the job market. The fourth industrial revolution, characterized by the contributions of pioneers such as Michael Faraday, marked the integration of computers and the internet into various aspects of daily life. This revolution was foreseen by Greenberger in 1964, who predicted the use of computers in scientific research and various industries. The vision of Vannevar Bush in 1945, with his proposed Memex machine, inspired hypertext, and innovative ways of organizing, storing, retrieving, and sharing information. One such development is the digital notebook, facilitating seamless access to text, images, videos, and audio, as well as file sharing among users. To address the challenges posed by the fourth industrial revolution, the Bhorat suggests a potential solution: leveraging Artificial Intelligence (AI) technology as an educational tool including smartphones. This concept was practically demonstrated during the Community Engagement Conference in Durban in August 2019. The paper does not specify a hypothesis. Instead, it aims to combine lived experiences and institutional knowledge to suggest an approach for using Artificial Intelligence in education.

'**Exploration of the Barriers to Youth Social Entrepreneurship**', by **Anyway Mikioni, Livhuwani Gladys Nkondo** and **Vhuthu Mampheu** starts off by reflecting on the academic debates of what social entrepreneurship is, and how it is influencing the livelihood of individuals. Seeing that most of the approaches developed and the related academic debates were mostly western-oriented, and little focused on Africa and especially South Africa, these studies fail to fully capture the reality of social entrepreneurship and its effect on youths at a South African context. It is, in their assessment therefore, not surprising that entrepreneurship development policies and interventions are not successful in stimulating entrepreneurship. This problem, this article argues, is a consequence of the limitedness of

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[1] Some sections of this paper first appeared in the author's doctoral research conducted in 2014.

localised research focused at understanding social entrepreneurship and youths in South Africa. This constitutes a research gap, which this study seeks to address. It is against this background that the aim of this study is to explore the barriers that youths face when embarking on social entrepreneurship. The study adopted a qualitative approach, and the sample was selected using convenience sampling. The sample included 8 youth entrepreneurs from 8 universities who had gathered at the Sandton Convention Center in Gauteng. Participants were interviewed using an interview guide. The findings revealed challenges that threaten social entrepreneurship which include societal resistance, networking barriers and negative cynical perception. The value of this work is among the first in contributing towards understanding the social entrepreneurship and youths within the South African context. The implication of the study is that it potentially provides policymakers with valuable tools to understand social entrepreneurship in a South African context and provides the premise for intervention measures for social entrepreneurship.

**Rosemary Mankinti Phumelele Zakwe's 'An Evaluation of Inclusive Leadership Approaches for the Provision of Quality Higher Education at the University of KwaZulu-Natal'**, examines the aspects of inclusive leadership approaches for the provision of quality higher education at the University of KwaZulu-Natal, South Africa. The major problem informing the study was that leaders did not take into cognizance the importance of inclusive leadership in order to enhance the provision of quality higher education. In order to answer the research questions, the study used qualitative research design and in-depth interviews with Deans and Heads of schools, Academic Leaders, Operations Managers, and Administration staff. The findings reveal that inclusive leadership remains a serious challenge in higher education institutions due to various perceptions of the importance of inclusive leadership approaches with regard to the provision of quality higher education. The study concludes that leaders do not expand their efforts to identify exclusive approaches, practices, and behaviour, and educate the workforce to foster inclusion in decision-making, as universities becomes more diverse. Based on the findings and conclusion, the study recommends that UKZN leaders should effectively view inclusive leadership as a need to empower individuals. Inclusive leadership will assign new approaches for innovation hence providing answers to the human resource challenges facing the institution today.

