

Africanising the Curriculum



Indigenous Perspectives and Theories

EDITORS

Vuyisile Msila & Mishack T Gumbo

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Preface

For the advancement of knowledge in Africa, we need many written works as well as ordinary dialogues that uncover African-centred approaches. There are many who know the story of Africa's loss as colonial powers plundered the African resources. The story of the West's scramble for Africa demonstrates how culture was defiled in African states. In the process of losing their material possessions, the Africans lost identity, culture and heritage. Many myths were spread by the colonial culture that sought to underscore the ignorance of African cultures, which were purported to be backward and devoid of civilisation. The policy windows in many African governments are opening as they begin to search not only for their origins, but for their future as well. During the 1950s a number of African states were freed from colonial governments and many began to try to reclaim the African heritage as they retold their history. We cannot delude ourselves by romanticising Africa; the African village was not perfect. In fact, Chinua Achebe has demonstrated in his novels such as *Things Fall Apart*¹ and *Arrow of God*² that there were some shortcomings in African societies. In the same vein, the academic and novelist, Archibald Mzolisa Jordan demonstrated contradictions within the Xhosa traditional society in his classic work, *Ingqumbo yeminyanya*³. The novel shows how modernity clashes with the traditional ways of life.

The celebrated South African social commentator and academic, Ezekiel Mphahlele also posited that he would like to get the entire picture when reading about the stories of Africa and not just the picturesque countenance. He added that he would like to see the misdemeanours about this continent as well. Yet even these limitations do not eclipse Africa's sophistication. But we need Africans to be certain about their own contribution to the world. Africans should never perceive themselves as lesser nations. There are still many challenges though, as African nations are faced by factors such as famine, dictatorial governments and poor education. These problems are not necessarily unique to Africa and Western governments too face some of these challenges. Yet Africans are able to use their cultures in a changing society whilst also ensuring endurance and connection with the past. Effective cultures adapt to the changing society. The African has come into contact with many nations over the epochs, In South Africa, the Dutch came in the 1600s. Much earlier there was contact with the Portuguese. Other nations have come into contact with Africans in the north and west of Africa. The French, the Belgians, the Italians, the English are some of the nations that have influenced the cultures of Africa in many ways. We are also certain that Africa has influenced these cultures in several ways. As a consequence of these contacts, today we cannot speak of a pure African culture that was never tainted or benefited from other Western cultures. There are a number of things that were borrowed from Western cultures; these became part of African nations.

The early African explorers portrayed a sensationalised barbaric nature of the African landscape; where there was darkness and pessimism. The big African needed civilisation and cultural refinement. Yet these explorers conveniently forget that African cultures were not as simplistic as they draw them. The sophistication of the 16th century discovery of the Kingdom of Monomotapa in the present day Zimbabwe shows that Africans were advanced as early as that century, and possibly long before. We also know about the ancient Egyptians and their brilliance in science and mathematics. Some of the theorems that are studied today originate from Egypt. In fact, few could doubt the mathematical skills of the ancient Egyptians after seeing their pyramids that are built with precision. There are many other stories around Africa that demonstrate that Africa was also in the forefront when it came to cultural advancement. It is the colonial portrayal that killed these successes. We need literary and oral accounts that will expose some of these truths without over glorification or over simplification of the continent.

African history has shown that the Africans have had their civilisation although Europe's archetypal picture of Africa has been that of savagery. The cultural and historical past of Africa demonstrates how the fecund African cultures were obfuscated by colonialism. We have mentioned a few examples of places in Africa that illustrated the African Renaissance values; long before the 20th century. The story of West Africa is one example that shows of how culturally rich Africa was. In many ways, pieces of this past have impacted on the present. Chu and Skinner⁴ write about the great ancient empires of Ghana, Mali and Songhay. The development in these empires was comparable to civilisations of Europe and Asia. Chu and Skinner⁵ point out:

The stories of ancient Ghana, Mali and Songhay were parts of a larger story, the history of mankind's struggle to live and develop civilisation in all parts of our world. The people of these lands were like mankind everywhere, some of them noble, industrious, and forward-looking; others cruel and destructive.

For far too long, the path to understanding Africa has been blocked by barriers of ignorance. Today this situation is gradually changing. Thanks to the work and findings of dedicated historians and scientists, a new awareness of Africa's past has begun.

From time immemorial, the African people were using technology in their daily activities, for example, metal-working, cloth making, farming; tool-making and fishing. Some research has shown that in western Sudan, in the village of Nok (what is now the northern Nigeria), iron has been mined and worked at since the time of Christ⁶. In the Ghanaian empire for example, the craftsmen made weapons and were involved in jewellery, cloth weaving and sandal making. The much used terms, 'barbarians', 'savages' and 'primitive' people are all misnomers when one considers the way of life of many Africans living in those days. The Greeks invented the term, 'barbarian' when referring to foreigners. Ironically, even though their mathematicians learnt from Egypt, the Egyptians were classed

as barbarians because they lived outside Greece. This was the superiority complex that engulfed European nations when viewing Africa. Africanisation seeks to rectify this cultural hegemony and moral superiority. The call for indigenisation of knowledge in African education institutions is a call to acknowledge rich knowledge in African cultures.

The purpose of this book is to respond to the Africanisation of educational institutional curricula. It throws a gauntlet to African governments, departments of education, schools, policy-makers and all Africans in Africa and the diaspora to sit and cogitate about Africa's potential role in education. In some way, it is also a response to a call of transformational pedagogy. Formal education has tended to perceive African tenets and beliefs with suspicion. Gradually though, ethnographic scholars find that much can be useful from the African villages. This book looks at some aspects from these African villages and how they impact on formal education. The book presents African scholars' critical views on the Africanisation theme. They express the significant aspects from Africa and how these can be utilised in mainstream education. Whilst Africans cannot ignore the Western belief systems, Africans will be stronger if they start by describing their own environment, even for the formal 'Western' education. For so long the curriculum has been and still is a reflection of everything that is not African.

The book's contribution is twofold – theoretical and practical. At theoretical level the authors advance African theoretical perspectives on education and curriculum, mapped against the Western ones. As authors we are aware that the dichotomy between Western ways and African values may not be as pronounced as portrayed by similar works. From the West there have been schools of thought that support the calls to Africanise institutions in Africa. To some degree, the authors draw on the areas of convergence between African knowledge and Western knowledge as a suggestion for a balanced approach towards curriculum. This stance demonstrates that humanity shares some knowledge forms and perspectives, and thus should not be robbed of celebrating this similarity or commonness such as has happened over decades of oppression by the system of Westernisation. Some authors have gone to the extent of suggesting models and conceptual frameworks that can begin to steer the curriculum towards embracing indigenous knowledge forms. The book is therefore a scholarly work that also contributes to the discourses in the domain of curriculum, thus the target readership is researchers who operate in the knowledge domains related to Africanisation of curriculum. The editors do not rule out the opportunity that this book presents to be prescribed for students operating at the research level, as well as educational stakeholders, particularly curriculators.

This collection of chapters is a response to the open policy window towards African philosophies. It is a response to a call by Chinua Achebe⁷ for the lion to scribble its story. Achebe captures it well when he states, 'until the lions have their own historians, the history of the hunt will always glorify the hunter'. As Africans review the curricula in their institutions of learning it will be crucial for them to portray exactly how they view their

histories whilst also exploring how this can be used to educate the African nations. The contributors are not professing any solutions and the book might leave the reader with more questions than answers. The latter is not necessarily bad, for what is important is to keep fires burning and let the discussion on African philosophies continue as communities, the ‘organic intellectuals’ and educationists try to infuse these in the current Western dominated curricula. With the advent of awareness of the need for an African Renaissance, people have begun to realise the need for an education curriculum that reflects the African experience. The constant call for a changed system is inspired by the need to change the absolute colonialist curricula in education. Education systems in many African states are based on a system of democracy and a need to free the African from the throes of colonial hegemony yet few have really taken seriously the need to transform education.

It is then a challenge to democracy in Africa: to live the African ideals by (among others) reflecting the indigenous knowledge systems (IKS) in education. The latter is a challenge for education that needs to reflect the values, cultures and experiences of Africans. The curriculum is crucial in shaping the wellbeing of any society’s citizens; hence autocratic regimes use education to annihilate some values as they elevate other values. Apartheid education in South Africa is a good example of what education did in destroying the pride of being African by insisting on state propaganda. That has instilled a sense of inferiority in many Africans. Apartheid education was based on beliefs that the black Africans were inferior hence the marginalisation of their values, language and culture.

Today the call for IKS and the Africanisation of knowledge is a call for acknowledging the need to redress the damage done by ideologies, such as apartheid, and general colonialist domination and suppression of the Africans. The challenging aspect though is that many Africans have internalised the Western tendencies and hate that which is African. It should be the role of scholars to intensify their work in the area of IKS and ensure that research addresses some of these challenges. There are a number of things that could be done to address this:

- o We need to undertake research that seeks to fill the void that scholars have tended to shy away from in the past;
- o We need to highlight the history that has marginalised the Africans for many epochs;
- o We need a pedagogy and curricula that would reflect the African experience; and
- o We need to show this generation that there is nothing to be ashamed of for having an African heritage.

Seepo⁸ points out that Africanisation of knowledge and IKS are an antidote to years of denigration of people’s knowledge.

As editors of this volume of chapters we envisaged a book that was to address some of the above and a series of related themes on IKS and Africanisation of the curriculum in

African institutions of learning. This collection does not only reflect theory but it encourages practice as well. The contributors reflect on strategies on how to transform the curriculum, infuse an IKS-inspired curriculum in schools and higher education. We hope that this will be a useful resource for African scholars and students of the African philosophies alike. We thank Dr Steve Sharra for introducing this volume.

The Editors

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Introducing the book

The ownership of global knowledge

Both my grandmothers died while I was already a grown-up, however, I never saw my grandfathers, who both died before I was born. On my father's side, my grandfather died of asthma. That was in the 1960s. It seems that asthma runs in the hereditary line because my father's brother also died of asthma in 1997. My younger brother, 20 months younger than me, developed asthma by the time he was seven. A friend of my father, a fellow policeman, knew traditional medicine that cured asthma. My brother took the herbs, and his asthma, known in modern medicine to have no permanent cure, disappeared.



Dr. Steve Sharra (PhD, Michigan State)

Decades later, when I was a primary school teacher in a rural part of Malawi, I once developed severe, bloody diarrhoea. The local clinic said it was dysentery, and they prescribed modern medicine. It did not help. A husband to one of my cousins in the village went into the bush and brought back some herbs. He made a concoction for me and I took it. By the end of that day my dysentery was gone.

There was nothing mystic or mysterious about the herbs I took for my dysentery, nor the ones that my brother took for asthma. No magic or witchcraft. Just products of nature endowed with the ingredients that happen to cure dysentery, or in my brother's case, asthma. This was indigenous knowledge that had probably been discovered through some unintended experiment, tested and replicated over time, and proved to work. It was passed on through observation, apprenticeship and oral instruction, the well-established methods of passing on knowledge in endogenous contexts.

This knowledge is rapidly disappearing. Much of it has already disappeared, buried with the last known repositories, usually old people in the villages. Yet even modern science is uncovering 'new' knowledge from this old indigenous knowledge. Dieticians and medical doctors are now recommending ancient and natural foods as wholesome and healthier for us. We are now also encouraged to walk more instead of using our cars, and to be active instead of spending long hours seated in an office. These practices, once considered 'old-fashioned' are now seen as better for our bodies and our health. Organic foods are now considered to be healthier than processed foods and we are encouraged to grow our own food instead of buying it from the supermarket.

But questions of knowledge production processes and ownership of scientific knowledge persist. The system of acknowledging who produces what knowledge and who gets credit for that knowledge remains steeped in asymmetrical power relations and geopolitics. A recent case in southern Africa is an example. In 2009, a team of British scientists announced that they had discovered a new rain forest and mountain in Mozambique¹. One of the scientists, Julian Bayliss, said he had been working on Mulanje Mountain in Malawi when the discovery was made. He had returned to Britain and was using Google Earth when he noticed something that had not been mapped and recorded in the scientific record before. With the help of local people, the team of scientists went into the forest, and up the unmapped mountain. There they found new species of plants and animals that were unknown in the scientific record, including trees and chameleons.

Ironically, the local people knew some of the trees and the animals, and had names for them. One of the local people is heard on the YouTube video speaking Chichewa, the dominant language in Malawi and parts of Mozambique and Zambia, and mentioning a type of tree whose bark is used as medicine for back pain. But because this knowledge and the names of the creatures were not recorded in scientific databases, the forest and its creatures were considered unknown. *The Guardian* newspaper, acknowledging that the local people knew about the mountain already, reported: ‘The locals knew of this mountain, of course, but scientists had no knowledge of it before 2005’².

That gave the British scientists the licence to claim that they had discovered the forest and the new species. Mozambican and Malawi government institutions are acknowledged in tributes at the end of the video, but neither videos nor media articles feature interviews with any local Mozambican or Malawian scientists offering their version of the ‘discovery.’

On social media sites, such as YouTube, where news of the discovery was posted, a debate raged as to how someone could claim to have ‘discovered’ new areas in a part of Africa that was habited and occupied by people and protected by a government. Were the team of scientists oblivious of the painful history that has caused so much anguish for African people through similar claims by Westerners several centuries before? Why was the knowledge of the people indigenous to the area not recognised? When is knowledge considered knowledge? By whom and for whom?

Although the above story is not a part of this volume, the questions asked form the undercurrent throughout this book on the importance of recognising knowledge developed in indigenous contexts but unrecognised by the formal school system, legal frameworks and policy structures. The quest to advance indigenous African knowledge reveals a troubling paradox, as Gregory Kamwendo argues in this volume, why do we need an Africanised curriculum while everyone else is going global? A related question to that is whether indeed everyone is going global. What does going global look like? As

Kamwendo argues, the paradox is made more apparent when one looks at the extent to which African universities are going to internationalise their curricula and research.

There are growing efforts across African universities to educate students so they can fit in what is said to be a global context. There is more stress on attracting foreign students, through formal recruitment and also through study abroad and exchange programmes. The hold of the English language as the language of instruction, research and policy is growing from strength to strength. Kamwendo gives the example of an African university that teaches an indigenous national African language in English while pursuing a goal to be a leading ‘African’ university.

Obviously this is an intriguing quandary for African universities. And the irony should not be lost on us. This book, whose singular purpose is to argue for greater effort in enhancing the status of indigenous African knowledge, has been written entirely in English. This testifies to the power and global reach of the English language in carrying out teaching, scholarly discussion, research, policy and publishing. Even the terms used in the discussion are English terms, as are concept, such as curriculum, science, technology and theory. These are products coming out of the modern education system, where the dominance of English has become overbearing and incontrovertible. But the history of how English came to dominate the knowledge industry is not as straightforward and linear as it is usually presented, as Simon Gikandi (1996) has argued³.

But African scholars are not the only ones championing indigenisation of the education curriculum at all levels of the education system. As Mishack Gumbo and Paul Webb indicate in this volume, in separate chapters, several regions of the world, including New Zealand, Canada, the Philippines and China, have also embarked on indigenising their educational systems.

A common realisation in all the contexts where the indigenisation of knowledge is an ongoing debate is the low status of indigenous knowledge and the absence of investment in encouraging local knowledge production. The overwhelming belief in these contexts is that the only knowledge worth recognising and using for educational purposes and for running governments and economies is what is considered to be ‘Western’ knowledge. In order to understand where this belief comes from, one needs to examine the status of the legacy of colonialism today.

Although the issue of what constitutes ‘Western’ knowledge has been debated for decades (see, Cheikh Anta Diop⁴; Martin Bernal⁵; Ivan Van Sertima⁶; Simon Gikandi⁷; Odora-Hoppers⁸), Western claims to the ownership of science remain very powerful and consequential. This is one of the enduring legacies of colonialism, now propelled by the immense power of global capital. But as the authors in this volume contend, and as have others before them, these claims do not represent the whole truth of how knowledge is

produced. It is one thing to have a domain known as ‘Western’ knowledge; it is another thing to make claims about who developed and came to own that knowledge. If the scholars in this volume are calling for the ‘Africanisation’ of knowledge, it is because there have been claims of a ‘Westernisation’ of global knowledge.

This volume underscores the importance of the African university in advancing this goal. Unless they conduct research that addresses Africa’s problems, Vuyisile Msila has argued, African universities will become irrelevant. This message was powerfully presented by Mahmood Mamdani at Makerere University in 2011⁹. Mamdani pointed out that the importance of research in a university lay in formulating problems obtaining in a particular context. He said the research agenda in Africa was now being driven by Western donors who were funding academics to conduct research through consultancies. Mamdani argued that Africa had a higher education tradition going back to the 11th century in what today are the countries of Egypt, Morocco and Mali.

This type of knowledge flies in the face of claims of ‘Western’ knowledge and who developed it. The authors in this volume are participating in the broader discussion of how global knowledge is a sum of many types of knowledge from different parts of the world. This observation is the subject of a book published in 2000 and edited by George J. Sefa Dei, Budd L Hall and Dorothy Goldin Rosenberg, which challenges the received wisdom and dominance of claims to Western knowledge¹⁰.

In 2002 a book edited by Catherine Odora-Hoppers, with contributions from various researchers in Africa, Asia, Australia and Europe put this argument into sharp perspective¹¹. The book originated from South Africa’s Parliamentary Portfolio Committee on Arts, Culture, Language, Science and Technology, which requested heads of the country’s science councils to explore the development of indigenous knowledge systems (IKS).

The contributors to this volume continue in this tradition and cover a wide range of issues seen from the perspective of curriculum and pedagogy in a school setting and educational policy context in Africa. In the first chapter, Phillips Higgs sets the tone of the volume by posing questions that link the decolonisation of the school curriculum to African epistemologies. He argues why the curriculum must be transformative by being conscious of other types of curricula, including the hidden curriculum, and how it obscures our vision of a better society. The historical perspective that Higgs provides on how the desire to Africanise the South African curriculum has evolved since 1994 is instructive.

In Chapter 2, Gregory Kamwendo provides a framework for approaching the Africanisation of the higher education curriculum. He poses questions about the purpose of the quest and its possible implications on resources and on educational policy. Kamwendo cautions against intellectual isolation, arguing that Africanisation must be balanced and be made to work with internationalisation for both systems to enrich each other.

Mishack Gumbo takes a different turn to offer a practical model for introducing MEd programmes in Indigenous Knowledge Systems at the University of South Africa (Unisa). He indicates that the Unisa College of Law is already pioneering efforts in this direction, requiring its students to study indigenous aspects of the legal system. Gumbo discusses the ideas of Tanzania's founding president, the late Mwalimu Julius Nyerere, who argued for the indigenisation of his country's education system. Gumbo also discusses other models of indigenisation of the curriculum outside Africa, including Australia, the Philippines and China.

Nyerere's ideas for the type of education relevant for African contexts still resonate with biting poignancy nearly five decades since he stated them¹². Nyerere argued that the purpose of education was to cultivate skills and knowledge that would enable a society to function into the future. When a society failed to deliver this type of preparation, that society would implode into a chaotic mess. The education system inherited by most formerly colonised African societies, argued Nyerere, was not meant to serve this purpose of looking into the future. While the system had successfully persuaded African societies to stop investing in indigenous systems, it failed to fully equip them for the world they now lived in. This, Nyerere presciently pointed out, resulted in Africans 'getting the worst of both systems' (p. 59).

The inherited educational system was breeding steep inequalities and was leaving a lot of people ill-prepared to succeed. It was breeding what he termed 'intellectual arrogance' on the part of the so-called educated who looked down upon their compatriots who had not attained this type of education. Yet, it was, and still remains to this day, in its nature to allow only very few individuals to proceed with further education. People's worth was now being measured by their ability to pass examinations, rather than by their attitudes and character, lamented Nyerere. Traditional knowledge had now been completely undermined.

In Chapter 4 Vuyisile Msila explains the rationale for an African philosophy of education. He embarks on a search for relevance and argues that this project is not about IKS for their own sake. The larger goal, argues Msila, is emancipation of the African people. He contextualises this search in the history of education in South Africa, where Bantu education was imposed on African people with the overt aim of giving them an inferior education. The rationale he sets out to provide comes out through definitions he provides for the key terms in the project, including Africanisation of education, African Renaissance, IKS, African philosophy of education, and emancipatory education.

The discussion over a rationale is extended by Vitallis Chikoko who brings in the concept of Ubuntu and how it further contributes to the political emancipation of Africans. In Chapter 5, Chikoko reaffirms the importance of IKS in the education system, presenting students' views on the Africanisation of the curriculum, globalisation, and the expressed goal of educating students into global citizens.

An important aspect of the discussion on indigenising the curriculum is the role of women in leadership positions. Vuyisile Msila and Tshilidzi Netshitangani address the place of women and African feminism in the discussion on indigenising the school curriculum in Chapter 6. They posit that the position of women in contemporary Africa has not always been relegated to subsidiary roles as it is today. Colonialism changed gender relations on the continent and placed hurdles in the advancement of women. Msila and Netshitangani argue that by reclaiming the knowledge of traditional forms of leadership, women can be galvanised to bring their leadership roles to contemporary contexts.

Technology is integral to knowledge production, argues Mishack Gumbo in Chapter 7. He decries the absence of indigenous knowledge in the modern curriculum, saying this is a consequence of the dominance of Western perspectives in the education system. He uses what he terms 'critical corrective theory' to deal with the subjugation that relegates IKS to an inferior status and leaves technological advancement in the narrative. Providing a design process model for integrating technology in the indigenisation process, Gumbo suggests 'technacy' as a concept that provides holistic technology education that incorporates literacy and epistemological issues in the knowledge production process.

In Chapter 8 Soul Shava returns to the issue of relevance started by Msila, arguing for both internal and external critical reviews of the indigenous knowledge process. He refers to the work of Catherine Odora-Hoppers, a leading researcher of IKS who has cautioned against 'indigenous epistemicide,' the marginalisation of indigenous knowledge by scholars trained in the Western tradition. Shava draws on research on indigenous agriculture and indigenous diets as examples of domestic science that is now being appreciated as being healthier and better than modern diets. This understanding, argues Shava, ought to make us wary of the false dichotomy between modern science and indigenous science created by the Western curriculum.

If there is an indigenous Africa philosophy that brings together all these to Africanise the curriculum, it is Ubuntu. That is the argument in Chapter 9, in which Msila defines Ubuntu and discusses how it shapes a new type of leadership in school management and in educational policy. As we debate how best to educate Africa's future leaders, Msila emphasises the notion of servant leadership and how it contributes to community building. Ubuntu holds the key to African values of group solidarity and communal interdependency, argues Msila. He cites the work of Chiku Malunga, a leading thinker of Ubuntu management philosophy, whose five Ubuntu principles ensure collective ownership, relationships, participatory decision making, patriotism and reconciliation. Msila uses these principles to come up with a further articulation of how Ubuntu philosophy builds community. The significance of Ubuntu can be seen in the South African Department of Education documents, where it is considered central to the education process, according to Msila.

In Chapter 10, Onoriode Collins Potokri argues that the project to Africanise the curriculum must be put to the test of what he terms 'mixed methodology research'. He explains that mixed methodology research is pertinent to the nature of higher learning environment, which are always looking at problems from various perspectives. He argues that mixed methodology research is not given the attention it deserves, and calls upon educationists, researchers and policy-makers to incorporate it into research designs and the training of new researchers.

Chapter 11 addresses the question of how to bridge the gap between indigenous knowledge and science education. Paul Webb uses Contiguity Argumentation Theory as a way of resolving what appears to be a conflict of ideas between the two types of knowledge. He surveys the arguments for including indigenous knowledge in the Science curriculum and the arguments against. He argues that by highlighting the similarities and the differences between the two systems, it is possible to reach common ground that respects cultural heritage and identity and makes science education more meaningful and understandable for students.

The penultimate chapter focuses on arguments surfacing constantly on the cultural hegemony reflected in African education which hampers the education of African children. In a world of global growth and knowledge building Africans should also stand strong among other nations as they reflect on their African heritage. Msila looks at why the African university needs to be reinvented.

Finally, the closing chapter captures the varied pertinent arguments in the book. In his summary Sesanti traces the gallant struggles in pursuit of Africanisation against extreme odds so as to give a historical context. Using a somewhat sharp tone, the reader paradoxically may find Sesanti raising more arguments than ushering the debates to repose.

This volume is coming out at a time when there is growing recognition for Ubuntu philosophy as an African indigenous epistemology that has relevance for the global context. Ubuntu has been made the theme for the 2015 conference of the Comparative and International Education Society (CIES), the most important grouping of international education researchers and academics in North America. The significance of this decision by CIES is captured by the perspectives offered in this volume, which collectively demonstrate how IKS cannot be discussed in the vacuum of isolation or vacant stagnation.

Returning to Mamdani, he has argued that the challenge for African universities today is to prepare the next generation of researchers using a new paradigm that rethinks old questions and formulates new ones (2011). This calls for original research rather than research driven by the needs of Western institutions. Mamdani calls for new programmes that 'will seek to understand the global from the vantage point of the local.' He sees the formulation of problems as central to the new research framework: 'the point of basic

research is to identify and question assumptions that drive the very process of knowledge production' (2011).

As the scholars in this volume have argued, making research relevant for African societies will be a pivotal task. It will require tremendous improvement in translation projects, requiring massive investments, between African languages and foreign languages. That will serve two purposes; first to make African knowledge more readily available to Africans and to the world, and second to make global knowledge readily available to Africans.

Since Nyerere made the observations discussed above, very little has happened in an attempt to change things. Nevertheless there still remain pockets of persistence and dedication that still think it is not too late. This volume joins those efforts aimed at what Soyinka-Airewele and Edozie (2010) call a 'reframing' of knowledges and discourses about the continent of Africa¹³. It also joins efforts by Emeagwali and Sefa Dei (2014) to bring to bear new thinking from various academic and research disciplines on indigenous knowledges in the Pan-African world¹⁴.

Very few cultures on the planet today enjoy untouched serenity and epistemic purity. This comes with the great risk of asymmetrical power relations, an awareness sharply acknowledged by researchers engaged in IKS. Knowledge production is a sociological process that thrives on contact between and among various cultures and societies from near and from far. Knowledge production in the 21st century is a complex phenomenon that collapses language barriers and transcends epistemic boundaries. This is where African universities and other educational and knowledge producing institutions need to bring forth their intellectual capital and research expertise to make a contribution to society. This is the challenge the scholars in this volume have taken up.

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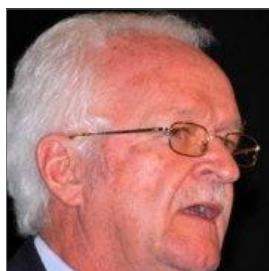


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Chapter 1

The African Renaissance and the decolonisation of the curriculum

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[F]or at least three centuries since the conquest of the indigenous people in the unjust wars of colonisation the education curriculum in South Africa did not include African philosophy. For the colonial conqueror and the successor in title thereto the indigenous conquered peoples had neither an epistemology nor a philosophy worth including in any educational curriculum. (Ramose)¹

1.1 Introduction

Education in Africa in the 21st century has to operate in both a post-colonial and globalising context. But, the curriculum in postcolonial Africa is still to a large extent confronted by the legacy of colonial education that remained in place decades after political decolonisation. Despite the advent of decolonisation, African education systems mirror colonial education paradigms inherited from former colonial education systems and as a result, the voices of African indigenous populations are negated. Colonial education was hegemonic and disruptive to African cultural practices, indigenous epistemologies and ways of knowing. The centuries-old subjugation of Africa to colonial exploitation, ranging from slavery to the creation of socioeconomic structures during the colonial era, which were designed to achieve maximum extraction and exportation of raw materials, wreaked serious damage that remain palpable years after the demise of colonial rule. This was accomplished as Nkomo² notes, by a whole range of arrangements including educational philosophies, curricula and practices whose context corresponded with that of the respective colonial powers. This meant that with the advent of colonisation traditional African epistemologies started disappearing due to cultural repression, misrepresentations and devaluation (see, Ramose^{3, 4}; Higgs⁵).

Consequently, there is an existential and humane need today to decolonise the curriculum in Africa by means of postcolonial education systems that reclaim indigenous African voices through curriculum reforms and the transformation of education discourses (see, Higgs⁶; Ramose⁷). In this chapter, I do not address directly the question of what, how,

to whom and by whom curriculum knowledge should be taught and learnt in education institutions in Africa. Instead I attempt to explore the need for curriculum reconstruction in an African context in the light of Africa's colonial past and the call for an African Renaissance. In reflecting critically on this curriculum issue, I understand curriculum as a social and epistemic practice concerned with the cultural and social conditions that underpin the construction of curriculum knowledge (see, Luckett⁸). In this endeavour, I argue that through the implementation and integration of indigenous African epistemologies in the curriculum, Africans can reclaim their voices in the education spaces of Africa.

1.2 The African Renaissance and education

The call for an African Renaissance has been present in the period marking the nearly four decades of African post-independence. The process of decolonisation that unfolded during this period saw Africa assert its right to define itself within its own African context in the attainment of independence. Wa Thiong'o⁹ claims that independence was about people's struggle to claim their own space, and their right to name the world for themselves, rather than be named through the colour-tinted glass of the Europeans (see, Asante¹⁰; Udogu¹¹; Kagwanja¹²; Mboup¹³; Asante¹⁴; Okumu¹⁵; Gigaba¹⁶; Mali¹⁷; Zenawi¹⁸). In the context of education, Odora-Hoppers¹⁹ describes this continuing struggle in the following way:

The African voice in education at the end of the twentieth century is the voice of the radical witness of the pain and inhumanity of history, the arrogance of modernisation and the conspiracy of silence in academic disciplines towards what is organic and alive in Africa. It is the voice of 'wounded healers' struggling against many odds to remember the past, engage with the present, and determine a future built on new foundations. It invokes the democratic ideal of the right of all to 'be', to 'exist', to grow and live without coercion, and from that to find a point of convergence with the numerous others. It exposes the established hegemony of Western thought, and beseeches it to feel a measure of shame and vulgarity at espousing modes of development that build on the silencing of all other views and perceptions of reality. It also seeks to make a contribution to the momentum for a return of humanism to the centre of the educational agenda, and dares educators to see the African child-learner not as a bundle of Pavlovian reflexes, but as human being culturally and cosmologically located in authentic value systems.

What is meant by the African Renaissance in education is, therefore, founded on the perception that the overall character of much of educational theory and practice in Africa is overwhelmingly either European or Eurocentric. In other words, it is argued by advocates of an African Renaissance in education, such as Odora-Hoppers²⁰, Teffo²¹, Vilakazi²², Seepo^{23, 24} and Lumumba-Kasongo²⁵, that much of what is taken for education in Africa is in fact not African, but rather a reflection of Europe in Africa.

The African Renaissance has also taken on a much greater significance in recent days with the call for the recognition of indigenous African knowledge systems (IKS) by scholars such as Odora-Hoppers²⁶, Zenawi²⁷, Hoppers²⁸, Sepe^{29, 30}, Asante³¹ and Okuma³². The inference here is the distorted view that Africans possess little or no indigenous knowledge of value that can be utilised in the process of educational transformation. This same inference also presupposes, it is argued by protagonists of an African Renaissance in education, that the norm for educational achievement and success for African children and students is that of Western European capitalist elitist culture, where the English language is sacralised, and internalisation of bourgeois European values are seen as the index of progress (see, Sefa Dei³³).

This situation is compounded by globalisation which has corrupted African culture through its progressive technological changes in communication, political and economic power, knowledge and skills, as well as cultural values, systems and practices (see, Nicolaides³⁴). Shizha³⁵ notes that globalisation promotes the epistemological and ontological realities and experiences of the most powerful in the world. In so doing globalisation has, as Maweu³⁶ observes, catalysed the colonisation of African ways of knowing. And it is in response to this state of affairs that the call for an African Renaissance in education goes out; a call that insists that all critical and transformative educators in Africa embrace indigenous African world views and root their nation's educational paradigms in an indigenous African socio-cultural and epistemological framework. This implies that all educational discourses in Africa should have Africa as their focus, and as a result be indigenous-grounded and orientated. Failure to do so, it is argued, will mean that education becomes alien, oppressive and irrelevant, as is seen to be the case with the legacy of colonial and postcolonial education systems in Africa, including South Africa. It is, therefore, vitally important to decolonise the misconception of the superiority of Western Eurocentric knowledge in order to debunk the belief that this knowledge is the only viable knowledge when it comes to education.

The call for an African Renaissance in education, therefore, seeks to demonstrate how indigenous African epistemologies can be tapped as a foundational resource for the cultural and socio-educational transformation of the African continent, and also how these epistemologies can be politically and economically liberating. But in assuming the indigeneity of culture, the call for an African Renaissance in education does not connote a detachment from political radicalisation and mobilisation. But rather, proponents of the African Renaissance would claim that the influence of Western Eurocentric culture on Africans needs to be forcefully arrested by all critically conscious African educators in the struggle for the establishment of an African identity in education. In this regard, Brock-Utne³⁷ emphasises the important role which education can play to counteract the colonisation of the African mind by forces emanating from the excessive mono-cultural

domination of Western and European forms of knowledge and languages, and goes on to urge Africans to ask critical questions about the knowledge included in curricula and the languages spoken and used as medium of instruction.

Such a critical questioning about knowledge included in the curriculum will be evidenced in what I call, *transformative education discourses* that examine the sources of the knowledge that inform what is imposed on or prescribed for Africa, and how educational curricula are implicated in the universalisation of Western and European experiences. These discourses will also ask which ways of knowing, curricula validate and promote, and which ones they ignore, invalidate, and why. In so doing, transformative education discourses will help to construct decolonised curricula that will seek to integrate indigenous African epistemologies with the content of present day curricula in Africa. Such curricula will provide for the construction of empowering knowledge that will enable communities in Africa to participate in their own educational development.

But any discussion or critical reflection on the curriculum, even one concerned with the construction of a curriculum that includes reference to an African epistemic, requires some understanding of the curriculum in educational discourse. We need to ask: what meanings of the curriculum are pertinent to an African education discourse? In other words, what is the nature of the curriculum and its purpose, its value or worth? Also, how is the curriculum conceptualised, demarcated, structured and regulated? As Parekh³⁸ suggests, meaning depends on how we understand the nature and purpose of a concept, in this case the curriculum. Such an understanding of the meaning of the curriculum will allow us to critically explore the nature of the curriculum in an African context.

1.3 Conceptualising the curriculum

What is the meaning of 'curriculum'? I would like to suggest that a curriculum is designed to ensure that knowledge is conveyed in a systematic and planned way so as to impart an amalgam of knowledge and skills that are determined to be appropriate and necessary to society. A curriculum, therefore, refers to what knowledge is included or excluded in teaching/learning courses. The concept 'teaching/learning', encompasses the activities of teaching and learning in the spaces of education. It also encompasses policies, strategies, plans and infrastructure to support these activities. 'Curriculum' is, or should be, one of the key major concepts in the language of education. Through curricula, values, beliefs, and principles in relation to learning, understanding, knowledge, disciplines, community and individuality, and society are realised (see, Herder & Hopmann³⁹).

What follows is a brief discussion of three notions that reveal that issues of curricula are intertwined with the cultural, political, social and historical contexts of education systems and the world in which they operate (see, Barnett & Coate⁴⁰).

1.3.1 Curriculum as reproduction

The term ‘hidden curriculum’ is a key aspect of the notion of curriculum as reproduction, and there is a belief that this notion of curriculum seems to benefit some students more than others (Barnett & Coate⁴¹). It suggests that something else is going on beyond what can be seen on the surface in classrooms and textbooks. It is not just that some students are better able to decipher the rules of the hidden curriculum and thus achieve success, but that this hidden curriculum acts as a deliberate form of gate keeping by ensuring that only certain types of students will be able to use it to their advantage. This observation concludes that curricula serve to reproduce divisions in society, and that there is thus a sense of curriculum as social reproduction.

An emphasis on the curriculum as reproduction applies, for example, to current discourses on equity in South African higher education. The apartheid system of higher education was profoundly inequitable, and this has been addressed since 1994. Equity in this instance refers to more than just access. It is also about substantive access to a variety of academic fields and disciplines, to postgraduate study, and to opportunities and outcomes in general, in all fields and disciplines, and at all levels of study.

1.3.2 Curriculum as transformation

Political debates over the role of higher education have generated theories about its potential to empower and transform the lives of students. The literature concerned with empowerment begins from a premise that higher education has excluded certain groups, and recognises that some people have been disadvantaged within the system. According to Harvey and Knight (Barnett & Coate⁴²), the transformative model looks to the ways in which the educational experience enhances the knowledge, ability and skills of graduates, and in these terms can be empowering for students.

1.3.3 Curriculum as consumption

As education institutions compete with each other for lucrative student populations, contemporary curricula are guided increasingly by consumer demand. Students are now viewed as consumers of their education, and courses are designed to offer the kind of skills and knowledge that attract students who anticipate having to compete in the labour market. In this model, the curriculum has become increasingly influenced by outside interests. The government, industry and students all have a greater say (directly or indirectly) in the types of curricula that education institutions offer. The notion of curricula as consumption reveals how social values have shifted towards the marketplace, which is seen by some as in itself offering the potential for empowering students or transforming education.

