

The Imprint of Education

The Imprint of Education (TIE) is a project of the Human Sciences Research Council (HSRC), South Africa, in partnership with the Mastercard Foundation that is exploring the post-graduation trajectories of Mastercard Foundation Scholars Program alumni. TIE is investigating topics such as ethical and transformative leadership, give back, employment and entrepreneurship, student support and mentoring. It consists of five sub-projects or learning activities. The TIE project principal investigators are Prof. Sharlene Swartz, Dr Alude Mahali and Dr Andrea Juan.



Reimagining the African University – Conversation Series

Learning Activity Four consists of a series of conversations with experienced scholars and thought leaders on the future of higher education in Africa. In Reimagining the African University, they discuss challenges, best practices, and the potential for innovation to initiate further dialogue. This transcript is part of a series of interviews conducted in 2021 and may be used with appropriate attribution for scholarly purposes. The learning activity is coordinated by Prof. Thierry Luescher, under the intellectual leadership of Prof. Crain Soudien.

Interview with Prof Tade Aina

Interview conducted by Prof Crain Soudien, Prof Thierry Luescher, Dr Angelique Wildschut and Ms Vuyiswa Mathambo on 7 March 2023

Crain Soudien: A present focus of this project is to learn what important innovations, established practices and emerging practices are under way at various higher education institutions, including in relation to pedagogical innovations, curriculum reforms and Africanising modes of inquiry. There is a view which arises out of the crises of the past few years that institutions and individuals are beginning to exercise urgency in ways that had not been seen before. People are taking the initiative. The COVID-19 crisis forced people to rethink what they are doing. So, from your perspective, your experience of these institutions, what are some of the noteworthy emerging practices?

Tade Aina: I like the point about the emerging intensity and the exercising of urgency in ways that have not been done before, which links to how I feel about what's going on in African universities. It's a mixture of excitement, trepidation and even fear. Because there is a wave of innovation that is also going on outside the universities that has implications for and impacts on what is taking place inside the universities. This is creating tensions for the regulatory institutions. It is also challenging inherited notions of higher education which have an almost theological aspect – for example, in

relation to the notion of a convocation, the wearing of gowns, and the traditional titles such as Dean, Provost, Vice-Chancellor and Chancellor.

In part the change is led by the impulse to push Africa into the Fourth Industrial Revolution as a result of COVID-19 particularly in relation to how digital technology can be understood and deployed, which is leading to new ways of creating ideas and imagining how institutions may be restructured. In this regard, a recent paper on globalisation described a new sense of placelessness, but also a heightened regard for antiquity.

So, there is a significant amount of tension around the conceptualisation of the practice of higher education at the moment – and tensions are good from a dialectical perspective because they can lead to new forms of synthesis. In this respect, there is a tension between the old conception of what may be termed “dignified” academic work and new forms of academic “enterprise” which view the project from the perspective of business and markets. That is something that I’m beginning to see. And the element of innovation is evident in pockets in the larger institutions, as well in the ways that smaller institutions, which are still in limbo, are trying to re-create and re-configure themselves.

So, for example, you have Strathmore, which is a chartered university in Nairobi, providing specialist legal and business training; and you have these new schools of business and governance that are emerging at established institutions, such as the University of the Witwatersrand (Wits), which are driving the Senates and the Councils at these places in directions that they themselves had not yet envisioned. In this respect, it may be argued that the rulers and governance of many universities are far behind what the practitioners on the ground in various units that have access to ideas and resources are already doing.

Soudien: So, are you identifying these business schools as key sites of innovation?

Aina: It is not only the business schools. There are other interesting schools that have been emerging, such as the schools of governance, and the school for future studies at the University of Pretoria.

As certain innovations around transdisciplinary schools have been undertaken, there has also been a breakdown of the old ways of thinking about the nature of knowledge largely as a result of occurrences such as the climate crisis. There is now a greater emphasis on the holistic nature of knowledge. The arts and sciences are coming together around the issue of climate change, although, unfortunately for the arts, they might not be seen as that significant in this whole process even though they may play a more important role as climate studies become increasingly integrated.

There is now a geography focus in climate studies, an astronomy focus, a geo-science focus and a biotechnology focus.

Meanwhile, the governors of the conventional big universities allow such studies to emerge but without being able to provide a vision for what is happening. While the governors of the smaller universities, such as Ashesi in Ghana; the African Leadership University in Mauritius and Rwanda; Strathmore in Kenya; and the Pan-Atlantic University in Nigeria – universities which are generally no larger than the individual units and schools at the larger higher education institutions – the vice-chancellors and senates of these sites are more involved in the innovation that is taking place there.

