

### **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 Ms Claudia Frittelli**

### **Interview conducted by Prof Thierry Luescher on 26 May 2021**

**Thierry Luescher:** What is your understanding of the university in Africa and the roles that it can play, and the purposes that it can serve?

**Claudia Frittelli:** I hold the traditional view that the university's purposes are teaching, research and community engagement. The other things that fit within that are the transmission of knowledge and culture from one generation to the next and developing citizenship. Universities are an important route to democratisation; reforming public policy; building civil society; and development. Universities produce the leaders – the scientists, the scholars and the public officials – who are needed for development.

**Luescher:** What is your vision of the university of the future on this continent?

**Frittelli:** I don't think the vision of an African university exists; after all, Africa is not a country. But adopting a pragmatic approach, it is crucial to have a faculty that can conduct research that is up to standard. There is a whole thing around Western standards and rankings and about publishing locally versus internationally, but it is possible to do both; African universities are able to publish locally and internationally. In addition, while addressing their own local problems and challenges, they can also be part of addressing global challenges. Their response to the Covid-19 pandemic has shown how relevant they are in terms of research and producing equipment and resources for communities. In addition, as university staff and students increasingly worked from home under lockdown, they became more engaged with their communities, dismantling the ivory-tower concept of the university. Covid-19 has

illustrated how an African university can play an important role in a global crisis, for example, by tracking the course of the pandemic.

African universities have also shown that they are at the forefront in terms of the deployment of new technology in support of pedagogy. At the start of the pandemic, a lot of the universities in South Africa were already offering blended learning as a result of the introduction of systems for remote teaching and learning during the nationwide student protests that erupted in 2015. In this regard, South African universities were perhaps more prepared than non-African universities because they had already been supporting students and staff working from home.

In relation to the idea of a vision for the African university, I think the research aspect of the university is something that really needs to be a focus because otherwise the continent is only going to have teaching colleges. Accordingly, it is important to ensure that the appropriate resources and infrastructure are available to be able to conduct research. In this regard, many academics from the Diaspora who go to African universities say they are surprised at the lack of course materials among the students and the staff on the continent, which is a strange predicament given the increased access to resources facilitated by digitalisation.

Given that Africa is only producing 2.6% of research, concerns have been expressed that the resources that are generally being accessed are produced in the West rather than Africa, which may be seen as a problem in the context of the continent's colonial legacy. The problem is compounded by the unaffordability of resources produced by Africans that are published outside the continent. This issue of access to African and worldwide knowledge resources represents a huge challenge for the future that should be addressed. This is an area in which the digital technologies may present significant new opportunities although access to e-published material can be subject to tricky negotiations with powerful academic publishers.

**Luescher:** In the context of the increasing use of online technologies in research and teaching and learning, would the ideal university of the future as you see it be constructed from bricks and mortar or on the basis of a server and bandwidth?

**Frittelli:** If internet resources, money and efficiency were not an issue, I would advocate a return to the tutorial model. For example, academics at Oxford University are not moving to blended learning. They are keeping the individualised, face-to-face tutorial model, which is the basis of their institutions, as the ideal, even though they realise it is an elite model. However, given the access issues in Africa, this model is not feasible – although it should be noted that there can be multiple types of universities serving different purposes within a differentiated system.

**Luescher:** What kind of a support is required to support promising post-graduate students along their path into academic careers?

**Frittelli:** The University of Cape Town (UCT) has been the greatest producer of research on the continent for many years, but in the meantime the University of Ghana

(UG) has forged a strong strategy to improve the productivity and credentials of its staff. Under partnership programmes called, Next Generation of Academics in Africa (NGAA) (2010-2018) and Building the Next Generation of Academics in Africa (2016-2023) (BANGA), UG identified areas in the basic and applied sciences in which there were staff with low credentials; and then chose particular departments as a focus area for their efforts. As a result, they now have academics with much better credentials, including in the field of mathematics which had become quite depleted. In 2010 at the outset, 48 percent of UG staff had PhDs. By 2016, 66.8 percent of staff had PhDs and in some of the targeted disciplines, over 85 percent of staff had PhDs. A significant spin-off from the interventions of the UG-Carnegie projects was the nearly 400 percent increase in the number of doctoral degree candidates being graduated from the UG, increasing from the low figures of less than 30 PhD graduands annually prior to 2010 to 115 in 2018.

In this regard, the Carnegie Corporation of New York has supported students in undertaking Masters and doctorate degrees and has provided seed grants for early post-doctorate careers, as well as research projects conducted by teams. Interrogating the impacts of this work, the foundation found that it was sometimes more productive to fund research teams rather than provide seed grants for individual PhDs or post-doctorate work, indicating the value that mentorship provided by a senior academic working alongside a junior peer can bring.