Barnett and Coate⁴³ conclude by observing, for example, that the higher education curriculum has often been a site of contestation and debate, and that there are various

underlying points emerging that should be recognised in a search for a framework for a relevant curriculum. These include the following:

- o The curriculum reflects the cultural, social and political context in which it is located: Curricula are created within a wider cultural, social and political order, and as such, an understanding of the curriculum cannot easily be accomplished without recognition of these extraneous contexts in which it has been shaped.
- o The ‘hidden’ curriculum is pervasive and powerful: All curricula require processes of understanding and complying with rules, some of which are explicit, but many remain tacit.
- o The power of the knowledge fields: The subject areas or knowledge fields that constitute the foundations of the curriculum have a powerful hold on changes to the curriculum. Academic knowledge has, for example, had a special, almost untouchable, place in the universities that resisted outside attempts to interfere in the construction and design of the curriculum.

These observations highlight the role of the curriculum in empowering students, which is a cardinal issue in the construction of a curriculum in an African context. The transformation of South African higher education since 1994, for example, is located within a knowledge-driven and knowledge-dependent society, which the Council on Higher Education (CHE)⁴⁴ links with ever-changing high-level competencies and expertise necessary for the growth and prosperity of a modern economy. But these learning requirements that underlie curriculum development are also subject to two contrasting forms of knowledge accomplishments, namely skills of knowing and formal knowing.

Barnett and Coate⁴⁵ suggest that knowing (in skills of knowing) is less concerned with knowledge as such, but more concerned with being able to manipulate knowledge in knowing performances. They further suggest that the curriculum that sets out to encourage students to know a subject may also be intimately bound up with ways of being and acting. A curriculum in which the domains of being and acting are not integrated with knowing offers a fragmented experience, perhaps lending itself to a more performative character rather than a deep engagement with knowledge. The relationship between the dimensions of knowing, acting (in that students must take on and act out in a first-hand way their intellectual and professional roles) and being (the student must develop his or her inner self – a self that has to be developed if students are going to acquire durable capacities for flourishing in a world that is, to a significant degree, unknowable) are important to our understanding of changes in curricula.

There is thus an emphasis on competencies, which requires HEIs, for example, to develop curricula that allow students to develop competencies which can be transferred to other contexts; competencies which are derived from two contrasting forms of knowledge accomplishments (skills of knowing and knowledge).

These three notions that are concerned with the spelling out different meanings that can be attributed to the concept ‘curriculum’ indicate that the curriculum should be understood as a social practice concerned with the cultural and social conditions that underpin the construction of curriculum knowledge. In short, this means that the curriculum serves the cultural, political, social and historical contexts of education systems and the societies in which they operate. These conceptualisations are important when considering the nature of a curriculum that takes into account an African epistemic because they touch on the historical uses of the curriculum in Africa, the imperative of curriculum transformation, as well as market tendencies that dictate the nature of the curriculum.

1.3.4 Reconstructing the curriculum in an African context

Questions such as: ‘What should be learnt?’ and, ‘How knowledge should be organised for teaching?’ are key questions to be considered in any discussion on the reconstruction of the curriculum in an African context. These questions point to the social and political nature of the curriculum, and also to the public discourse connected with it.

These questions also involve a consideration of the following:

- o In what way(s) does the call for an African Renaissance in education impact on the task of, and approach to, knowledge production, and how does this effect knowledge production and curriculum development?
- o How is the content of the curriculum to be aligned with the needs and realities of African societies and communities?
- o What, and how much of the content of indigenous African knowledge systems should be included in the curriculum, and how shall this incorporation take place? In other words, how should this content be integrated with the existing content in the curriculum?
- o What are the possible research initiatives in curriculum development that can be embarked upon so as to ensure the integrity of intent in transforming the curriculum by including an indigenous African epistemologies and value systems?
- o What constitutes school knowledge in post-colonial African schools?
- o How is this knowledge created and disseminated?
- o The validation of school knowledge is political. So, how do we define and validate knowledge for the official curriculum in the face of multiculturalism, globalisation and the internationalisation of knowledge?

In considering these questions, the aim of reconstructing the curriculum should be to give indigenous African epistemologies their rightful place as equally valid ways of knowing among the array of knowledge systems in the world so as to solve global and local problems more effectively. Matos⁴⁶ reminds us that a major ‘disease’ of education and research in Africa is the systematic attempt to dismiss the intrinsic value of African culture,

language, customs and practices from the curriculum. Insofar then as colonial education contributed to the marginalisation and exclusion of indigenous African epistemologies and ways of knowing in the discourse and practice of education in Africa, curriculum planners can promote the decolonisation of the curriculum by:

- o determining the extent to which the content of curricula in Africa are informed by the wishes, thoughts and practices of local communities in that education should be firmly anchored in the cultural and intellectual environment of the community in which it is located;
- o examining the source of the knowledge that informs what is imposed on or prescribed for Africa, and how the curriculum is implicated in the universalisation of Western and European experience; and
- o interrogating the ways of knowing the curriculum validates and promotes, and which ones they ignore, invalidate, and why.

These actions will allow indigenous African epistemologies to be valorised and legitimised in educational discourses and curricula in Africa, but without leading to the extreme of doing away with Western and European epistemologies. What is needed in this instance is the creative integration of Western and European, and African systems of knowing in the reconstruction of the curriculum (see, Odora-Hoppers⁴⁷; Le Grange⁴⁸; Maweu⁴⁹). But also to be noted as Njoku⁵⁰ observes, '[A] restoration, however, must precede integration.'

Teaching and learning within an African context in education is, therefore, primarily involved with processes of inquiry that do not see the oppressive situation as a closed world from which there is no exit, but rather as a process of constructing and building possibilities through imagination and hope. Hence, a curriculum constructed on the basis of indigenous African epistemologies is primarily concerned with empowering educators and learners to gain confidence in their own capabilities and to acquire a sense of pride in their own ways of being in the world. Curriculum planners should, therefore, contribute to the project of epistemological redress and infuse the content of the curriculum with the wealth of knowledge that emanates from local communities and appropriate such knowledge towards human-centred development.

Odora-Hoppers⁵¹ takes this point further when she makes a powerful plea that our thinking with regard to development in general needs to change dramatically. She argues for what she calls a 'post-victimology' perspective, where local people should be allowed to redefine their own existence. She asks the question: 'Are rural people living off local resources really backward vis-a-vis urban people in the North who are consuming global energy and natural resources at unsustainable levels?'

The challenge for an African discourse in education is to apply the notion of 'post-victimology' in education content and practices in all sectors of its concern. For example,

the underpinning rationale of the curriculum in education should be to convey to a diverse learner population, the idea of the legitimacy of their own voices. Learners should be encouraged to look for the significant connection between content offered in the curriculum and their own life experiences. This poses an obvious challenge to educators to facilitate the connection between content of the curriculum and life experiences. The latter should also be regarded as important sources of knowledge to make informed decisions and, for a meaningful existence. Learning thus implies taking full responsibility for ones' own destiny. This is the epitome of a post-victimology perspective and should ultimately lead to what Odora-Hoppers⁵² calls, the 'discovery of knowledge as wisdom' which is facilitated by the curriculum in the spaces of education in Africa. The 'discovery of knowledge as wisdom' as an outcome of education is an interesting notion and a very relevant one when considering the curriculum in an African context. Mazrui⁵³ speaks of the seven pillars of wisdom which when seen in relation to the purpose of such a curriculum, provide a basis for the construction of a curriculum which includes and integrates indigenous African epistemologies.

The first pillar of wisdom is tolerance. The question arises: how do curricula promote tolerance? Given (South) Africa's colonial and ethnical past, there should surely be a concerted attempt to promote tolerance through informal, non-formal and formal curricula. Recent incidents relating to xenophobia, racism and concerns about violence and crime in South Africa suggests that a lot of work needs to be done in this crucial area. Ongoing factional wars on the continent also point to a need to promote tolerance through education curricula. Recent developments in Sierra Leone, Sudan, Tunisia, Libya and Egypt suggest that tolerance amongst people from different cultures, traditions and languages could benefit from a curriculum which emphasises tolerance.

The second pillar of wisdom is the optimisation of the economic wellbeing of the people. Poverty is still plaguing many people on the continent, and some of the poorest countries in the world are found on the continent. Despite Black Economic Empowerment initiatives in South Africa, the large majority of black people have not benefited and poverty remains a major challenge.

The third pillar of wisdom is social justice. A focus on social justice involves coming to understand oneself in relation to others; examining how society constructs privilege and inequality, and how this affects one's own opportunities as well as those of others; exploring the experiences of others and appreciating how these experiences inform their life worlds, perspectives and opportunities; and evaluating how schools and classrooms operate and can be structured to value diverse human experiences and to enable learning for all students (Darling-Hammond, in Keiser⁵⁴). A central question is: how can education best benefit all individuals and also the society that they live in? In addition to the earlier question about who stands to benefit, we also need to ask: who is not benefiting?

The fourth pillar is basic gender equality. The question arises: how should curricula address gender issues? There are still many gender disparities in education in (South) Africa; this is evident in the disproportional representation of women in positions of school principals. Despite a strong focus on gender inequalities in South Africa, it seems quite a challenge to achieve gender equity in education. Institutional gender discrimination intersects in a cumulative manner with race, class and culture; and men within all these categories to a lesser or greater extent have wittingly or unwittingly contributed to the consolidation and ‘canonizing deficit theories’ related to women. In the light of this, curricula should address gender issues in a much more radical way.

The fifth pillar of wisdom relates to the environment, the quest for ecological balance and the protection of Planet Earth against excessive exploitation and devastation. We need to ask how ecology-friendly African culture is, and how the environment features in curricula. A feature of modern economies is the option of nuclear power to supply our ever-growing energy needs. But what are the implications for the environment in relation to nuclear energy? Africa is in danger of losing its natural resources at a very fast rate, and thus may have serious consequences for the future wellbeing of nations. One way to reverse this trend is for the environment to feature much more prominently in curricula.

There is also the sixth pillar of inter-faith dialogue and cooperation. A curriculum, in an African context, has to take into account the role of religion in the colonisation of Africa, and the polarising effects of a so-called Christian justification of apartheid rule. At the same time Africa has a history of embracing religious differences, and this should be foregrounded in curricula to promote dialogue and cooperation.

The seventh pillar of wisdom is a relentless quest for greater wisdom. An important part of this area of wisdom is the pursuit of creative synthesis. This synthesis may be between ethics and knowledge, between religion and science, and between one culture and another. It is sad to see how museums on the continent have been neglected over time; this cannot be allowed as Africa stands to lose important intellectual resources.

Mazrui’s⁵⁵ seven pillars of wisdom represent a telling commentary on issues that need to feature in the reconstruction of the curriculum in an African context. Post-colonial Africa needs to transform through educational decolonisation and reconstruction. Decolonising the curriculum requires rupturing the hegemonic structures of Western and European defined knowledge. From this perspective knowledge is transformed, reconstructed and rewritten to celebrate difference, diversity, pluralism, multiplicity and heterogeneity without portraying one form of knowledge as the culture of reference. And such is the mandate for curriculum planners in restoring an African epistemic in the curriculum for an African context. Efforts at realising this mandate have been demonstrated in, for example, South Africa.

1.4 The Africanisation of curricula in South Africa

What are some efforts to Africanise curricula in South Africa? In 1995, the South African government began the process of developing a new curriculum for the school system. There were two imperatives for this. First, the scale of change in the world, the growth and development of knowledge and technology and the demands of the 21st century required learners to be exposed to different and higher level skills and knowledge than those required by the existing South African curricula. Second, South Africa had changed. The curricula for schools, therefore, required revision to reflect new values and principles, especially those of the Constitution of South Africa.

The first version of the new curriculum for the General Education Band, known as Curriculum 2005, was introduced into the Foundation Phase in 1997. While there was much to commend the curriculum, the concerns of teachers led to a review of the curriculum in 1999. The review of Curriculum 2005 provided the basis for the development of the National Curriculum Statement (NCS) for General Education and Training (Grades R–9) and the National Curriculum Statement (NCS) for Grades 10–12.

A critical element in the reconstruction of the school curriculum was the recognition and valuing of IKS systems. IKS in the South African context refers to a body of knowledge embedded in African philosophical thinking and, cultural and social practices that have evolved over thousands of years. The NCS Grades 10–12 (General) infused IKS into the Subject Statements to acknowledge the richness of the history and heritage of this country and its constitution.

I briefly refer to some learner areas to demonstrate the use of IKS. Tourism acknowledges the rich history and heritage of this country as important contributors to nurturing the values contained in the Constitution (Learning Outcome 2). Life Sciences propagate the making of African beer, as compared to the traditional Western methods of manufacturing beer. It is also possible in Life Sciences to consider traditional methods, including herbal treatment used for healing certain ailments. The Life Sciences, therefore, recognise the richness of indigenous epistemologies which feature Learning Outcomes 2 and 3 in Life Sciences.

With regards to mathematics it is stated that in the 1960s the theory of multiple intelligences forced educationists to recognise that there were many ways of processing information to make sense of the world, and that, if one were to define intelligence anew, one would have to take these different approaches into account. Up until then, the Western world had only valued logical, mathematical, and specific linguistic abilities, and rated people as ‘intelligent’ only if they were adept in these ways. Now people recognize the wide diversity of knowledge systems through which people make sense of and attach meaning to the world in which they live. Through the learning outcomes and assessment standards for the

subject Geography, teaching and learning aims at intellectual accomplishment with the acquisition of a broad range of skills, gains in knowledge and understanding, as well as, the ability to apply these competencies to promote sustainable living.

Agricultural Technology is designed in such a way that it values IKS, developed and used through the years by communities to solve local problems in their agricultural environment, for example, the burning of dung between cattle during the night as a mosquito repellent, and fires between orange trees to prevent black frost damage. Through language, learners can make sense of the world. Listening, speaking, reading, viewing and writing broaden learners' knowledge of the wide variety of IKS within South Africa. Learners need to be able to articulate IKS in whichever language they use. In this regard, the Subject Statements for Languages acknowledge the rich history and heritage of this country through its integrated text-based approach. Many visual, audio, audio-visual and multimedia texts with different perspectives have been included for every grade to assist problem solving and information gathering in the curriculum for Languages. The emphasis on IKS is, however, not confined to the school curriculum in South Africa, and universities are increasingly including IKS-related epistemologies in their curricula (see, Mollema & Naidoo⁵⁶; Letseka⁵⁷; Gumbo⁵⁸; de Beer & Hoffman⁵⁹; Vogel⁶⁰; Gray⁶¹; Kreitzer & Mupedziswa⁶²; Botha & de Beer⁶³; Higgs & Moeketsi⁶⁴).

1.5 Conclusion

My intention in this chapter has been to address the need for curriculum reconstruction in an African context in the light of Africa's colonial past and the call for an African Renaissance on the African continent. In so doing, I have explored the reclamation of indigenous African epistemologies in curriculum reconstruction in post-colonial Africa, and the challenges in revisiting these indigenous epistemologies on education in general, and the curriculum in particular.

African epistemic traditions see the development of knowledge as a holistic journey that encompasses process, content, learners, educators and the socio-cultural context in which the structured learning is being modelled. According to Odora-Hoppers⁶⁵, the trend to view knowledge simply as information, mediated by institutions of learning should be debunked because it removes participants from knowledge as wisdom and hence detracts from those who hold the responsibility for its transmission. Ramose⁶⁶ reminds us furthermore, that wisdom is openness to unfolding praxis, which also cherishes the logic of co-operation, rather than that of conquest and competition. The golden rule of wisdom, he goes on to say, is that 'reductionism, absolutism and dogmatism are an injury to the complexity of life as a holistic phenomenon'. It is precisely in this regard that the curricula constructed on indigenous African epistemologies can contribute to addressing the problem of viewing knowledge as something divorced from the learner

and thus removed from the responsibility, as well as the opportunity to be actively involved in one's own learning.

These considerations have serious implications for the construction of the curriculum. This is so because the way in which teaching and learning are mediated and structured by the curriculum should model an appropriate epistemology that encourages a learning environment where the learner not only learns 'facts', but rather undergoes change, because of the insights gained and subsequently becomes a wiser and more humane person, capable of living in harmony with the surrounding world. This is the prerogative of attempts at reconstructing a curriculum in an African context.

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Chapter 2

Unpacking Africanisation of higher education curricula: Towards a framework

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2.1 Introduction

Africanisation of curricula is a concept that invites a number of critical questions such as: what? (definition), why? (rationale), how? (process), and so forth. This is a concept that has bred a number of definitions, meanings, connotations and implications as it has partly already been acknowledged by Higgs in Chapter 1 as well as Msila in Chapter 4. The concept can also be an emotionally and politically loaded concept and has led to confusion, fears and misconceptions in some people. Given the complexity and sensitivity of the concept and its political, economic and social implications, it is important that before an institution begins to walk on the path towards Africanisation, serious efforts should be undertaken to unpack or understand or appreciate the concept. If these steps are not taken, we are not going to make meaningful progress since we will be working with a concept we do not understand. There is need, therefore, to cultivate a culture of a shared or common understanding of the concept. It is against this background that the chapter proposes a framework for unpacking the concept of Africanisation of curricula. I will do this in addition to the brief definitions that Gumbo furnishes. This exercise should not be mistaken for unwarranted repetition, because my definition of the concept is meant to lay a platform for the kind of curriculum issues that I raise in this chapter. Also, at the heart of the discussion in this chapter is the term 'Africanisation'.

There is no single definition for this term. However, for the purpose of our current discussion, we adopt Maluleke's¹ definition that runs as follows:

Africanisation is the re-orientation of persons, institutions, products, processes and ideas towards a fresh, creative and constructive imaging of Africa and African contexts which take past, present and future African reality and African potential seriously, consciously and deliberately.

For others, Africanisation is used synonymously with the terms localisation and/or indigenisation. Gumbo has adopted this approach in Chapter 3 by choosing to use the two concepts interchangeably. Africanisation of the university has a wide range of focus areas such as:

- o Africanising curricula, i.e. ‘integration of issues of concern to Africans into the curricula’²;
- o Africanising higher education institution’s philosophy/mission statement/vision/strategic plan;
- o Africanising student body (student recruitment);
- o Africanising teaching and research staff body; and
- o Africanising the research agenda.

Africanisation of curricula stems from the realisation that higher education in Africa has, since the days of colonisation, been dominated by curricula, practices and structures borrowed from the West as Higgs has emphasised in Chapter 1. One of the consequences of this trend has been the neglect of African cultures and indigenous knowledge systems (IKS), as Gumbo and Msila in ensuing chapters hammer this point. Africanisation of higher education is not confined to curricula only. Africanisation is about touching the entire academic trinity, namely, teaching, research and engagement. To put it more strongly, Africanisation has to touch every corner of higher education, including the mindsets of both staff (academic and support staff) and students. As such, Africanisation of curricula cannot bear tangible fruits if it does not receive support from all the sectors of an academic institution. What is needed is not Africanisation that is confined to some isolated areas of higher education but rather what I would call Africanisation across a higher education institution (HEI). The discussion in the chapter takes the following format: In the next section, I propose a framework for analysing Africanisation of higher education curricula. This is followed by a section which, with the use of relevant examples, elaborates the framework for unpacking the Africanisation of higher education curricula. In the last section I provide recommendations and conclusions.

2.2 Towards a framework

As mentioned earlier, the chapter proposes a framework for unpacking and analysing the Africanisation of higher education curricula. An earlier version of the framework was employed by Knight³ in her analysis of the notion of internationalisation of higher education. I have adopted Knight’s⁴ framework and re-tailored it to illuminate and unpack the concept of Africanisation of HE curricula. My version of the framework comprises the following fifteen critical questions:

- o What is Africanisation of curricula?
- o What is the purpose of Africanising curricula?

- o What are the expected benefits or outcomes of Africanised curricula?
- o What are the positive consequences of Africanisation of curricula?
- o What are the unintended results of Africanisation of curricula?
- o What are the negative implications of Africanisation of curricula?
- o What are the values that underpin Africanisation of higher education curricula?
- o Who are the main actors, stakeholders, and beneficiaries of Africanisation of higher education curricula?
- o Is Africanisation of higher education curricula a passing fad?
- o Is Africanisation of higher education curricula sustainable; and if so, how?
- o How are HEIs responding to the competing forces of Africanisation and internationalisation of higher education curricula?
- o Is Africanisation of higher education curricula a response to globalisation?
- o What are the implications of Africanisation of higher education curricula on international labour mobility and graduate employability?
- o What are the funding/resource implications of Africanisation of higher education curricula?
- o What are the educational policy implications of Africanisation of higher education curricula?

By engaging with each of the 15 questions posed above, the proposed framework will help us appreciate some of the critical issues surrounding the Africanisation of higher education curricula. More questions can be added into the framework. The proposed framework will help us to deepen our understanding of possible and/or competing definitions of Africanisation, justification behind Africanisation, possible outcomes of Africanisation, the relationship between Africanisation and globalisation, and resource and policy implications of Africanisation of higher education curricula.

2.3 Discussion and elaboration of framework

2.3.1 Purpose of Africanising curricula

The question is asked: What is the purpose of having Africanised curricula? Providing answers to this question demands thinking deeply about what the Africanisation of curricula intends to achieve. A widely made assertion is that HEIs in Africa are largely institutions where curricula are dominated by Western and other non-African knowledges. To this end, Africanisation of curricula is one way of correcting such an imbalance. One can also argue that there has been a wrong and unfortunate impression, arising out of slavery, colonisation and apartheid, that true knowledge worth learning is that which comes from the West. It can also be argued that Africanisation of curricula can help us to document Africa's contribution to knowledge production. It goes a long way to confirm

that Africa is both a consumer and producer of knowledge. As Ntuli⁵ has argued, within higher education, there is the subjugation of IKS in favour of Western knowledge systems. It is as if true knowledge is that which comes from the West. By Africanising the curricula, one is dispelling that myth of the West or the global North as the only legitimate site of knowledge production. The West is simply one of the many sites of knowledge production and not the only site of knowledge production.

There is now a call to decolonise higher education curricula in Africa. Furthermore, there is a necessity to recognise the validity and relevance of knowledge created about and from Africa. In other words, there is a realisation that knowledge production and consumption has to be a two-way traffic, namely, to have Africa as both a consumer and producer of knowledge. After the end of colonisation in the 1960s, African countries took the initiative to make their higher education curricula relevant and responsive to local situations. The temperature of Africanisation went up with the demise of the apartheid regime in South Africa. The post-apartheid higher education context in South Africa has given a new lease of life to Africanisation. This has been fuelled by the renewed call for the African Renaissance. Arguably, South Africa has been at the forefront of championing the African Renaissance and Africanisation, but it is not correct to think of the African Renaissance as an exclusively South African issue. The African Renaissance is for the whole continent of Africa and the diaspora.

We live in an increasingly globalised world, and in this context, internationalisation of curricula is gaining strength every day. So why then go for Africanisation? What is the need for an African curriculum when everybody else is going global?⁶ Africanisation of curricula, therefore, leads to the creation of an African identity (compare with definitions of Africanisation in Chapters 1, and 3). In addition, Africanisation of curricula gives higher education an African essence (see, Makgoba & Seepe⁷). Africanisation of curricula means that non-Africans, due to the globalisation of educational services, can also access or acquire this knowledge of African origin.

The question of relevance is crucial to the Africanisation of curricula. Think of medical training as one example. Is it possible to Africanise medical training? Yes. And what does that mean? It means training doctors that are of a quality and standard to compare favourably with their colleagues who are trained elsewhere in the world. In addition, these medical doctors who have undertaken Africanised curriculum should be able to respond well to local problems. Writing about the then English-sector universities of the apartheid South Africa, Davies observes that the medical school curricula were of Western orientation, 'focused on high-tech, drug-based, curative medicine, rather than on preventive programmes more relevant to an African country'⁸. Going into the present era (the post-apartheid South African era), I came across a dictionary (English/Xhosa) for medical students at the University of Cape Town. Why should medical students also take courses in language(s) (or African languages for that matter)? The relevance of isiXhosa

to South African medical practitioners operating in the Cape cannot be questioned, and in my view, this constitutes an act of Africanising medical curriculum. The issue amounts to what McLellan⁹ describes as addressing national needs within a global context. One of the major education trends of Africa in the post-independence era (and the post-apartheid era in the case of South Africa) has been the desire to effect changes in curriculum and to have curricula content that are no longer Eurocentric, but those that are centred on African people's thoughts, experiences and environments.

2.3.2 Competing forces of Africanisation and internationalisation

In this section, we respond to the question: How are HEIs responding to the competing forces of Africanisation and internationalisation? This is a question that Msila also tries to answer in Chapter 4 as well as Chikoko in Chapter 5. Internationalisation is a common concept in higher education discourses across the globe. Despite its frequent use in these discourses, internationalisation remains a slippery concept that has been variously defined. It is a concept that has also sometimes been used synonymously with globalisation, but strictly speaking, the two concepts are not the same thing. For the purpose of the current chapter, 'internationalisation refers to the specific policies and initiatives of countries and individual academic institutions or systems to deal with global trends'¹⁰.

We are also aware that internationalisation takes a number of forms, for example, internationalisation of student body, staff, curricula and research, just to give a few examples. In the current chapter, we focus on internationalisation of curricula versus Africanisation of curricula. Writing from the context of South Africa, Botha¹¹ notes that higher education institutions are faced with a tug of war between the desire to Africanise (a very strong force in post-apartheid South Africa and post-colonial Africa) and internationalisation (another equally strong force). Both Africanisation and internationalisation are much needed initiatives given their respective benefits, but the two do at times seem to be in conflict with each other. There are, therefore, some challenges that appear when a HEI takes the two approaches on board. It is an uphill task for any HEI to entertain Africanisation and internationalisation at the same time. One of the approaches is bound to suffer. Trying to go for a balanced attention between Africanisation and internationalisation is certainly no easy road on which to travel.

As a result of the strong force of the African Renaissance and the current interest in Africanisation, one notes that the notion of Africanisation is highlighted in higher education institutions' mission statements, visions, and strategic plans. To this end, one finds universities that describe themselves as African universities (e.g. the University of Botswana, the University of KwaZulu-Natal and the University of South Africa). Let us first take the case of the University of Botswana (UB) whose mission is 'to improve economic and social conditions for the nation while advancing itself as a distinctively

African university with a regional and international outlook'¹². The same university has an internationalisation policy. One of the values of UB is internationalism through participation in the global world of scholarship by being receptive and responsive to issues within the international environment as well as the recruitment of staff and students' body. This focus on internationalisation does not make the university shy away from local responsibility since the university has the 'social responsibility by promoting an awareness of and providing leadership in responding to issues and problems facing society'¹³.

Let us turn to our second example of an African university – the University of South Africa, also well known by its acronym UNISA. This is Africa's largest open learning and distance education-based university. When one visits the university's website, one sees an open declaration on the vision page that reads as follows: 'towards the African university in the service of humanity'¹⁴. Having declared itself as an African university, Unisa proceeds to link itself not only to Africa but also to the world beyond the continent. This comes out clearly in the mission statement that declares that the university 'is accessible to all learners, especially those on the African continent, and the marginalised, by way of barrier-free movement, while responding to the needs of the global market'¹⁵. Our third example of an African university is the University of KwaZulu-Natal (UKZN). The vision of UKZN is to be the premier university of African scholarship. The mission statement reads:

A truly South African university that is academically excellent, innovative in research, critically engaged with society and demographically representative, redressing the disadvantages, inequalities and imbalances of the past¹⁶.

One of the goals of UKZN is to promote African-led globalisation through African scholarship by positioning the university, through its teaching, learning scholarship, research and innovation, to enter the global knowledge system on it¹⁷.

As noted above, all the three universities aspire to be African universities, but that aspiration does not cut them off from being responsive to global issues.

We now turn to an example of competition between internationalisation of curricula and Africanisation of curricula. Whilst UB is a public university that prides itself in being an African university, the reality on the ground is that the same university is found to be promoting internationalisation of language curricula at the expense of Africanisation. My contention on this aspect corroborates Msila's questioning of the mismatch between what the South African Constitution recommends in terms of promoting indigenous languages vis-a-vis the delayed transformation on the ground (see, Chapter 4 Section 4.6). Internationalisation of language curricula is conducted through the Department of English, the Department of French, the programme in Portuguese language learning, and

the Confucius Institute for Chinese language and culture. On the other hand, there is a Department of African Languages and Literatures. This department is supposed to cater for Setswana, but the courses are taught in English, allowing students to use Setswana or other African language examples. It is only recently that there has been a proposal to launch a Bachelor of Arts degree programme majoring in Setswana. The new programme is expected to have Setswana as the medium of learning and teaching.

Still at UB, an external examiner for the Post Graduate Diploma in Education (PGDE) programme once expressed concern over the medium of learning and teaching for Setswana methodology courses. Just like the English methodology courses, Setswana methodology courses are taught in English. Course outlines, assignment tasks and examinations are all set in English. Even the lesson plans are written out in English and yet when students graduate and go to teach in the schools, they are required to teach through Setswana. There is, therefore, a mismatch between the training obtained at the university and the reality in the classroom. The continued use of English as the medium of learning and teaching for Setswana methodology courses creates the impression that Setswana does not have appropriate terminology. Yet, the truth is that outside UB, colleges of teacher education are able to teach Setswana methodology courses through Setswana.

Another area of conflict between localisation and internationalisation at the university is the practice by some lecturers who code switch between English and Setswana during lectures. One may argue that such lecturers aim at helping local students (who are in the majority) to overcome the language barrier, i.e. using English as the medium of learning and teaching. But considering that UB is a national university and at the same time one that is on the path of internationalisation, this code switching amounts to giving no attention to international students who are not proficient in Setswana. It is a case of linguistic exclusion. At one time the Dean of Education sent out an email to all members of staff, advising them to adhere to the English language policy. This is just one example of the clash between internationalisation and Africanisation.

2.4 Africanisation: A response to globalisation?

A question can be asked: Is Africanisation a response to globalisation? First, what is meant by globalisation of higher education? Globalisation and internationalisation are some of the commonly used terms in higher education discourses. The two terms are closely related but are not one and the same thing (see, for example, Altbach¹⁸; Knight¹⁹; Scott²⁰). The seriousness of the confusion surrounding the term internationalisation of higher education can be summed up as follows: ‘internationalisation is interpreted and used in different ways in different countries and by different stakeholders’²¹. It is against this background that it has been observed that ‘the internationalisation of higher education is by no means an uncontested concept’²². As far as Altbach is concerned, globalisation refers to ‘the

economic, political and societal forces pushing 21st century higher education towards greater international involvement²³.

The African university is not immune from the influence of globalisation. But when we talk of the African university, what are we really talking about? Are we talking about a university that is physically located on the African soil? Mthembu²⁴ poses the big question: 'Does an African university exist?' Mthembu proceeds to ask more questions on the same topic: 'Is it about mere geographical location or about a distinct belief, conceptual, and intellectual system? Does it exist as a unique entity, with universal or non-universal elements? What are its foundations, philosophy, values, conceptual system, and epistemology? How different are these from those of modern universities in Europe and Asia, for instance?'

For the purpose of the current chapter, we take an African university to be one which addresses African aspirations and concerns. This is a university that displays a sense of social responsibility towards African societies. This is how Makgoba and Seope²⁵ perceive an African university to be. For Mthembu:

without a clear understanding of what the African university is, the African University shall remain a university in Africa with no unique contextual purpose or global respect for its decontextualised purpose.²⁶

The African university has to respond to globalisation. In its interaction with the forces of globalisation, it can be easy for the African university to be African only in name and not in its curricula. There is the temptation to focus on the global picture at the expense of the local picture in as far as curricula are concerned. It is against this background that the Africanisation higher education curricula can be seen as a response to the powerful force of globalisation.

2.5 Africanisation and international labour mobility and graduate employability

We now turn to an exploration of the link(s) between Africanisation and international labour mobility and graduate employability. Some critical questions arise here. Firstly, what are the implications of the Africanisation of higher education curricula on international labour mobility? Secondly, what are the implications of Africanisation on graduate employability? To what extent do Africanised curricula promote graduate employability? We also have to ask: Who are the prospective employers, and where are they located? One of the arguments for internationalising higher education curricula is to enhance the capacity of graduates to effectively handle matters of global concern. Others would say that they want to produce graduates that are globally competitive and productive. These are graduates that are very knowledgeable and skilful in handling global issues. There is no doubt that Africa needs to produce graduates that can play effectively and competitively on the

international labour market. However, this desire should not shut Africa off from the fact that we also need graduates who are first and foremost, well versed with local issues (i.e. national, regional and/or continental issues in Africa). As the saying goes, charity begins at home. Africa cannot afford to have graduates that are more knowledgeable about foreign (non-African) situations than their own African situations.

The relevance of academic programmes that produce graduates becomes a critical issue. Africanisation answers the need for relevance. That is, through the Africanisation of curricula, HEIs should be able to produce graduates who are of relevance to their immediate environments. But that is not the end of story. In view of the dangers of not being able to look beyond one's own small village, it is important that Africanisation should not mean a ban or removal of curricula that address global issues. Any institution of higher education, whilst Africanising their curricula, should take cognisance of the dangers of living in an academic cocoon. Extreme Africanisation, with little or no space for internationalisation, can create graduates who are locally relevant, but who fail to appreciate how the local situation can respond to global trends, or how global trends are affecting the local situations. At the end of the day, African countries need graduates who are effective and competent players on both the local and international scenes, and this calls for a well-articulated blend of internationalisation and Africanisation of higher education curricula. It is a difficult task, but it is certainly one that HEIs cannot afford to ignore. The idea of Africanisation of curricula should be that of prioritising local (national, region or continental needs) whilst at the same time being appreciative of the global contexts. We should be looking for what Botha²⁷ calls compatibility between internationalising and Africanising higher education curricula.

A question that is worth asking here is: What are the employment and self-employment opportunities for those who specialise in African studies, for example, those who graduate with specialisations in African languages? I have picked the case of graduates of programmes in African languages deliberately given the fact that all over Africa, there is a preponderant offering of European languages (or former colonisers' languages) as subjects of study in higher education. Graduates who specialise in languages such as French, English or Portuguese partly do so in the belief that since these are international languages, employment opportunities can come faster than when one specialises in African languages. African languages are regarded as dead ends as far as employment and self-employment opportunities go. But have the doubting Thomas ever thought of what is known as the African language industry. This concept emanates from a situation whereby language becomes a commodity²⁸ or forms a product or service that can be placed on the market. Naturally, there is a supplier or producer of a language commodity or product (e.g. a bilingual Chichewa/English dictionary could be the commodity) or a language service (e.g. interpretation or interpretation) or editing. On the other side, you have consumers who pay for these language products/services. As an example, the

dominance of English throughout the world has led to the creation of what can be called the English language teaching (ELT) industry and ELT is a fast-growing industry²⁹.

What, then, is the composition of an African language industry? This industry comprises both indigenous African languages and foreign languages. Given that the linguistic landscape in Africa comprises indigenous African languages and foreign languages, then the African language industry boils down to the two categories of languages. However, in the spirit of African Renaissance, one can argue for a special emphasis on African languages. This, however, does not mean the isolation of foreign languages. In the spirit of African Renaissance, there is an urge to develop and promote African indigenous languages, and enable them to penetrate into domains that are currently dominated by exoglossic languages. This entails elevating the status of indigenous African languages, but does not mean abandoning the use of foreign languages. It is in higher education where we find the highest level of scholarly attention being paid to African languages. These institutions serve as training grounds for language workers such as information technology specialists, translators, interpreters, editors and teachers. If we are to have a vibrant African language industry, then we must also strengthen the teaching and research programmes in African languages in higher education. The various courses and programmes in African languages (aimed at producing language workers) should be tailored to suit the needs/demands of the market. The ultimate goal here is to improve graduate employability and strengthen the relevance of such programmes/courses to the reality on the ground³⁰.

2.6 What are the values that underpin Africanisation of higher education curricula?

There is need to consider very carefully the values that should underpin an institution's Africanisation agenda. This has to be seriously debated within a HEI itself.

2.6.1 Actors, stakeholders and beneficiaries of Africanisation

There is a need to know and appreciate who the main actors, stakeholders and beneficiaries of Africanisation of higher education curricula are. For every institution, there is need to determine who the main actors are and how well prepared they are for the implementation of the Africanisation programme. Who stands to benefit from Africanisation, and how? And also, who stands to lose in the course of the Africanisation of curricula, and how? Outside the learning institutions, which groups are affected by Africanisation, and in what ways? These are some of the questions that should be interrogated as an institution decides to walk on the road to Africanisation of curricula.

2.6.2 Is Africanisation of higher education curricula a passing fad?

Is Africanisation of higher education curricula merely a passing fad? It is worth asking the question since some sceptics tend to dismiss Africanisation of higher education as just one of those many passing fads. What proof do we have for dismissing Africanisation in this manner? And what proof do we have for developing faith and confidence in the view that Africanisation of curricula does not belong to the category of passing fads? There is, therefore, need for institutional leaders to demonstrate in very unambiguous ways that Africanisation is a serious agenda. It is a programme that is not new at all and it is a plan that is closely connected to Africa's freedom and independence. It is an agenda that is very supportive of Africa's desire to undergo the process of renewal, rebirth as well as re-invention. There is need to demonstrate that Africanisation of curricula is not motivated by emotions, racism, pressure from the big brother, and anti-Westernism. Africanisation of curricula should be a fair attempt an academic institution in Africa to give its curricula local relevance and identity.

2.6.3 Is Africanisation of higher education sustainable; and if so, how?

There is no single way of ensuring that the Africanisation programme can become sustainable. One may wish to think of how mindsets can affect sustainability of Africanisation. Are the mindsets of staff, students and other stakeholders well-tuned to support or oppose Africanisation? For instance, the mind-set that carries the view that true knowledge emanates from the West is without doubt a threat to the sustainability of any Africanisation programme. The same is also true of the tendency among some Africans to look down upon African languages and shun them as subjects of study in higher education. African academics are some of the worst culprits of this self-inflicted damage.