So, there are sites in African higher education that are innovating outside the traditional governance boundaries and visions of higher education, which is a process supported by the centres of excellence programme promoted by the African Research Universities Alliance (ARUA) – including, for example, at the University of Lagos.

The innovations being produced are interdisciplinary in nature; they entail engagement across boundaries. In the process, different departments and units from older universities are re-constituting themselves, maybe temporarily, in new forms. At the same time, the smaller universities which have the ability to be more flexible and nimble, are re-forming, re-casting, re-interrogating themselves. In part, these institutions benefit from visionary leaders, such as Patrick Awuah who founded and oversees Ashesi University. But the benefits of visionary leadership should not be seen merely in relation to the individuals at the apex of these organisations. Visionary leadership is also to be found in the matrices of engagement – the leaders of the sub-units or sub-levels who are doing interesting things.

All of this offers hope for change over the next five or six years, although the skills base remains insufficient across the continent. In this regard, the transformation higher education in Africa in terms of access and innovation depends on the production of cohorts of graduates who can combine and configure skills and knowledges in new and unprecedented ways.

Indigenous knowledges have a potentially crucial role to play in this process, not only as repositories of learning but as an element in the production of new theories. In this regard, I see indigenous knowledge as an aspect of knowledge flows, rather than as a static stock of information. Indigenous and endogenous knowledges may combine as students and researchers experiment with digital platforms and evolving sciences, such as in the fields of genetics and biotechnology.

The forging of connections between indigenous and endogenous knowledges may contribute to the broader process of knowledge reconstitution that is taking place at the moment. There is a move to

a pre-industrial revolution view of the nature of knowledge under which there was a unity among disciplines. That might be the shift that the ongoing fourth and emerging fifth industrial revolutions are creating- a shift in epistemologies- such as how we know, work in, and use the world today. Once, all knowledge was viewed as an aspect of philosophy – and then there was a splintering into the various sciences and, subsequently, further splintering. However, the present establishment of new spaces for experimentation and innovation within and outside is producing new forms of contestation over the nature of knowledge which are leading to it being reconstituted in new, more interdisciplinary ways.

The process has given rise to new tensions in the regulation of higher education, particularly in the context of the increasing deployment of digital technologies as a tool for teaching and learning. Many of the present founders of online academic ventures and enterprises are people without a background in academia. This is a new phenomenon in higher education governance which has traditionally been the preserve of individuals with a track record of intense, extensive scholarship in a particular field of study. These new educational entrepreneurs, a number of whom some people have dismissed as charlatans, adventurers and imposters given their lack of academic credentials are, in some cases, wooing thousands of students to register for their training as they seek, and often obtain accreditation, for the new universities and schools that they have established.

The question that then arises is: How to regulate the sector so that the so-called “imposters, charlatans and adventurers” can be prevented from deploying online spaces to deceive millions of young Africans who are hungry for knowledge, while at the same time fostering the potential of digital technologies as a means to accelerate and scale up the provision of education across the continent?

So, for example, while the growth of I-labs and E-labs may be exploited by educational entrepreneurs for profit, such facilities can also facilitate popular access to real-time simulated laboratory experiences and experiments, as was shown during an I-lab project for civil engineering students that was jointly established by Makerere University and the University of Cape Town (UCT). The project reduced the queues for the physical laboratories; resolved problems of access to resources at these laboratories; and enabled female students to undertake their experiments online, free from the sexual harassment that a number of them had encountered in the physical laboratories. In addition, the lecturers said they had been able to integrate the laboratory work with their lectures and tutorials more efficiently and effectively.

I-labs and E-labs have become commonplace in computer- and software-engineering courses, but may also be used increasingly in the fields of mechanical engineering, physics and biology. So, higher education in Africa has entered a new phase in how teaching and learning is being delivered,

which begs the question: How best may teaching and learning be delivered in the future? And who should be responsible for ensuring that the new ways of teaching and learning are being delivered properly and effectively?

In this regard, the resources for the next phase are not going to come from only external foundations and philanthropists. They must be derived from the continent's own wealth and resources. External interventions can only go so far. Africa itself has to find cost-effective ways of doing what it has tried to do for the past 30 or 40 years in the form of massive investments in physical infrastructure – that is, provide spaces for the massification of higher education. This represents a major challenge for the potential founders of new sites of education.