So, rather than leaving post-doctorate students to struggle in isolation with their new supervisory workload, which can often lead to planned research projects being abandoned, the goal is to ensure that there is greater support in the form of mentorship and/or collaboration among a team of researchers.

**Luescher:** What is your view on the discourse of decolonisation, including in relation to cultural and religious values at universities and the promotion of indigenous knowledge in higher education?

**Frittelli:** I do not like the term “decolonisation” because it is such a broad term. Every discipline is different and decolonisation means something different in relation to the social sciences and the humanities than it does in relation to the sciences.

The French chemist Louis Pasteur once said: “Science knows no country because knowledge belongs to humanity.” Taking the Covid-19 pandemic as an example, those who are saying “No” to Western knowledge in the name of decolonisation are effectively proposing denying access to knowledge about producing a vaccine. To give another example: a recent volume titled *From Ivory Towers to Ebony Towers*, which considered the transformation of humanities curricula at African universities since independence and at historically black colleges in the United States, produced some counter-intuitive findings. For instance, it described how the history of Africa as this was first taught at university in Uganda was written by expatriate academics rather than the Ugandan academics who, returning from their post-graduate studies in Europe, were more interested in teaching the European history that they had learned.

The point being that promotion of an African agenda is not only the province of African academics.

In general, transformation of the curricula for the humanities and the sciences should be considered on a discipline-by-discipline and departmental basis and should be implemented by the faculty staff who are in place. In implementing such processes, the term “decolonisation” is too vague to be of great use.

**Luescher:** So, what about the use of other languages, including indigenous ones, rather than English at universities? For example, do you know what progress has been made with the introduction of Swahili among higher education institutions in Tanzania?

**Frittelli:** What they were finding in East Africa was that Tanzanian graduates were not competitive with the Kenyans and the Ugandans in the workforce because so much Swahili was being used at their universities and their English was so poor. I am not sure what the answer to this problem may be, given the logistical constraints on providing an education and this issue of competitiveness. At the same time, there is clearly a broader value in exposing people to local languages, even if they are not going to learn them all.

**Luescher:** As is happening at the University of KwaZulu-Natal (UKZN) where it is now compulsory for every new student to take Zulu lessons, although the teaching still takes place in English. It is considered part of the institutional identity that all graduates should have a basic level of Zulu competence.

**Frittelli:** Yes, and there is more to this approach than just learning to say “How are you?” in Zulu. For me, it is about the idea that another language expresses something in another way, which can foster a broader appreciation of that language or culture. In this regard, it is about promoting and enabling access to other forms of cultural capital. So, there is a constant need to review the curriculum to determine its relevance and broader value.

**Luescher:** Returning to the issue of digital technologies at universities, aside from whether the Oxbridge tutorial model is preferable to the establishment of entirely virtual models for teaching and learning, what are your views on the place of such technologies at university?

**Frittelli:** Such technologies may be deployed to help African universities improve their administration in pursuit of greater accountability and better performance, which has been a key goal of Carnegie in its support for the African Research Universities Alliance (ARUA) and previously the Higher Education Research and Advocacy (HERANA) project. Universities may deploy the new technologies to enable them to monitor a range of performance indicators, such as their research-production and staff credentials, more effectively. The aim should not be to foster bureaucracy for its own sake but rather to promote greater accountability among universities, most of which are, after all, largely publicly funded; and as a means of incentivising improvements in their performance. For example, the publication of firm data on the production of PhDs

and articles can lead to additional funding for the university concerned. In this regard, South Africa is currently ahead of the rest of the continent in relation to this kind of performance monitoring; but the deployment of the new technologies could create significant opportunities for administrators to improve their data collection and dissemination in support of greater institutional transparency, more effective governance and improved performance.

Digital technologies may also be deployed to support teaching efforts but not as a replacement for human contact. In addition, just as digital technologies may be leveraged to ensure greater access to knowledge resources held beyond the continent, they could also be used to facilitate access to key course materials and online lectures – although bearing in mind that there is a body of research that has shown that readers retain more from actual books and paper than they do from materials made available in an online format.

Another field in which digital technologies are supposed to have made great strides is that of academic conferences, which increasingly went online during the pandemic. However, although such online meetings can have a broader reach, the cost of licensing the technologies used to host them, such as Zoom, can be similar to that of hiring an actual venue. In addition, although there are obvious savings in terms of travel, these may be greatly reduced by the high cost of the data packages that may need to be distributed among the participants, including speakers living in rural areas. Then there can be problems of connectivity, as well as the broader problem of limited actual contact among the participants. For example, some speakers may send in video presentations and not even be present during the virtual meeting to respond to questions. Although such challenges can be addressed to an extent by moderators emailing correspondence back and forth among the participants, the immediacy of the discussion is lost, as well as the opportunity for beneficial informal interaction.