We also have think of sustainability with reference to the availability of material and human resources. Does a particular institution have the necessary and adequate resources to sustain the Africanisation agenda? Most institutions of higher education in Africa suffer from acute shortage of resources. Because of the scarcity of resources in African institutions of higher learning, there can sometimes be a temptation to turn an uncritical eye towards accepting foreign assistance. Some of this foreign assistance goes a long way to threatening Africanisation. For example, under some international partnerships between African universities and non-African universities, some courses or programmes or teaching materials find their way into African institutions. In this context, some foreign bodies or governments may come to African universities to promote their own interests. Examples include the Confucius Institutes that have been established across the world. When such institutes are received uncritically, they may pose a challenge to efforts towards setting up institutes whose focus is on Africa issues.

2.6.4 What are the funding/resource implications of Africanisation of higher education curricula?

It is not easy to highlight the funding/resource implications that arise due to the implementation of the Africanisation of curricula. There is no doubt that some funding/resource implications associated with the Africanisation of curricula are bound to prevail. The exact nature these implications will obviously vary from one institution to another. All we can do here is to appreciate some likely demands such as staff training, resource persons, and learning and teaching materials. This is, by no means, the limit. Firstly, there is need to train or reorient teaching staff towards Africanisation. This can take the form of seminars, conferences, workshops and other avenues. Through such avenues, participants should be able to share ideas, debate and deepen understanding of Africanisation.

Secondly, the availability of resource persons is crucial. These are people who are well versed with Africanisation and could be found within or outside the institution. Creating teams that can campaign for Africanisation and win the hearts of sceptics is one possible strategy that can be pursued at institutional level. Buying the support and confidence of those who oppose or doubt Africanisation is one of the prerequisites for the success of Africanisation.

Thirdly, there is need to have learning and teaching materials that can support the Africanisation programme. These materials (books, journals, audio-visuals, etc.) could be produced within the institution or outside. One good example is the CODESRIA textbook series and the CODESRIA journals whose focus is on Africa. Africanised curricula have to be supported by Africanised learning and teaching materials. One of the seven priority areas of focus for Africa's 'Second Decade of Education'³¹ is curriculum and teaching and learning materials:

To ensure the development and provision of balanced, relevant, responsive and culturally sensitive curricula adequately supported by appropriate teaching and learning materials, in all forms and levels of education.

CODESRIA's textbook project aims at producing textbooks for use in African universities. The project has the following goal; to promote and facilitate research and knowledge production in Africa using a holistic, multi-disciplinary approach. The Council is committed to combating the fragmentation of knowledge production, and the African community of scholars along various disciplinary and linguistic/geographical lines³².

The programme was initially introduced as part of a broad set of objectives for achieving greater balance and relevance in curriculum development in African universities by making available to teachers and students, textbooks that are adapted to the African historical context and the environment of research on the continent.³³ The programme

aims to assuage the book famine that has afflicted the African social science community for some time now.

Whilst the focus of the current chapter is the Africanisation of higher education curricula, it is not out of order to have research as one of the areas of consideration. I take this view given that research and the learning and teaching of curricula should be regarded as allies rather than opponents. Research creates knowledge. It is this knowledge that forms part of the curricula. In other words, research findings do find their way into the learning and teaching activities in higher education. This is a case of research feeding into learning and teaching, thereby supporting curricula. It is also possible for learning and teaching to feed into research. Given this mutual enrichment between research on one side, and learning and teaching on the other hand, it is important to determine the extent to which research can be Africanised, and how such Africanised research supports efforts to Africanise curricula. Deliberate efforts should be taken to Africanise a higher education's research agenda.

2.6.5 What are the educational policy implications?

It is imperative that we explore institutional and national policies, and assess the extent to which they accommodate, support or even oppose/contradict Africanisation. It may also become necessary to come up with specific policies that go a long way in supporting or consolidating the Africanisation agenda.

2.7 Recommendations and conclusions

Africanisation is not about the promotion of isolation through creating curricula that are so localised that graduates become incapable of surviving in the complex and globalised world. Africanisation of curricula, in whatever form or format, should leave room for the incorporation of non-African issues. As Louw³⁴ declares:

those advocating the Africanisation of higher education institutions should keep in mind that their teachings are dominated by what is happening in the global community and their eyes should be on the bigger picture, but they should not forget to emphasise the local community's 'place in the sun' and where this all fits into their own cultures and values.

As argued by some scholars, Africanisation of curricula should not oppose internationalisation or globalisation, but must open to the world of knowledge. 'If Africanisation means the ostracism or ridiculing of 'non-African' knowledge or replacement of Western knowledge, then it is unacceptable'³⁵. Africanisation should not breed academic silos. Scholarship of African and non-African origins must feed into each other and strengthen each other. Working in isolation, in this globalised world, cannot be fruitful.

Africanisation of curricula cannot be fully taken on board without establishing clear and meaningful linkages in the academic trinity, namely, teaching, research and community service/engagement. The delivery of Africanised curricula will have to be enriched and supported by research and community engagement that are also Africanised. To this end, national and institutional policies driving teaching, research and engagement need to be assessed to determine the extent to which they support Africanisation of higher education curricula. At institutional levels, there is need to engage in deep conversations regarding the concept of Africanisation of curricula, the idea being that of trying to build a shared or common understanding of the notion of Africanisation of curricula.

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Chapter 3

A model for indigenising the university curriculum: A quest for educational relevance

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3.1 Introduction

The purpose of this chapter is to explore internationally and Africa-based existing models, strategies or efforts by scholars, tertiary institutions or states of indigenising the university curriculum. In this chapter I specifically propose a model for indigenising the university curriculum. The specificity comes in the form of the programme level the curriculum of which I am proposing the model, namely, postgraduate level. The aim with the discourse is therefore to propose a postgraduate curriculum which embeds indigenous knowledge systems (IKS).

Student population in most African universities is predominantly black Africans. Ironically, these universities' curricula are still dominated by Western epistemologies and knowledge systems instead of allowing other knowledge systems, particularly indigenous ones, to co-exist with Western systems. African universities are thus faced with the challenge to Africanise or indigenise their curricula in order to better and relevantly service their students. But frequently the universities do not know where and how to start with the process of Africanising their curricula. Thus, to fill this gap, a few international and continental models, strategies or efforts are explored to abase the recommended model. Let me revisit the concept of Africanisation as a central construct for purposes of engagements in this chapter, which Higgs defined in Chapter 1.

Msila¹ has quoted Makgoba, who perceives Africanisation as the process or vehicle for defining, interpreting, promoting, and transmitting African thought, philosophy, identity and culture (also see Msila, Chapter 4). Viljoen and Van der Walt² build onto this view, declaring that Africanisation encompasses an African mind-set, or a mind-set shift from the Western to an African paradigm. Africanisation disclaims the view that any knowledge pyramid is by its very nature eminently superior to all the others³. It also entails a serious

quest for a radical and veritable change of paradigm so that the African may enter into genuine and critical dialogical encounter with other pyramids of knowledge⁴. Africanisation is thus a conscious and deliberate assertion of the right to be African. Africanisation resonates with indigenisation due to the (black) African masses being indigenes to Africa whose education is contested in this chapter. Therefore, I use the terms Africanisation and indigenisation interchangeably in the chapter to refer to the black majority who bear a history of being marginalised by Western colonial systems. This stance does not suggest a hate campaign against Westerners, but affirmation of the right of dignity that the historically indigenous or marginalised groups deserve.

Let me also describe curriculum as the second construct of engagements in this chapter. The definition of curriculum that I prefer is Marsh's and Willis⁵, which states that curriculum is the questioning of authority and the searching for complex views of human situations. It follows that this chapter concerns itself with curriculum inquiry because the issues that I raise hit squarely on the curriculum that higher education institutions (HEIs) purport to offer. Curriculum inquiry is a method that explores the formulation and enactment of curriculum policies and programmes in classroom practice the objective of which is to examine the body of knowledge that becomes the source of learning and teaching⁶. In the context of these definitions, the stance that I take in this chapter is that of questioning colonial approaches to curriculum, which do greater disservice to indigenous African students, and recommend a model solution towards transforming higher education curriculum. HEIs are aware of the 'what', i.e. they know that something is definitely wrong about the relevance of their curriculum to the indigenous masses in Africa, and that it is inevitable that they transform it. The 'how' is what many institutions do not know yet. The recommended model will begin to answer this 'how' and inform practice about attempts to indigenise curriculum.

Contesting Western canons by educational terms is thus at stake in this chapter. I undertook this inquiry to confront the hegemonic status-quo in the tertiary education environment – the Western dominance to curriculum that further disadvantages indigenous African students and advantages non-indigenous students (there are exceptions). I do this whilst holding vivid and salient memories of a discontenting curriculum that I received from my primary school through university education, even though it is not my intention to focus on these memories in this chapter. A Western curriculum approach does a disservice to indigenous African students by pushing for a positivist notion that claims that only the Western knowledge systems can be justified at the expense of (African) IKS. The marginalisation of indigenous knowledge seems to be a trend elsewhere as well. To this McLaughlin and Whatman⁷ attest to the difficulty that they faced in their research that attempted to decolonise the university curriculum in Australia. This difficulty has reference to the resistant front of Western intellectuals. According to Michie⁸, government policies

in the Western countries may have no longer been assimilationist, when curriculum has certainly not followed suit. Curriculum transformation can only be realised if indigenised standpoints are put at the centre of curriculum⁹. Furthermore, transformation can be achieved only if there is attitudinal change to recognise indigenous culture as a positive resource¹⁰ rather than a stumbling block or curriculum overload.

The route that this chapter follows is to motivate indigenous knowledge for inclusion in university curriculum. This is ensued by critiquing the function of universities and calling on them to play a transformation role – to indigenise their curricula. Then I proceed by exploring models, strategies or efforts on indigenising curriculum existent in Africa and those outside of Africa. A close study of these models, strategies or efforts enabled me to recommend a model for Africanising the university curriculum (MIUC).

3.2 Arguing for the inclusion of indigenous knowledge in the higher education curriculum

Engagements in this chapter are aligned to the critical ontological and indigenous standpoint theories^{8, 9}. These theories contest the fact that educators integrate indigenous knowledge into the curriculum in order to make learning and its application more relevant to indigenous people¹¹. In support of Vygotsky's notion of constructivism¹², these authors contend that learning is culturally and socially contextualised and that this approach to curriculum is a well-regarded dimension of constructivism derived from socio-cultural theories. They are opposed to the curriculum that is devoid of IKS. Critical ontological theory in particular drives a stance about self-discovery and the power of self-emancipation, denying to be boxed in the frame defined for one by the oppressors. This stance is critical in the sense that it plays an important role of resurrecting awareness of indigenous students' confidence and their urge to believe in their identity without self-pity, in tune with what Makgoba¹³ purports in his definition of Africanisation. This is possible within curriculum engagements that they can identify with which integrates indigenous knowledge.

Indigenous knowledge is starting to become more widely valued in areas like environmental management, quantum physics and ecological knowledge¹⁴. Unfortunately, the Western valuing of such knowledges emerges from the recognition of its monetary value in global markets¹⁵. This attitude needs to change. An Australian experience about this attitudinal change is worth noting here. Choy and Woodlock¹⁶ relate a case study in this regard in which a field worker, Julie, worked with indigenous people for eight years. She learned along with her students. Her traditional approach to knowledge and pedagogy was transformed into a 'respect-and-wait' principle. This means that rather than forging knowledge through her Western lenses always, she realised the value and richness of indigenous knowledge forms and for that she was prepared to reserve her 'bossy' claims

to knowledge in order to learn along with her indigenous students. These authors highlight the seven critical factors about integrating indigenous knowledge:

- o Community ownership and involvement;
- o Incorporation of indigenous identities, cultures, knowledge and values;
- o Establishment of partnerships;
- o Flexibility in course design, content and delivery;
- o Quality staff and committed advocacy;
- o Extensive student support services; and
- o Appropriate funding that allows for sustainability.

A South African based academic, Taylor¹⁷, has dedicated his involvement towards the Africanisation of curriculum in terms of integrating African law in the law curriculum. Having become aware of a deficiency of African perspectives in the law curriculum at the University of South Africa (Unisa), he initiated the transformation agenda. Two modules on indigenous knowledge have now been embedded, even though Taylor still feels that this is far not enough considering the 40 module-based law curriculum. He also submitted his strategy for Africanising the university curriculum to the Summit on Higher Education Transformation. Taylor's strategy is tailored in the context of the response of Council on Higher Education's¹⁸ response to the Soudien Report on the research carried by the Ministerial Committee and on the report itself¹⁹.

According to Kincheloe and Steinberg²⁰ and Semali and Kincheloe²¹, research and curricular use of IKS can yield the following benefits to the academe:

- o **Rethinking of educators' purposes:** Educators are alerted to the existence of multilogicality (multiple perspectives of human and physical phenomena); disclaim intelligence through a positivist mind-set; opposed to logocentric knowledge boundaries.
- o **Focusing attention on ways knowledge is produced and legitimated:** Official and valid knowledge is not produced in a neutral, noble, and altruistic manner; refutes role of the academic as a neutral transmitter of prearranged facts; critic the political role accompanying knowledge production.
- o **Encouraging construction of just and inclusive academic spheres:** Curricular reforms require hermeneuts (scholars and teachers who help students make sense of their world) and epistemologists (scholars and teachers who question the validation of accepted knowledge); uncover the etymology (origin) of knowledge inclusions and exclusions, notions of superiority and inferiority, racism, and ethnocentrism.
- o **Producing new levels of insight:** Realisation that indigenous knowledge is important for the culture that produced it and for people from different cultures;

- awareness of the value of indigenous knowledge about health, medicine, agriculture, philosophy, ecology and education.
- **Demanding that educators become researchers:** Push education to achieve more rigor and higher pedagogical expectations. Teachers and students value research and can interpret the meaning of information from a variety of perspectives.

The next section discusses the role that HEIs can play in promoting and advancing IKS through its inclusion in the curriculum.

3.3 A call to universities to indigenise their curricula

Agrawal²² writes that focus on indigenous knowledge clearly heralds a long overdue move. Agrawal sees indigenous knowledge as an alternative shift from the Western knowledge towards people's development. Development is based on people's knowledge and to ignore their knowledge is tantamount to ensuring failure in development²³. Scores of scholars have been disquieted by irrelevance characterising Western dominated or colonial approach to the education of indigenous communities^{24, 25, 26}. The available literature condemns this blinded dominance. On a practical level, Michie²⁷ relates the stance taken by the Inuit educators in the north-west territories of Canada to develop an Inuuqatigiit curriculum by involving elders for their guidance and information. Its goals were to maintain, strengthen, recall and enhance Inuit language and culture; to enhance unity within Inuit groups; to create a link between the past and present; to encourage the practice of Inuit values and beliefs; and to encourage pride in Inuit identity to enhance personal identity²⁸. Coming home in the African continent, David²⁹ relates the Eritrean experience of educational oppression aimed to Europeanise Eritreans, which Eritreans were profusely opposed to. Amongst those that David³⁰ interviewed, he captured a student's experience of the Eritrean curriculum:

I remember when I was in middle school the medium was English and books were all from outside the country. The content was mainly about Europe, Asia and America. Mathematical units were learnt, such as pint, bushel, gallon, foot, yard, etc. By that time I knew more about Europe than my locality.

The roots of colonialism seem to have sunk so much that some African intellectuals and governments have adopted the colonial mentality to advance oppression rather than opposition. Odora-Hoppers³¹, laments the silenced fellow African intellectuals for not staying on course to forge the Africanised concept of education and curriculum. She, backed up by scholarship that she consulted in this regard, seems to have read carefully into the African government trading the Africanisation of education for nationalist goals, shrinking their purses from showing any commitment to support the postcolonial Africanisation agenda.

The post-1970 political instability has also entrenched the relativisation of academe and simply left no room for intellectuals to occupy public space, sending scores of Africa's best brains into exile, self-effacement and invisibility, self-imposed marginalisation, fawning adulation of power, jail or death³². Odora-Hoppers³³ observes that right from the first conceptualisation of the African university, universities were conceived of as institutions for producing manpower to indigenise the civil service following independence. She cites Mkandawire in Odora-Hoppers³⁴ who argues that the conception of the social contract that universities had is today assessed by African scholars (those who vociferate in defence of Africanisation) and found not only to be a gross understatement, but also to represent a complete misunderstanding of the tasks that lie ahead.

It would seem from the above claims that the university is yet to wean itself from the Western notion of educational provision. But what make the transformation effort even tough are African governments, who are blamed for detouring from the course to facilitate the Africanisation agenda. They regulate universities' programmes especially with regard to knowledge production for economic reasons, denying them to exercise their transformative mandate. As a result, universities are perceived as agents of governments that perpetrate marginalisation. Marginalisation means exclusion, a state of being left out or insufficient attention to something, in this case of indigenous students with their IKS³⁵. They are included for numbers to claim subsidy, but they are excluded in terms of knowledge construction. They are being ostracised due to their culture being defined as backward, primitive and having nothing to offer educationally. This is a deliberate oversight to degrade the educational importance of culture when indigenes have to be served. Odora-Hoppers³⁶ offers an alternative of the definition of culture, which corrects the conventional definition from Latin. She states that culture is the totality of socially transmitted behaviour patterns, arts, beliefs, institutions and all other products of human work and thought. She states further that 'it is the template shaping values, behaviour and consciousness within a human society from generation to generation'³⁷. The social transmission speaks for the social constructivist learning of culture. Higher education can thus no more escape the claws of the challenges that it faces – to balance qualifying students to be absorbed into the corporate market and to be answerable to equipping the majority African students with relevant knowledge production to fit well in the indigenous communities that they come from. According to Odora-Hoppers³⁸, two pertinent issues that face higher education have to do with service to the communities and answering relevantly to the economic call. These issues crucially implicate the curriculum that universities offer. In many contemporary settings, the content and organisation of curriculum are structured in ways that differ dramatically from students' homes and out-of-school experiences³⁹.

As such universities are being called upon to play a leading role as knowledge production sites, to indigenise their curricula so that an African child is better served.

They have to reorientate themselves to ensure that they offer relevant programmes to African students. For the implementation of the IKS Policy, Green⁴⁰ recommends the intellectual presence of the academe. Amongst the important role players in the promotion, protection and advancement of IKS, Mosimege⁴¹ mentions universities. Njiraine, Ocholla and Leroux⁴² conducted a qualitative study on auditing IKS in South Africa. Their aim was to explore IKS policies and legislations, structures and systems, activities and research trends. They purposively sampled policy documents and applied snowball sampling to interview key informants in this regard. Their findings confirmed the existence of policy that guides activities around IKS, and intellectual property framework; established structures which include the Advocacy and Policy Development Directorate, which participates in international structures dealing with intellectual property, for example, World Intellectual Property Organisation; National Heritage Council and Agricultural Research Council, as centres with their activities; a comprehensive list of activities like IKS festival, Ubuntu and heritage awards; various research, including Indilinga which is a dedicated research journal of IKS, databases that harbour IKS created by many institutions. Hauser, Howlett and Matthews⁴³ acknowledge the progress made by the Canadian universities such as Trent University and Breton University in embedding indigenous knowledge in their curriculum compared to the greater extent to which indigenous students are being underrepresented in the Australian higher education system.

Academic institutions, by their very nature of being research institutions, are the knowledge construction sites. This being the case, it should also be mentioned that their research activities are informed by the primary world, namely, the authentic contexts where they conduct their empirical research. Given the realities of the microcosmic cultures that they research, there is much room to diversify their approaches towards their research to ensure that they co-research with indigenous custodians of knowledge that they research. Linear methodological approaches and skewed research, coupled with positivistic distorted representations of indigenous communities can no longer hold. In this sense, academic institutions can really reposition themselves to unravel the realness of IKS, which have for decades suffered self-aggrandised colonial hegemony.

IKS are a reality characterising the philosophy and survival of indigenous communities. We can no longer look to the Western universalised knowledge for our educational endeavours. Thus, in keeping with IKS' contestation in this section, they should be considered as an alternative to Western knowledge forms or claims.

3.4 Models of indigenising university curricula

Let me start this section by explaining the criteria that I used to decide on the contexts whose models/strategies/efforts I explored:

- o I chose three contexts in Africa and three outside of Africa. The choice was informed by the scope of this chapter and my belief that this was a reasonable

number to satisfactorily enable me to draw a pull of ideas from for the proposed model.

- o The models/strategies/efforts could have been developed by higher education institutions, national governments, individual researchers or philosophers, research groups, or even indigenous communities who showed commitment to indigenise the curriculum.
- o The contexts from which these models/strategies/efforts were explored should have a colonial experience and history.
- o The choice of the contexts outside Africa was not based on any particular principle, for example, First World or Second World contexts.

3.5 Africa-based models

3.5.1 Culture product indigenisation process model

Obikeze⁴⁴ from the University of Lesotho, suggested the Culture Product Indigenisation Process (Culpip) model based on culture manifesting in terms of products. Culture products are human devices, formulations and techniques, tangible or intangible, which fulfil some need or provide some service for humankind in a given environment. Tangible devices include knives, fishing nets, machines, bombs, electronic devices, etc. Intangible devices include songs, jokes, ideas, skills, methodologies, organisations, etc. These culture products are organised according to technologies and goods and services. Technology is any human-made or culture-generated devices, formulations or organisations utilisable for the purpose of producing or creating needed goods and services. Three categories of technology are material (physical) technology, social technology, and communication technology. Material (physical) technology encompasses tangible devices and implements, for example, bows and arrows, ploughs, typewriters, looms, laboratories, machines and computers. Social technology comprises of ‘theoretical’ formulations, procedures, ‘know-hows’ and ways of doing things, for example, methodologies, techniques, organisational and management skills, bookkeeping and accounting procedures, negotiating and counselling techniques, social institutions like patriarchy, and the United Nations. Communication technology comprises of purely symbolic devices that serve as vehicles for communication and thus facilitate social interaction, for example, language, signs and symbols, drumming, and the internet.

Goods and services technologies are any products of human activity that are usable to satisfy human needs or meet societal ends. These are sub-divided into material goods, social goods or services and intellectual goods. Material goods are physical finished products and consumables for the satisfaction of individual and group needs of humankind and the society, for example, soap, food items such as maize, houses, ornaments,

aeroplanes and television sets. Intellectual goods consist of non-tangible culture objects in the context of ideas, abstract concepts, names, terminologies, cognitive knowledge and idioms. Social goods and services include non-material, intangible end products of human social activities, interaction processes and role-relationships essential for life in society, for example, values, norms, customs, motherhood, priesthood and friendship, social services like concerts and plays, football games, health and healing systems and belief systems.

From the Culpip model, Obikeze⁴⁵ proposes a process which should be guided by closely interrelated, largely dialectical and interactive activities. These activities are grouped into six essential steps that inform the process:

Step 1: Establish a Culture Products Transformation Centre/Institute

- Purpose: Coordinate, oversee and facilitate the shift from reproduction of foreign culture products to the production and reproduction of both pure, hybrid, and adapted indigenous culture products.
- Function: Disseminate, popularise, and market indigenous culture products.
- Mandate: Collaborate, deal and negotiate with other institutions and local and foreign governmental agencies for sponsorship and utilisation of indigenous culture products of the university.
- Research: Undertake independent research into any aspect of the national culture and culture products.

Step 2: Self-examine and evaluate traditional culture products

- Self-examination: Examine local African traditional values, belief systems, and customary practices to identify those that tend to hinder social and economic advancement and competitiveness that need to be modified, discouraged, or eradicated.
- Evaluation: Evaluate culture products that portray the positive African humanity and progress that need to be retained, empowered, promoted, and exported.

Step 3: Engage constructively about fracturisation of foreign and indigenous culture products

- Fracturisation: Subject all significant local foreign culture products to a structural breakdown and analysis to identify and isolate their respective constituent elements or parts. Set specialised resources in place to carry this task.
- Generation of new forms of culture products (inventions and discoveries): Create various forms of new culture products by combination, recombination, modification, integration blending and fusion of the earlier isolated elements of foreign and indigenous culture products.

- Integration of new culture products into the university curriculum: Incorporate new culture products into courses of instruction in order to ensure that the knowledge base, social and intellectual skills implicated in the new culture products are disseminated and imparted to the population.
- Protection, empowerment and popularisation of indigenous culture products: Protect and produce the newly created indigenous culture products to ensure their survival by empowering them legally, socially, and psychologically to withstand competition from more refined, mass-produced culture products from the West.

Step 4: Generate new forms of culture products (inventions and discoveries)

- Production and reproduction of pure indigenous culture products.
- Creation and reproduction of new hybrid culture products.
- Creation and reproduction of adapted culture products.

Step 5: Integrate the new culture products into the university curriculum

Engineering of the curriculum, namely, systematic incorporation of the new culture products into courses of instruction to ensure that the knowledge base and social and intellectual skills are imparted and disseminated to the population.

Step 6: Protect, empower and popularise indigenous culture products

Protection of culture products to ensure their survival by empowering them legally, socially, and psychologically to withstand competition from more refined, mass-produced culture products from the West and the East.

3.5.2 Developments about efforts to indigenise curriculum in South Africa

Efforts by South Africa to indigenise the curriculum are basically policy-based efforts. Mosimege⁴⁶, the forerunner of the IKS project, relates efforts by South Africa in his paper presented to the Arts and Culture Portfolio Committee on 9 November 2004. These efforts started as an audit project of indigenous technologies between 1996 and 1998 by the Portfolio Committee commissioned by government. Later on, indigenous technologies as a concept was reviewed for IKS. I support this idea because my view is that indigenous technologies are embedded within IKS. The audit project involved the Council for Science and Industrial Research and nine local universities. Let me try to define audit for purposes of fathom of its application to the knowledge aspect. I do this by pulling together essentials from definitions by Njiraine, Ocholla and Leroux⁴⁷. I take 'audit' to mean a process in which information resources can be discovered and evaluated within a particular organisation. The purpose of auditing then is to implement, maintain or even improve information management systems. What is even more helpful is Ikoja-Odongo's contextualisation of audit within IKS, cited by Njiraine, Ocholla and Leroux⁴⁸. He opinionates that information

auditing is a yardstick to ensure conformity to standards, and believes that it is meant to discover, check and verify IKS within a given country and such country's ability to deal with this knowledge. Each university conducted its own provincial workshop to report on its findings of the audit. I did not intend within the scope of this chapter, to state these findings.

The audit project led to the formulation of the IKS Policy by the government's Ministerial Task Team in 1999⁴⁹. In this same year the task team delegations were sent to India and China to learn about IKS⁵⁰. In terms of funding government provided ring-fenced funding to the National Research Foundation, which was tasked to use this funding for research by individuals or groups in IKS since 2000⁵¹.

The IKS Policy was approved by Cabinet in 2004, which, in 2006, saw the establishment of the National IKS Office (NIKSO) located in the Department of Science and Technology (DST). The IKS Policy was developed by a committee comprising a variety of stakeholders – eleven ministries, among which was Education⁵². A foreword by the then Minister of Science and Technology, Mosibudi Mangena, states that the IKS Policy was adopted by Cabinet in November 2004. It provided the first important milestone for the recognition, affirmation, development, promotion and protection of IKS. The executive summary of this policy⁵³ states that the IKS Policy is an enabling framework to stimulate and strengthen the contribution of indigenous knowledge to social and economic development in South Africa. The main drivers of this policy include⁵⁴:

- o the affirmation of African cultural values in the face of globalisation – a clear imperative given the need to promote a positive African identity;
- o practical measures to develop services provided by indigenous knowledge holders and practitioners on traditional medicine, agriculture, indigenous languages and folklore, etc.;
- o underpinning the contribution of indigenous knowledge to the economy – the role of indigenous knowledge in employment and wealth creation; and
- o interface with other knowledge systems, for example, indigenous knowledge is used together with modern biotechnology in the pharmaceutical and other sectors to increase the rate of innovation.

The executive summary of the policy further lists the required institutions and legislative provisions in order to realise its implementation⁵⁵:

- o An IKS Advisory Committee that reports to the Minister of Science and Technology.
- o A development function that includes academic and applied research, development and innovation in respect of IKS.
- o A record system for indigenous knowledge and indigenous knowledge holders, where appropriate, to pro-actively secure their legal rights.

- The promotion of networking structures among practitioners, to be located in the DST.
- Legislation to protect intellectual property associated with indigenous knowledge, to be administered by the Department of Trade and Industry.

The second bullet above implicates the role of and accords universities a formal mandate to be proactive in the protection and promotion of IKS, especially in the area of research.

The South Africa Constitution protects principles of democracy, social justice and equity, equality, non-racism and non-sexism, human rights and human dignity. These principles underpin the values upon which the national education system is premised⁵⁶. These principles are important in the treatment of IKS. They also inform curriculum policies in South Africa. In fact, IKS is one of curriculum principles⁵⁷. Though the policies are school based, they have serious implications for higher education curriculum as institutions at this higher level receive students from schools.

It is asserted in the White Paper on Science and Technology that sustainable technological capacity requires a transformed, vibrant and effective educational system⁵⁸. On the other hand the White Paper on Arts, Culture, and Heritage views education as part of culture and acknowledges that culture itself is transmitted through education⁵⁹. The vibrant and effective educational system can be realised through the accommodation of indigenous cultures which form the majority of the society of South Africa. This means full recognition of their domains of knowledge and the techniques and technologies that drive their knowledge. According to DST⁶⁰, it is critical to ensure that the national education strategy is synergistic with and nurtures indigenous knowledge.

3.5.3 Julius Nyerere's philosophical model on indigenisation of curriculum

The educational philosophical stance of Nyerere, Tanzania's former president, whose educational contribution is celebrated and advanced by scholars in the likes of Kadenge and Kariuki⁶¹, Kassam⁶², Nasonge and Musungu⁶³, and the model that he proposed are related in this section. Nyerere's education for self-reliance advocacy for formal schooling opposed the colonially designed education system offered to the Tanzanians and elsewhere in Africa. According to him, such education system:

- makes a critique of the inadequacies and inappropriateness of colonial education;
- outlines the kind of society the United Republic of Tanzania is trying to build;
- examines some salient features of the education system that existed around 1967 in the light of the newly-declared goals and strategy of socialist development; and
- proposes changes designed to transform the education system in order to make it more relevant and appropriate in serving the needs and goals of a socialist society with a predominantly rural economy.

Nyerere⁶⁴ maintains that colonial education as prevalent in Tanzania during 1967 (and to a larger degree still prevalent in some African countries) was based on the assumptions of a colonialist and capitalist society. It was designed to transmit the values of the colonising power and train individuals for the service of the colonial state. It induced attitudes of subservience, human inequality and individualism, and emphasised white-collar skills. Its content was largely alien and organised along racial segregation. It was characterised by four features which disadvantaged indigenous Tanzanians. These features demonstrated Nyerere's particular concern about how the colonially designed education system discouraged the integration of learners into society as a whole and promoted attitudes of inequality, intellectual arrogance and individualism among those who entered the school system.

The first feature is elitism. Formal education in this case, in the context of Tanzania, catered for the needs and interests of the very small proportion of those who managed to enter the hierarchical pyramid of formal schooling. The second feature is separatism. The colonially designed education system was blamed for divorcing its participants from the society for which they are supposed to be trained. The third feature is the falsified notion of formal schooling. The system bred the notion that education is synonymous with formal schooling, and that people are judged and employed on the basis of their ability to pass examinations and acquire paper qualifications. The fourth feature is learner passivity towards productive work. The system did not involve its students in productive work. Such a situation deprived the Tanzanian society the much needed contribution to the increase in national economic output and bred among students contempt for manual work.

Nyerere⁶⁵ proposed an alternative educational model designed to reorient the goals, values, and structure of education to address the realities of a poor, underdeveloped, and agricultural economy and the cherished goals of socialist transformation. He maintained that education was to serve the common good and foster the social goals of living together and working together – based on the socialist concept of *Ujamaa* (a Kiswahili word meaning familyhood)⁶⁵. It was to help in the development of a society in which all members share its resources fairly equally. It was to inculcate a sense of commitment to society. Nyerere's⁶⁶ proposed model anchored on three aspects and these include entry age into primary schools, content of the curriculum and organisation of the schools.

The primary school entry age would be raised from five or six to seven years so that the learner was older and more responsible and mature on leaving school. Primary school education would be restructured in such a way that it became a complete education in itself, rather than simply a preparation for secondary education. Similarly, secondary education would not simply be a preparation for higher education. He maintained that the major purpose of the education system should be to prepare people for a meaningful and productive life, and for service in the villages and rural areas. The re-orientation of the school curriculum in this case had to go hand-in-hand with de-emphasising the importance

of formal examinations, which merely assess a person's ability to learn facts. Furthermore, it was necessary to abandon examinations that are geared to an 'international standard' or practice regardless of the country's particular problems and needs.

Regarding the organisational structure of schools, Nyerere⁶⁷ proposed that they become both social and economic centres for the local communities in order to make them an integral part of the society and economy. Such a reorganisation of schools involved both pedagogical and attitudinal implications. It would contribute to the integration of theory with practice, as well as the integration of mental with manual labour. The assessment of student performance would take into account both academic abilities and the work done for the school and community. In terms of societal attitudes and values, students would learn the meaning of living together and working together for the good of all. In this way, their commitment to the development of their own society would be strengthened.

3.6 Models outside of Africa

3.6.1 Efforts by Queensland University of Technology

According to McLaughlin and Whatman⁶⁸, the efforts by the Queensland University of Technology (QUT) to indigenise the curriculum are related. These efforts by QUT resulted from the launching of the Australian Reconciliation Movement triggered by the 1990 Royal Commission into Aboriginal Deaths in Custody. The 339th recommendation in the report states that all political leaders and their parties recognise that reconciliation between the Aboriginal and non-Aboriginal communities in Australia must be achieved if community division, discord and injustice to Aboriginal people are to be avoided. QUT launched its reconciliation statement in May 2001. In the statement, QUT committed itself to sustainable reconciliation between indigenous (Aboriginal and Torres Strait Islander) and non-indigenous Australians. To this QUT committed over half a million dollar grant to start a project on embedding indigenous perspectives (EIP) in its teaching and learning. Four faculties applied and implemented the project. These include QUT Carseldine (School of Humanities and Human Services) and Creative Industries, Law and Justice Studies, Faculty of Health and Faculty of Education. QUT recognised that the Oodgeroo Unit, which is the centre for Aboriginal and Torres Strait Islander student support, teaching, research and community engagement, should be the first point of contact for conceptualising each project. I only describe the project by the Faculty of Education.

The Faculty of Education re-conceptualised its Bachelor of Education (BEd) programme offered to all pre-service student teachers. It followed an outcomes-based approach as a model of design and implementation of the project like other faculties did. Unlike the other faculties, the Faculty of Education introduced a core unit as part of the foundation suite of units. In this instance, an indigenous academic from the Oodgeroo Unit was seconded to spearhead the conceptualisation and design of the unit of study entitled:

Culture Studies: Indigenous Education. This unit was informed by indigenous knowledge and experiences both theoretically and pedagogically. The unit became compulsory for all pre-service student teachers from 2003. The outcome of the project was that the Oodgeroo Unit ultimately produced two internal monographs, which informed the BEd and teacher practitioner attributes developmental process. Another outcome entailed the creation of a Learning Circles professional development programme for the staff of the Faculty of Education, which was convened by the academic staff from the Oodgeroo Unit. The case study conducted reported that the unit was challenging, informative and shifted students' thinking or positioning of themselves and indigenous Australians.

3.6.2 Sagu-llaw SIKAT

Abejuela⁶⁹ reports the strategy by a tertiary-type school by the Buckidron tribe Philippines archipelago. The Philippines archipelago has 7 107 islands. It spans a total area of 300 000 square kilometre with approximately 8 million people, 75% of which comprises of the eight major ethnic groups. The remaining 25% comprises different ethnic groups and indigenous tribes. Americans established the public school system in the country with no effort to integrate indigenous knowledge. English was dominant as a language of instruction and native languages have never been encouraged. A handful of indigenous schools exists solely due to efforts of the tribal leaders, often with minimal, if any, government support. The Asian Council for People's Culture (ACPC) introduced a Schools of Indigenous Knowledge and Traditions (SIKAT) programme. The declaration contained in ACPC states that indigenous education is a basic right of all indigenous people founded on the life-ways, traditions, worldviews, culture and spirituality of the native community. It is a pathway of education that recognises wisdom embedded in indigenous knowledge. SIKAT is undergirded by the principles of ownership, emancipation, cultural diversity, environmental sustainability, community centredness, rootedness in day-to-day reality and recognition.

Sagu-llaw SIKAT trains indigenous para-teachers. Students attend class once a week on Fridays. For the other days of the week they teach kindergarten in their respective barangays (communities). The school uses four languages as mediums of instruction – English, Tagalog, Cebuano and Binukid. The school's curriculum runs over four years. It is briefly explained as follows:

The first year covers:

- o orientation on Bukidnon which is a Higaonon cultural language, and the Philippine Constitution and the IPRA law;
- o principles and methods of teaching;
- o literacy and numeracy skills development and traditional songs, dances and arts; and
- o introduction to community development.

The second year covers:

- o intricacies of the Bukidnon language, which include lexicon, grammar and usage;
- o Bukidnon culture and migrant culture to promote understanding between people and lowlanders;
- o history, institutions and heroes of the tribe, that is things that student teachers would have not learnt in government schools;
- o ethnic songs, stories, dances and art and craft; and
- o vocational, social and economic aspects of community.