In this respect, higher education reformers should question the old colonial thinking that at least 50 acres of land are needed for new institutions; and that multiple student hostels, large senate buildings, massive lecture theatres and impressive gates are required for viable places of higher education. Even the new universities want to have impressive gates and large lecture theatres and convocation halls. The point here is not that there is no value in a physical presence, but rather that it may take a different form than the old, massive constructions at universities which resemble chapels, churches and citadels. Instead, for example, the site of an abandoned trade fair may be turned into a university complex. Malls may be reconstituted as spaces for higher education and technical training. There should be cross-fertilisation with the humanities, in which digital technologies have already been widely used to produce animation and theatre, with the aim of producing new kind of digital and physical laboratories and other learning spaces. Ancient manuscripts, lost languages and lost arts and crafts may be deployed to produce new educational spaces unlike the present citadels of learning, which may even be torn down to make way for something new.

Similarly, the whole conception of libraries, which is already changing, should be transformed to establish an information and learning commons. Libraries should move from being places of silence to being areas of interaction, as materials and books are digitised and access to bibliographic databases is democratised and digitised through the adoption of new forms of software. That shift is imaginable and is coming, including at the libraries at UCT, the University of Ghana, Legon, the University of Pretoria, Stellenbosch University and the Wits with the support of the Carnegie Corporation of New York. Tens of thousands of volumes can be made available via cellphone, if the data is good and the appropriate digital and telecommunications technologies are used.

Soudien: Do you see the development of higher education in Africa being informed by a millenarian perspective, which is a sensibility that find expression in many other ways across the continent?

Aina: It is interesting that evangelists who promote conservative creeds about sexuality and marriage and advocate a return to pristine forms of human existence use the most advanced technological platforms to disseminate their message.

I am not a technological determinist; I'm a dyed-in-the-wool sociologist. However, I cannot but begin to acknowledge and recognise that the nature of our humanity is being transformed by what has been called the fourth and fifth industrial revolutions. For example, the latest developments in vaccine production leverage genetic engineering; and it is now possible to renew different body parts using bio-technology. Students who are not physically present can be engaged and taught simultaneously across distances of thousands of miles via cheap and widely available technology such as WhatsApp. These are phenomena which would once have been ascribed to magic or witchcraft, as the humanities show.

In other words, it has become quite common to imagine the “impossible”, whether in terms of human longevity or millenarianism – and this rejection of what has been taken for granted for so long is something that universities will have to address. So, for example, students are questioning the model of spending four years obtaining a bachelor's degree and only then – and only if one is best in class – moving on to an MPhil and a PhD. People – both those who finished school and those who didn't – are becoming increasingly impatient with the guardrails and the boundaries of studying and of higher education. I know many students who have completed their Master's and want to embark on a PhD, but only want to attend university for a few months before leaving and undertaking their doctorate remotely, keeping in contact with their supervisor online.

There has also been a shift in terms of the new forms of artificial intelligence that may be deployed for essay and dissertation writing. Aside from the issue of plagiarism, which has been addressed, this shift, which accelerated as a result of the COVID-19 pandemic, has introduced a new brave world, changing the way young people themselves think about access to knowledge and what they want in terms of such access – which may be a much more mixed offering than that currently provided by universities. At present, the accreditation and examination systems at the universities do not support the certification around the mix of education that the students want for themselves, which leads to many of them leaving universities after they have acquired the mix of what they want. This poses a challenge in terms of how higher education should be re-constituted and reconfigured.

Thierry Luescher: You say that the ways in which knowledge has been organised into different disciplines and fields doesn't really make sense anymore because the problems being faced are different and require different approaches; and that as a result there are spaces of innovation

emerging where trans-disciplinarity is possible; and that new thinking and new epistemologies are emerging. I wondered whether you wanted to elaborate on this process.

Aina: There used to be overt subversion of universities from within, but now there is a much more surreptitious subversion occurring more from the overall knowledge ecosystem. On one side, there are the governors of the higher education institutions; and on the other, there are the practitioners within the higher education institutions who are not stuck with the governor's mentality and who can be transcendental in their imagination of the possibilities for reconfiguring knowledge. And this is where I think Africa has a fighting chance of thinking and acting differently, notwithstanding the condescending discourse around the idea of "leapfrogging".