Since Female students comprise the majority of students worldwide,

accounting for approximately 60% of the student population, it is crucial that their unique expectations and perceptions of technical vocational education and training be studied. In '**Female Students' Expectations and Perceptions: A Case Study of South African Technical Vocation Education and Training Institutions', Nkululeko PraiseGod Zungu** and **Lawrence Mpele Lekhanya** studied female students' expectations and perceptions as these especially relate to teaching quality, support services, and future career prospects. To evaluate the expectations and perceptions of the female students, regarding service quality within selected TVET institutions, a survey was conducted using the service quality (SERVQUAL) model as the measurement instrument. The survey reached 240 females drawn from diverse campuses of the selected TVET institutions, ensuring representation across different groups through systematic and quota sampling techniques. Reliability was assessed using Cronbach's Alpha, and data analysis employed descriptive statistical techniques. The findings of this study highlight the significant presence of female students in TVET institutions and their level of expectations and perception were revealed. As a result, five gaps were identified, that may constructively inform the quality of services to students at vocational education and training institutions.

**Thabisile L. Mtshali's** very helpful and informative study, '**Evaluating Prominent Factors to the Failure of Public Healthcare Services in KwaZulu Natal: A Case Study Umphumulo Public Hospital',** studied the multiple intricately linked elements that contribute to South Africa's poor delivery of health services. There is ample evidence of unpleasing service delivery in public, from developing and developed countries. This is despite government rhetoric about boosting efficiency in the health sector and investing in the construction of public health facilities. There are persisting challenges faced by healthcare workers (health professionals) and patients mostly in public or government healthcare institutions. And, to note, the remote healthcare institution also experiences comparable challenges with urban government hospitals, and too, that the health sector is internationally dual – there are private and public healthcare sectors. So, one may argue that some of the challenges exist in both sectors, yet the difference is incomparable and unjust. This study acknowledges change and transformation since 1996, by government prompting to increase efficiency and effectiveness in public healthcare sectors. However, since one may distinguish between good policy implementations, and some salient contributing factors to the existing challenges, the study focuses on the push

and pull factors to the uMphumulo public hospital calamity. The findings about the challenges the hospital experiences, are: lack of funding resulting in insufficient and shortage of medication; and that it is short-staffed, resulting into severely high workload, burnout/ stress, exhaustion, and absenteeism. The study used Maslow's hierarchy of needs theory and qualitative research and unstructured interviews during articulation of research questions from doctors, nurses, human resources personnel and a dietician and also a systematic review analysis.

In the context of the implementation of community engagement programmes by select universities, **Obianuju E. Okeke-Uzodike's 'University Rankings - Does One Size Fit All? Bringing the South African Universities of Technology into Perspectives'** seeks to argue that indeed, one size for the ranking of universities does not fit all universities. The practice of university ranking has garnered much debate amongst scholars and decision-makers on its varied applicable criteria. So, increasingly, critics have argued for and against the strengths and weaknesses of the ranking metrics, pointing out the absence of comprehensive indicators given the multidimensional characteristics of higher education institutions globally. In this context, a rethink into the practice of ranking and its measuring indices becomes paramount. The article critically examined the question raised by scholars - 'Does one size fits all'? drawing example from the South African Universities and in particular, the Universities of Technology (UoTs). This paper presented some reflections on the diverse background and varied characteristics that depict the higher education institutions in South Africa. The findings posit the need for non-uniform ranking metrics given the differences in institutional settings across world.

So, concerning the relevance of papers emanating from the 2017 conference, and this volume, we believe a follow-up international conference is needed, and there are three main reasons for this. One, the papers' topicality are such, that the matters they focus on, now need to be researched and the requisite data generated and analysed, within not only post-pandemic life and work conditions, but also in view of the looming possibilities of new pandemics on the horizon. Two, these same focuses need to be taken to the next level of the re-imagining of the research-led technical and academic universities' systems and processes of community engagement in lieu of the accelerating of tertiary education into the digital age. Three, since it has become clear that

geo-, and socio-politically speaking, the world has also entered a new age of forms of international violence, war and value extraction, tertiary institutions of the global South are in need to chart  way forward where they are not only reckoned on par with their counterparts internationally, but also contribute towards providing incisive global research-founded and -informed intellectual direction.

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Professor Ivan Govender
Public Management and Economics
Durban University of Technology
Durban
South Africa
ivang@dut.ac.za