The third year covers:

- o different chants, stories, legends and customary law of the tribe;
- o ethnic cultural practices, beliefs, rituals and ceremonies and knowledge systems which incorporate community development and environmental conservation and protection;
- o traditional political leadership and the Philippine justice system in order to protect the tribal members from exploitation from migrants and lowlanders; and
- o training to teach Philippino and English as second language.

The fourth year covers:

- o Philippine and world history, vocational art and craft, ancestral domain; and
- o cultural research.

3.6.3 Sichuan University

Tillman and Salas⁷⁰ write on the efforts by Sichuan University to embed indigenous knowledge in its curriculum. Sichuan people are the Chinese indigenous community characterised by diverse ethnic minority cultures. These cultures belong to the nationalities of Zang (Tibetan), Qiang and Yi. The community lives in mountainous areas. The majority of these ethnic groups are rural and still keep their traditional livelihoods and cultures alive. They and some Han adventurous settled many centuries ago to become herders and farmers developing original indigenous technology and knowledge systems. The attempts by the Han adventures to civilise these indigenous groups were resisted. They were determined to maintain the accumulated wisdom as key to understand nature in promoting endogenous development.

As a result, scholars and lecturers of Sichuan University opted to include the theory and methods of indigenous knowledge and cultural affirmation in the academic curriculum with an option to specialise as an applied researcher. They started by conducting a ten-day curriculum design workshop. They invited some selected graduate and postgraduate students of Sichuan University to this workshop. They designed a master's course with content selected from the literature in the fields of ecology, history and anthropology

(culture studies) and translated into Chinese for graduate students. The course was embedded in a general philosophical-theoretical framework of knowledge as a human intellectual effort to explain reality. The course enabled participants to do self-reflection on their own knowledge to come closer to other ways of thinking reality. It included the following modules:

- o Concepts of indigenous knowledge;
- o Methods of indigenous knowledge, including the design of fieldwork plans;
- o Rights and ethics of indigenous knowledge;
- o Pedagogical (teaching) concepts related to indigenous knowledge based on experiential learning; and
- o Indigenous knowledge approaches defined in the context of learning at Sichuan University in terms of time frames, structure and content.

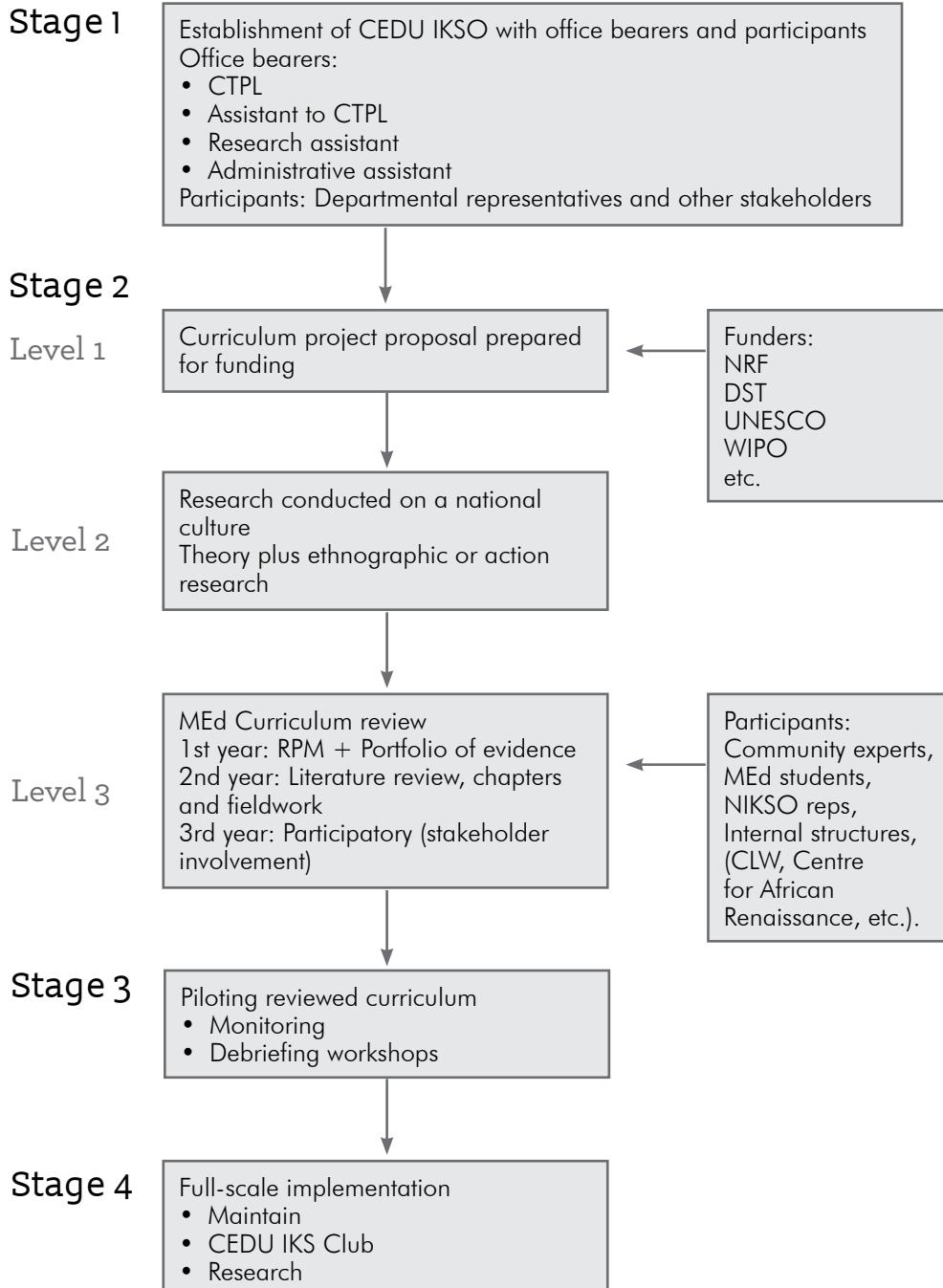
The workshop was guided by the process and method of active participation, non-compliance to conventional teaching, epistemological foundations, visiting professors only introducing concepts, visualisation, mental mapping and interpretation, and documentation and analysis of own experiences.

The following were the outcomes of the workshop:

- o Work plan to introduce indigenous knowledge in the different disciplines. This consisted of curriculum for the first year, proposal writing for fieldwork and thesis writing during the second year and third years of the master's courses.
- o Necessary tasks to be performed, such as translation of the reader, collection of Chinese material on indigenous knowledge of ethnic minorities, and documentation of own research experiences based on the indigenous knowledge practiced during the workshop.
- o University club on ethnic and cultural studies.
- o Identification of students with ethnic origin who may become intercultural facilitators in the future, as they know the language, have a village background and will eventually be motivated to engage in village work with their own ethnic group.

3.6 A model for indigenising the university curriculum (MIUC)

Within the scope of this chapter, I propose this model using my college, namely the College of Education (CEDU) and Master in Education (MEd) as examples. Figure 3.1 depicts a model for Africanising curriculum that I envisage for CEDU and Unisa, followed



by its description. I propose that this suggestion supports Unisa's vision: 'Towards an African university in the service of humanity'.

Figure 3.1: A model for indigenising the university curriculum (MIUC)

Stage 1: Establish the College of Education IKS office (CEDU IKSO) and staff and equip it

- Appoint an IKS practitioner (preferably an associate or full professor) as a curriculum transformation project leader (CTPL).
- Appoint an IKS practitioner (preferably a senior lecturer with a doctorate) as assistant to the CTPL.
- Appoint at least one representative from each department in CEDU to serve on the CEDU IKS Committee chaired by the project leader and participate in its projects. These representatives should either be engaged in IKS or be interested in churning their careers towards this field. The main reason for this is that they are envisaged to drive curriculum transformation that embeds IKS in their departments.
- Appoint a research assistant and administrative assistant to be responsible for data collection and analysis, and administrative duties respectively. The research assistant should have knowledge of data collection and analysis.
- Equip CEDU IKSO with required equipment and technology for the project leader, his or her assistant, research assistant and administrative assistant as per the needs of CEDU IKSO.

Stage 2: Curriculum review project

Project Level 1: Project proposal for funding

- Conceptualise a research project proposal to research a national culture to be used as a compass to draw up the curriculum.
- Write up a project proposal plan for funding in accordance with the criteria of the identified funding agency – target funding institutions capacitated by government to support IKS projects, e.g. NRF, DST and other national and international funding organisations such as UNESCO's education wing and the World Intellectual Property Organisation (WIPO). Unisa's research office can be of help in identifying relevant funders and the application format.
- The proposal should identify the research as an ethnographic or action research for purposes of spending more time in the community of identified culture and for active participation of the community members as co-researchers.
- Also highlight the proposal's relevance to the goals of Unisa's Institutional Operational Plan (IOP), and its ODL and MIT nature.
- Submit the project proposal to the relevant approval structures in the CEDU and Unisa at large, and finally to the funding institution/agency.

Project Level 2: Research a national culture

- o Implement the project proposal in Project Level 1. Add onto the literature survey in the project proposal by embarking on intensive literature survey on IKS. This should also include IKS policy and IKS audit report.
- o Spend no less than six months of ethnographic or action research (or other IKS relevant methods) in the field (community of culture identified above) to engage community members as participants in the study and gather data. The interest should fall onto the culture itself and its practices and products.
- o Identify key informants within the community being researched (preferably elders) who can provide rich data on the cultural history, products and practices. Plan well for the use of indigenous languages in engagements with the community, and their translation.
- o Write a report on the research conducted, which can be used as a guideline for drawing up the curriculum.
- o In the report highlight aspects that can be used to preserve the culture and aspects that can be blended with the conventional (Western) culture.

Project Level 3: MEd curriculum review

- o From the existing MEd programme, select at least one specialisation per department, which can be reviewed to infuse IKS and to be piloted.
- o Conduct programme review workshops that are participatory in nature, that is, encourage stakeholder participation.
- o Invite key stakeholders to these workshops. Select from the IKS experts in the community, MEd students, NIKSO representatives, key players who were commissioned by government to for the IKS audit, and internal structures such as the Centre for African Renaissance, Thabo Mbeki Institute of Leadership and the College of Law, which has already taken initiative to infuse IKS in its curriculum.
- o From the workshops produce a work plan to introduce indigenous knowledge in the sampled specialisations. Plan around the first-year Research Proposal Module (RPM), second and third years. The first year must specifically be spent on literature survey and community based visits. Select a sample of local students for a guided visit. The rest of other students should make their own arrangements in their own settings, but follow the guidelines set down by the CEDU IKSO. At the end of the first year all students should present a supervised approved research proposal plus portfolio of evidence. The purpose of a portfolio of evidence is to showcase the students' accumulated experiences based on the literature survey and visits. The portfolio should include, but not be limited to, biographical information, learning journal, resources and artefacts.
- o The second to third years should be characterised by fieldwork visits and the writing up of chapters.

Stage 3: Pilot reviewed curriculum

- Roll out the reviewed curriculum as a pilot IKS-infused curriculum.
- Closely monitor the process of implementation and evaluate it.
- Conduct a debriefing workshop.
- Involve representatives of stakeholders who were part of the review workshop, particularly students and indigenous experts.
- Re-plan (if necessary) and re-implement the pilot IKS curriculum.
- Monitor and evaluate the process again.
- Conduct a debriefing workshop.

Stage 4: Full-scale IKS-infused curriculum implementation

- Informed by the pilot IKS-infused curriculum, embark on the overall curriculum implementation – all MEd programmes in all departments.
- Maintain and manage the programme.
- Embark on ongoing research with teams that include MEd and DEd student projects.
- Establish a CEDU's IKS club for cultural and social activities that advocate IKS (Ubuntu products, etc.)

Be proactive about programmes on other levels:

- Already plan for a DEd with specialisation in IKS by building onto this model as a template.
- Consider cascading the IKS-infused curriculum down to the undergraduate programmes.

3.7 Conclusion

In this chapter I have attempted to make a case for the embedding of IKS in the higher education curriculum. To this effect I theoretically abased the chapter, presented the indigenous knowledge perspectives as an alternative to the Western dominant curriculum, critiqued the function of universities and called on them to indigenise their curricula. The heart of the chapter was the exploration of existing IKS-based models, strategies or efforts in Africa and from elsewhere, which enabled me to design MIUC. This model was presented subsequently. MIUC provides the 'how' to embed IKS within higher education curriculum. Of course, based on their contexts, HEIs are cautioned to critically apply their minds when engaging MIUC. For that purpose the model can be modified in the process of its adoption. It thus befits to call it a working model towards curriculum transformation

to ensure the embedment of IKS in higher education institutions. This model is has been conceptualised for postgraduate curriculum with specific reference to the MEd programme. Institutions should strongly consider adopting it for the undergraduate programmes, modifying it to suit that level. They should also advance it to the DEd programme so that students carry their specialisation right through.

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Chapter 4

Africanisation of education and the search for relevance and context

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4.1 A rationale behind an African philosophy of education

Chapters in this book herald for a need for a transformed system of education in Africa. Higgs in Chapter 1 justifies the needs for the African philosophy whilst Chikoko in Chapter 5 also illustrates the various dimensions that an Africanised system might have to follow among these themes in access. The chapters explore the critical relevance of indigenous knowledge systems (IKS) in the African society in which the higher education institutions (HEIs) are situated. The African university exists at a precarious position if the academia within fail to nurture the idea of relevance and building a new breed of competent African intellectuals. The African HEIs face mammoth challenges as they strive for transformation in an attempt to address the African past laden with the impact of colonialism. An African philosophy seeks to address, among others, issues of equity where students will value the logic in African curricula. Obviously there are certain successes from the Western models of education. However, the past curricula in South African HEIs have failed many students as it was not based on equity. More often than not programmes promoted individualism and this is opposed to the African philosophy. The institutional changes though in the new African universities require institutions that would envisage a new vision; institutions whose curricula reflect the African philosophies. This chapter explores some of the most important issues in the Africanisation of higher education debate and this includes relevant research and globalisation of HEIs.

Teacher education in South Africa needs to strive for a liberating philosophy. New teachers and intellectuals need to be produced by university departments. Schools will never be truly Africanised unless teacher education curriculum is embedded in an IKS-biased institutional culture, and faculty should be open to new ways and new philosophies. Waghid¹ writes about the need for university teachers to be deliberative if they are to appropriate more adequately values of an African philosophy of education. This then means that in Africa they need to respond to the requirements and circumstances of African learners. The

African philosophy ensures that the teaching-learning encounter deliberates and explores the African experience. The African experience refers to the whole of the African peoples; aesthetic aspects, cultural aspects, political and social aspects. Waghid² contends:

Consequently, an African philosophy of education is a form of human activity which creates space for people to engage deliberatively with one another about their traditions and practices, on the one hand, and interrogating, comparing and contrasting critically the African experience on the other... African philosophy of education is constituted by 'structures of dialogue and argumentation', what I would refer to as modes of deliberative inquiry. Deliberative inquiry ought to be considered as a necessary (although not sufficient) instance of African philosophy of education.

Teacher education faculty ought to exercise a certain role of cultivating deliberative discourse in their classes or through engagement with in-service or pre-service teachers. Students in university programmes should be involved in deliberations where they could perceive the significance of the African philosophy. Ramose³ argues about the desirability and significance of an African philosophy when he avers:

[F]or at least three centuries since the conquest of the indigenous people in the unjust wars of colonisation the education curriculum in South Africa did not include African philosophy. For the colonial conqueror and the successor in title thereto the indigenous conquered peoples had neither an epistemology nor a philosophy worth including in any educational curriculum.

The Bantu Education system for black South Africans had been a means of restricting the development of the learners by distorting school knowledge and to ensure control over the intellect of the learners and teachers, and propagating state propaganda⁴. Black South Africans were contained in a permanent state of political and economic subordination. As early as the 18th century, the coloniser was intent on dispossessing the black Africans of anything African. Christie⁵ cites Rose and Tunmer who quote George Grey, Governor of the Cape who once said to the British Parliament:

If we leave the natives beyond our border ignorant barbarians, they will remain a race of troublesome marauders. We should try to make them a part of ourselves, with a common faith and common interests, useful servants, consumers of our goods, contributors to our revenue. Therefore, I propose that we make unremitting efforts to raise the natives in Christianity and civilisation, by establishing among them missions connected with industrial schools. The native races beyond our boundary, influenced by our missionaries, instructed in our schools, benefiting by our trade, would not make wars on our frontiers.

The Calvinist apartheid education, as reflected above, was to continue from this premise. Calvinist education yearned to lead the child, who has a sinful nature to God via a Christian life. In this sort of education, the learners had to obey their teachers, their parents and all

others with authority over them, but only ‘In the Lord.’ Therefore, what appeared to stand out in this philosophy was that childhood was seen in a negative light and that was as a ‘not-something’ or an ‘unsomething’⁶. Ramose⁷ highlights that the so-called civilising and Christianising mission was predicated on a premise comprising the fallacy that precluded the need to consider the inclusion of African philosophy in educational curriculum. For many centuries Africa was invisible; almost a pariah in Western formal education. It is for the latter reason that Ramose⁸ points out that much more literally than metaphorically, educational institutions in South Africa ‘discovered Africa in 1994’; the year of liberation. This chapter explores arguments pertaining to Africanisation of education in South Africa. Focusing on various intellectuals’ views, the chapter investigates whether Africanisation is congruent with democratic and transformation’s ideals. Secondly, the chapter explores whether an Africanised system can be practical and meaningful to the learner. The chapter also explores the role of relevant research and globalisation in Africa. There have been several debates for Africanisation and the use of IKS. Seepe⁹ argues that a radical restructuring of education in Africa which makes education relevant to African challenges can hardly be complete without a serious consideration of IKS.

4.2 Definition of terms

Some of the key terms used in this chapter are construed differently by many people. For the purposes of this chapter though, the following definitions will be acceptable.

4.2.1 Africanisation of education

Van Heerden⁹ states that Africanisation of education is often used in relation to educational reform and in the sense of bringing African culture into formal schooling. Urch¹⁰ concurs when he states that Africanisation is a regeneration of that which was good and respected in African culture, ‘a rejection of subservience to foreign masters and the assertion of the rights and interests of the African’. For detailed definitions on this concept see Gumbo in Chapter 3, and Kamwendo in Chapter 2. The following concepts have been used quite extensively in the previous chapters, but not extensively defined, providing the reason to define them because they are important for the discourse in this chapter as stated above.

4.2.2 African Renaissance

According to Makgoba, Shope and Mazwai¹¹, African Renaissance is a unique opportunity for Africans to define themselves and their agenda according to their realities and taking into account the realities of the world around them. Furthermore, it is about Africans being agents of their own history and masters of their destiny.

4.2.3 Indigenous knowledge systems

Bitzer and Menkveld¹² define IKS as a combination of knowledge systems encompassing technology, philosophy, social, economic, learning/educational, legal and government systems. These systems are embedded in the culture and history of a people including their civilisation. Furthermore, they cite Odora-Hoppers who states that IKS form the backbone of the social, economic, scientific and technological identity of such people¹³.

4.2.4 African philosophy (of education)

The African philosophy is a philosophy that is linked to an inquiry that explores the epistemology and experiences of the Africans. Waghid¹⁴ defines this as simply a philosophy that explores the lives of African communities and their situations the same way that an Islamic philosophy of education examines the lived experiences and conditions of Muslim communities.

4.3 African Renaissance and Africanised education

Higgs and Van Wyk¹⁵ opine that African Renaissance enhances educational discourse in Africa. Furthermore, they trace the emergence of African Renaissance to numerous attempts to reassess distinctively African ways of thinking and of relating to the world. Higgs and Van Wyk¹⁶ posit:

The African Renaissance has also taken on much significance in recent years with the call for the recognition of indigenous African knowledge systems by scholars such as Hoppers and Seepe. The inference here is the distorted view that Africans possess little or no indigenous knowledge of value that can be utilised in the process of educational transformation. This same inference also presupposes, as is argued by protagonists of an African Renaissance in educational discourse, that the norm for educational achievement and success for African children and students is that of Western European capitalist elitist culture, where the English language is sacralised, and internationalisation of bourgeois European values is seen as the idea of progress.

Makgoba et al.¹⁷ also define African Renaissance as an important aspect in tracing the roots of the awakening of African values. They aver that the African Renaissance is a unique opportunity for Africans to define themselves and their agenda according to their own realities and taking into account realities of the world around them. 'It is about Africans being agents of our own history and masters of our destiny'¹⁸. The African continent requires encapsulating ways of thinking that uphold African values in various structures of the society. Transforming education in Africa would be truly meaningful if Africans realise the importance of that which belongs to the Continent as they utilise the Western knowledge systems. Wiredu¹⁹ contends that the task of African philosophy of

education should be to master the arts of modern living and that an African system needs to address a combination of a number of pertinent components. Furthermore, he points out that Africans need to involve complex of capabilities drawing on African heritage of indigenous knowledge²⁰.

'The call for an African Renaissance in educational discourse, therefore, seeks to demonstrate, how indigenous African knowledge systems can be tapped as a foundational resource for the socio-educational transformation of the African Continent, and also how IKS can be politically and economically liberating'²¹.

From the earliest to the current African intellectuals, one can see the values that are embraced by African philosophy of education. For a number of writers the idea of an African philosophy conjures a number of terms such as Ubuntu, humanism, and communalism^{22, 23, 24}. Whilst this chapter will not discuss these terms in depth it is crucial to highlight the importance of some of these with regards to an Africanised education. The importance of the concept of Ubuntu has become prominent under the democratic dispensation in South Africa. It is rooted in African traditional society and philosophy and it means humanness or the quality of being human. It espouses the ideal of interconnectedness among people. In Africa there was always this belief that one lives for the others. Mbigi²⁵ explains that Ubuntu literally means, 'I am because you are – I can only be a person through others'. This is supported by Prinsloo²⁶, who cites Chikanda's definition that Ubuntu is African humanism that involves alms-giving, sympathy, care, sensitivity to the needs of others, respect, consideration, patience and kindness. (I have deliberated fully on the definition of Ubuntu in Chapter 9).

The ideals of the concept of Ubuntu need to be stressed to learners, preparing them for the future. Mbigi²⁷ points out that the concept is both uniquely African and universal for it is implicitly expressed elsewhere in the world. African humanism is identified with movements of national independence and with the development of collective African identity. The political side of African humanism is also referred to as African socialism²⁸. Under a different section in this chapter, propinquity between Ubuntu and democracy is discussed. Africanised education has its foundations in African philosophy, which largely has to do with African experiences, concerns, aspirations and how Africans construct knowledge²⁹. Furthermore, Van Wyk and Higgs³⁰ point out that African philosophy should respond to the problems and human conditions in modern Africa. An analysis of education within an African context has to shed light on how Africans learn and construct knowledge and also has to focus on the underlying beliefs and values that constitute education within an African context³¹. Communal aspects of African philosophy, when infused in education, can help create a community of learners who glean from one another in an unselfish manner. Early African intellectuals such as Julius Nyerere of Tanzania identified the value of society as an extension of the basic family unit³². Bell³³ also states that Nyerere maintained that the family to which all people belonged must be extended further, beyond the tribe, and the

community to the entire society. Kwame Nkrumah of Ghana, like Nyerere, believed in African socialism and they both coined terms such as 'consciencism' and 'villagisation'³⁴. Both terms allude to the idea of a collective. They underscore the need to embrace a broad inclusive society.

Gyekye³⁵ highlights the importance of communitarianism in African socio-ethical thought. He points it out that there are reflected in social structures of African societies. Communitarianism sees the individual as an inherently communal being and is never isolated atomic individual³⁶.

Some Western and African notions though cannot always be thought of as mutually exclusive. Wiredu³⁷ stresses the importance of combining Western and African knowledge systems, especially when this can do the Africans good. The possible coexistence and synergy of African knowledge systems and Western knowledge systems is supported by Le Grange³⁸ who concedes that IKS should be treated with caution and that people should avoid blind romanticism of IKS. He avers that cultures tend to be permeable and are constantly influenced by other cultures³⁹.

Urch⁴⁰ had also earlier stated that there is firstly a need to instil a sense of security and that if this happens, Africa could borrow from the West without fear that changes wrought would destroy the African character. Higgs and Van Wyk⁴¹ argue that colonial subjugation in Africa ignored indigenous African knowledge systems (hence the African identity), because of an inverted mirror of Western Eurocentric identity. 'This state of affairs gave birth to numerous attempts to reassert distinctively African ways of thinking and of relating to the world, and found expression in the call for an African Renaissance⁴²'. This urge for Africans to want to embrace an African Renaissance is a conscious attempt to reclaim an (African) identity. This reclaim can be legitimate only if knowledge generated as well as educational purposes formulated respond to the immediate environment of the Africans. Ekong and Cloete⁴³ aver that institutions around the world should be responsive to the changes that are taking place in the society. There is also a belief by some that IKS-induced education has a liberating effect. Higgs and Van Wyk⁴⁴ write:

The call for an African Renaissance in educational discourse, therefore seeks to demonstrate how indigenous African knowledge systems can be tapped as a foundational resource for the socio-educational transformation of the African continent, and also how indigenous African knowledge system can be politically and economically liberating. This means that by virtue of assuming the 'indigeneity of culture', the call for an African Renaissance in educational discourse does not connote a detachment from political radicalisation and mobilisation.

Clearly, according to Higgs and Van Wyk⁴⁵, Africanisation of knowledge has a bearing in a number of aspects in society among which are democracy, attainment of an African identity, political and economic liberation among others. Moreover, some literature

as cited above sees a potential of emancipatory function of education in Africanised education system.

4.4 Africanisation as emancipatory education

Some African intellectuals, including a number of them in this book, have written about the restrictive nature of Western education especially when one looks at the apartheid era experience briefly explicated above. The university classroom where teachers are prepared needs to model emancipatory practices of education. Adetutu⁴⁶ argues that in quest for emancipatory curriculum, universities should rather use eclectic approaches where African philosophies of education and Western forms are utilised. In combining the African philosophy and Western values, Adetutu⁴⁷ argues that while the Western conception of education is individualistic, the African conception of education is holistic. Both orientations though have some value. The challenge for faculty at universities is to show their students the importance of IKS as well as the African experience in general. The drive to recruit more indigenous language primary school pre-service teachers is a movement towards the right direction. When learners see their languages elevated they will stand tall about their own culture. Usually, the hidden text when teachers get into the classroom is to teach the learners about the inferior nature of their language and culture. Indigenous languages are part of the African philosophy and language can address issues of social justice and equity (compare with Kamwendo's contention regarding this issue in Chapter 2).

The idea of communitarianism, Ubuntu and African humanism mentioned above attests to this. There is a better chance of working with others rather than stress individualism in education. According to Robert Sobukwe, the founder of the Pan Africanist Congress, education should mean service to Africa and should be a barometer of African thought⁴⁸. Bantu Biko, the Black Consciousness leader, concurred with this view when he contended that education should be geared towards raising the cultural, social, economic and intellectual level of all the country's citizens⁴⁹. Both views reflect education as a means of opposing the absolute Eurocentric notions of education. The African IKS are based on ecological relationships in nature. Mutwa⁵⁰ states that in Western civilisation, people live in a world of separatism, where things, which ought to be seen as part of a greater whole, are separated. Yet education needs to reflect the unity between various factors of life.

IKS have an opportunity to bring forth an inclusive approach to education. The IKS also have a potential of developing the learners in an 'African way' which is much different from the Western forms of education. Bitzer and Menkveld⁵¹ cite Easton, Nikiema and Essama who highlight three areas, meanings and applications of indigenous knowledge in community development. The first of these is that IKS should be conserved and respected since it represents accumulated wisdom of generations of people living in a particular context. Secondly, IKS embodies a different distinctly African mode of thought. Thirdly,

IKS serves as a conduit for articulation of what local people know while involving them in the correction of knowledge required for development. Yet, without relevant research Africanised education can hardly be advanced.

4.5 Research and African higher education

The paradox of African HEIs is that whilst this continent has many challenges, that need scholastic inquiry, the research levels are low. Usually the arguments are that Africa in general faces a number of research infrastructure and capacity constraints⁵². Yet there is much need for research in a continent that needs solutions in problems such as disease, peacebuilding and economy, as Abrahams et al.⁵³ contend.

One of the major priorities for addressing Africa's development challenges should be knowledge production by African researchers working primarily at African institutions, focusing on locally relevant knowledge production, which is made available to Africans. According to Sawyerr⁵⁴, this insistence on African research and researchers at African institutions is to ensure rootedness and the sustainability of knowledge generation, as well as the increased likelihood of relevance and applicability.

Research is an aspect that would also place the African continent in a position of strength if relevance research can be produced by HEIs. The relevance of African institutions will always be questionable if they cannot produce knowledge to address the challenges in African communities. We are at a time when African academics should change the symbol of the university as a white elephant. Research conducted by academics and researchers from Africa should address the present challenges as well as future solutions and possibilities. They can hardly accomplish all these when teaching in both undergraduate and postgraduate courses does not address Africa's societal needs. It is high quality research that would drive knowledge production of indigenous knowledge systems and the general African landscape. Africa has several countries with varying histories and conditions. Universities in these countries ought to be able to utilise research to generate knowledge on the context of these countries. Relevant research will lead to well-rounded students who will address the challenges in their communities. Growing literature also demonstrates the need for Africa to take centre stage in research. Kaya and Seleti⁵⁵ argue that African intellectuals should close the gap created over years of colonial conquest through research. Furthermore, there needs to be a realisation among researchers of the need to start with the local people when conducting research on African issues and circumstances. Furthermore, Kaya and Seleti⁵⁶ declare that researchers 'need to leave the assumption that the 'modern' must replace the 'traditional'. As outsiders, they must be open and willing to learn from the local people who are knowledge holders'. However, this relevant research agenda must be linked to globalisation.

4.6 Globalisation and issues of relevance

The policy brief by Trust Africa⁵⁷ highlights that Africa risks lagging behind in the global economy unless there is true transformation in higher education. Over the years many questions have been posed about the readiness of Africanisation to play a role within a globalised world. When people talk about an Africanised curriculum, the question of standards as well as globalisation frequently comes up. The main fear has been that Africanisation of education will stifle the development of education in Africa. This argument is misleading for a number of reasons as it assumes that:

- o African experience is archaic and subordinate to Western values;
- o knowledge can be gleaned only from the West, as Africa can provide no relevant knowledge; and
- o the intellectual traditions in Africa cannot be trusted but should be viewed with suspicion.

Yet African communities and scholars have to assert Africanness as they argue for African philosophies in education. The African will always be arguing from a position of strength when contesting with Western ideologies in education. The African reality should be more pronounced as students in African faculties learn about their experience before they make sense of other (Western) values. Teacher education that embraces these ideals strengthens the nation for the teachers will soon be in classrooms to mould the African children. Luckett⁵⁸ aptly summarises the need for an Africanised system of education in HEIs by saying that:

Higher education (HE) in Africa in the 21st century has to operate in both a post-colonial and a globalising context. On the one hand African intellectuals are calling for an end to the hegemony of Western thought and culture and for Africanisation of the higher education curriculum – or at least for greater responsiveness and relevance to African identity, culture and issues. In discussing the meaning of Africanisation in current South African higher education debates, Kister (2008) traces the genesis of the idea to Pan-African national-liberationist ideals of the 1960s.

The above excerpt demonstrates the necessity to heed the call for Africanisation in South African institutions of higher learning (HEIs). An HEI that follows these aspirations will be ensuring that the curricula encapsulate the African ideals. There are a few universities in South Africa that currently demonstrate the desire to Africanise not only in their staff recruitment but also in curricula as well. Frequently this is illustrated by their vision and mission statements. The University of KwaZulu-Natal in Durban demonstrates its vision in its statement, 'To be the premier university of African scholarship', whilst the University of South Africa points 'Towards an African University'. These two examples demonstrate how

the Africanisation agenda of higher education has become crucial in the transformation of post-apartheid HEIs.

In a globalised world, African education must respond to the challenges faced by Africans mainly. Conditions rife in Africa such as poverty, illness, illiteracy, child mortality and conflicts are among the greatest challenges. Education in higher education has to address these issues.

The HEI has been changed by a number of aspects in Africa and the world generally. Niang⁵⁹ writes about an obligation to rejuvenate the African HEI and return its role to a creative centre that makes possible cultural exchanges and solidarity. He also supports acts of globalising the African HEIs as they attain networks for enhanced dissemination of information. Furthermore, Niang⁶⁰ emphasises the links between the north and the south as invaluable in ensuring that the African HEIs will restructure themselves into 'strong regional centres of knowledge as part of a wider policy of African integration for development'. Globalisation of the African HEIs ensures that dialogue between cultures is achieved; that the HEIs, as they strive for Africanisation, do not overlook facilitating the cooperation of cultures.

Zeleza⁶¹ also stresses this cooperation as he states:

International education cooperation involves activities ranging from academic mobility, internationalisation of curricula and programs, networking and linking arrangements to research collaboration and joint publishing. To be effective, academic exchanges have to be truly reciprocal and mutually beneficial, based on shared planning, implementation and evaluation process.

Zeleza⁶² argues that, in the case of Africa, there have not been effective academic exchanges. He argues that in African HEIs issues such as gender imbalance, inequities of class, race, location and language all have an impact on knowledge dissemination and consumption. Zeleza⁶³ also underscores the unequal exchange between African HEIs and HEIs from the North. He says that the linkages are usually unequal and unproductive and tend to follow the remnants of colonial ties. Okoli⁶⁴ also argues that globalisation in African universities has become an uneven process that has divided the world into the 'haves' and 'have-nots'. He writes about the 'flight of talents' as many promising African intellectuals leave for the North⁶⁵. He contends:

The forces of globalisation have subjected African nations to a state of absolute poverty and marginalisation from world economy and education. Many African nations do not benefit from opening their economies despite the well-publicised claims of export and income gains. The economic losses and social dislocation that are being caused to many developing countries (especially Africa) by rapid financial and trade liberalisation, the growing inequalities of wealth and opportunities arising from globalisation;

and the perception that environmental, social and cultural problems have been made worse by the workings of global free-market economy, cannot be quantified.

Despite these arguments, though, there are myriad persistent debates today that call for the compulsion for Africa to open up for globalisation. Okoli⁶⁶ argues like Ajayi⁶⁷ as they maintain that Africa can benefit from globalisation only if there is use of suitable policy measures. Furthermore, Ajayi points out that African countries must take necessary steps towards the evolution and development of a coordinated trade strategy.

4.7 Conclusion

This chapter opened by focusing on what apartheid education wanted to achieve in South African classrooms. Subsequently, it went on to explore the possibilities in transforming the curriculum. A growing number of African intellectuals are acknowledging that time for the recognition of African traditional knowledge in schools is long overdue. Higgs⁶⁸ points out that African philosophy of education needs to empower communities to participate in their educational development since it respects diversity and acknowledges and challenges the hegemony of Western Eurocentric forms of universal knowledge. African philosophy in African schools has a potential of enhancing the learners and teacher experiences in education institutions as they learn more about the local knowledge. The latter will be a deliberate transformative move as the new system attempts to view education discourse differently from that which characterised apartheid education. The call for the use of IKS is also a move to ensure that people empower themselves by utilising local knowledge.

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Chapter 5

Issues in Africanising higher education curricula

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5.1 Introduction

In this chapter, I couch the selected issues in Africanising higher education curricula in the context of Ubuntu. Various authors in this book have defined Ubuntu (see, Gumbo as well as Msila). The proponents of Ubuntu claim that it forms the basis of an 'African worldview' and that it resides and flows in the veins of every African¹. According to the author, the meaning of Ubuntu can be traced back to Pan-Africanism, a continental drive against colonial rule that ultimately realised the formation of the Organisation of African Unity (now African Union) in 1965. Khoza¹ defines Ubuntu as follows: Simply put, Ubuntu means 'humaneness' or 'being human' and encompasses values such as the 'universal brotherhood for Africans', 'sharing' 'treating and respecting other people as human beings'.

Khoza² further advises that to appreciate the depth of the concept of Ubuntu we need 'to visit the age-old wisdom resident in African idiomatic expressions and proverbs'. One such is *Umntu ngumuntu ngabantu* (Nguni), which literally translated means 'a person is a person through other persons'. Thus the essence of Ubuntu is that my personhood and yours are dependent on our relationships with others. Taking this school of thought to the business of seeking to Africanise higher education curricula, my take in this chapter is that such Africanisation must necessarily know no political borders on the African continent.

In the chapter I tackle two main issues: student mobility trends in Southern Africa and their implications for Africanising higher education curricula, and the role of African scholarship. In the former, I discuss issues of physical and epistemological access, globalisation and curriculum internationalisation as important matters for consideration in attempts at Africanising the curriculum. In the latter, I position African scholarship as the major driver through which higher education curricula can be successfully Africanised.

5.2 Student mobility trends and their implications for Africanising the curriculum

The socio-politico-economic unevenness and hardships in many African countries have resulted in increased human movement from contexts perceived as less promising to those seen as more viable in terms of employment, education, security, and more other considerations. Student mobility is a significant feature of this development. In the southern African region, South Africa as the biggest economy therein has clearly become one of the most viable destinations for university entrants from neighbouring countries and beyond. This has led to an increase in the diversity of student populations in South Africa's institutions of higher education³. This increased diversity is also experienced in countries such as the United States of America (US) and the United Kingdom (UK). To illustrate, in the US in 2010, international students accounted for more than 18% of the total student enrolment. Similarly, in the UK, international students account for 13% of the overall annual income³.