**Luescher:** Yes, a key attraction of going to a conference is not only the presentations but the opportunity to approach the speakers and the other participants and share ideas, which can spark conversations that may even lead to the establishment of new research projects.

**Frittelli:** Right. Recently, I learnt that the notion of a symposium was founded in ancient Etruscan culture and that the word “symposium” comes from *symptera*, comprising *sym*, meaning “with”, and *potera*, “drink”. The Etruscan tradition was that women and men would come together in the evening over dinner, and drink and talk. And then when the Greeks adopted the tradition from the Etruscans, they banned women from coming to these symposiums.

**Luescher:** You mentioned earlier in the context of different levels of access to resources the need to establish different types of institutions. What do you see as the key challenges in producing a differentiated system?

**Frittelli:** Different types of institution are required – and this is already being made clear with the establishment of private universities which are teaching professional

skills. With the advent of the fourth industrial revolution (4IR) and the likely growing need for technical skills, this trend is set to continue. So, for Africa, the question is: How to respond given the likely impacts on the continent's national economies? For example, many of the older kinds of jobs are going to be eliminated under the 4IR, although this process may take longer than elsewhere given the particular economic conditions in Africa.

So, institutions such as Ghana's Ashesi University, where the goal is to produce immediately employable graduates capable of pursuing professional careers, will continue to meet a need. At the same time, such universities, while excellent at producing high-level management consultants and other leaders, do not necessarily generate original research or even the cadre of less-skilled technicians who are the bedrock of a developing economy. So, amid the growing importance of subjects such as data science, machine learning and the health sciences, as well as the increasing engagement of industry in higher education, the pressure for differentiation in the sector will persist.

At the same time, the production of an increasingly differentiated system gives rise to difficult questions about who gets to go where; and also, about the dominance of technical subjects at the expense of the humanities, as increasing numbers of students are forced to prioritise immediate employability over the value of liberal-arts education – particularly given the relatively great expense of tuition.

**Luescher:** One of the key recommendations of a recent report on the transformation of universities in South Africa conducted by the Human Science Research Council (HSRC) is that differentiation in the public sector does not only mean differentiation in terms of core functions, such as teaching or research, it may also entail differentiation in terms of sectoral specialisation – such as was the history of the University of the Witwatersrand which was originally established as a school specialising in the topic of mining. In this regard, new higher education institutions also could prioritise the needs of local industries in their founding mandates. Such differentiation within an articulated system could produce significant benefits for students seeking to specialise and advance in their studies.

**Frittelli:** The problem is that the establishment of such a system may be viewed as promoting elitism, which has been compounded as an issue in South Africa by the country's history of racial apartheid, under which the elite universities were the preserve of white people, while the rest of the population were only able to access the less comprehensive, technical universities. However, in many other countries, it is not considered inherently demeaning to be a student or staff member at a technikon. At the same time, for young people who have less of an aptitude for, or focus on, a particular career path, a liberal arts education offers exposure to multiple ways of thinking that may broaden their horizons and enable them to find their way in contemporary society and the economy.

Meanwhile, notwithstanding the relative virtues of the different approaches to higher education, massification and a widespread shortage of jobs indicate that there will be a

growing need to establish higher education institutions that can provide graduates with the kinds of skill sets that will ensure them gainful employment and/or set them on the path to livelihoods.

**Luescher:** You describe an important tension between the professional route as against a liberal-arts kind of education; and obviously, there is value in both. What do you conceive as some of the other challenges that must be addressed in realising the African university of the future?

**Frittelli:** Paul Zeleza talked about three scenarios that may be enacted after the pandemic: first, universities restore themselves and return to pre-pandemic times exactly the same as they were; second, they evolve and choose to incorporate lessons from the pandemic; and third, they transform and use the pandemic to launch or accelerate the transformation agenda, although, in this context, I am not fond of the term “transformation”, which I find vague.

In this regard, I think that the issue of access and in particular the growing numbers of high school students seeking to enter university poses a key challenge. Ghana, which has 100,000 new students every year entering tertiary education, has responded by eliminating the entry fees for secondary schools and spending the money on additional equipment for pupils, such as in laboratories – the aim being to improve the quality of the first-year students. However, there seems to be little concern in the policy for the faculty at the universities who are going to take on all these new students.

The reality is that increased access brings with it a lot of issues, which it may only be possible to address through a combination of financial aid; loan schemes; public and private funds; scholarships; and philanthropic support. Africa has to figure this out.