So, in terms of investing a large sum of money in a new higher education space, there is the potential for doing something different that really captures the trends, the imagination – but in a disciplined way so that a new space may be created which is the best in terms of the kind of knowledge that it is producing. And such can only be ascertained by validating the knowledge that is being produced in an appropriate way – that is, from the point of view of both the experts and the users or consumers of the knowledge.

This issue of validation is critical since the tendency at universities has been only to validate knowledge through what may be described as a "guild of experts". Historically, universities have operated as alchemists' guilds. First, those who have undertaken a period of study become "bachelors"; then, as "masters", they are able to carry out unsupervised study; and then as "doctors" they can turn base substances into gold. So, there is a need to move away from the old guild system that constitutes this space.

However, as the founders of new institutions such as the African Leadership University /ALX have found, experimentation in higher education cannot be entirely independent of history and experience or of the ways in which knowledges are currently being validated. This has given rise to tensions, with some people arguing that, in particular academic fields such as physics, knowledge can only be produced and accredited within certain physical and ideological spaces; even as proponents of new higher education institutions and spaces have sought to be both rigorous and adventurous in their efforts to produce and validate knowledge in different ways.

Meanwhile, new mixes of knowledge are already emerging in biotechnology, in genetic sciences, visual arts and animation, in climate studies and in environmental studies, as well as in the digital humanities and the social sciences. So, the question then is: How to begin to harvest these new forms of knowledge, this new experimentation within new configurations of space and place that allow for greater access and unprecedented forms of accreditation and validation. This is the

challenge and the possibility for Africa. At the same time, the process should not mean the end of the established institutions. But rather that the established institutions will be forced to reconcile with the new institutions as well as the changes taking place behind their own gates – such as in the form of the schools and the centres which are intentional about creating change even as the faculties remain stuck with their single disciplines.

Soudien: The tension used to be between the hard sciences versus the soft sciences. But with the emergence of these new centres of experimentation inside the universities – such as at UCT’s Graduate School of Business, which used to act as a stepping stone into the highest ranks of the capitalist order, but is now more interested in questions of sustainability – the site of the tension has shifted. So, how would you characterise the new kind of tension as it is taking expression in the African university?

Aina: In terms of decolonisation, indigenous thinking or pre-industrial thinking may be deployed to deconstruct the binary thinking that is a child of Western positivism. Binary thinking has reigned in the world in many ways. In religion, it led to ideas of good and evil; and it has shaped Western epistemology, spirituality, metaphysics and ontology. However, ontologically, binary thinking does not hold true because the world does not comprise only opposites. The world is not structured in binary forms, even as such forms have shaped the systems of classification for the world that emerged from Western epistemology, including in sociology. In fact, the world may better be viewed as a continuity, a spectrum, featuring different shades of experience and existence, as is becoming increasingly clear with the evolution and deployment of new technologies. For example, in the biological sciences, the nature/nurture divide only came into existence once posited by Western epistemology, when the reality is that these poles, which are always only found in a process of interactive engagement, cannot actually be separated.

Similarly, the tension between the hard and soft sciences is a product of the colonial knowledges promoted by African universities which are historically colonial institutions – and is becoming increasingly outdated. For example, the study of software engineering has changed the notion of engineering as a discipline which was originally conceived as a matter of hardware. The genetic sciences which have become a discipline in their own bring together many strands of thought. Schools of climate studies are fundamentally interdisciplinary. Even physics is beginning to be challenged in this way. Meanwhile, computerisation has enabled the integration of qualitative data in the establishment and implementation of systems.

So, Africa, as a continent cannot afford the luxury of the old ways of thinking anymore. Indeed, established institutions in the Global North, such as MIT, Harvard and the universities at Cambridge

and Oxford, are moving ahead with new innovative centres and laboratories even as they cling to old theological forms of governance, such as provosts.

In this context, the old idea of laboratories as spaces of the so-called physical and hard sciences is giving way to a new notion of social laboratories in which qualitative elements, things that are not quantifiable in a positivist manner, are subject to experimentation. So, now there are impact labs, innovation labs and policy labs. Places in which human reality beyond the biology of cells is being considered; places in which students and scholars may study the ways that the cells of social, political and cultural bodies and infrastructures are being continuously reconfigured.

The process of change should entail discarding epistemologies that only think in binary terms and that continuously reconstitute binary elements as the basis for thought in an endless fiction; and, in their place, establish advanced African thinking systems which consider the limitless continuities and shades of reality in the world. I think this is the challenge.