5.3 Access to curricula

Africanising higher education curricula presupposes that the issue of access to such education would have been addressed. But the concept of 'access to education' is not as 'tame' and straight-forward as it may seem. This would explain why concern for such access has been a worldwide preoccupation for a long time (Tinto⁴; Koen⁵; Pithouse-Morgan et al.⁶; Keith⁷). To illustrate, Dhunpath and Vithal, as quoted by Chikoko⁸ report of Ireland's 'National Plan for Equity of Access to Higher Education, 2008–2013', a strategy aimed at addressing socio-economic-educational factors that connived to block or at least reduce the chances of some students of fully benefiting from education. According to Morrow as quoted by McKenna⁹, there are two types of access: physical access (PA) and epistemological access (EA). PA is to do with facilitating that students physically enter an institution. For example in South Africa, this would entail removing the obstacles created by the apartheid system in that regard. EA is about the student accessing knowledge in the institution. It is to do with the student becoming an active participant in the learning process.

Epistemological access is possible and sustainable only if a student integrates with the institution in which he or she has gained physical access. Tinto developed (a student integration model whose essence is that 'students who strongly identify with the internal features of an institution will succeed while those who do not will leave'¹⁰. Thus, for an institution to reap high throughput rates, it must invest in student welfare. Tinto¹¹ proposes that an institution's capacity to bond students together is paramount to student integration which in turn is crucial to academic success. In a study they entitled 'The air is hostile': Learning from an African international postgraduate student's stories of fear and isolation

within a South African university campus', Pithouse-Morgan et al.¹² concluded that the student's learning could 'be understood as pedagogically unsound, even when effective teaching and learning activities might be seen to be taking place in designated places'. The following is one vignette from the student they studied:

I have adopted some mechanisms to survive at [this university]. There are many spaces within this campus that I am not at ease in. I am always reminded that I am different. So I choose to just keep quiet. I also ensure that I have the right amount of money that I need when taking a taxi for fear of talking and being found out that I am a foreigner. The only places that I find solace in are in my study room at the [university] campus, when I am with my supervisor in his office and when I am in the library¹³.

In a similar study, Chikoko¹⁴, studied lived experiences of international post-graduate students from Africa studying in a South African university. The results were a mixed bag including some very pleasant as well as not-so-pleasant experiences. One student participant commended the PhD cohort support system in the university as follows:

I am happy with the cohort system...it sort of defeated some of my friends' choice to go to Europe. When we communicate, some of them are always complaining. My closest friend says she books for an appointment with her supervisor and the supervisor writes to her and says: 'I am not ready for the meeting'. I said aha! You chose to go to [another continent]! We don't have that here in South Africa especially here at [name of the university]. And she said, you are lucky, your fellow Africans can understand your situation.

Another student participant reported that he had been very surprised by what he termed a very friendly student-academic staff interactive atmosphere which he said was in sharp contrast to what he experienced in his country. This is what he had to say:

Where I come from there is a distinct demarcation between the senior and the junior...if you are a professor or you have a PhD, you are up there. When I arrived at my current institutions here I saw that there is social integration between staff and students. You can easily walk into a professor's office just like that...you interact with him and get out. I said to my mind: this is how it should be.¹⁵

In the same study, one student participant expressed a sense of multiple isolations in her class. She reported:¹⁶

My PGCE [Post-graduate Certificate in Education] class was like it was already structured. You find that Indians are seated at one place, we the blacks are seated at one place and whites at one place. For you to break those structures it was very difficult. Where I come from we do not do things like that. Among ourselves blacks we were then further structured...forced to move to those who come from other countries and we form a brotherhood from Burundi, Rwanda.

Another student commented on the academic levels of some local students he had interacted with as follows:

The legacy of apartheid is still striking me. I am very sorry to observe this but the level of academic achievement among some of our South African fellows [fellow students] is not that high if I may put it that way. Sometimes I really feel like I want to help but it's too demanding, you don't know how to help at the end of the day.

On this same matter another student participant reported his appreciation of how a local student friend of his rated his work ethic:¹⁷

I have a friend [local student] who came to me and said: 'I like the way you commit yourself to your studies and I wish I could do the same'. So in that respect I am happy that I am also a reflection of what they (local students) can look up to.

In the same study, a concern was raised regarding the apparent differences between countries regarding the requirements for entry into an honours degree. This is what one student had to say:¹⁸

In [name of own country] we do four-year undergraduate degrees. I did research and I wrote a dissertation. But here what we do in Honours is not even comparable to my undergraduate dissertation. When I finished PGCE [Post Graduate Certificate in Education] I applied for Masters and they said I don't qualify. I said God I have done research I know all these things, why don't you give me like a module or something to prepare me. This is something that should be looked into.

The literature I have reported on above is pregnant with cutting-edge issues regarding the business of Africanising higher education curricula. There cannot be in my view, any sustainable Africanisation without serious consideration of the here-to-stay diversity among students and of course the staff. In South Africa for example, even before we factor in the international student dimension, there are huge issues of diversity that come into play. But the assignment is compounded by the internationalisation factor. According to Keith¹⁹, the concepts *emic* and *etic*, derived from linguist Pike's work suggest that there are principles or truths that vary from culture to culture (*emics*) and others that are universal or pan-cultural (*etics*). Kemp, as quoted by Keith²⁰ says that just as such truths may differ from culture to culture, so too may perspectives on education and teaching. This is essential in any attempts at Africanising higher education curricula. Thus:

Teachers...must realize that the reality of their students' lives can differ widely across the bounds of culture and that it is essential to bridge differences in communication, religion, and worldview. In a diverse world, a one-size-fits-all perspective will serve neither students nor teachers.²¹

Interestingly and rightly so, Keith²² argues that people are more alike than different. Today, cultures interact in varied ways more than any time in the history of the world. Despite growing disparities between the lives of the rich and the poor, there is increasing access to common media and other communications. The resultant dynamic, intermingled mix demands that we re-visit our understanding of similarities and differences between people²³. According to Matsumoto²⁴, despite a multiplicity of cultural differences-social, economic, psychological, religious, etc, all cultures have common needs to address such as health, safety, and ultimately survival. Similarly, educators across cultures agree on some common sources of motivation for students, such as the influence of parents, teacher-student relations, and the importance of enjoying academic subjects²⁵. Therefore, while our students may differ in many different ways, there are similarities in their basic motivations²⁶.

While we cannot and should not take lightly the implications of diversity in seeking to Africanise higher education curricula, it should not be construed as a burden to cater for diversity. Rather, we should approach this assignment from an asset perspective. Asset-based thinking is an alternative to the needs-based approach to development²⁷. The latter approach focuses on needs and ignores the potential capabilities that people may possess to respond to their own dilemmas even though they may still require outside support as appropriate. We can take the example of many donor-driven development efforts in Africa, which, through needs-based approaches, have planted a legacy of absolute dependence on outside help on the one hand, and powerlessness on the part of the supposed beneficiaries on the other, to the extent that people no longer see any value in themselves and what they can do. All they see in their lives and surroundings are needs and deficiencies. In contrast, asset-based thinking advocates drawing on local resources, abilities and insights as a starting point towards addressing problems. According to Kretzmann and McKnight²⁸, this is consistent with a central tenet of community development, namely that communities develop from inside out and not from the outside in. In making use of this knowledge, I argue that the capabilities, the varied experiences, values, and such like, that the diversified classroom will come across with should be embraced and celebrated as a 'gold mine' of assets from which to build an Africanised curriculum.

Africanising the curriculum would only make meaning when the student is successfully integrated with the institution. As the literature suggests, integration is both physical and epistemological, involving helping the student to seek affiliation with the institution's norms, values and attitudes in order to enhance their chances to succeed therein. But such affiliation is possible only where there is congruence between the student's values, interests, needs and abilities and those of the institution. Thus, all the constituencies of a higher education institution (HEI) including the student must play their part in ensuring student integration. This involves, among others, dismantling entrenched barriers such as

racial and cultural stereotypes. Thus, the ‘feel at home’ factor is crucial in ensuring student integration and Africanisation.

Perhaps one of the most complex matters, African countries have to find ways of harmonising their school and higher education curricula. A case in point is how countries construe and configure an honours degree. Such harmonisation would go a long way in curricula comparability and cost-effectiveness as students progress with their studies. Below, I dwell a bit more on the role of an institution, department and individual academic staff member regarding internationalising the curriculum.

5.4 Globalisation and internationalisation

In the quest to Africanise higher education curricula, we must be conscious of the influence of globalisation. Stromquist²⁹ argues that the term ‘globalisation’ is widely used and this has resulted in it acquiring multiple meanings. According to Robertson³⁰ globalisation is a term that ‘refers both to the compression of the world and the intensification of consciousness of the world as a whole’. Stromquist³¹ identifies two versions of globalisation. One is to do with technological advancement. Modern technologies have widened, deepened and fast-tracked the interconnectedness among people and countries. The other is economic globalisation. The technological advances have enabled and themselves affected by new economic strategies that promote market-driven decision-making, commonly known as neoliberalism³². But there is often tension between the pressure to meet international obligations on the one hand, and satisfying domestic needs on the other, particularly among developing nations.

So where does the globalisation imperative take us within the debate to Africanise higher education curricula? I argued earlier that the increased student mobility we currently witness in Africa in general and in southern Africa in particular demands that efforts towards Africanising curricula must be articulated in the context of diversity. Therefore the Africanisation discourse would be incomplete without us engaging in the issue of internationalising the curriculum. According to Knight³³, internationalisation is ‘the process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education’. Among others, internationalising the curriculum would include activities such as the development of courses or programmes with an international, cultural or comparative dimension, study abroad programmes, and foreign language courses. According to Velayo³⁴, to be effective, curriculum internationalisation needs to take place at the institutional level, departmental level and individual academic staff level. At the institutional level it would entail such things as the development of mission and policy statements. At departmental level, internationalisation issues can

be included in all major courses, collaborative projects with institutions abroad can be forged, international students can be harnessed to share cross-border experiences, etc. At individual academic staff level, infusing international content into a course would be one of the key expectations. Velyo³⁵, identifies a number of other possibilities academic staff can use as follows:

- Having visiting scholars, international students, and study-abroad returnees as guest speakers.
- Discussing academic staff international experiences in class.
- Facilitating interaction between local and international students through collaborative projects and other organised activities.
- Including non-local authors on course reading lists and lectures.
- Showing videos that enhance international perspectives and critical thinking.
- Engaging in cross-national comparisons of course content to help students examine and challenge their own assumptions, beliefs, values and practices.
- Encouraging students to attend international events and conferences.
- Discussing world events and current affairs.

Thus Africanising higher education curricula, which I argue here must necessarily be achieved together with internationalisation, should be configured such that behaviours for global citizenship and sustainable learning³⁶ can be optimised. This 'citizenship', consistent with Ubuntu, is about outward looking on the part of a HEI. To illustrate, Cranney and Dalton³⁷ refer to Australia's University of New South Wales which in 2010 defined global citizens as:

having an appreciation of (a) relevant applications of their discipline to solving problems in local, national, and international contexts and (b) the need to respect diversity, be culturally aware, be socially just and responsible, and be environmentally responsible.

Cranney and Dalton³⁸ borrowing from Barnett, add that citizenship should also entail life-wide learning. This is learning that occurs in different spaces simultaneously, whether formally through curricular, extra-curricular or non-curricular. Such 'learnings' converge and collectively build a student's self-identity. Thus institutions of higher learning (HEIs) have a responsibility to contribute to students' capacity to learn from all these multiple avenues. The message is therefore that Africanising higher education curricula must be understood in the context of globalisation and to be global citizens students must benefit from an internationalised curriculum context. It is right but not enough for us to think and act local we must also do the same at global level. For this to happen we need a solid grounding in scholarship, to which I now turn.

5.5 The role of African scholarship

As we have seen in the preceding section, Africanising higher education curricula would inevitably entail some degree of internationalisation. The internationalisation agenda in higher education seeks to, among other things, ‘recruit international students and to collaborate in cross-nation research and scholarly activities³⁹. Thus in the process and in the context of Africa, the African scholarship agenda arises. Dhunpath, Nakabugo and Amin⁴⁰ assert that issues of African scholarship and IKS are taking centre stage on the African continent in conversations about curricula. They argue that it is now time for Africans to reposition themselves as active players in knowledge generation. This they argue requires reconstructing university curricula and pedagogy. To these authors, African scholarship should not only challenge existing theoretical and epistemological frameworks but also draw from them in generating new knowledge. But the notion of African scholarship is not without controversy in terms of what it means exactly as we see below.

In a study on curriculum intellectualising, Naicker et al.⁴¹ administered a questionnaire to local and African international postgraduate (Master’s and PhD) students studying in a South African university. One of the questionnaire items asked about how the students understood and experienced African scholarship. To this end, they included the following questions:⁴²

- What is your understanding of African scholarship?
- To what extent during your studies [at the university] are you exposed to discussions or debates about the meaning of African scholarship?
- To what extent during your studies [at the university] are you exposed to research studies based in Africa?
- To what extent during your studies [at the university] are you exposed to academic texts written by African scholars?

Some students linked African scholarship to financial support African students received. Some specified that it was the ability of a university to provide scholarships to qualifying African students in African universities. Yet some students were of the view that African scholarship was about promoting African knowledge systems and literature. Finally, others maintained that it was about promoting African intellectuals for example, through giving prominence to the works of academics from Africa and contributions of Africans to scholarship through research and publications. Thus this study unearthed an assortment of perspectives among the participating students, about the concept of African scholarship.

Regarding the two questions to do with students’ exposure to African research studies and academic texts, three categories of responses emerged. One group of students reported that they were yet to experience such exposure but this was something they were looking

forward to. One participant reported that he had done his last two degrees at the same institution but had never been exposed to African scholars' works. A second category was one of students who reported that they had had some but very little exposure to issues to do with African scholarship. They reported that only here and there did they read works by African writers, otherwise most of the literature was by writers from Europe and America. The third category was that of those who reported they had had significant exposure to literature by African scholars. Some of these said they enjoyed reading researches conducted in Africa.

During discussions and presentations, the works of African scholars were held in high esteem. The African perspective gave another angle of how things can be done. The varieties of perspectives regarding the notion of African scholarship led these researchers to ask many questions about this matter. Some of the questions they asked were:⁴³

- o Who is African?
- o What makes scholarship African?
- o What does it take to engage in African scholarship?
- o Where do our different understandings of African scholarship come from?
- o Can we come to a common understanding of African scholarship? Should we?

The authors report that they reached some agreement that one's history, particular situations and priorities shaped one's construction of African scholarship. The authors' initial take had been that defining African scholarship as funding or access to African HEIs, as some students had portrayed, was a very limited understanding of this concept. But this position did not last. Through further conversations they began to ask whether their own taken-for-granted perspectives were not a stumbling block against appreciating what drove some students to construct African scholarship the way they did. The researchers further asked themselves whether it might not be that what they had initially seen as a higher level understanding, namely that of African scholarship as the contributions of Africans and others to scholarship arising through research and publications about African issues, emanated from students who might not have had the same challenges as those who foregrounded funding.

In other literature, Karlsson and Pillay⁴⁴ cite Wiredu is of the view that African scholarship is about knowledge being used to address Africa's interests. To Makgoba and Seepe⁴⁵ African scholarship is about producing knowledge while rooted in African conditions and foregrounding the African identity as central to that process. The *Longman English dictionary*⁴⁶ defines 'scholarship' as 'the knowledge, work, or methods involved in serious studying'. Being scholarly is to do with spending a lot of time studying, and being knowledgeable a lot about a particular subject. Thus we can say African scholarship is in-depth generation of knowledge rooted in the African context and seeking to address African issues. It is not a cut-and-paste affair from other knowledge contexts, rather it is driven by

the conviction that building an African identity in knowledge production is the most ideal in the quest to seek African solutions to African matters. In the context of this chapter, we seek solutions to Africanising higher education curricula, so how can African scholarship help us? I contend that we need in-depth knowledge about the African challenges we currently face and those we foresee, about the capacities we need to address them, about who the students in HEIs are – their assumptions, beliefs, values, fears and capacities, and how they may succeed or fail to integrate with their universities. We need knowledge about what learning experiences are useful and how we can measure success or failure. But if the assortment of perspectives of what African scholarship I reported above is anything to go by, then we are likely to have equally assorted perspectives of what Africanising higher education curricula should look like. The Africans' salvation would lie in a knowledge-driven approach to seeking answers. Thus the importance of African scholarship in crafting Africanised curricula in higher education cannot be over-emphasised.

5.6 Conclusion

There certainly are more other issues about Africanising higher education curricula than the few I tackled in this chapter. However, I attempted to show how one factor inevitably influences and is itself influenced by another. The continent of Africa is in motion in many respects, and regarding student mobility in particular. Any efforts at Africanising higher education curricula cannot and should not ignore that reality. Such mobility brings about a highly diversified higher education classroom. Success in the classroom requires investment in student integration and only when the 'feel at home' atmosphere is achieved can deep learning begin. Africanising curricula is in a way about thinking and acting locally. This is well and good but the connectedness of the world today suggests that doing so is not enough. Africans in Africa and the diaspora should also think globally. This inevitably compels us to internationalise higher education curricula. Reshaping African higher education is complex, it requires high level scholarship. The most viable of scholarship is that which is rooted in Africa, that which is capable of organically addressing African issues such as health, education and poverty.

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Chapter 6

Women and leadership: Learning from an African philosophy

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6.1 Introduction

The role of women in society is gradually taking its rightful place not only in urban areas but in rural areas as well. Women in Africa have always assumed an important role in villages and communities. They have been in the forefront of food security, bio-diversity and various other aspects of the household. In apartheid South Africa for example, women lived without their men who were migrant workers in the mines. In the absence of the men the women became managers of their households. In this chapter we explore why the education leadership curriculum should explore deeper as to why the role of women in African societies can enhance organisations. The curriculum in many programmes teaches management and leadership by merely looking at 'male modes of leadership'. Yet, femininity and the role of women have much to teach students of management and leadership.

African history has given us accounts of great women leaders who led with distinction, for example, MaNthantisi during the rise of the Zulu kingdom. Then there was the Ghanaian Queen Mother Yaa Asantwa who led and protected her chiefdom against British Colonialists. The Empress Uelete Ruteal from Ethiopia was also a strong leader in her own right. There are various other examples that show that women in Africa have the ability to lead with distinction. However, many have argued that due to their 'biology' women cannot be good leaders. Yet the African Women Leaders' website [Online] declares¹:

Another excuse used against the participation of women in leadership is the fact that they are usually sensitive and emotional and as such would not be able to perform to the best of their ability in stressful situations. True, women are usually very emotional. But does this necessarily have to be a bad thing? The empathy that women feel for people and situations make them better able to understand the people they are leading.

This chapter explores some of these debates, for it is unthinkable to ignore these aspects of womanhood in leadership. Women in Africa have had various roles that show them enhancing their communities.

6.2 Leadership: What's gender got to do with it?

There is much literature that has highlighted how barriers or obstacles stifle women leaders in organisations. Aspects such as education are among factors that suppress women aspiring to go up the leadership ladder. Although there are instances in traditional society where women are perceived unequal to men, they are crucial in ensuring a working society. Afasi underscores the key role that African women play in the education of children as well as the transmission of moral values. Furthermore, Afasi points out that in traditional African societies the 'woman possessed the power that binds the society together'².

Afasi argues that colonialism was the root of gender equality in Africa. During colonialism, women's complementary role to man changed to that of women subordination. When African cultures met the Europeans cultures they came into contact with cultures where men were more powerful and dominant in social structures. Afasi³ also succinctly captures how colonialism demeaned the roles of women:

[T]he face of African society on gender equality changed owing to the influence of colonialism. Women began to suffer oppression from men. The shackles imposed by law, custom, religion and attitudes forced women to play the second fiddle. In fact, women mostly remained relegated to the last rung of the social and political ladder. Women no longer were giving the opportunity to exercise any power except those supervised by men.

Chukwu⁴ contends that although the traditional society was patriarchal, there were gender specific roles which complemented male roles. As pointed out above, colonialism and Western ways destroyed the traditional power of the African woman. The Western schools that were introduced and the type of work offered altered the role of women in African societies. Sharma⁵ contends that in traditional society women had an active role in sustaining the family. This author also points out that it had been suggested recently that women were inventors of agriculture. In the pre-colonial era, communities were mainly agricultural in which women played a crucial role. As people closer to the earth, various ceremonies and rituals in Africa needed the woman's role. Linked to Mother Nature, women were instrumental in growing and nurturing communities. There are many researchers who demonstrate opposition to African traditional societies for demeaning the role of women. Coetzee⁶ writes about traditional African women who are forced to be passive and submissive in marriage. Whilst Nyanhoyo⁷ writes about how African societies are biased against women as they are gender insensitive. Such researchers overlook the damage done by Western influences in post-colonial African villages.

The Western influence created barriers for women in leadership. It is unfortunate that many people assume that the current status of women in Africa is reflective of their status in traditional African societies⁸. However, it is colonialism that introduced barriers for women in various aspects of life. In South Africa, the Venda people have illustrated the role of the *makhadzi* in their society. The *makhadzi* is a father's senior sister, who plays different roles in community. According to Matshidze⁹ the *makhadzi* plays a critical role in succession, resolution of disputes, regency, initiation of girls and spiritual roles. This author adds that even today the *makhadzi* continues to play this role in the Venda culture. The role of the *makhadzi* is crucial for it is she who talks to the ancestors when offering sacrifices. The *makhadzi* can for example give blessings when a member of a family is embarking on a long journey¹⁰. Munyai explains that the first grains, the marula and other fruits of the New Year among the Vhavenda culture cannot be eaten before the *makhadzi* informs them. The *makhadzi* is a mediator between the clan and the Creator. This is a huge role in traditional leadership. De Beer¹¹ also mentions the role of the *makhadzi* in selecting a successor when a traditional leader had died. It is the *makhadzi* or the half-brother (*khotsimunene*) of the successor who play a role in selecting the successor. In the Pedi culture, the same respect is accorded to the *rakgadi* (aunt). These are few examples that show that in traditional culture there were numerous crucial roles women played in society. In Chinua Achebe's novels, such as *Arrow of God*¹² and *Things Fall Apart*¹³, one can see how the women's role complements that of men, albeit in a seemingly patriarchal society. After colonialism though the scenario changed.

Elmuti et al.¹⁴ write about numerous obstacles that remain in preventing women from obtaining high levels of leadership. Among the obstacles they highlight are organisational barriers, workplace relationships, globalisation, internal motivation and lifestyle conflicts. These obstacles are briefly clarified below.

- o **Organisational barriers:** This refers to culture within organisations that prevent women from advancement.
- o **Selection process:** Although there is usually a huge pool of qualified women they are not considered for leadership positions.
- o **Workplace relationship:** Frequently women are unable to find suitable, capable female mentors.
- o **Globalisation:** Often top executives have to relocate to new cities and countries. This can be a barrier to women with families.
- o **Internal motivation:** Usually people argue that women lack self-confidence to move to higher levels within organisations.
- o **Lifestyle conflict:** Women have various other roles they need to play outside the workplace. They are caretakers for their families and work roles may clash with domestic roles.

Kanyoro¹⁵ also points out that women's leadership has been invisible over decades because it has been viewed through 'gender-biased lenses'. Furthermore, Kanyoro¹⁶ argues that the challenge of society is to make women leadership visible as society magnifies women leaders' role. This includes ensuring that women pioneers in leadership have space and voice to practice their leadership in positions that commensurate with their skills. Singh and Prasad¹⁷ mention sexual harassment and stereotypes as being among the foremost hindrances to women managers.

6.3 New organisational culture and transformational leadership

Ananda¹⁸ writes about a concept in leadership that she refers to as 'midwifing' and she calls this a new paradigm. Midwifing underscores feminine leadership thereby bringing qualities such as transformation, nourishment and energy to all our organisations. Ananda¹⁹ adds by stating that midwifing is necessary in all organisations because feminine leaders support a spirit of cooperation not competition. In fact, much research currently supports feminine leadership qualities that are linked with compassionate leadership. Researchers have linked this leadership as transformational leadership, which they say fosters the followers' organisational commitment. Furthermore, Verma and Krishnan²⁰ contend that feminine style of leadership is characterised by sensitivity and cooperation.

At a time when many South African schools have teachers who lack commitment, there is much need to grow leaders who are transformational in their approach. Leaders who want to be transformational or those who want to entrench a new organisational culture can utilise feminine qualities of leadership contained in transformational leadership. Schools, like all organisations need progress and achievement of learners; yet learners cannot achieve when teachers are not committed to their job. Verma and Krishnan²¹ argue:

Transformational leaders motivate their followers to do more than they really expect they can do, increase the sense of importance and value of the tasks, stimulate them to surpass their own interests of the team, organisation on large community, and raise the level of change (Bass, 1985). Transformational leadership occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality... Transformational leaders inspire and motivate followers in ways that go beyond exchanges and rewards.

The above quote explicates a number of crucial values necessary for successful leadership. Arguably, women possess these qualities. Daniel²² points out that the instinctive tendency of women to nurture and take care of their families makes them dependable. Some people have also argued that the ability of women to multitask makes them better leaders

than men. 'African women leaders have an immense capacity to positively influence the livelihoods of people. Maybe women are even better leaders compared to men due to their ability to multitask and deal with all the stresses of a family'²³. These abilities enable women to be effective transformational leaders who will be able to achieve organisational success in a changing society. The theory that undergirds the rebirth of Africa will want to recognise the pre-colonial abilities that were accorded to women in society. Dodo²⁴ underscores the need for an African Renaissance theory based on African values and norms. For an African revival, this theory would use gender opportunities for women to advance their standing in society. Leadership and management in Africa would not be complete without the input and role of women. In the African village even great leaders (men) were successful because women complemented and elevated them.

Kawatra and Krishnan²⁵ have written how transformational leadership and femininity enhance achievement orientation within organisations. These studies concern the effect on femininity and transformational leadership on culture. Furthermore, Kawatra and Krishnan²⁶ argue that feminine leadership enhances factors such as people-orientation, collaboration and team orientation. Tuuk²⁷ posits that transformational leadership will be crucial in the next decade as organisations are showing signs of needing more transformational approaches. Transformation leaders try to utilise the interdependence of feminine and masculine attributes of leadership. Tuuk²⁸ points out that transformational leadership helps in engendering better performance than other styles and leads to more satisfied followers. Furthermore, Tuuk²⁹ argues that transformational leadership is more aligned with communal qualities than with argentic qualities.

Salim³⁰ traces the pivotal role of women as transformational leaders from the family when he declares:

Women are considered to be the force that develops and strive the future generation in the smallest organisation, which is the family. Decades before, women were mostly sticky to the nourishment and development of their children and family alone. But, in the previous two decades or more, we can see more women coming up in the social scenarios and taking up leadership roles that match or even excel that of men in the same roles.

Current organisations are rapidly changing and the women's feminine skills will be crucial in this regard. There is much need though to understand the role of the theory of African feminism.

6.4 African feminism

Students of leadership in Africa also need to learn more about the crucial nature of African feminism followed by women in Africa. This would enable them to understand the frequently confusing and condescending arguments in Western forms of feminism. In the

name of feminism, Western feminists merely preach an ideology through the battering of anything patriarchal. Generally, Western feminists regard African women impotent and clouded, hence they are determined to highlight their ills to the world. *Lobola* (bride price) for women to be married, polygamy and a women's genital operation for cultural purposes are some of the ills fought by (Western) feminists. They fail to realise that African feminists have the ability to respond to their context. They do not always do things because they are coerced by the seemingly patriarchal society. Okome³¹ writes about how feminists' literature portrays African women as powerless and confused. Furthermore, Okome points out that Western feminists have a tendency to patronise African women as they fight on their behalf although they do not understand or are wilfully ignoring the African contexts.

The NGO Pulse (online)³² highlights the crucial contribution of popular feminism in Africa. This extracts its experience from the culture and lived experience of African women. 'These women's inspiration and bias for their feminism lie in the importance of women in traditional African society in terms of food production as well as women's role in liberation movements against colonialism'³³. Furthermore, popular feminism underscores the point that the African women are powerful with important roles in food production and day-to-day running of pre-colonial society. It is the post-colonial society that tended to minimise the African women's role. Today, whether women are in rural areas or cities they play an important role in society. Often society does not always perceive the women's roles in guiding organisations. Snyder and Tadesse³⁴ state that the post-colonial state has relegated them to the role of nurturers and narrowed their role in governances.

It is however, the unique feminine qualities that make women better leaders. Women in Africa can use the traditional values of womanhood to combat the patriarchal impositions and prejudices frequently levelled against them. Those who are for social justice will realise the importance of gender equality and women ability in leading organisations. Gourley³⁵ lists a number of qualities that women need in leading today's organisations. Some of these are found in African traditional society. These are some of those qualities suggested:³⁶

- o Act not like a man –women bring balance to the workplace.
- o Have more skills than acknowledged, many skills needed for effective leadership can be found in good parenting.
- o Reflect and learn – people can learn a lot from their mistakes.
- o Encourage other women.
- o Care for people.
- o Build networks and relationships – women should persevere cultural prejudices when trying to network.
- o Respect others – have greater capacity for compromise when answers are not clear.
- o Femininity in the traditional African village addresses these and these are part of the African discourse.

The empowerment of women for leadership positions will be incomplete if it does not address these aspects of African feminism. Apparently, women will be stronger when they utilise the various aspects of womanhood in leading organisations. In this African feminism theory, we see how mothering becomes a crucial factor in defining feminism. Management students will not fully understand leadership in Africa without understanding these dynamics of African feminism. Shaped by African contexts, it will enable any scholar to understand the values that underpin leadership in African organisations. The traditional African society perceives women as decision-makers who are strong and creative thinkers and these are all qualities necessary for any organisational leadership. Ebunoluwa³⁷ uses the term 'womanism' to describe the African experience. 'Womanism differs from feminism because it recognizes the triple oppression of black women wherein racial, classist and sexist oppression is identified and fought against by womanists, as opposed to the feminism main concern with sexist oppression'³⁸.

However, even this womanism, which embraces all black women in Africa and the diaspora, is inadequate for the concerns of women in Africa. This author speaks of the need for a development of the need for an indigenous African theory to situate the experiences of African women. It can be argued that African feminism is trying to achieve this. Ebunoluwa³⁹ captures this succinctly:

Therefore an indigenous African on gender should involve a dialogue or accommodationist approach, a healthy appreciation of African cultures, a realistic and wholesome strategy devoid of unnecessary aggressiveness and the centralizing of family, marriage and motherland as positive experiences for African women based on the idea that we can diversify feminist theory to meet the specific needs of African females.

We should understand that although the emphasis on traditional culture illustrates how much we can learn from those cultures, there were ills that disadvantaged African women in society. For example, women lacked access to aspects such as property. However, African feminist do not want to forsake tradition. Tradition imbues cultural memory, rich knowledge and spirituality⁴⁰. They realise how culture can enrich society as customs and culture should do.

6.5 Mothering and leadership

Lumby and Azaola⁴¹ argue that women bring a different set of values and qualities to leadership when compared to men. They emphasise how different the role of mothers and fathers is in family institutions. And these roles manifest themselves in varying ways in organisations. The values associated with motherhood have proven to be critical in organisations where women lead. Yet, the society tends to view mothering as an antithesis

to leadership roles. The idea of motherhood and womanhood is seen as too soft for leading organisations. Lumby and Azaola⁴² contend:

Parenting is more closely associated with mothers than fathers, and is assumed to prevent the long hours which indicate appropriate effort and loyalty. Therefore, women, as actual or putative mothers, may be perceived as less of a match to the prototype of an ideal employee and particularly to that of a leader: women who wish to achieve and enact leadership roles must therefore contend with stepping outside the acceptable notion of what it is to be a women in order to match the leadership prototype. In doing so, they draw down disapproval for transgressing the boundaries of being women.

However, the nurturing role of a mother in Africa can bring forth a number of lessons for women in leadership. Even within their households, the mothers deal with several characters, not only from their children, but the children in extended family. The mother needs to create peaceable living among these children as well as in-laws. It is a skill to make sure that one manages these various characters. As the mothers manage their families, they inculcate the idea of sharing among members of the household. As mothers cook and feed families, they magnify the value of sharing among family members. The family and the village are also crucial in sharing motherhood duties, even when the mother is present. All these are crucial values in leadership today; shared leadership; participative leadership and understanding the different individuals within an organisation. The motherhood qualities can enhance leadership in organisations. Attributes such as caring and listening are some important qualities that mothers practice and these help with the organisation's growth. All these can be understood within the realm of African feminism.

Without the trap of oversimplifying the traditional society before colonisation but it is crucial to understand the role of women there. However, African feminism is an epistemology that seeks to clarify misunderstanding and fallacies that may be portrayed by Western feminist thought as well as the masculine biased theories characterising patriarchy. Western feminist as well as patriarchal dispositions can be oppressive to African feminist thought. The idea of mothering briefly discussed above may be understood differently from the Western view of feminism. Theories biased towards patriarchy can see the feminine role that women play in mothering as 'soft role' that can only be played by women. Again, these are factors and arguments that education leadership students should be aware of.

African feminists' ideas can be linked to post-structuralist feminism, which is a branch of feminism with insights from post-structuralist thought. Arndt⁴³ points out that gender debates influenced by post-structuralism have given rise to an understanding of the dynamics and complexity of feminism. This author says this necessitates the society to speak of feminisms rather than feminism. Randall⁴⁴ declares that post-structural feminism underscores the contingent and discursive nature of all identities. Nnaemeka, in line with

these, argues that anyone who wishes to participate in African feminists' struggles must do so in the context of their agenda⁴⁵. Moreover, this author opines that African feminists can provide solutions to their problems and it is in this view that Nnaemeka⁴⁶ also adds that African feminism empowers African women. The post-structuralist slant in African feminism is also crucial in explaining that the correct explanations come from our own interpretations and experiences.

As highlighted above, mothering qualities in leadership include caring, loving, protecting, providing and serving. These are attributes that can enhance the organisation's success. Employees need managers who care for they will be understood. They need leaders who serve because they will feel respected. However, some female leaders can be 'too mothering'. According to Mai Vu⁴⁷ this is when the female leader:

- starts to believe that the organisation cannot do without her (she takes on too much);
- cannot stand the thought that her followers might fail so she tries to be overprotective; and
- tires herself and forgets her own needs, wants and boundaries.

Despite these disadvantages, mothering can be a boon to any organisation. It is this mothering quality gives women the ability be able to juggle a number of roles within leadership. Steady⁴⁸ states that in her fieldwork in West Africa women leaders highlighted the need for female leadership. Many of these women maintained that leaders are born, not made. 'Their definition of leadership always took the higher ground with a strong emphasis on moral integrity, altruism, mothering, caring and for present and future generations⁴⁹'. Meier⁵⁰ points out how women leaders argue that managing children prepared them to be boss. Meier states that many women mentioned that motherhood and mothering is a training ground for leadership. The Business Journal⁵¹ also emphasises the role of mothering in leadership. This publication states that mothers motivate their children to attain certain goals, missions and purposes around common values. Mothers do this every day without even being conscious that they are leading in the process.

The next section focuses on how African women can use these qualities to lead effective organisations.

6.6 African women, feminism and effective and organisations

Beaman et al. argues that girls may be less likely to want to be scientists because there are few women scientists⁵². 'Exposure to own-gender experts can provide such role models, break stereotypes regarding gender roles and improve individual women's aspirations and propensity to enter traditionally male-dominated areas'⁵³. Unfortunately,

women in rural areas have less from a pool of role models. They grow to believe that only men prosper in the workplace's managerial positions. Kanjere points out that the public sphere in rural areas such as Limpopo Province does not encourage rural women to occupy leadership positions; hence there are less than 50% of women principals in schools.⁵⁴ In her study, Kanjere identifies a number of challenges that rural women school principals encounter, some of which were evident in this study. These challenges include convincing men in their community that they can be effective managers and that tribal authorities usually undermine their management, openly wishing that males should be managing the schools instead. Lumby et al.⁵⁵ cite Grant's study which stipulates that in rural communities, 'women have very little credibility as leaders, since effective leadership is associated with the physically strong and thus perceived the domain of men'⁵⁶.

Much research shows that feminine qualities can be a benefit to schools (Coleman⁵⁷, Dezso & Roos⁵⁸; Msila⁵⁹). Whilst on the one hand society 'knows' that the good headmaster is male, there are many debates that prove that women's qualities can enhance school management. Msila⁶⁰ cites literature that shows that women tend to embrace qualities that are advantageous to transformational leadership. Msila⁶¹ quotes Winkler as he writes:

Winkler (2010) states that transformational leadership has four important factors and these are; charisma, inspirational motivation, intellectual stimulation and individualized consideration...transformational leadership results in performance beyond expectations. The implications here, some would argue, point to the fact that women are potentially better leaders than men in a time of change.