For example, many governments faced with stagnant economies can struggle to fund a massified higher education sector on their own. So, there is a responsibility on the part of the private sector to contribute if it wants the universities to produce the kind of human capacity on which businesses depend. There will have to be partnerships with industry and the private sector, as well as additional government and other forms of funding beyond what is already being made available to universities. In this context, African philanthropy also could provide significant support, which is not happening at present, although I am not sure what is preventing this other perhaps than a lack of trust in the higher education institutions themselves.

The pipeline into the universities is another big issue given the relatively low quality of the pupils graduating from high school. How should universities respond to this? By refusing to admit as many pupils? Or by supporting the establishment of large-scale remedial programmes for the primary- and secondary-school sectors?

**Luescher:** Could you talk about your experience in addressing those kinds of challenges over the years?

**Frittelli:** In general, there has been a great increase in external funding for universities at the same time that there has been a minimal increase in government funding for research. In this regard, there is a significant opportunity to access further funding by tapping into alumni, particularly the successful ones. In many African countries, such exploitation of alumni has taken place mainly at the secondary-school level, perhaps because these schools were the only source of education for many of those in previous generations. However, it seems that the universities have struggled to foster a similar sense of allegiance among their alumni. One of the reasons for this could be that those graduates who were formerly educated at universities when they were elite institutions are now unimpressed by what they have become under massification and consequently feel they are unworthy of their support. Nevertheless, alumni funding represents an important source of financial aid.

Alumni networks may also be deployed in support of graduate employability and the transition into livelihoods. For example, one route into employment is for the student concerned to go to the career services office at the university and research all the alumni in their field and then make contact with them, asking them for information and further contacts that may help them to find a job. However, such leveraging of the alumni network depends on universities undertaking tracer studies, tracking where their graduates have gone. In other words, it is important to keep in touch with the alumni, tracking where they are; nurturing long-term relationships with them; and even inviting them back to deliver public lectures as appropriate, so that the graduates remain part of the institution.

**Luescher:** Are there any other best practices that you have seen which may be adapted and adopted more widely?

**Frittelli:** I have seen significant increases in grant and research funding at institutions which offer proposal-writing workshops to their post-graduates.

Academics in the African Diaspora represent a potential further source of funding, mentorship and research support. In this regard, one recent study found that, given the focus on publishing research as a route to tenure at Western universities, African universities can most effectively promote Diaspora engagement by providing these academics with publishing opportunities. The reality being that ambitious academics in the Diaspora do not generally otherwise have the time to mentor or teach at African universities. However, the picture of what the Diaspora may contribute to universities in Africa could also be more complex than this, as an evaluation of the Carnegie Africa Diaspora programme may well show. For example, there is an interesting tension between the potentially recolonising and decolonising roles of the Diaspora in their engagements with African institutions. On one level they may seek to reshape the universities in line with external ideas and priorities, on the other, their acute understanding on the African context could lead to them reshaping the terms of their own disciplines. Members of the Diaspora can also be able through their networks to facilitate access to additional, large-scale funding for African universities.



**Luescher:** Earlier you were also talking about the value of partnerships with different stakeholders.

**Frittelli:** Telecoms companies have increasingly engaged with universities, offering free platforms in support of digitalisation. Meanwhile, healthcare research also has attracted significant private sector funding. However, it is important that universities strike a balance in this regard: accessing useful funding in support of academic goals, such as the development of scarce skills like the data sciences, while also placing limits on the proximity of the industry involvement so that it does not infringe on academic freedom.

**Luescher:** Are there any final reflections that you would like to discuss?

**Frittelli:** In the context of relatively weak university programmes, there are a number of regional networks which have played an important role, sharing resources and mentorship and seeking to capacitate institutions over the past decade or so across the continent. These have included the Regional Universities Forum (RUFForum), the African Institute for Mathematical Sciences (AIMS) and ARUA. These networks have fulfilled a number of functions. Some offer training and qualifications; others provide institutional support or engage in advocacy. RUFForum, for example, initially focussed on agriculture as a discipline before moving into policy, engaging government ministers at their meetings. The innovative approaches adopted by such regional networks and their potential as models for change could usefully be studied.

There has also been some interesting work on the future of employability in Africa. In this regard, it is clearly important to train people in the key sectors of tourism, agriculture and food security, although such training need not take place at universities. There could be special schools established for this – for example, to produce the required hospitality workers. At the same time, there is a need to address the big issue, such as climate change and sustainability, in these sectors, which requires the production of relevant research and thought leaders – which is a function of universities. So, there is a need for different types of institutions to address the various niches, indicating again the importance of establishing differentiation and articulation within higher education systems in Africa.