However, when I go and sit with the governors of universities – people who once lived in the intellectual world and were stimulating – I rarely have imaginative conversations. Perhaps these former academics changed their ways of thinking once they became senior university administrators and encountered the magnitude of the often metropolitan governance that characterises contemporary universities, for instance, overseeing the infrastructure – the water, the security – for several faculties and hundreds or thousands of students.

In this context, perhaps what is needed is a new kind of role or position from which it is possible to begin to think the unthinkable and see the unforeseeable – such as a chief innovation officer whose job in my imagination, would be to walk around the university and to sit and listen, perhaps on the steps outside the library, to the cleaners and the staff at the gate; to the students; and to the young and old members of the faculties. And that officer's job would be to harvest innovation – and to represent and promote that innovation within the university – affording it legitimacy since this would be a post in which the university had invested. In this way, universities could establish a formal way of engaging with those who are thinking in different ways and who are contesting the power dynamics within the institution. Such a post could be filled by a young scholar or a contrarian thinker who is not scared of the power games in the institution and has no wish to become provost, vice-chancellor, chancellor or any such position. They would have transcended that and would now only be interested in identifying the dynamics and spaces of innovation within the university, including where there are clashes and tensions. And they would have a mandate and the scope to perform this task, enjoying unlimited access to spaces because they would not be acting as a gatekeeper or threatening anybody.

Soudien: The leaders of universities are often quite enchanted by these centres that have emerged, such as the centre of innovation at UCT, and even boast about them and erect new buildings to house them – even though these centres represent an opposition to their mode of governing and can be quite disruptive. In this respect, it seems that university leaders have not developed a comprehensive understanding of how their institutions should relate to these centres.

Aina: It comes back to this notion that I’ve been struggling with: the tensions and pretensions faced by the governors of higher education. These institutions offer those who have direct administrative decision-making authority and who control the resources spaces in which they can enact their pretensions in one way or the other. These institutions also serve as vessels and vehicles for funding in ways that stand outside the normal budgetary systems. For those who are daring in their short five-to-ten-year term as leader, the institutions offer a space for resolving tensions in higher education in new ways. I saw a little bit of that at Wits, where a number of these centres were established.

The establishment of such new centres and schools is an interesting phenomenon because, if allowed, these new institutions can undermine the current hierarchies at universities. They allow a spirit of adventure and adventurousness – a spirit of creativity, innovation and entrepreneurship – to emerge. And as the economist Joseph Schumpeter posited, the process of innovation and technological change, which is espoused by such centres, may be viewed as a form of “creative destruction”.

Meanwhile, the ways in which schools of business at universities not only study, but engage in, markets have already had an impact on their host institutions. Universities talk of their “business models” rather than funding perspectives for their intellectual models. Individuals in the higher education system are asked for their “business propositions” whenever they are writing a proposal or seeking to establish a particular intellectual or creative project. Metaphors of doing business have been institutionalised and internalised in day-to-day thinking. And this is something that also bothers me. While it opens creative spaces, it could lead to the fetishisation of “business” as the sole way of life and living even in universities. Balance and nuance are always necessary.

Soudien: I have to write a piece now for a collection of essays on universities and I think that I’m going to take this provocation that you’ve raised and look at what some of these centres are doing and whether and how they may constitute a proposition for a new direction for universities, a re-institutionalisation of the universities away from their existing architecture as guilds.

Aina: Notwithstanding the emergence of the guild system as an element of feudalism, many indigenous modes for organising economies and societies, such as those of hunters and gatherers

and pastoralists, remained relatively intact in Africa – and continued to ensure that knowledge was conveyed and transmitted in different ways. Such may form the basis of African pedagogies.

For example, the art of hunting concerns more than hunting alone – more than just taking and throwing a spear. In Maasai culture, it also entails scouting by the sun; and identifying spoor by taste and smell so that the passage of animals may be tracked. In other words, indigenous cultures have their own ways of acquiring and disseminating knowledge. Another example would be the practice of simulating love-making as a rite of passage for women found in some ethnographic accounts. The idea was for women to gain an understanding of their bodies in a concrete, practical way, rather than through theoretical training. The ethnographic studies of Africa and its folklores are rich with narratives of alternative epistemologies and pedagogies.

So, it would be interesting to look at pre-colonial and indigenous pedagogies and the kinds of educational connections that they may make, particularly given that under the present basic education system, many African pupils fail to understand what is being taught because the pedagogies of their communities are different from the pedagogies that have been inherited and laid over them in schools.