Coleman⁶² also raises interesting arguments of how women principals can have positive aspects that they can use in management positions. She states that being a woman in a man's role can bring positive results; women in these positions feel less constrained than their male colleagues by stereotypes about how to be a make leader. Furthermore, Coleman⁶³ illustrates how women tended to ask for help easily and also lists other advantages. 'The fact that some of the principals are mothers themselves and can understand the difficulties that parents and female staff may face is also an advantage'⁶⁴. In her study Giroux⁶⁵ found that many teachers wanted a leader who is transformational and there were strong preferences for managers who had feminine traits. In the current times of constant educational changes, more people maintain that it is transformational leaders who will bring the necessary changes in schools. The society does not perceive the change in workplace management preferences. The irony is that many women (as evident in this study) do not realise the need for women leadership qualities today. As pointed out above, women do not ascend easily in management positions. The workplace is seen as a terrain of the males. We usually associate effective leaders with male attributes such as independence, assertiveness and decisiveness⁶⁶. Furthermore, these authors point out

that being a woman signals family responsibilities and marginalises women to remain at positions where they are at odds with current perceptions of the 'ideal worker'.

6.7 Conclusion

This chapter captures the essence of African feminism and how feminine qualities evoked in traditional societies can enhance organisation effectiveness when women are in management and leadership positions. Stereotypes, societal expectations and the patriarchal society culture are some of the aspects that ensure that women never progress to the helm of organisations. The women's access to managerial positions continues to be an item that should be first on the transformation agenda. Society needs to realise the dynamic organisation and diversity that women managers bring. Moreover, addressing women's access to managerial positions is one pertinent aspect in redressing the past as well as existing gender imbalances. The discussion also illustrated that women's experiences in educational management cannot be isolated from the context in which they live and work.

The paradox in women management though, remains the point that when appointed to manage, many want to emulate their male counterparts. It appears that many are not aware that their femininity can be a boon to their organisations. As they try to be male in their approach, they fail their schools. Yet, these women's experiences, whether agreeable or problematic, are shaped by the context in which they are: women, mothers, wives, African, and educational managers.

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Chapter 7

Contesting technology education curriculum for the schooling of African learners in South Africa

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7.1 Introduction

This chapter is a literature study that critiques technology education curriculum in terms of the extent to which it integrates indigenous technologies as part of indigenous knowledge systems (IKS). Indigenous technologies have a history of being sidelined educationally by colonisation. It thus becomes imperative to give an indication of the extent of commitment to promote indigenous technologies through the school curriculum. I became aware of the scanty research in this area in South Africa. The study that comes close to it is one undertaken by Van Wyk¹. Van Wyk's² published article entitled 'Indigenous Knowledge Systems: Implications for Natural Science and Technology Teaching and Learning', conceptualises IKS and explores the valuable implications that it has for natural science and technology teachers.

South Africa has a pre-1994 apartheid history when IKS and their custodians were marginalised, suppressed and subjected to ridicule³. The apartheid curriculum, by the then apartheid government, separated educational developments according to the four racial groups – whites, coloureds, Indians and blacks. The aim of the apartheid government was to serve the interests of whites at the expense of these other racial groups. Apartheid ruling was informed by the Western colonial invasion of South Africa. According to Louw⁴, South Africa was colonised by the Dutch in 1652, conquered by Britain in 1803 and unified in 1910 after a devastating war. Apartheid ruling came to an end in 1994 when a predominantly white government gave way to a government in which Africans (majority blacks) rule. Since then there has been an overhauling of the entire education system. I confine myself in this chapter to curriculum transformational processes and that of technology education in particular.

Since the inception of technology education through the mainstream curriculum in 1998 research in the field focused mainly on technology teacher education, technology

curriculum review and especially learners' attitude towards technology (Ankiewicz et al.⁵; Burns⁶; Chisholm⁷). The significance of this chapter lies in the developments about IKS in South Africa, which include the already developed policy on IKS (DST⁸; Mosimege⁹; Semali¹⁰). It is important to know the extent to which these developments are considered in the curriculum, including the recently decided Curriculum and Assessment Policy Statement (CAPS). IKS and indigenous technologies in particular are crucial for teaching and learning of technology. Semali¹¹ argues that in the arena of science and technology, historically and presently, Africa is generally unrecognised or extremely discounted.

According to Ramose¹², curriculum in South Africa has been devoid of African philosophy since the conquest of indigenous people. 'Western' or 'Westernised' are terms used to refer to the ideas and practices whose origins can be traced to European traditions of knowledge, teaching and learning¹³. By contrast, 'African' or 'Africanised' are the terms used to refer to the ideas and practices whose origins can be traced to African traditions of knowledge, teaching and learning. I confine myself to these perspectives of the terms in this chapter rather than the specific cultural entities included in them. The route that I follow is firstly to clarify the important concepts related to IKS that will facilitate the understanding of engagements in this chapter. These concepts include indigenous, culture, indigenous people, indigenous knowledge and Africanisation. Indigenous technologies will be clarified under the heading that incorporates the concept later in the chapter due to it being the main focus. Secondly, the chapter argues the need for curriculum to integrate IKS. Thirdly, the chapter closely examines the extent to which technology education curriculum integrates indigenous technologies and provides a practical example to integrate indigenous technologies.

7.2 Indigenous, culture and Africanisation: A technological perspective

The contestations in this chapter are immersed in the critical corrective theory¹⁴. The critical corrective theory drives a stance to correct the tendency of the Western ideology to subjugate other forms of knowledge, in this case, IKS. In terms of curriculum, there is a need to consider the self-correcting purpose of IKS¹⁵. This theoretical stance is levelled against the technology education curriculum, in this chapter from a critique point of view. I start in this section by engaging the three concepts from a technological perspective as they apply to the discussions in this chapter. These concepts are indigenous, culture and Africanisation.

'Indigenous' as a term refers to the root of things or something that is natural and inborn to a specific context or culture¹⁶. The United Nations Economic and Social Council's Commission on Human Rights define 'indigenes' as people that include populations of existing descendants who inhibited the present territory of a country wholly or partially.

Elsewhere indigenes are also referred to as first nations (Aikenhead¹⁷; Battiste¹⁸). At the time when persons of a different culture or ethnic origin arrived there from other parts of the world, they engaged oppressive forces to reduce them to a non-dominant or colonial situation. Although indigenous populations may not have suffered colonialism, isolated or marginal groups existing in the country are regarded covered by this definition because:

- o They are descendants of groups which were in the territory of the country at the time other groups of different cultures or ethnic origins arrived there.
- o They have preserved almost intact the customs and traditions of their ancestors, which are similar to those characterised as indigenous.
- o They are indigenous populations, even if only formally placed under a state structure, which incorporates national, social and cultural characteristics alien to theirs.¹⁹

The definition of 'indigenous populations' as it applies to Africa is shared by Jegede²⁰ (confer with Tedla²¹). According to Jegede²², Africans are the original inhabitants of Africa who moved from one part of the continent to another as hunters and gatherers whose population growth resulted in kingdoms and chiefdoms. They share common characteristics due to their common experiences of pre-colonial trade in goods, crops and slaves, and common ancestry. 'Africanness' implies the total culture into which Africans have been immersed, which constitutes similarities both at macro level (beliefs, customs, and traditions relating to theories of knowledge, causality, religion, concepts of time and space, kinship system, rituals, marriage celebrations, concept of witchcraft, ancestors, story-telling, etc.) and at micro level (differences are of degree than kind).

The idea of 'originality' as encapsulated in indigenous applies to other parts of the world for the same experiences that indigenous populations have with colonialism. For example, Aborigines are indigenous to Australia. In this sense 'aborigine' as a concept used to define and distinguish Aborigines means the earliest inhabitants of a particular country or region. Aborigines are the first nations who lived in Australia some 40 000 years ago²³. Australia as a continent remained relatively unknown to the outsiders until the 17th century when the first British convicts arrived in 1788, and grew as a group of British colonies during the 19th century²⁴. The second example is that of American Indians (Discussions from the US based Summer Educational Transformation Institute of 1999 in which I participated. These indigenes were forced out from their natural environment by European colonialists²⁵.

Indigenous populations have a history of being referred to by the colonial masters as primitive, lower order, backward, ethnic minorities (minority in US and Europe from a diasporan perspective, but majority in Africa), marginalised, working class culture, people of colour, disadvantaged, underprivileged, other, uncultured and dominated class. This resulted in their marginalisation in important forms of human development such as

education. That is why their worldviews and technologies could not be accommodated in the curriculum. They possess the knowledge that is practically expressed in terms of technology²⁶.

The idea of indigenous technology is therefore not just woven baskets and handicraft for tourists, but it rather expands up to the technologies such as looms, textile, jewellery and brass-work manufacture; and technological knowledge in agriculture, fishing, forestry, resource exploitation, atmospheric management techniques, knowledge transmission systems, architecture, medicine and pharmacy²⁷. From a technological point of view, indigenous technology also forms a body of knowledge, developed by a culture, that provides methods or means to control the environment, extract resources, produce goods and services, and improve the quality of life²⁸. ‘Indigenous knowledge’ refers to the complex set of knowledge of these technologies existing and developed around specific conditions of populations and communities indigenous to a particular geographic area. This knowledge enables them to interact with and manipulate the environment to address their needs, wants or problems.

According to Nakpodia²⁹ ‘culture’ is defined as the way of life of a social group. It includes actions, values and beliefs that can be communicated with necessary modifications from one generation to the next. Nakpodia³⁰ postulates that culture is learnt, is dynamic because it varies from one society to another, and is a complex whole that includes knowledge, beliefs, art, morals, law and customs. In communities, parents and elders can actually be noticed educating their young ones in terms of their cultural notions. For example, amongst many black cultures, the young ones are taught respect towards elders, like greeting them by kneeling down, making way for elders to sit on a chair, and such like. As the young ones grow to emancipation they preserve and cherish their own culture while they may assimilate other cultural traits in a multicultural setup such as in South Africa. The dynamism of culture thus attests to the modifications caused by societal developments, adopting a certain degree of other societies’ cultures.

What is even more helpful is to define culture also in terms of the technologies expressive of it in the context of this chapter. Gumbo’s³¹ article entitled ‘Multicultural education and its politics’ shares this technological perspective regarding the definition of culture. (see also the cultural perspective of technology through Obikeze’s³² concept of culture products in my Chapter 3 in this book, entitled *A model for Africanising Higher Education Curriculum: A Quest for Educational Relevance*). Van Wyk³³ writes that culture includes intellectual expression, customs, arts, technologies and social institutions of a particular group of people as well. Again, technology is included in Van Wyk’s³⁴ definition. An American study on expanding the dimensions of technology by Custer³⁵ supports the idea that technology is inherently cultural. Furthermore, McCade and Weymer³⁶ and Potgieter³⁷ concur, that technology is part of humans’ cultural system.

I need to point out that the term technology is derived from the Greek word *technologia*, which means a systematic study of something. This term is divided into *techne* for art, skill or craft, and *logia* for area of knowledge or study³⁸. Custer³⁹ argues that the notion of technology as an artefact extends quite beyond physical objects and that the traditional view of this artefactual dimension is unnecessarily restricted. This conceptual limitation serves to restrict the comprehension of the diverse nature of technology as an aspect of cultures. Artefacts are seen as wonderful and diverse cultural expressions⁴⁰. When learners engage in project design and making in the teaching-learning of technology as a subject, reference is made to an artefact as a product that they will end up making. In the context of this chapter, it is imperative that in their technological learning activities, learners be exposed not only to the Western technological perspectives but also to indigenous technological perspectives. I can attest to the fact that the curriculum that I received throughout my entire education was devoid of African perspectives. When I enrolled for my Masters in Education coursework with specialisation in technology education, I was confronted with readings on Western perspectives by Western writers and technologists only. There were no attempts by the designers of the course to include African technological perspectives, yet these are galore. African indigenous forms of technology do exist and should be part of what learners should learn in a technology education curriculum. A proof of the rich existence of indigenous technologies is presented later on in this chapter.

According to Custer⁴¹, a more balanced technological perspective should begin with imagination and culture, and then consider and appreciate the wonderful diversity that has been created. Instead of form being a distinguishing criterion (for example, machine, tool, artwork, score of music, etc.), the emphasis should be on the ways in which the values, priorities and needs of various cultures take form through the creative energy of their people⁴². It follows that extending the learning of technology to indigenous forms will enrich and expand the scope of learners' concept of technology. The fact that physical or technological artefacts cannot be separated from the cultural finery stands to argue that if the aim of curriculum is to be culturally sensitive, it must then integrate indigenous technologies that form the lived-experience of learners from indigenous technological environments.

Another crucial conceptual understanding of technology is that it is a knowledge aspect as already cited in this section. That is why I maintain that technology is part of the knowledge systems. By bearing this in mind, 'technology' is defined as the use of knowledge by incorporating skills and resources to solve humans' problems or to meet their needs and wants existent in the environment. In learning contexts, the idea of teaching technology is to teach learners to identify technological problems, needs or wants in particular environments, to investigate these problems and design and make solutions that can solve these problems or meet needs and wants. This happens by manipulating an

environment while taking cognisance of environmental factors and impacts. In the context of indigenous environments, indigenous technologies are part of IKS. This term embraces both declarative (the specific cultural, traditional and community facts) and procedural (the peculiar or general processes in knowledge construction). In view of what was stated in the introduction of this chapter, Green⁴³ conceives of indigenous knowledge according to the struggles against political domination – struggles that have been characterised by marginalised people. Most important for the section on indigenous technologies, indigenous knowledge is also defined according to Battiste⁴⁴ as comprising the complex set of technologies developed and sustained by indigenous civilisations. Battiste attests to the oral and symbolic nature of indigenous knowledge as transmitted through the structure of indigenous languages and passed on to the next generation. It is adaptable and dynamic, and based on skills, abilities and problem-solving techniques that change over time depending on environmental conditions⁴⁵.

I reflect briefly on the definition of Africanisation for purposes of discourses in this chapter, which has already been defined in the previous chapters. 'Africanisation' is a learning process and a way of life for Africans⁴⁶. Furthermore, Makgoba⁴⁷ also claims that Africanisation is a process of defining or interpreting African identity and culture. His view inclusive in the sense that it seeks to incorporate, adapt and integrate other cultures into and through African visions. This view is important to dismiss reactions against IKS in general on the basis of accusing them of being exclusionary. In fact, IKS incorporate the principle of Ubuntu (an African humanist philosophy that promotes people's allegiances and relations with each other) because of its people-centred philosophy. Msila⁴⁸ (also see definition by Msila in Chapter 9) writes in this regard that Ubuntu means humanness and it is rooted in African traditional society and philosophy. Makgoba⁴⁹ argues that this view provides the dynamism, evolution and flexibility essential in the global village. Makgoba's idea builds onto Sefa Dei⁵⁰, who claims that in the global context, understanding IKS in this way helps in affirming them as alternative ways of knowing the world. Opponents of IKS who may want to charge them of exclusion might therefore be mistaken as they fail to look to the West for its exclusionary attitude instead. This claim supports Sefa Dei⁵¹ who blames the Western tendency to marginalise African indigenous knowledge systems (AIKS), educational texts, mainstream academic knowledge and scholarship.

In light of the above, concepts on of indigenous knowledge can be conceptualised as the collective knowledge of indigenous people or communities⁵² indigenous to a particular geographic area. They are the combination of knowledge systems that encompass technology, philosophy, social, economic, educational, legal and government systems (Gumbo⁵³; Msila⁵⁴). According to Bitzer and Menkveld⁵⁵ these systems are embedded in the culture and history of a people. IKS and AIKS will be used interchangeably from now on in this chapter for the purpose of the African perspective from which this chapter is written. Attuned to the aims of the South African Constitution to be stated later in this

chapter, the principles of NCS, namely social transformation, active and critical learning, high knowledge and high skills, human rights, inclusivity, social and environmental justice, valuing IKS, credibility, quality and efficiency – have been maintained in CAPS⁵⁶. The focus in this regard is on indigenous technologies in the context of IKS.

Though relatively a new subject internationally, technology education already exhibits some indications of marginalising indigenous learners. The technology education curriculum of England and Wales and United States mirrors the marginalisation of learners of African descent. Pondering on the technology education curriculum for England and Wales, Eggleston⁵⁷ notes the unfair treatment of black learners. Eggleston accuses the curriculum statement that claims to address exclusion, stated as ‘technology education should be taught to all children, black or white’. Eggleston⁵⁸ considers this claim as potentially futile until the sources of powerful social pressures are understood that have for generations differentiated technological achievement by race. Eggleston⁵⁹ claims that educators and officials disregard the declaration by The Design and Technology Working Group contained in its final report, which he rephrased as follows:

Cultural diversity has always been a feature of British life [providing] a richer learning environment for all...the teaching of design and technology will require perceptiveness and sensitivity from teachers [to take account of] different beliefs and practices, especially when food, materials and environmental designs are involved...there are rich opportunities here to demonstrate that no one culture has the monopoly of achievements in design and technology.

This report urges emphasis, as much in white as in culturally diverse schools, so to affirm the importance of technology in preparing learners for life in a multicultural society. Layton⁶⁰ backs this idea with the need to expose learners to artefacts, systems or environments from other cultures, which have identifiable characteristics and styles, in order to draw from this knowledge in design and technological activities. Young people have so far not been afforded opportunities to make it in the more traditional areas of curriculum. The racially motivated white educator attitude is being blamed for this. Black learners are being accused of as being messy in their school work, incapability in examinations due to lack of motivation, language handicap, lack of appropriate cultural backgrounds, failure to understand the system, lack of knowledge for hard work, behavioural problems and disruption⁶¹. There is a need to let them read about their world as well in the curriculum so to enhance their confidence and performance. According to Eggleston⁶², curriculum should present opportunities for young black people to compete on more equal terms with white children, even for the new examination, higher education and career opportunities being opened up through design and technology.

In the American context, Zuga⁶³ notes the biased treatment of learners in the American schools based on ethnic backgrounds. Zuga⁶⁴ thus blames researchers’ omission of

research in this area, which could inform technology educators about curriculum. This state of affairs can be traced back to the historical development of technology education founded on the industrial capitalistic ideology of Western culture as related by O'Riley⁶⁵. According to O'Riley⁶⁶, from the Saskatchewan Education and Department of Education and Science, in England and Wales, over a decade ago, industrial educators decided to revise and update their curriculum stories and renamed them technology education. In the United States, for instance, a conceptual framework for industrial education, the Jackson's Mill Industrial Arts Curriculum Theory, was developed in which the authors identified four universal technical systems: communication; construction; manufacturing; and transportation. Nine years later, the International Technology Education association updated the Jackson's Mill model and also identified four universal content reservoirs: bio-related; communications; production; and transportation. Similarly, in British Columbia, four content organisers have been decided to represent the study of technology education: information technology; materials and products technology; power and energy technology; and systems integration technology. O'Riley⁶⁷ argues that these traditional content organisers should be open to different epistemological and ontological positioning so that technology education narratives can become more appropriate, relevant and equitable to a broader range of learners considering the cultural and socioeconomic diversity of learners in technology education classrooms. To ignore the study of technology, more so from a multicultural perspective, is to fail to engage learners with an important dimension of culture that affects them every day⁶⁸. Wicklein's⁶⁹ assertion holds in this regard, 'To deny our technology education learners a chance through the curriculum to delve into contrasting cultures of the past and present is pure tunnel vision as technology is relative to time and culture'.

In Eggleston's⁷⁰ view, when this is properly recognised in schools it could enable many black learners to experience high achievement in technology education. Ankiewitz⁷¹ asserts that what should be addressed, as a priority in curriculum development for technology education, is the impact of a multicultural society on the philosophy and application of technology and the possible impact of technology education on the society. Apple⁷² rightly cautions that if the place of the new technology in the curriculum is not examined it may continue the existing disparities between the advantaged and the disadvantaged.

Due to indigenous technologies being an aspect of IKS, and technology education one of the learning areas within the mainstream curriculum, I now turn to a discourse on IKS and curriculum before considering indigenous technologies and a technology education curriculum.

7.3 Indigenous knowledge systems and curriculum transformation

Education is the transmission of values and the accumulated knowledge of a society⁷³. It is a societal instrument for the expansion of the human culture⁷⁴. Human cultures are diverse, but critical education discourses have revolved around curriculum as a contention between two power blocks of culture – Western culture and indigenous culture. Western culture has dominated the educational arena at the expense of indigenous culture. South African curriculum has for long been subjected to Western colonisation through apartheid. Efforts have been fronted to oppose this colonial oppression. For example, Msila⁷⁵ cites Bantu Biko, the Black Consciousness representative and leader, who was opposed to the obsolete Western notions of education.

Recently, reactionary efforts have been focused on the need to integrate IKS in the curriculum. Elliot⁷⁶ calls for a more responsive curriculum to the African indigenous culture. The notion of indigenous implicit in AIKS seeks to be transformative by striving to be inclusive of those views that have been historically excluded from knowledge construction. It encompasses the diversity of cultural, racial, ethnic and religious practices of all people, which will lead to a situational understanding of the learners' social context. Curriculum is the vehicle that transports education. It contains the packaged knowledge and other notions spanning the cultural realities of a given community. The packaged knowledge should embrace indigenous perspectives if it is at all hoped to do service to indigenous learners, rather than Western monocultural perspectives. Attempts to Africanise education are deemed incomplete without a serious consideration of IKS⁷⁷.

The transformative nature of the South African education needs to use IKS as forms of emancipative education⁷⁸ in step with the transformative ideals of Freire⁷⁹. Research has shown that when learners' community and background are taken into consideration, learning is more likely to be effective⁸⁰. In my other study entitled *Indigenous Technologies: Implications for a Technology Education Curriculum*⁸¹, the action research findings showed that learners' interest and participation increased when indigenous technological perspectives were engaged. Higgs and Van Wyk⁸² allude to the African philosophy for problem solving. Thus, there is a great need to utilise the wealth of local IKS and incorporate them into the mainstream formal education⁸³ as alternative ways to solve problems experienced by the society. This wealth includes what indigenous people know about their environment⁸⁴, that is, their IKS and technologies that they engage in the manipulation of their environment.

Within the democratic dispensation in which South Africa finds herself, efforts are made to affirm and integrate IKS in the curriculum. The National Constitution (Act 108 of 1996) provides the basis for curriculum transformation and development⁸⁵. It was on the basis of the Constitution that the transformative version of outcomes-based (OBE) education

was adopted in line with the transformative principles of the Preamble to the National Constitution whose aims are to:

- o heal the divisions of the past and establish a society based on democratic values, social justice and fundamental human rights;
- o improve the quality of life of all citizens and free the potential of each person;
- o lay the foundations for a democratic and open society in which government is based on the will of the people and every citizen is equally protected by law; and
- o build a united and democratic South Africa able to take its rightful place as a sovereign state in the family of nations.

Msila⁸⁶ argues that the NCS is not purely the Africanised version of education. He however acknowledges that there is a constant mention of the inclusion of IKS, which alludes to the acceptance of the African philosophy. In fact, elsewhere he writes in support of the NCS for its learner-activeness principle to promote an opportunity for IKS. From this perspective learners are encouraged to and trained to challenge the existing relations of power and domination in terms of transformative epistemology⁸⁷. Emeagwali supports the ideals of this kind of curriculum. According to her, it fosters a socially orientated learning in support of the principle of knowledge being socially constructed. She further claims that this model of curriculum aims at developing the mind and the intellect in the context of rigorous intellectual activity and community-oriented research.

But Botha⁸⁸ radically dismisses NCS by claiming that it is purely based on the Western ideology and culture and thus dismissive of the opportunities to accommodate IKS. Botha's paper helps in urging South Africa to place IKS at the centre of its educational transformational efforts. On the other hand, Botha's paper falls short to recognise the deep seated transformation principles encapsulated in the National Constitution that cascaded down to the NCS through OBE. In this sense, South Africa adopted the transformational version of OBE. From a political perspective, the principles as mentioned earlier in this chapter remain the thread that abases the educational transformation in South Africa, including CAPS as it will be explained in the later section in this paper. In my view, while I partly support the idea that OBE might not be a solution to South Africa's curriculum problems, its transformational principles could be helpful for embedding IKS. I contend that it may not be the OBE-based NCS per se that hampers the IKS integration. It is rather how the implementation is conceptualised in the South African context that matters, especially with regard to embedding IKS. It appears that there is no commitment to embed IKS at implementation level. Teacher training and workshops lack this. Appreciated efforts made thus far include the existing national policy on IKS and the curriculum policy statements that provide room for the inclusion of IKS. However, they seem to only beautify policy and theory.

7.4 The rationale for embedding indigenous technologies into the technology education

The infusion of indigenous technologies in the curriculum has the potential to make teaching and learning relevant for learners, especially indigenous learners. In the mainstream educational thinking many teachers feel that they are losing control if learners do not fit in with their traditional teaching content and teaching methodology⁸⁹. According to Van Wyk⁹⁰, IKS hold valuable implications for teachers in the learning area of technology. The utilisation of indigenous technology and AIKS is the key to unlock the door that has prevented the masses from accessing mathematics, science and engineering⁹¹. The artefacts that indigenous people produce as their rules and routines are a manifestation of their explicit knowledge⁹². Feenberg⁹³ writes about the value-laden nature of technology – it is never context-free or neutral. In terms of the substantive and critical theories of Heidegger (in Vandeleur⁹⁴; and Hansen⁹⁵), as well as re-constructivist approaches⁹⁶, values emerge from culture and technology reflects the dominant ideologies of the culture in which it emerges (compare with Custer's idea on the cultural perspective of technology above).

The practice of indigenous technologies is evident in indigenous communities. This provides a wealth of what should be considered for a technology education curriculum. To buttress this point the reviewed literature reveals the following fields about indigenous technologies.

7.4.1 Food technologies

Food technologies includes dehydrated granular food products – common to various parts of the continent – that involve fermentation, frying and dejuicing. Also products such as sorghum, maize, or other cereal fermented and made into alcoholic beverages; and various types of cereal-based flour, pulverised tubers of various kinds and a wide variety of vegetable-based soups (Okagbue, in Emeagwali⁹⁷).

7.4.2 Metallurgical technologies

Metallurgical technologies relates to carbon steel production 1 500 to 2 000 years ago on the western shores of Lake Ukerewe in Tanzania and copper smelting developed independently in western Africa around 900 AD (Emeagwali⁹⁸; Van Sertima⁹⁹).

7.4.3 Astronomical technologies

An example of astronomical technologies is a stone astronomical observatory created in Kenya on the edge of the Lake of Turkana (Adams¹⁰⁰; Lynch & Robbins¹⁰¹; Van Sertima¹⁰²).

7.4.4 Tools technologies

Tools technologies include, for example, bone tools and blades in southern and eastern Africa 90 000 BC to 60 000 BC. The use of iron smelting and forging for tools appeared in Africa around 1 200 BC¹⁰³.

7.4.5 Architecture and engineering technologies

Examples of architecture and engineering technologies are the construction of Great Zimbabwe, the stone city more than 800 years ago and discoveries of ancient mines not far from Great Zimbabwe. Also the discovery of sacred birds of soapstone, divination bowls and dishes, sophisticated guns made from iron, currencies consisting of gold and brass, and metal coinage on the eastern and western African coasts. In addition, the discovery of Khoi ceramic pottery in Mpumalanga, iron production in Cameroon and the discovery of golden artefacts at Mapungubwe¹⁰⁴.

7.4.6 Transport technologies

Transport technologies include the construction of watercrafts for jungle canoes and dugouts from reed and wood, with cooking facilities¹⁰⁵.

7.4.7 Agricultural technologies

Agricultural technologies include the cultivation and harvesting of barley, einkom, cowpea, millet, sorghum, yam, coffee and cocoa, and the use of different cropping systems, as well as the domestication of cattle¹⁰⁶.

7.4.8 Medical technologies

Medical technologies relate to technologies such as aspirin, the use of bark of *salix capensis* to treat musculoskeletal, rootbark *annona senegalensis* for treatment of cancer in Nigeria. Also herbs to treat retarded labour, malaria fever, rheumatism, neurotoxic venoms, snakebite, intestinal parasites, skin ulcers, tumours, convulsions, venereal diseases, bronchitis, conjunctivitis, urethral and stricture (Jonathan¹⁰⁷; Emeagwali¹⁰⁸; and Van Sertima¹⁰⁹).

7.4.9 Communication technologies

Communication technologies include the dumming scripts used to relay news over great distances and for celebrative music and dance¹¹⁰

A close look at technology education and the extent to which it allows space for the inclusion of indigenous technologies is made subsequently.

7.5 Technology as a learning area

Technology was first introduced as a learning area with C2005. Other learning areas include Languages, Mathematics, Natural Sciences, Social Sciences, Arts and Culture, Life Orientation and Economic and Management Sciences for grades R to 9. These learning areas, now called subjects, have been kept to a larger extent in CAPS. The focus in this section is on technology education. Technology is the modification of the natural world to meet human needs and wants¹¹¹. It is defined in terms of the context in which it is practiced just like IKS is context bound. As a result a corpus of technology definitions exists¹¹². In this chapter ‘technology’ is defined according to Department of Education for the reason that I enquire into the technology education curriculum. Thus, in line with the definition given earlier, ‘technology’ means ‘the use of knowledge, skills and resources to meet people’s needs and wants by developing practical solutions to problems, taking social and environmental factors into consideration’¹¹³. As such, ‘technology education’ is the study of technology in which learners learn about processes and knowledge related to technology, which are crucial for solving problems and extending human capabilities. It aims to contribute to their technological literacy by providing them with opportunities to:

- o develop and apply specific design skills to solve technological problems;
- o understand the concepts and knowledge used in technology education and use them responsibly and purposefully; and
- o appreciate the interaction between peoples’ values and attitudes, technology, society and the environment¹¹⁴.

The four content areas in the context of which the above sub-aims should be achieved are structures, processing, mechanical and electrical systems and control¹¹⁵. The Department of Basic Education (DBE) specifically states:

As learning progresses, learners must be made aware of the interrelationship between technology, society and the environment. Wherever applicable, learners should be aware of different coexisting knowledge systems. They should know how indigenous cultures have used specific materials and processes to satisfy needs, and be aware of indigenous intellectual property rights. Learners should be able to consider the impact of technology, both positively and negatively, on people’s lives. Learners should be aware of bias in technology and be able to express opinions that explain how certain groups within society might be favoured or disadvantaged by products of technology.

The problem that I have with this quoted statement, which has been expressed in Maluleka et al.¹¹⁶, is the impression of not showing commitment in terms of embedding indigenous cultures and technologies in the technology education curriculum. This is expressed through the phrases, ‘wherever applicable’ and ‘have used’. This also contradicts the emphasis that I read in the phrases, ‘indigenous cultures’, ‘impact of technology’ and

'impact of technology'. 'Wherever applicable' can actually make teachers downplay the essence of indigenous cultures and technologies by choosing as to when they may want to consciously plan them in their lessons and when not. I believe that for every knowledge area and the process of finding a solution to the problem, indigenous perspectives can feature always. In fact, teachers should consciously steer some design tasks towards indigenous scenarios from which learners can identify problems. 'Have used' also has a downplaying effect because teachers and learners may approach indigenous cultures and their technologies as if they are a thing of the past and therefore not really commit to learning about them. These are real, and the majority of learners are actually learners with African descent or origin. They are members of indigenous communities and cultures from which they hail. They need to learn what they can better identify with. My action research-based study cited above discovered that technology teachers did not really tap into indigenous perspectives, possibly for reasons attributed to the above problematic phrases, and the fact that their workshops did not include perspectives on indigenous technologies. The study helped to embed indigenous technologies. The interviews conducted with these teachers and learners after embedding indigenous technologies revealed a heightened learner participation because learners dealt with the subject matter that was relevant to their context.

7.6 Implications for the NCS/CAPS technology education curriculum regarding the integration of indigenous technologies

The teaching of technology happens through design project-based and problem-solving approaches, drawing to some degree from the scientific investigative principle¹¹⁷. An authentic technological design problem is posed to the learners. They engage in design project activities as ways of solving technological problems. This follows the design process, which entails the following steps:

1. Investigate the existing technological solutions (using design aspects – function, values, aesthetics, ergonomic plus material and manufacturing) to better understand the problem so to design a workable solution.
2. State the design brief, specifications, and designing possible solutions to later select the optimum solution from and develop it further to get it ready for making.
3. Make the solution to produce an artefact.
4. Evaluate the made solution against the design brief and specifications.
5. Communicated the solution and the entire design process (presentation especially through the design portfolio), including marketing the solution.

The design process is not meant to be followed rigidly in the order in which it has been presented above. It is a rather cyclical process. This is demonstrated in Figure 8.1 below. For example, evaluation can happen at the stages of Investigate, Design and Make when learners evaluate their decisions and choices (e.g. of materials used and of their design options). Evaluation happening between the Make and Adopt/Adapt is the summative evaluation of the solution. Communication is overarching, that is, at every stage the learners may be asked to present their design work using different media such as drawings and oral presentation.

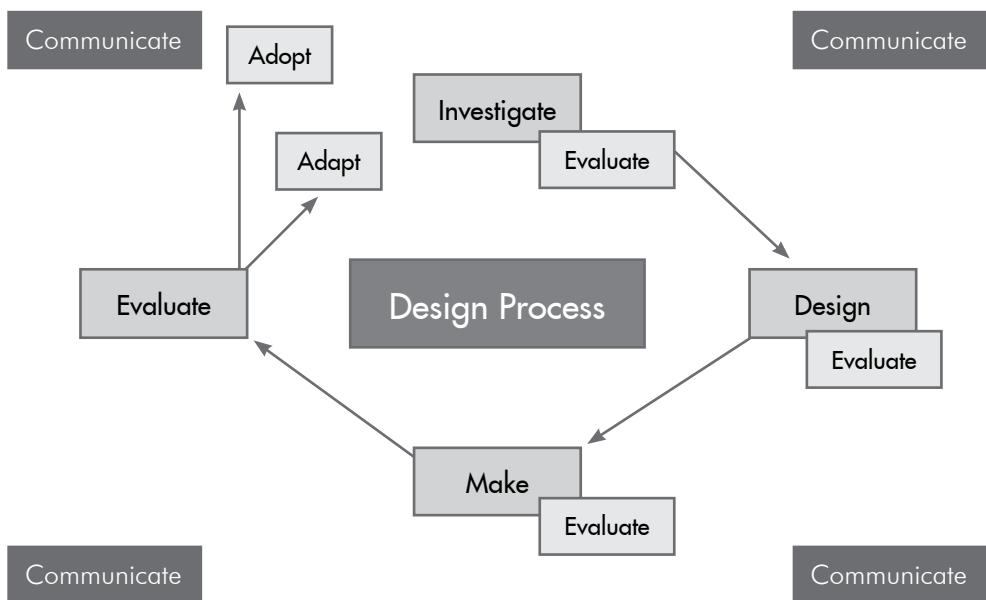


Figure 7.1: The design process

This design process relates to the first sub-aim stated above. To arrive at the solution of the problem entails engaging complex technological processes, technological knowledge (see, second sub-aim above) and taking into account the impact on the society and environment (see, third sub-aim). So, the second sub-aim relates to the technological knowledge fields of food technology, metallurgical technology, tools technology, etc. given above. Sub-aim three relates to the values issues (culture, gender, religion, education, societal, to name a few) impacting technology and technology in turn impacting them. This kind of approach for teaching technology, in my view, avails the platform to integrate indigenous technologies. For example, if we consider indigenous technologies of architecture and engineering with reference to structures we could think of the building of indigenous house/hut in a set community. A design problem about this could be identified within indigenous setup and a design brief stated. The investigation will then be carried out in indigenous context. The teacher can present a problem scenario to the learners in

this case, or can let the learners identify it themselves in their respective communities. He or she asks them to investigate the nature of the problem about the huts in the identified community context and the people that live in such huts. The teacher asks the learners to analyse the existing huts in terms of their identified problem based on the design issue of materials. The teacher can design a questionnaire in this regard that the learners can use to interview a few community members based on the huts. In addition, the teacher identifies relevant internet sites on cases of huts for learners to research (library, internet). This becomes a case study task where learners specifically read and discuss about roof designs and materials used on the huts. They should present their findings to the class.

7.6.1 A design scenario

The following example shows how indigenous technologies can be embedded using design process approach.

The huts built in a set community are occasionally hit by violent weather conditions like winds or heavy rain. When this happens, the affected members of the community are left without roofs over their heads. As a result the area is declared a disaster area. This costs government money in order to help the community deal with these conditions. In order to provide a long-lasting solution to this problem, you are required to design and make a hut with durable roof to resist these weather conditions.

Investigation

The Learners will now be asked to carry out their investigation in this context. As said above, the teacher can help them design a questionnaire that they can use to interview members of the community. Items that to consider in the questionnaire can include: 'How long have you lived in this hut?' 'Has your hut ever been affected by weather conditions and which ones exactly?' 'How many times has this happened?' 'Which part of the hut was affected?' Learners should also be helped how to speak to the community members about the process of making the hut, especially the roof, to view it and identify the materials used to build it.

Design brief

A design brief and specifications for this design project are stated as follows:

Design and make a hut for the community identified whose roof is made from reinforced cardboard material (to represent a durable material) so that it can provide safety to the people living in it against violent weather.

Specifications:

- o The hut must cover the area of 150 cm² maximum, including its roof.
- o The roof must be made from reinforced cardboard.
- o The roof must be strong and durable.
- o Use a maximum of 300 ml of paint to seal the top of the roof.
- o The walls, windows and doors of the hut can be made from your material of choice.
- o The cost of making the hut must not exceed R20.

Initial design:

- o Learners are asked to come up with three initial/possible solutions of their design per group.
- o For this they must present their freehand drawings of their design to communicate their ideas through graphics.
- o Then each group must choose one optimum design (solution to the problem) from their three initial designs. They must provide reasons for their chosen solution.

Development of the chosen solution

- o The groups must build details into their chosen solution, that is, they further develop the chosen solution to represent a real design in the drawing. This entails producing 3D drawings with measurements and other details shown.
- o The emphasis about the details should be on the roof.
- o They must also produce their working schedule for their making activities. This can be as follows:

Task	Responsibility	Date started	Date accomplished

Make:

Learners develop a plan for making which details:

- o resources needed (e.g. materials lists, tools, people and costs);
- o dimensions (e.g. lengths, breadths, depths and widths); and
- o steps for making the product (e.g. annotations and simple flow diagrams).

They choose and use appropriate tools and materials to make products by measuring, marking, cutting or separating, shaping or forming, joining or combining, and finishing different materials with some accuracy.

They use safe working practices and show awareness of efficient ways of using materials and tools.

Evaluation

The learners' artefacts (huts) are evaluated based on self-generated objective criteria linked directly to the design brief, specifications and constraints using self-designed procedures for self-testing. In this case the hut can be subjected to different weather conditions over a set period to test the durability of the roof. Or, the teacher can organise the testing environment – learners' designs to be tested, water and a hose to represent violent weather, air-blowing device to represent violent wind. They should note possible weaknesses in the design in the duration of testing. They should then suggest sensible improvements or modifications that would clearly result in a more effective or higher-quality end product. They should also evaluate the efficiency of the plan of action followed, objectively demonstrating insight into the consequences of key decisions, and suggest sensible improvements.

Communicate

The learners must have been prepared from the beginning of the project to prepare and present their ideas (in a project portfolio) using formal drawing techniques, in two-dimensional (initial ideas) or three-dimensional sketches in terms of:

- o use of South African conventional drawing standards (e.g. scale, outlines, dimension lines, first and third angle projection);
- o notes that clarify design reasoning and key choices; and
- o impressive enhancements of significant sketches (e.g. colour, texture, shade, thick and thin lines, shadow).

They should also choose and use appropriate technologies identified and specified by the teacher to combine and organise graphics and text effectively to produce their project portfolios, poster presentations, case study reports, and so on, that have a formal organised structure appropriate for the target audience.

7.7 Recommendations

Valuing IKS suggests that there is a space to integrate indigenous technologies as such. The implementation strategy and Vision 2025 need to plan around IKS and indigenous technologies. It appears that curriculum policy is accommodative of IKS and indigenous technologies to a greater extent. Only the implementation seems not to take advantage of this invitational atmosphere as cited previously in the DBE quote. ‘*how indigenous cultures have used*’ seems problematic and needs to be revisited. I suggest that this phrase change to ‘*how indigenous cultures use*’. I also suggest that ‘*Wherever applicable*’ in the statement ‘Wherever possible, learners should be aware of different coexisting knowledge systems’ should be cut to read ‘Learners should be aware of different coexisting knowledge systems.’ I further strongly recommended that teacher training for CAPS integrates the content and pedagogy for IKS and indigenous technologies. This perspective on technology education curriculum supports the kind of education for learners that Seemann envisages. Seemann¹¹⁸ uses the concept ‘technacy’ to refer to such education, which goes beyond a mere technological literacy. Seemann¹¹⁹ explains such education as follows:

Technacy education seeks to highlight the universals that define holistic technology education and understanding. It provides a generic expression for focusing and raising the level of pedagogical and epistemological exchange in technology education. In terms of outcomes, technacy education programmes seek to develop skilled, holistic thinkers and doers who can select, evaluate, transform and use appropriate technologies that are responsive to local contexts and human needs [my own emphasis italicised]. In other words, the technacy educator seeks to foster technate individuals, just as other educationists are striving to foster people who are literate and numerate.

7.8 Conclusion

This chapter has attempted to critique the extent to which the technology education curriculum integrates indigenous technologies. It has done this by sharing a technological conceptualisation, exploring the IKS integration efforts to transform the curriculum, and specifically the technology education curriculum. It was realised that the curriculum policy document on technology education based on the IKS-related principles that undergird the mainstream curriculum is better placed to integrate indigenous technologies. The identified weakness has serious implications at the level of implementation. This is attributed to the technology education curriculum policy not having been properly conceptualised with regard to the identified weaknesses. There is a marked neglect of indigenous technologies at the implementation level that renders them but an ivory tower in the policy documents. Furthermore, technology teacher training programmes are devoid of indigenous technological perspectives. A concerted effort is needed to embed indigenous technologies at this level to ensure its full integration.

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Chapter 8

The application/role of indigenous knowledges in transforming the formal education curriculum: Cases from southern Africa

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8.1 Introduction

Education has for long been trusted to provide the foundations for societal advancement and to open up opportunities for employment. The formal education system has come to define for learner and for society what knowledge is legitimate or not, or in other words what is valid or invalid knowledge¹. However, education has a powerful influence on our lives and is saturated with power/knowledge relations. Considering the time our children spend in the schooling systems and the premise that knowledge is imprinted into the lives of the receivers, this implies that knowledge shapes and guides the practice, perceptions and value systems of the learners' lifetimes long after it has been taught. It therefore stands to reason that we should be concerned enough to ask: What kind of education are we giving to our children? This brings to attention critical issues such as: Where does that education derive from? Whose knowledge is being represented and disseminated? Who produces the knowledge? Who consumes that knowledge? Whose values does it portray? Whose cause does it advance? Does it contribute to the upliftment of our communities? Who lays the parameters of what is acceptable as valid or invalid knowledge in mainstream education and social contexts. In other words, the main question is what and where is the place of our indigenous knowledges in African education systems and processes? It is these questions that should guide educational curriculum reform in the African context. Expounding on these aspects, Ball² asserts that:

We must be confident that our worldview is clearly understood by our own children, and that they know that their culture has value in modern times as it did in the past. We must be able to teach our children appropriate skills and understand, and control how our children are taught.

Africa, with its history of colonial occupation, has been characterised by colonially-derived education systems that are based on knowledge from Western science knowledge generation processes. These education systems, structures and processes have marginalised, underplayed, negated, misrepresented, ridiculed, excluded, banished and replaced African indigenous knowledges and ways of teaching and learning in ‘formal’ education contexts and in defining people’s role in society. In undermining and ignoring the role of African indigenous knowledges and learning process, thereby relegating African indigenous knowledge and learning practices to the dustbins of knowledge, Western education systems have succeeded in introducing an education system that is foreign to the local indigenous communities it targets and creates a dualistic divide between what the indigenous students learn in school and the way they learn in their communities and lived environments. Siedman³ reflects on ‘how dominant knowledges shape human life by naturalising and normalising the construction of personal and social identities’. Such new identities run contrary to indigenous cultures and value systems and alienate learners from their own socio-cultural origins.

In the current post-colonial era, as it has been repeatedly argued by the forgoing authors in this book, formal education curricula in Africa are still characterised by the dominance of the Western knowledge system and the unwillingness to represent and apply local knowledges within formal education and socioeconomic contexts. This Western knowledge hegemony partly stems from our past history of colonial domination (as discussed above) and partly from the globalising trends that continue to entrench the Western ideals as the only possible pathway for socioeconomic development in post-colonial and neo-colonial Africa. This results in a deliberate, colonially-derived, epistemic blindness to indigenous knowledges, which demeans them as incoherent and inadequate because they do not conform to the parameters of Western knowledge disciplines and thought systems. In this way, Western colonial epistemology remains the dominant valid and validating knowledge lens in our education systems. It is this status quo that prompted Bobby Sykes (quoted in Smith)⁴ to remark/exclaim: ‘postcolonial? Have they left?’

Modern education systems in Africa and related institutionalised knowledge generation processes have, among other factors, significantly contributed to the relegation and exclusion of indigenous knowledges from the mainstream education processes. The most disturbing aspect of Western education systems is that it denies learners space to bring into the educational processes knowledge from their own lived experiences⁵. This sets in motion a colonising process in which learners are forced to consider their ways of life as inferior and their accumulated indigenous knowledge as valueless and insignificant.

Commenting on colonialism and its aftermath, Msila⁶ states that, ‘For the colonial conqueror and the successor in the title hitherto the indigenous peoples had neither an epistemology nor a philosophy worth including in any educational curriculum’. Msila here is alluding to the continuation of the marginalisation of indigenous knowledges in the

post-independence era. The inability of our formal education curricula to embrace the local context is aptly captured by Lizop⁷ in the following quote:

As soon as the school is opened, it creates around itself a zone of cultural depression, as it were. Ask an African teacher what the cultural resources of his village are. He [sic] will answer: the school – and nothing else... Maybe the missionary, but often because he, too, is imported. But the market, the palaver tree, the dance, the song, the language of the tam-tam, the tales and proverbs, the historical legendary stories, the potter, the blacksmith, the weaver, are not for him sources of culture. The school acts as an instrument of humiliation. It establishes its empire upon destroying whatever it is not, whereas its mission should be to reveal to everyone all the riches and gifts they represent.

Lizop⁸ points to how the formal school curricula is devoid of the indigenous knowledge, situated practices and culture of the local community and makes no attempt to relate to them as valid knowledge sources that are relevant to learning. In support of the above assertions, Van Damme and Neluvhalani⁹ point to how such a system creates 'schizophrenic citizens' by establishing a disjunction/divide between the students' learned world and their lived world. Describing the negative impacts of the Westernised school system on indigenous knowledges, Odora-Hoppers¹⁰ states:

More like the proverbial blind, deaf and dumb torchbearer trampling on everything in its path, the school's awkward presence is also felt in terms of the value patterns, norms, and modes of social and economic relations that it chooses to impart. Thus every time a child enters the gates of the school, the spontaneous process of that symbolic fumigation, cosmological cleansing, and mandated acculturation begins... as teachers determinedly pursue the orderly dispensing of the knowledge and information they have acquired during their years of training, and unknown to them, or perhaps unwittingly, they begin to participate in the collective but sub-conscious process of subjugating indigenous values and suppressing the authentic cosmologies of the very context within which the school is located.

Odora-Hoppers¹¹ is alluding here to how the Westernised school context excludes and marginalises indigenous knowledges and how indigenous teachers trained in Western knowledge systems promote these processes of indigenous epistemicide by endorsing the illegitimacy of their own knowledge systems. With regards to educators, due to techniques and processes of normalisation, some of these processes of indigenous knowledge marginalisation and exclusion can be done unconsciously. Odora-Hoppers¹² further claims that curriculum experts and teachers in Africa routinely take learners in the school system as if their minds were *tabula rasa* by ignoring the knowledge that the learner brings into the classroom from their lived environment. Emphasising that learners do not come into formal education contexts as empty vessels, Odora-Hoppers¹³ dares educators to 'see the African child-learner not as a bundle of Pavlovian reflexes, but as a

human being culturally and cosmologically located in authentic value systems.' Reflecting on the values enshrined within the South African constitution of diversity, plurality and equality versus the hegemony of Western epistemology in the national education system, Odora-Hoppers¹⁴ questions whether policy makers, managers, researchers and educators would continue to accept 'a situation in which knowledge, the single most dear currency in global transaction today, continues to be defined through the monocultural prism of Western epistemology alone'.

What is evident in the above statements is the lack of contextual relevance of our Westernised modern education systems and the exclusion of the educational role of the local community and its knowledge. Hence, through formal education, indigenous people become alienated from their own culture and are absorbed into Western culture to the detriment of their own culture and their own local communities. Many recollections are made by indigenous scholars of how the formal education system brought about a disruptive disjunction between their learned and lived world (see, Sefa Dei¹⁵; Shava¹⁶). However, as educators we need to realise that while we may no longer speak of colonised states, we still continue to thrive under colonising knowledge systems that deem our indigenous knowledges as inferior. Wa Thiong'o¹⁷ refers to this as the 'colonisation of the mind'.

Realising the continuing colonising mission of our school systems, it is therefore apparent that there is a need to decolonise our African education systems through creating educational space for recovering and applying our indigenous knowledges and learning practices in formal education processes and for developing curricula that are responsive to the local contexts. Grosfoguel¹⁴ refers to this as the 'epistemic decolonial turn'. It is against this background that this chapter showcases some efforts by some emerging indigenous researchers to contextualise the formal education curriculum in primary and secondary schools in southern Africa through the application of indigenous knowledge research in formal education contexts. These initiatives pave way for future scenarios in which our curricula can be Africanised and thereby made contextually and epistemologically relevant through the pluralisation of existing curricula to incorporate relevant indigenous knowledge aspects and perspectives. This allows for the re-development of our curricula in ways that do not maintain colonially-derived structures of privilege and dominance.

8.2 Theoretical underpinnings

One of the key concerns among indigenous scholars is the colonially derived unequal representation and application of indigenous knowledges in relation to Western knowledge systems in formal education contexts. This includes the domination, colonisation, neo-colonisation, devaluation, subjugation, appropriation, misappropriation, misrepresentation, marginalisation, primitivisation, invalidation, decontextualisation, exclusion and rejection

of indigenous knowledge that has been perpetuated primarily by Western knowledge institutions and researchers (see, Sefa Dei, et al.¹⁸; Odora-Hoppers¹⁹). This growing number of indigenous scholars argues for the recognition of indigenous knowledges in the academy (schools and higher education institutions). The aim of this chapter is to challenge the current politics of knowledge representation in formal education contexts. To this purpose I will draw upon critical insurgent theories from the ‘Global South’ that challenge dominant knowledge views and allow for multiple knowledge perspectives, thereby giving voice to subjugated knowledges in a context where Western knowledges and epistemologies have been imposed and are hegemonic, thereby marginalising and excluding local knowledges. These theoretical perspectives are transformative in that they call attention to the role and the need for inclusion of indigenous knowledges in the academy. However, they are not dismissive of existing Western knowledges and point to the possibility of existence of plural, complementary knowledge systems and reciprocal valorisation of knowledges.

Reflecting on his educational experiences and how indigenous knowledges were viewed while growing up, Sefa Dei²⁰ recalls that:

I come to a discussion of Indigenous knowledges through an educational journey replete with experiences of colonial and colonizing encounters that left unproblematised what has conventionally been accepted as ‘in/valid knowledge’. My early educational history was one that least emphasised the achievement of African peoples and their knowledges both in their own right, and also for their contributions to academic scholarship on world civilisations. Like many others, I engage the topic of ‘Indigenous knowledges’ with a deep concern about the historical and continuing deprivileging and marginalizing of subordinate voices in the conventional processes of knowledge production, particularly (but not exclusively), in Euro-American contexts.

Sefa Dei²¹ argues that the interplay between different knowledges is one reason for integrating (re-centering) indigenous knowledges in academic knowledge work. He suggests using indigenous knowledges for the political purposes of academic decolonisation, that is, as counterhegemonic knowledges to challenge imperial ideologies and colonial relations of knowledge production that continually characterise and shape academic practices. Commenting on colonial domination and oppression of self-representation, Wa Thiong’o²² speaks of postcolonial literature as:

[T]hat tradition of the struggle for the right to name the world for ourselves. The new tradition was challenging the more dominant one in which Asia, Africa and South America were always being defined from capitals of Europe by Europeans who often saw the world in colour-tinted glasses.

Wa Thiong’o²³ proposes ‘moving the centre from its location in Europe towards a pluralism of centres, themselves being legitimate location of the human imagination’.

Shiva²⁴ refers to Western knowledge hegemony as a ‘monoculture of the mind’ in that it destroys the very conditions for alternative knowledge systems to exist. She calls for pluralism and democratisation of knowledges against the disturbing tendency of Western institutions and academy to divorce Western institutional discourse from the rest of the world, to frame what counts as in/valid knowledge and to determine regimes of truth.

Santos²⁵ refers to modern Western thinking as abyssal thinking in which a line is drawn between invisible and visible distinctions. Social reality is divided into two realms: the real of ‘this side of the line’ and the realm of ‘that side of the line’, and the division is such that the other side of the line vanishes as abyssal thinking does not allow the co-presence of both sides of the line. In abyssal thinking, modern Western epistemology is granted monopoly while other epistemologies are made to vanish. Santos places a focus on one’s ‘locus of enunciation’, that is where one is speaking from, and points to the fact that epistemologies are geo-politically located creating an epistemological cartography. Santos proposes the existence of plural epistemologies, which he refers to as the ‘ecology of knowledges’, where other epistemologies are granted a radical co-presence (equal representation) in a struggle for global cognitive justice guided by post-abyssal thinking.

Sefa Dei²⁶, Hountondji²⁷, Nader²⁸, and Smith²⁹ draw attention to how Western scientific disciplines have grown from indigenous knowledges through appropriative knowledge generation processes, thereby pointing to the interplay between and the interrelated nature of different knowledge systems. Commenting on the interrelated nature of knowledges and the growth/development of Western science from the appropriation of Indigenous Knowledges, Nader³⁰ states:

[I]n spite of differences, there is the common theme of human societies doing science or accumulating knowledge by verifying observation, or by borrowing from others knowledge that works in some way. Thus one way of looking at modern science is as the ongoing result, though not cumulative result, of the discoveries, inventions, and collective sciences of others. We have been munching on each other for millennia.

Nader³¹ points to the fact that modern/Western science has grown from processes of knowledge exchange among different knowledge forms and also alludes to the fact that modern science does not replace nor supersede other knowledges as it is not the cumulative result of other knowledges. In a similar vein, Hountodji³² argues that:

[T]he development, within Western Science, of a discipline or group of disciplines known as ethnoscience, including ethnobotany, ethnozoology and ethnomathematics and the like, shows only a kind of relationship that could exist in the context of domination, between so-called modern science and so-called traditional knowledge, where the latter is either marginalised or, better still, eaten by the former. We have experienced for almost a hundred years (the word ethnobotany was coined in 1895 and the word ethnoscience not earlier than 1950) a sort of scientific cannibalism.

Indeed, the growing number of contested patent cases by indigenous peoples which involve the commercial application their knowledges by private commercial enterprises is a clear indication of this appropriation process alluded to by Hountondji above. The case of Hoodia, one such example is the natural thirst quencher and hunger suppressant used by the San people in southern Africa that is now commercialised for use as herbal appetite suppressant³³.

The above insights reveal the complex and dynamic interactions between different knowledge entities which continually influence each other. Considering the Western knowledge appropriations and assimilation of other knowledges, it is evident that the claim to the existence of knowledge hierarchies is therefore false. There are plural knowledges systems that each have equitable value in the contexts in which they are applied. This also points to the value of alternative knowledges to Western knowledge systems and the need for their appreciation and representation in formal education contexts. Sefa Dei³⁴ argues that, 'To integrate indigenous knowledges into Western academies is to recognise that different knowledges can co-exist, that different knowledges can compliment each other, and also that knowledges can conflict at the same time'.

This argument points to the possibilities of the representation of plural knowledge systems within formal education contexts and processes. Representations of indigenous knowledge systems (IKS) in formal education contexts provide an opportunity to 'bring forth an inclusive approach to education'³⁵. The above theoretical considerations inform this chapter's focus on the opening of such possibilities for the representation and application of indigenous knowledges in formal education contexts and their implications in the academy.

8.3 Conceptualising indigenous knowledges

In discussing the role of indigenous knowledges in the academy, it is necessary to make an attempt at defining what indigenous knowledge entails. Here I find it necessary to avoid the limitations of giving a concise and prescriptive definition of indigenous knowledge that fits all contexts on the basis of the contextual variability of indigenous knowledges. Instead the focus should be on the key aspects that characterise IKS and what a definition of indigenous knowledge should incorporate. What makes knowledge 'indigenous' is addressed in the sub-sections that follow.

8.3.1 People

People are creators of knowledge; they give it its own discourse and meaning based on and relating to their experiences in interactions with their environment over time. Indigenous knowledge is about what indigenous communities know and do. This knowledge is trans-generational, transmitted by indigenous peoples from generation to generation orally through narratives, stories/folklore, songs and poetry, visually through arts such as

'bushmen' paintings, writings, craft, cultural rituals and dance, and practically through doing and the artefacts associated with practice.

8.3.2 Context (space and time)

Context refers to the spatio-temporal dimensions of the lived environment. Because IKS derive from different locales/places and different communities, they cannot be grouped as a collective single entity under the commonly used unifying term 'indigenous knowledge'. They are plurally definable heterogeneous bodies of knowledge or 'indigenous knowledges' arising from various spatially differentiated and distributed knowledge-generating nodes instead of a singular homogenous body of knowledge. This deliberate emphasis underlines a shift from the plural unity that drowns these knowledges into a collective anonymity to a focus on plural diversity of identifiable singular knowledges and an emphasis on place (contextual relevance) that is usually ignored in Western knowledge abstractions and generalisations of the 'other'³⁶. The same argument applies to using the term 'indigenous peoples' instead of the universalised and depersonalised label of 'indigenous people'.

8.3.3 Culture and practices

The knowledge that indigenous people generate is embedded in their culture and embodied in their practices.

8.3.4 Language

Knowledge is communicated and shared through a common unifying language within the community context. Language provides the main medium for the representation and transmission of indigenous knowledge.

8.3.5 Dynamism

Though rooted in history, indigenous knowledges are reflexive to changes over time in the lived environment and external influences, contacts and interactions. Therefore, they should not be rigidly held and perceived, but instead analysed to reveal the emergent processes of natural evolution. Over time they lose some of their substance, retain some of it, produce new ways of knowing and absorb new aspects through interactions with other knowledge systems. This means they are not static or stagnant closed systems but rather open and dynamic systems that are being transformed, created and recreated in context (see, Sefa Dei³⁷; Masuku³⁸; Masuku, Van Damme & Neluvhalani³⁹). However, dynamism does not refer to a periodic complete overhaul of a knowledge system, which will posit indigenous knowledges as uncertain and indefinable bodies of knowledge. Indeed much indigenous knowledge generated in the past has stood the test of time (what I will refer to as the skeletal framework or roots) and is still applied in the current everyday lives of

local communities. All knowledge systems continually undergo processes of internal (and external) critical review in order to be authenticated in terms of their relevant applicability.

Indigenous knowledge comprises various ‘knowledge’ components. These include factual knowledge, practical knowledge (know-how), knowledge of the lived context, tacit knowledge, intuitive knowledge as well as knowledge from dreams⁴⁰. There are some aspects of indigenous knowledges that are generalised, which we can refer to as knowledge for everyday living. There are also some aspects of indigenous knowledges that specific. Such specific knowledge aspects are distributed asymmetrically rather than uniformly within the community context. These include specialised knowledge such as traditional medical practice, making craftware, hunting, collection, preservation and preparation of food. Some of this knowledge is specific to gender and age. However, all indigenous knowledge is for the benefit of the community and is applied within the community contexts.

8.4 Indigenous education systems: Some insights

It is hard to imagine there ever was/is an education system within the indigenous community contexts because we are now so used the formal education systems that have set curricula, subject disciplines and formal institutional structures. Over time we have become attuned to the belief that children and learners can only acquire an education within formal Westernised education institutions such as schools, colleges, universities and other tertiary institutions and overlooked the possibilities of alternative education systems. However, in reality indigenous communities across Africa had their own diverse education systems that were linguistically and contextually relevant as well as culturally responsive prior to the emergence of formal education institutions. Education was not separate from but actually linked to and part of the mainstream everyday life of indigenous peoples. These indigenous education systems were designed to provide education through varied channels that included parents, extended families, elderly community members, peers and siblings, apprenticeship from expert groups (hunters, fisherman, cattle herders, agriculturists, brewers, builders, carvers, traditional medical practitioners, dancers, musicians, poets, etc.), initiation ceremonies and spiritual leaders. The educational approaches used were also diverse, including show and tell, observation and imitation, story-telling, discussions in community forums such as *inkundla* or *dare* (the meeting place for man in Nguni culture (in South Africa and Zimbabwe) and in Shona culture (in Zimbabwe) respectively), cultural dances, participation in initiation ceremonies, involvement in cultural activities such as *nhimbe* or *ilima* (the practice of communal ploughing or weeding of a field in Shona and Nguni culture respectively), and apprenticeship processes within specialised trades. Interestingly, the diversity revealed by these educational approaches resonates with approaches that are currently being advocated for in formal education contexts. It therefore stands to reason that Indigenous education approaches can augment learning

processes in the formal education contexts and contribute to the transformation of our educational curricula to make them relevant to the African context.

Some of the above education practices still exist within indigenous communities today. However, their role has been marginalised by Western education and banished from the formal schooling contexts, making what was prior to formal education processes within indigenous communities into informal pedagogical processes. In the formal education system the written word is valued compared to other media of transmitting knowledge, thereby undermining the value of indigenous educational approaches. However, as Odora-Hoppers⁴¹ points out, being illiterate in the Western alphabet is not equivalent to being completely ignorant; neither does it imply lack of relevance. The formal school curriculum, with its emphasis on decontextualised knowledge content, hardly teaches the sharing of values and appreciation of indigenous cultures and identity, communal responsibility or the respect for the elderly, which the Indigenous education system naturally imparts, enabling the socialisation of its youth and their preparation for roles with the community.

I recall in my childhood that you could be called and sent on errands by any adult in the community. Every elder served as a cultural watchdog and you could be admonished for wrong doing by any adult. Adults were also our protectors from unruly elements in the community. I also remember very vividly, when I had grown older, one incident where I was stopped by an elder from my village while I was driving and he instructed me to take him to a place in the opposite direction, which I obliged him as culture expected of me. Such practices and educational processes within the community enabled the development of communal bonds and fulfilled the African proverb ‘it takes a village to raise child’. The focus of indigenous education systems was not on dehumanised, individual, quantifiable and hierarchically cumulative discipline-specific education outcomes but on moulding an individual who is fit for life in a community and is able to perform functions to the service of himself, the family and the community at large.

In the African community context any funeral is everybody’s funeral and everyone pitches in to console and help. Similarly, any ceremony such as a wedding is everybody’s ceremony and the whole village will be in attendance to celebrate, with their gifts and blessings. This is the essence of African life. I am constantly conscious of how our friends from Euro-American cultures always laugh and joke at how everybody becomes a brother or sister, an uncle or an auntie, a grandma or grandpa in the African setting. However, what this does is to establish lines of respect that should not be crossed and long-term bonds that incorporate friends into the extended family structure and vice-versa.

8.5 Mobilisation of indigenous knowledge into the formal school curriculum in Southern Africa: Case studies of applications

This section aims to showcase efforts by emerging indigenous scholars in southern Africa to contextualise the formal education curricula through the inclusion of indigenous knowledges in various subject disciplines. Here I document some case studies of research application of indigenous knowledges in formal education contexts. Unlike ethnographic studies of the 'other', these are studies into the relevance and application of indigenous knowledges by indigenous people.

8.5.1 Case 1: Traditional leafy vegetables and the agricultural curriculum

Modern agricultural practices are characterised by crop monocultures, which deny the inclusion of other crops and label any other plant in the field other than the main crop as a 'weed'. Mainstream formal/commercial agricultural practices and research still promote crop monocultures and comprise the dominant agricultural curriculum within formal education contexts. The long-term negative impacts of such agricultural practices on the landscape, the soil and the environment are now being realised. However, traditional agricultural practices on the other hand are conceptualised differently. They are characterised by multi-cropping and the selective retention of useful plants other than the main crops that would otherwise be characterised as weeds in modern agricultural practices. Embedded within such practices are the local knowledge and cultures on the use of these plants, some as food and some as medicines. It is only recently that the benefits of multi-cropping are being recognised and advocated for within sustainable agricultural practices.

Shava's⁴² research on indigenous knowledge, which explored the use traditional food plants in the Eastern Cape, opened up the possibilities of application of indigenous knowledge within formal education contexts. In this research Shava⁴³ argues that:

The dominance of the Western knowledge paradigm is perpetuated in southern Africa by our Westernised education system. Very little reference, if any, is made of Indigenous plants in the various school curricula for example. The agriculture syllabi, on the topic of fruits, use exotic examples. The food and nutrition classes focus on the dietary importance of domesticated vegetables at the expense of Indigenous ones. This applies across most subject disciplines.

Eisner⁴⁴, in his discussion of the three curricula that all schools teach, defined what schools do not teach as the 'null curriculum', i.e. 'the options that the students are not afforded, the perspectives they may never know, much less able to use, the concepts and skills that

are not part of their intellectual repertoire'. What this kind of education does in rural community settings is to provide 'educated' graduates who are poorly fitted to the local context in that their knowledge is not practically applicable to everyday community life. Shava⁴⁵ then recommended that 'educational approaches should be contextual and should encourage the learners to bring in and share their experiences in the learning situation'.

Drawing upon the educational recommendations from Shava's work above, Asafo-Adjei⁴⁵ observed that local learners taking his Agricultural Science classes at a rural secondary school near Queenstown in the Eastern Cape Province of South Africa were able to recognise some of the plants normally considered as agricultural weeds and were identifying them to be traditional leafy vegetables (locally termed '*imifino*') used as food by the indigenous Xhosa communities which they were part of. The learners, in so doing, were drawing upon the social capital (collective memory and agricultural practices) of their local communities. Tapping on this indigenous knowledge existing within the socio-cultural context of the learners, Asafo-Adjei⁴⁶ then developed Agricultural Science lesson activities based around these traditional leafy vegetables instead of focusing on only modern vegetables (*imifuno*), which was the accepted norm.

By breaking from the norm and expanding on the existing agricultural curriculum, Asafo-Adjei was able to (re)contextualise the agricultural curriculum, thereby making it locally relevant and linking the school's learning activities to the local community. In an environment characterised by degraded marginal land, erratic rainfall and poverty, traditional leafy vegetables contributed significantly to ensuring local food security and to local nutrition⁴⁷. Through engaging learners to investigate local community knowledge of traditional food plants and in caring for traditional leafy vegetables within school agricultural plots, Asafo-Adjei⁴⁸ was encouraging appreciation of role such food plants in the community and developing a curriculum that was responsive to the school-community context. This was against growing stigmatisation of the consumption of traditional leafy vegetables within the community, which were considered as primitive compared to modern vegetables and perceived to be a sign of poverty. This educational process was then initiating the re-valuation of wild leafy vegetables (*imifuno*) and their conversion into domesticated agricultural vegetable crops (*umfuno*), hence his thesis title 'From *imifino* to *umfuno*'. Most of these wild food plants are in reality actively managed by local communities in their fields and are therefore semi-domesticated, showing the thin/false divide between cultivated crops and wild food plants⁴⁹.

Working on traditional leafy vegetables, Asafo Adjei mobilised indigenous agricultural knowledge of the local community into the South African Agricultural Science curriculum, thereby going beyond the formalised boundaries of what is defined as Agricultural Science in the school curriculum by bringing local knowledge from the margins into the centre of agricultural learning activities. This inclusion of indigenous knowledge in the Agricultural

Science curriculum was in line with the Revised National Curriculum Statement's requirement for engagement with indigenous knowledge across the curriculum.

8.5.2 Case 2: Fermented beverages in the Life Science and Consumer Science curricula

Modern science comes with the notion that scientific processes are only understood and applied in real life from Western science experimental perspective. Kota⁵⁰ and Hanisi⁵¹, working separately, both looked at the application of indigenous knowledge on traditional fermented beverages within the school curriculum in the Eastern Cape, South Africa. Hanisi researched into educational implications of linking the traditional beer brewing practice of making the sorghum beer, *umqombothi*, to the modern scientific explanation of the fermentation process. Hanisi, a Life Science educator, observed the inability of her indigenous learners to relate the modern science fermentation process and concepts to the traditional beer-making practice in their culture. She also noted the loss of indigenous science of making *umqombothi* beer among most of the urbanised indigenous Xhosa communities in Grahamstown, in the Eastern Cape Province of South Africa, that were now detached from their rural backgrounds and traditional cultural upbringing⁵². Hanisi⁵³ then mobilised the indigenous knowledge on traditional brewing into formal science education processes by planning lesson activities around the traditional fermentation process. Through inviting elders knowledgeable in the traditional practice of brewing *umqombothi* to demonstrate the practice to her science classes, Nisipho was able to engage both the elders and the learners in meaning-making processes that uncovered the link between modern scientific explanation/conceptualisation of fermentation and its long-term traditional practical applications. The demonstration process and the subsequent discussions following this revealed the science of alcoholic fermentation behind the traditional brewing practice and its nutritional value in that it has low alcohol content and high vitamin B content. With this realisation, which contextualised science within the lived socio-cultural contexts of the learner and proffered new relational meaning to the alcoholic fermentation process, a new respect for and (re)valuing of indigenous knowledge and Xhosa cultural heritage was developed amongst the learners. Through the involvement of traditional beer brewing practitioners from the community, the local community was also made to appreciate that their knowledge and culture was valued within formal science learning contexts.

Working within the discipline of Consumer Science education, Kota⁵⁴ researched into the nutritional significance of the fermented traditional sorghum brew, *amahewu*, and its contribution to the diet of the local community in Phakamisa Township near King Williams Town that was affected by HIV and AIDS and poverty. Kota observed the widening use of this traditional fermented brew in the community, especially among those infected with HIV and AIDS due to its ability to stabilise their digestive system. She also uncovered its

traditional use a source of energy for working in the fields. Furthermore, Kota⁵⁵ developed learning activities in which she invited women from the local community to demonstrate to her learners the brewing of *amarhewu* using left-over grain porridge and leaven (*umlumiso*). Follow up discussions unravelled the science behind the traditional brewing process of *amarhewu*, its health and nutritional value, its cultural significance, as well as its current commercialisation. *Amarhewu* is now available as a packaged product in a variety of fruit flavours in the local shops. These educational processes emphasised the value of *amarhewu* as part of the isiXhosa heritage and its nutritional and health role and opened up possibilities for the inclusion of other cultural foods in the Consumer Science curriculum.

8.5.3 Case 3: Relating indigenous knowledge practices and science concepts

While observing the local day-to-day indigenous practices of local people in a rural community in Manase Village in Chipinge, Zimbabwe, Caleb Mandikonza was intrigued by the scientific logic behind the practices. Drawing inspiration from these practices Mandikonza sought possibilities of using these indigenous knowledge practices to explain scientific concepts to indigenous learners from southern Africa at Mutare Teachers College where he was a Science Education lecturer in order to create more contextually relevant learning experiences⁵⁶. The Science curriculum at the college comprises four main units, namely Biology, Chemistry, Physics and Science Education.

The traditional knowledge practices of the Ndawu (a Shona dialect) people that Mandikonza identified included: i) winnowing grain to separate it from chaff using a traditional winnowing basket (*rusero*) and air currents; ii) post harvest pest control practices using a traditional grain storage structure (*dura*) that allowed for free air circulation, dung coating and weevil repellent plants; and iii) traditional processing, preservation and storage of milk.

In the winnowing process, Mandikonza observed that a shallow broad-based basket was used to handle the grain and that the grain was lifted by rhythmically flipping the basket, exposing the grain to the air currents of a breeze that removed the lighter chaff from the basket, leaving behind the heavier grain that fell back into the basket due to gravity. These observations were used to prepare a physical science lesson activity in which the learners were made to perform the practice and then to discuss and explain it using scientific concepts.

In the post-harvest pest control practices, Mandikonza⁵⁷ observed that the granary (grain storage hut) was built on stilts with a floor made of poles that allowed air to circulate while there was a large space between the walls of the storage bins and the roof to allow for air draughts to remove moisture from the grain and to keep it dry. The grain storage bins

were made from wooden poles and dagga (clay) and lined with dung. The grain was then mixed with weevil repellent leaves of *Lippia* and *Eucalyptus*. In this second practice the lesson activity involved student teachers deliberating traditional grain storage practices and explaining the role of air circulation gaps, the dung walls and the insect repelling leaves from a physics and biological science perspective.

Regarding the milk preparation, after milking the cows, the milked collected was sieved or filtered through a fine cloth. Milk to be used later for cooking was boiled before it was stored, while the rest of the milk was placed in a clay pot to be soured and stored for later use as food. An activity was developed around the processing of milk in which the student teachers discussed the traditional processing of milk. The learners were then asked to explain the scientific significance of each practice, such as boiling milk to prevent it from souring, the storage in clay pots that had previously been used for souring milk and the storage in the warm kitchen environment to quicken bacterial activity.

Based on the above practices, Mandikonza⁵⁸ developed three teaching modules for use with his student teachers from Zimbabwe and Namibia. The student teachers divided into three groups based on each Indigenous Knowledge practice module and were asked to prepare science lessons plans which were then peer reviewed by the class. Drawing from their indigenous experiences from Zimbabwe and Namibia, all groups were able to derive meaningful and contextualised learning objectives and to link the indigenous practices to scientific concepts. Overall, the cultural significance of each of the practices was appreciated while the scientific explanations revealed the possible application of indigenous knowledge practices in providing contextualised science education processes that related to the everyday experiences of local communities compared to decontextualised textbook-based science teaching. In this case indigenous knowledge practices are applied to support the explanation of scientific concepts in a local context. This is in turn also brings to the fore the value of indigenous knowledges in the formal education curriculum, thereby enabling the reciprocal valorisation of Western and indigenous knowledges.

8.6 Conclusion

The above case studies reveal possibilities for the practical application of indigenous knowledges within the formal school curriculum or, to put it more succinctly, to indigenise the curriculum. Against a background where indigenous knowledges have been marginalised, trivialised and considered inferior within formal school contexts, this inclusion reveals the role that indigenous knowledge can and should play in the African school curricula and creates spaces for the greater representation and application of indigenous knowledges in formal education processes. It also enables learners and educators to transcend the boundaries between the school and the local communities created by the colonial education systems which undermined and marginalised local knowledges and

the enables the involvement of the local community knowledge holders in education. This intersection between school and community therefore brings back the role of the elderly and the indigenous local communities that have previously been excluded from formal education processes in the education of their children. A key revelation of the schools/communities interface is the fact that modern/Western science can be taught in the context of indigenous cultures and epistemologies in ways that can be articulated and understood by the indigenous learner through relating abstract scientific concepts to real local cultural practices. Looking at it vice-versa, it also points to the plurality (plural origins) of Western scientific knowledge arising from the fact that there is science in every knowledge system.

In addition, these case studies reveal the how some traditional practices resonate with modern scientific concepts and educational practices within the school curriculum, thus providing an opportunity for the contextualisation of educational processes to articulate local realities of the lived environment of the learners. This complementary resonance tears apart the artificial dichotomies and dual oppositions, created between modern science and indigenous knowledges in an effort to advance the hegemony of Western scientific knowledge, and creates spaces for plural knowledge representations within African education systems that recognise and value indigenous knowledges and their creators. The process reveals existing bridges between so-called Western science and indigenous knowledges. Plural knowledge education systems draw from Western and Indigenous epistemologies and allow for the reciprocal valorisation of the different knowledge systems as opposed to current hegemonic Western education systems in Africa that exclude, marginalise, undermine and primitivise local indigenous knowledges.

Indigenous knowledge can play an important role in bringing local relevance to education processes by bridging the gap between formal education systems and the lived experience within local community contexts. Its place in educational settings is attainable if efforts are made to identify areas of its possible integration into the existing education curricula. Such efforts can be an important aspect in the process of retrieving, revitalising, restoring the value of indigenous knowledge, and applying or engaging indigenous knowledge in useful ways. By combining Indigenous with current/Western knowledge we develop a hybrid, more vibrant and innovative plural knowledge landscape that is responsive to context and incorporates processes and advances in both Indigenous as well as Western knowledges. This plural recognition of knowledge epistemologies enables a parallel and interconnected view instead of a hierarchical perspective on different knowledges in African pedagogical contexts.

The inclusion of indigenous knowledge in academic institutions is a gradual transformative process which will certainly meet resistance from those comfortable with the current status quo that perpetuates the hegemony of Western scientific knowledge. The inclusion of indigenous epistemologies within the formal education curricula is a counter-hegemonic process that challenges the dominance of Western discourses in formal education contexts.

This process requires the development of a corpus of dedicated indigenous scholars who are committed to see this transformative process accomplished in curricular across subject disciplines and in relevant educational policies and practices. Knowledge and educational decolonisation is a crucial step in creating an education system that does not alienate our children from their cultural identities and origins.

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Chapter 9

African Leadership Models in education: Sustaining institutions through Ubuntu leadership

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9.1 Introduction: Models, values and leadership

Educational leadership in Africa is beginning to be put under focus as managers and leaders want to ensure success of their institutions. The trainers of leaders also use different models as they illustrate the complexity of leading organisations. Appreciative leadership, moral leadership, democratic leadership, servant leadership and social justice leadership are some of the kinds of leadership used in the preparation of today's leaders. In his writings about school leadership, Bush¹ contends that there is a great interest in educational leadership today because of the widespread belief that the quality of leadership makes a significant difference to school and learner outcomes. The call for mentoring of school managers comes at a time when organisations such as schools are emphasising quality for the attainment of effective teaching and learning. It is a critical commonplace that the 21st century, school principals are always confronted by moral and ethical dilemmas. Arguably, morality and values should be the core of education in general. Sobol² contends that troubled and dysfunctional schools where justice and equity are absent are precisely the places in which ethical thought and action are needed. Moreover, the school leaders and managers today require certain qualities to survive the challenging demands of their positions. Ramsey³ points out that most school administrators are stuck and that they are usually limited to function strictly as managers. Ramsey also argues that managers make do, monitor and that being a manager is hard work and not much fun. However, leaders energise and excite the organisation and the people in it by showing what it can become. 'Leaders deal with visions, dreams and possibilities'⁴ Several authors have observed the best leadership practices and have discovered that today's educational institutions require shared leadership and shared decision making at all times Kotter⁵; Pretorius⁶; Singh⁷. However, employees cannot share decisions or visions in institutions unless there is high morale in the workplace. Ramsey⁸ perceives employee morale as one of the cornerstones of productivity and contends that while some managers might care less about morale,

effective leaders will. Good morale results in a strong sense of common purpose, mutual support and unified effort. There are also various cultural models that acknowledge the importance of morale.

Cultural models in organisations have become crucial as organisations begin to emphasise the informal aspects. Bush⁹ asserts that cultural models focus on values, beliefs and norms of individuals in the organisation and ‘how these individual perceptions coalesce into shared organisational meanings. Cultural models are manifested by symbols and rituals rather than through the formal structure of the organisation.’ Furthermore, Bush¹⁰ postulates:

The increasing interest in culture as one element in school and college management may be understood as another example of dissatisfaction with the limitations of the formal models. Their emphasis on the technical aspects of institutions appears to be inadequate for schools and colleges aspiring to excellence. The stress on the intangible world of values and attitudes is a useful counter to these bureaucratic assumptions and helps to produce a more balanced portrait of educational institutions.

9.2 Indigenous Knowledge Systems (IKS) and Leadership Curriculum: Preparing tomorrow’s leaders

The above shows the various kinds of leadership that new leaders can be brought through. However, institutions of higher learning in Africa should also facilitate leadership preparation programmes using the knowledge of the various useful African models. Hoberg⁹ aptly puts it when he contends that while the practice in South Africa calls for the recognition and application of indigenous knowledge systems (IKS), educational management is facilitated solely from a Western framework. Higher education institutions (HEIs) should include the rich IKS in training educational leaders. At a time when educational institutions such as schools are underperforming, it is necessary to explore the value of alternative leadership practices and some IKS-inspired models are as such. Underperforming institutions need to inject certain values to steer their organisations to success. However, there is not much evidence in South Africa of HEIs that offer leadership training in IKS-inspired leadership models. Furthermore, Hoberg¹¹ maintains:

Most of the curriculum content in higher education is concerned with the Western tradition of school principalship, management and leadership, with scant evidence of existing AIK systems. Although there are multiple links between AIK and school principalship in terms of needs, goals, anticipated outcomes and methods of evaluation, not much has been written or researched on AIK in higher education.

It is within this context that African societies such as South Africa need the utilisation of the IKS-inspired models. In Africa it makes sense for institutions to use IKS born out of the African environment. However, even now the indigenous models are overshadowed by the Western models. There are however, many other models from Western orientation that have elements that overlap with some African models as servant-leadership discussed below shows.

9.3 Servant-leadership: Leading for community building

The West has developed a number of leadership styles that might be seen to have a semblance of African models. Shared leadership, participative leadership, collaborative leadership and democratic leadership have qualities of African leadership models discussed by African scholars such as Mbigi¹², Ramose¹³ as well as Higgs and Van Wyk¹⁴. As highlighted above, servant-leadership shares a number of qualities with some African models of leadership. Greenleaf¹⁵ describes servant-leadership as a management philosophy that sees the leader as a servant first before she or he can contribute to the wellbeing of people and community. The important aspect of servant-leadership is that it underscores the importance of serving first before one leads. A servant leader creates a conducive climate for a participative management style where employees are constantly supported in an effective organisational climate. Spears¹⁶ has highlighted ten characteristics pivotal in the practice and development of a servant leader:

- **Listening** – servant leaders need communication skills in order to enhance the organisation;
- **Empathy** – servant leaders must be able to be in the shoes of the other followers and see from their own point of view. This is a recipe for deep understanding;
- **Healing** – servant leaders will try and help others solve their problems in relationships. When the followers find healing at work the work environment becomes free of fear of failure;
- **Awareness** – servant leader ensure that the followers gain self-awareness;
- **Persuasion** – servant leaders eschew coercion of the followers and they rather convince them;
- **Conceptualisation** – servant leaders' functions are dependent upon a vision. They build on certain goals and strategies;
- **Foresight** – servant leaders try and foresee the likely outcomes. They learn from past experience as they move into the future;
- **Stewardship** – effective servant leaders seek to win the trust of employees; they want to serve them and discover that it is better to persuade in trust than control people;

- **Commitment** to growth of people – servant leaders build the spiritual growth of the followers. The followers are also encouraged at all times; and
- **Building community** – servant leaders build strong community with their organisations and want to develop a true community.

All these explicate the role of a servant leader who has to ensure that people around him/her are wiser, freer, autonomous and are able to be servant themselves¹⁷. The servant first leader ensures that other people's needs are being served in thoughtful and sensitive manner. Spears¹⁸ perceives servant-leadership as a long-term transformational approach to life and work. Spears¹⁹ also writes about the growing interest in servant-leadership:

We are experiencing a rapid shift in many businesses and not-for-profit organisations –away from the above traditional autocratic and hierarchical models of leadership and toward servant-leadership as a way of being in relationship with others. Servant-leadership seeks to involve others in decision making, is strongly based in ethical and caring behaviour, and enhances the growth of workers while improving the caring and quality of organisational life.

Arguably, servant-leadership engenders a sense of strong community. The leader makes everyone feel ready for change; as change agents or as change managers. In fact, effective servant leaders inspire from within the fold; when the followers' hands become dirty the leaders' hands are unlikely to be clean. The servant leader believes in developing and sustaining equality, respect and a sense of community. When the followers believe in their (servant) leader, they tend to believe in themselves as well.

The servant leader builds a sense of community. As a servant leader serves people with compassion and diligence, the followers appreciate the relationship among themselves. All are respected equally; they uphold their self-worth and serve one another as well as their organisation. The effective servant leader engenders values and culture supportive of organisational growth. Many organisations fail when this interdependence does not exist, Organisations that underperform may be so due to individualism that exists as well as the selfish competition within. In Margaret J. Wheatley's²⁰ speech she pointed out that 'the root of all suffering comes from our belief that we are not connected. The source of suffering is the belief that we are independent actors'. Servant-leadership combats this notion of individualism. People in such organisations serve their community, they want to serve others. The brief discussion above shows the selfless nature and interdependence in servant-leadership. A person exists for others and servant leaders create a community among colleagues.

This community cannot exist if other members destroy the objectives and reason for its existence. The democratic organisations in the 21st century will need to experiment on the noble qualities of the servant-leadership if they want to thrive in trying times. In schools

the idea of developing other teacher colleagues as teacher-leaders can increase their commitment and responsibility towards their organisation. The servant-leadership model is ideal in nurturing the community. Servant-leadership can also be seen to be akin to Fullan's²¹ sense of strong moral purpose. Below, the discussion is on Ubuntu and school leadership. One will pick up the commonalities which show why African models are strong. This juxtaposition also shows that some of the African values are not unique to Africa but some vestiges can be found elsewhere in the world. However, there are aspects that are unique to Africa though, the African experience can frequently not manifest itself anywhere else.

9.4 The African leadership context

Effective leadership leads to a positive work climate. In the above discussion on servant-leadership one can see this leadership style can lead to successful working teams within organisations. Maxwell²² writes about the four pillars of leadership. One of these pillars, Pillar 1, is *relationships*. Like servant-leadership discussed above, Maxwell's²³ first pillar underscores solid relationships; he relates the importance of connecting with one another in the workplace. Some of the concepts he uses in this pillar are used in the discussion on Ubuntu in the next section. Maxwell²⁴ also highlights five characteristics in relationships and they are respect, shared experiences, trust, reciprocity and mutual enjoyment. Maxwell²⁵, like Greenleaf²⁶ and others discussed above, emphasises serving and leading people at the same time. Jain²⁷ also states that working relationships matter in enhancing leaders and their self-efficacy, beliefs, conscientious leaders would also want to ensure that the followers are committed to the organisation. Hoy and Tarter²⁸ point out that there is a strong relationship between trust, collaboration and organisational commitment.

Some Western models do contain elements of the Africa view and vice versa. However, caution should be taken when applying the purely 'Western' applications of leadership in an African context. Western ideologies and forms of management and leadership have a potential of introducing a new form of colonialism because these entrench Western ways linked to Europe²⁹. In addition, Malunga³⁰ contends that a variety of initiatives are largely imported from the West, and these tend to have limited application to African contexts. African culture is at best ignored or at worst viewed as a negative obstacle to 'good' leadership. Whilst the African models do share certain qualities with the Western models of leadership and management each is unique and is informed by context.

Masango³¹ states that in Africa a leader is viewed as someone who is a servant to the clan. He cites Nehavandi who points out:

- a) Leadership is a group phenomenon. Leadership always involves interpersonal influence or persuasion.

- b) Leaders use influence to guide groups of people through a certain course of actors or towards achievement of certain goals.
- c) The presence of leaders assures some form of hierarchy within a group.

Furthermore, Masango³² adds that in Africa, leadership becomes a function to be shared by all villagers or community members rather than a leadership put in one person. The African villagers are usually dependent upon the encouragement and support of the leader. He is the voice of the village and the villagers in turn represent him. The role of the leader was crucial in sustaining the life of the village. Masango³³ aptly puts it:

The whole aim of an effective or life giving leader is to uplift the villagers/ community in such a way that they progress. This will help people to express their own gifts within the village/community. As leaders share their gift of leadership in return the people will honour them. As they continue to share in African religious ceremonies, which are an essential part of the way of life of each person, the villagers/community will join in celebration.

It is an African-centred education and leadership that will teach some of these aspects hence the need to shift education of leaders in Africa. Thabo Mbeki, the former South African president once spelt the role universities should play in Africa when he stated, 'Education has an important role to play in the economic, cultural and political renaissance of one continent in the drive for the development of indigenous knowledge systems. This implies that all educational curricula in African institutions should reflect the African context. They need to show the indigenous hue in grounding and orientation. To address this state of affairs we need a distinctly African knowledge system³⁴.

Malunga³⁵ comments on Ubuntu, which he characterises as a cultural worldview that captures the essence of what it means to be human. Ubuntu is the innate policy used to run the village. As members are born or join the village they are socialised to the principles of this policy. This keeps the fabric of the society intact and members learn about unity. Leaders have to follow the code contained in the Ubuntu philosophy although it is not unusual for corrupt dictators to break this code through greed. Megalomaniacs will always be incongruent with Ubuntu ideals because they use a different code. Ubuntu always strives for equality among the clan members in the village. Mthembu³⁶ describes Ubuntu as the key to all African values and that it involves humanness, a good disposition towards others, and a moral nature. Furthermore, he declares that Ubuntu describes the significance of group solidarity and the interdependence in African culture. Mbigi³⁷ supports this by pointing out that Ubuntu is a metaphor that describes the significance of group solidarity on survival issues that is so vital to the survival of communities.

Malunga³⁸ points out that Ubuntu is built on five interrelated principles:

- o Sharing and collective ownership of opportunities, responsibilities and challenges;
- o The importance of people and relationships over things;

- o Participatory decision making and leadership;
- o Patriotism; and
- o Reconciliation as a goal of conflict management.

Leadership within an African context includes these elements and leadership training in this framework will embrace some or all of these qualities. I also delineate five characteristics in Ubuntu – these are the five P's in Ubuntu philosophy:

- o **People-centeredness** – Ubuntu emphasises the role of the people within the village, the organisation. Without an interest in people Ubuntu cannot be realised.
- o **Permeable walls** – Communication in the village is not restricted and the walls are not opaque. All the members are able to communicate with one another without fear.
- o **Partisanship** – One of the most positive factors of Ubuntu philosophy is loyalty. People communicate freely and they are made to feel closer to the village.
- o **Progeny** – Ubuntu leadership promotes collective decision making. However, under this, effective leadership is respected and the leader is respected.
- o **Production** – When the above characterise the village, production is guaranteed. The village prospers when its members enjoy respect, loyalty and good leadership.

Below, the argument focuses on Ubuntu and school leadership. It shows how the philosophy applies in a school situation. This is one aspect that leader trainers in Africa should accommodate as they develop leaders for schools in this case. Institutions of higher learning should take a lead in this regard by embracing curricula that would promote these values.

9.5 Ubuntu and school leadership

Teachers involved in various programmes have tried to transform the old top-down structure that used to be purported by the previous departments of education in South Africa. The top-down structure was hierarchical and teachers were usually told what to do and not what not to do. It is this top-down culture of the past that is usually blamed for the teachers' resistance to change initiatives. Reeves and Ralphs³⁹ pointed out that many experienced teachers and principals were mostly schooled in apartheid ideology. They were used to being administrators within their schools and when it comes to democratising the schools they tend not to accept this. Mahomed⁴⁰ averred that four to five decades of a top-down teacher culture and passive acceptance of instructions might be enhancing interpretative difficulties being experienced by educators. Management utilising Ubuntu as a basis of management ensures that a new culture of inclusiveness is promoted in the workplace. Recently, there have been a number of writers and researchers who have suggested new forms of leadership in many dysfunctional schools (Steyn⁴¹;Masitsa⁴²). Research also

shows that many historically black schools in South Africa continue to underperform and school management structures are usually helpless in the face of educational changes⁴³.

In a recent study by Msila⁴⁴, he discovered that black African parents continue to move their children away from historically black African schools (township schools) because of the belief that township schools are failing their children. Among other factors cited by parents was that management in various historically black African schools continued to deteriorate in the face of teacher apathy and incompetence. Many conscientious principals have long started to look around for alternative models that would improve their schools. A number of these schools leaders have tried and given up because they maintain that their teachers are not up to the challenge. Some are trying participative leadership, team management and various other employee involvement strategies. Although other managers have become despondent in the process there are a number who still believe that teachers need more time to understand commitment.

The *Manifesto on Education* highlights Ubuntu as one of the important aspects and the need for it to be linked to the values cherished in the Constitution⁴⁵. Ubuntu is said to emerge out of the political tumult prior the 1990s and peacemakers wanted to ensure that in the process of creating a new framework, they would formulate a sentiment that would become part of the defining vision of the democracy⁴⁶. Furthermore, this publication states that there was a need in South Africa ‘for understanding but not for vengeance, a need for reparation but not for retaliation, a need for Ubuntu but not for victimisation’⁴⁷. Much Western literature as witnessed above sheds light on values that are cornerstone to Ubuntu. Prinsloo⁴⁸ argues that the concepts used within Ubuntu context are not unfamiliar to Western thinking. Sharing, brotherhood, dignity and trust can be found in Western contexts⁴⁹. Western literature also uses concepts such as participative leadership and the latter is similar to this article’s view of Ubuntu leadership. Furthermore, Prinsloo⁵⁰ explains that Ubuntu is religious, expansive, transcendental and centrifugal. Below, the focus is on the deeper meaning of the concept Ubuntu.

9.6 Ubuntu demystified

Among others, the current system of education in South Africa aspires to bring forth a system that would be comparable to education systems around the world. Mbigi⁵¹ declares that if a competitive, developed nation is to be built, collective solidarity in African life should find its expression in the modern forms of business entrepreneurship, business organisations and management. This collective solidarity contains a number of values that can influence how people make choices in life. Broodryk⁵² states that Ubuntu worldview contains the basic values of humanness, caring, sharing, respect and compassion. Furthermore, Broodryk⁵³ points out that these core values are associated with other positive values such as warmth, empathy, giving, commitment and love. Mbigi⁵⁴ also explains Ubuntu

as literally meaning 'I am because you are – I can only be a person through others'. The latter is very close to Chikanda's definition of the concept. Prinsloo⁵⁵ cites Chikanda who stated that Ubuntu is *African humanism* that involves alms-giving, sympathy, care, sensitivity to the needs of others, respect, consideration, patience and kindness.

The concept of Ubuntu is very crucial for a number of institutions in the society and this includes schools. As South African school leaders are assuming leadership roles they need the best leadership models, philosophies and strategies to help them in this regard. Arguably, Ubuntu is one philosophy that can help in developing practices of doing things together and differently in today's organisations⁵⁶. Ubuntu has become prominent under the democratic dispensation in South Africa. Mbigi⁵⁷ posits that the concept is both uniquely African and universal for it is implicitly expressed elsewhere in the world. Furthermore, Mbigi argues that South African organisations are faced with ruthless global competition hence the need to negotiate a shared common agenda in organisations⁵⁸. Common among the discussions above is the idea of interconnectedness among people which is espoused by Ubuntu. A number of African languages reflect this humanness, this inter-dependence among people. Ubuntu is based on these principles.

In support of the above, the DOE publication⁵⁹ states that out of the values of Ubuntu follows the practices of compassion, kindness, altruism and respect which are at the centre of making schools places of effective culture of learning and teaching. The publication further points out:

Equality might require us to put up with people who are different, non-sexism and non-racism might require us to rectify the inequities of the past, but Ubuntu goes much further: it embodies the concept of mutual understanding and the active appreciation of the value of human difference. ... Ultimately; Ubuntu requires you to respect others if you are to respect yourself.⁵⁴

Adair⁶⁰ differentiates between leadership and management. On the one hand, he explains that leadership is of the spirit compounded of personality and vision, while on the other he describes management as a phenomenon of the mind more of accurate calculation, of methods and routine. Furthermore, Adair⁶¹ explains that leadership is the understanding and sharing of a common purpose without which there can be no effective leadership. For Adair, while managers manage change, leaders manage growth. In this article, Ubuntu leadership refers to the management and nurturing of growth within an organisation. Ubuntu style of leading an organisation involves a departure from hierarchically structured management relations and rather introduces a cooperative and supportive form of leadership in which collective solidarity of the group is employed and respected⁶². Furthermore, Prinsloo⁶³ cites Mbigi who points out that Ubuntu is a social survival strategy that developed from adverse social and geographic circumstances in which people had to cooperate to survive. Mbigi⁶⁴ points out that it is the role of leadership to bring meaning and hope in any situation and into the confusing world characterised by rapid and chaotic

change. Furthermore, Mbigi states that in indigenous African traditions the leader is the one who is the medium of hope and channel for meaning. In schools, the principals as leaders need to take a lead role as they assist their teachers to make meaning of the leadership challenges that thwart certain schools⁶⁵.

Mbigi and Maree⁶⁶ argue that the modern South African organisations should strengthen and convert into a competitive edge. This is supported by Khoza⁶⁷ who opines that Ubuntu has practical implications for the workplace. Among these are values such as creative cooperation, empathetic communication and teamwork⁶⁸. These values can be very crucial for leadership in schools especially, schools that are dysfunctional. Schools striving for success can use Ubuntu philosophy to enhance effective leadership and meaningful followership that might translate to a collective solidarity among colleagues. It appears that a number of authors have agreed that the principle of Ubuntu has to be transmitted into the management practice⁶⁹.

9.7 Ubuntu, communalism and leadership

As evident above, the literature quoted reflects communalism as one of the important cornerstones of Ubuntu. Khoza⁷⁰ refers to communalism as 'collectivism'. Khoza⁷¹ also points out that communalism is any of the several types of social organisation in which the individual is seen as being subordinate to a social collectivity such as state, a nation, a race, a social class. According to Khoza, Ubuntu broadens the respect for the individual and the respect of each person in the social unit⁷².

The concepts of Ubuntu and communalism have a potential of enhancing team participation, sharing of skills as well as ideas. Mbigi and Maree⁷³ point out that Ubuntu is a collective, shared experience and solidarity and all these are crucial for the development of people and organisations. Emeka⁷⁴ points out that the African cultural values include, sense of community life, sense of good human relations, sense of community life, sense of good human relations, sense of sacredness of life as well as sense of the sacred and of religion. As highlighted in different ways above, Emeka⁷⁵ underscores the importance of the sense of community:

Go the way that many people go: if you go alone, you will have reason to lament.' The African idea of security and its value depends on personal identification with and within the community. Communalism in Africa is a system that is both suprasensible and material in its terms of reference. Both are found in a society that is believed by the Africans to be originally 'god made' because it transcends the people who live in it now.

The individual is safe within the ambit of the community. The individual cannot suffer alone under communalism: she or he will share the problem with the community. The village lives the African story told by one old man to his five sons. He asked them each

to bring a stick and ordered them to break each of their sticks. The sons found it easy to break these. However, when he gave each five sticks all tied together the sons found it difficult to break the combined wood. The old man was emphasising oneness and this is the solidarity emphasised by communalism. A village bound together by a vision will not lose the sight of its being.

Many African writers have shown in their literature over the years how the West destroyed Africa. Achebe⁷⁶ for example, traces a story of a powerful villager, the tragic hero Okonkwo, in *Things Fall Apart*. Okonkwo thought that he was bigger than the tribe but he dies alone. Okonkwo thought that he alone was the bearer of values and culture of his village, Umuofia. Yet all these are the community's products. In communalism there are cherished values. The leader in an organisation that uses Ubuntu knows the value of communalism for successful leadership. Biko⁷⁷ mentions the importance of values in a community when he says, 'For one cannot escape the fact that culture shared by the majority group in any given society must ultimately determine the broad direction taken by the joint culture of that society'. A leader who follows a communal approach will be able to embrace a common vision for the organisation.

9.8 Common vision and Ubuntu

Mbigi⁷⁸ refers to common vision within the Ubuntu context as collective visioning. He also states that it is crucial in creating a new collective mindset. The theory of shared leadership is one of the frequently discussed theories in literature particularly that from the 'West'. Mbigi and Maree⁷⁹ refer to Ubuntu as a spirit of collective development and reconstruction in organisations. Sharing a common vision within the Ubuntu context means creating a right balance between the individual and the group. The right balance between individualism and collectivism is made possible by accommodating people's need for dignity, self-respect and regard for others seriously⁸⁰. Nel⁸¹ claims that shared vision is the deepest binding principle that enables employees to be united within an organisation. Common vision, as evident in this study, ensures that employees are able to fight their doubts and fears.

9.9 Re-education: confronting fears

Among other challenges of leadership is the task of leading change. This is a time when leaders need to allay the fears of the employees. Facilitators of African leadership modules at universities might encounter a myriad of challenges. They need to prepare their students to welcome re-education and change. Many candidates in African-centred classrooms might be surprised if not shocked by knowledge which reflects the noble nature of African-centred knowledge. It is not an easy process to change from an education system that shows the absolute dominance of Western model of education. 'If change involves having

to unlearn something in order to learn something new, and if the change involves giving up something to which the person has been previously committed or has valued, then it is expected that the process of change will be difficult⁸². Institutions of higher learning embracing indigenous knowledge systems and Africanisation need to think of a bigger role of re-educating Africans whose colonial history has convinced them in glorifying the Western traditions.

Few African students will believe in African leadership if they cannot be re-educated to appreciate themselves and Africa. Real transformation in Africa needs the reversal of many stereotypes and higher education should be in the forefront in transforming knowledge⁸³. Furthermore, Vilakazi⁸⁴ points out that African intellectuals must initiate the formulation of a new and proper education policy for Africa. They need to engage in a process of re-education of themselves on the principles and patterns of African civilisation. Pityana⁸⁵ supports this as he states:

The panorama of the South African higher education system can never be complete without resorting to what Van Ginkel refers to as the 'Corpenian Revolution' –demanding a paradigm shift as revolutionary as the shift away from the Ptolemaic belief that the earth was at the centre of the universe. We dare to assert that there cannot be one centre of the knowledge universe but many, and that Africa has as much a claim to that centre as any other.

Teffo⁸⁶ points out that all that companies need is a mentor to teach or preach Ubuntu. Teffo⁸⁷ also states that this will go a long way into answering the question of: 'How do we incorporate Ubuntu in our management style?' The idea of introducing a mentor is very crucial especially when one looks at the crucial aspect of preparing the workers as the climate is made conducive to be receptive to Ubuntu models. Ubuntu empowers people to love and respect each other. In the search for a new management style, the writing of memos may have to be supplemented by communication (follow-up oral presentation and/or discussions). It would yield better results if the director or manager were to go to the people and discuss issues with them.

9.10 Conclusion

As we enter in the 21st century many leadership models have become crucial and among these are African models that incorporate philosophies such as Ubuntu. The Ubuntu worldview can have a positive impact when its principles are used effectively in leading any organisation. Yet Ubuntu demands a paradigm shift, a change in what many employees have been used to. As literature illustrates above, much research has shown the potential of participative-based strategies. However, aspects such as caring, sharing, respect and compassion might be challenging to internalise for many workers. Ubuntu

poses this challenge of fostering a culture of interconnectedness and interdependence among workers.

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Chapter 10

Mixed method research approach in research curriculum: Acumens for Nigerian higher education and Africanisation

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10.1 Introduction and background

Mixed method research is becoming increasingly recognised as the third major research approach. In Nigeria its application is still close to the infancy stage. This has aroused my interest in discussing this approach, particularly as it concerns curriculum issues in Nigerian higher education and Africanisation. In addition, I note in general that the Nigerian higher education curriculum has not changed significantly over the years. Press Release (23 April 2009)¹, records that one of the Nigeria state governors (Babatunde Fashola of Lagos State) claims that he went through the same curriculum as his uncles. This is absurd given the time that has elapsed since then with the numerous changes and innovations that have taken place. In this chapter I contend that mixed methodology research is a research method that is essential in a social setting and the ever-evolving environment within which higher education institutions (HEIs) operate. I conclude by suggesting that researchers should be urged to familiarise themselves with mixed method research and consider its advantages. I suggest further that policy-makers and curriculum experts should consider mixed method research as an essential part of research design that cannot be compromised in the discussion of the research curriculum and the Africanisation dream.

In the continent of Africa, education remains a major challenge especially in the light of the transformation from the inherited educational system of colonialism to an African system that suits the aspirations and philosophies of the present nations of Africa. There is increasing concern among African academics about the danger of higher education institutions in Africa instead of higher education institutions of Africa. Institutions of higher learning of Africa put the African experience and condition at the forefront of its knowledge production. While institutions of higher education in Africa are driven by the owners'

ideologies which include missionaries and profit making or surplus declaration, govern largely by corporatisation and the business models. The major concern of institutions of higher learning of Africa lies in the researching, teaching and learning skills that can promote 'Africanisation'.

'Africanisation' can be said to be synonymous with indigenous knowledge systems (IKS), and is a term often missing or invisible in higher education institutions in Africa. This term is also unlikely to be found in most research that has been conducted in such institutions over the years. A term closer in meaning but not exactly the same with this one is 'Afrocentricity' that Sesanti argues well in the last chapter in this book. Afrocentricity seeks to see the Africans as subjects of history so that feel a sense of driving the African agenda even in research. Furthermore, Afrocentricity 'seeks the collective consciousness in the African world through an emphasis on its collective history'². According to Asante, the main objective of the Afrocentrist is to 'seek to uncover and use codes, paradigms, symbols, motives and circles of discussions that reinforce the centrality of African ideas and values as a valid form of reference for acquiring and examining data'³. Simply put, Africanisation is a trademark, symbolising the uniqueness of the African people's values, experiences, challenges and pathways, powered by research (knowledge) and geared towards a united and better Africa. As a concept, Africanisation is aimed at putting to sleep permanently the inferiority complex or feelings of Africans on the global stage. In addition, it is a conceptual spirit and attitude that is aimed at fostering sustainable development across Africa.

Cognisant of the importance of sustainable development to Africa, the Association of African Universities (AAU) dedicated both the 2006 and 2008 editions of its African Universities Day celebrations to the theme 'Role of Higher Education in Promoting Sustainable Development in Africa'⁴. This was also the theme of its 12th General Conference held in Abuja, Nigeria in May 2009. Achieving sustainable development in Africa has therefore been included as one of the new programmes in the Core Programme of AAU (2013–2017). The AAU's programme on 'Achieving Sustainable Development' aims to ensure that the continent's HEIs continue to remain relevant to the continent's developmental needs by developing innovative local strategies to entrench the values, behaviour and lifestyles required for a sustainable future and for positive societal transformation⁵.

10.2 Higher education

Higher education has been identified as the process that helps develop the whole person physically, mentally, morally and technologically, to enable him or her to function effectively in any environment in which they find themselves so that they may become more productive, self-fulfilling and attain self-actualisation^{6,7,8}. Thus, its importance is to provide quality education for her products so that they can assume leadership positions in their

immediate and external communities⁹. In sum, higher education aims mainly at capacity building; that is, the human resource development on which the other resources of the continent depend for optimal functioning.

In addition to overall human capacity building, industries and the business world are now prescribing generic employability skills (representing what today's employers are looking for) that should guide the development of higher education curricular across fields of study as seen in the following example from Australia:

- o Communication that contributes to productive harmonious relations among employees and customers.
- o Teamwork that contributes to productive working relationships and outcomes.
- o Problem-solving that contributes to productive outcomes.
- o Initiative and enterprise that contributes to innovative outcomes.
- o Planning and organising that contributes to short and long-term strategic planning.
- o Self-management that contributes to employees' satisfaction and growth.
- o Learning that contributes to continuous self-improvement and expansion in company operations and outcomes.
- o Technology that contributes to the effective execution of tasks.
- o Personal attributes – loyalty, honesty, integrity, adaptability (see, Australian Chamber of Commerce and Industry and Business Council of Australia¹⁰).

The above demonstrates that higher education should evolve at the same pace with the social world otherwise it will become irrelevant. This suggests that HEIs must respond to new and emerging labour market needs in order to be effective and as well justify money spent on them by individuals and government. It is only when employability skills and those applicable to societal growth and development are taught and learnt from such institutions in relation to changing times that their usefulness will be treasured. In this 21st century – a century of knowledge and rapid innovation – HEIs must develop students' wider competencies alongside current job skills so that they can become 'globalised citizens' especially with the numbers of migrants and international jobs seekers across the globe increasing persistently.

Studies show that Nigeria boasts the highest number of HEIs on the Africa continent¹¹. This number will continue to increase given the population of the country, the number of people willing to pursue higher education and the policy and legislation on higher education privatisation. The increase in the number of HEIs in the country is not accompanied by higher quality in the educational process and output, which is the main thrust of higher education objectives. The education process depends on the personnel involved, usually academic staff, while the educational outputs centre on the skills, knowledge and experiences students acquire from learning, and which are needed for the overall development and growth of a nation.

Sub-Saharan African countries including Nigeria are beset by a number of internal and external educational research problems. According to Dzvimbo¹² these problems include low capacity of African universities and institutions to sustain research activities; the climate and tradition of research in Africa and the gradual erosion of university autonomy by governments; the underdevelopment of education; and the domination of the research arena by donor agencies. Identified problems indicate the relevancy of research to development and are 'exacerbated by the fact that approaches to the study of educational development in sub-Saharan Africa have been dominated by theoretical and methodological frameworks imbedded in inadequate and inappropriate paradigms that do not take into account the concrete realities of African educational systems'¹³.

Okunamiri¹⁴ as well as Abu and Oghenekohwo¹⁵ suggest poor funding, management problems and inadequate facilities as major challenges to the 'epileptic' educational process and outputs in Nigerian higher education. While I do not dispute this, I agree with Sawyer¹⁶ that the absence of adequate research knowledge and culture on the part of academics is a core problem facing higher education in Africa. This buttresses the reason(s) why 'only very few academic staff can successfully supervise a dissertation or thesis especially at postgraduate level and on the other hand, low level of research output in higher education'¹⁷.

Idogho¹⁸reveals that lecturers in Africa, more than any other continent, launch new journals almost daily because they cannot get their articles published in journals of good standing within or outside the African continent. The most worrisome of all these practices is that today, many young and inexperienced academics who may just be beginning their academic careers, now establish all sorts of journals with broad coverage and also accept all sorts of articles and research¹⁹. The pressure on academics from their institutions necessitates impatience to wait for publication outlets for years before publication. Also, the 'perceived' gate keeper(s) of certain journals as an influencing factor on publication cannot be neglected, especially when the 'golden rule' in the academia – 'publish or perish' is constantly on the mind of academics.

10.3 Research

Research is a measure of validation of knowledge within scientific scholarship. In recent times, research takes place outside the framework of disciplines; that is, it is no longer restricted to the framework of specific disciplines but extends to various disciplines – it is transdisciplinary. Transdisciplinarity is envisaged and provided from the outset in the context of application, thus indicating that knowledge production has moved away from traditional disciplinary activity into social contexts²⁰. This movement of knowledge production supports a new paradigm and also a revolutionary change in the curriculum design and structure of scientific organisations, for example, HEIs as the main producers

of knowledge, referred to sometimes as ‘post-normal science’²¹. In line with a democratic ethos and social responsibilities, transdisciplinarity ‘comes with its own methods of research and theoretical structures’²². These are not limited to quantitative and qualitative methods but include mixed methodology research, the main focus of this chapter.

10.4 Mixed methodology research

In simple terms, quantitative research plus qualitative research is equal to mixed research design²³. In other words, mixed research methodology is a combination of quantitative and qualitative methods in one study/research. Creswell²⁴ writes that mixed method research is both a method and a methodology for conducting research that involves collecting, analysing, and integrating quantitative and qualitative research in a single study or longitudinal programme of inquiry. Using only a quantitative or a qualitative approach in a research study falls short of what is used in the social and human sciences today²⁵. Quantitative research is an inquiry that is concerned with numerical representation and manipulation of observations and responses for the purpose of describing and explaining the phenomena that those observations and responses reflect²⁶. Put differently, Blanche et al.²⁷ define quantitative research as research in which data are collected or coded into numerical forms, and to which statistical analyses may be applied to determine the significance of the findings. Quantitative data are data in numerical form, often derived from questionnaires or structured interviews. Accordingly, quantitative research is highly formalised and explicitly controlled, and its range is more exact²⁸. Qualitative research is an inquiry process based on a distinct methodological tradition that explores a social or human problem²⁹. Qualitative research seeks to preserve the integrity of narrative data and attempts to use the data to exemplify unusual or core themes embedded in contexts³⁰. Qualitative data are descriptive data obtained from observation or unstructured interviews³¹.

According to Moon and Moon³², the separation of research methodology into quantitative and qualitative methods is common; the tendency has been to link quantitative methods with the natural sciences (positivist approach) and qualitative methods with the social sciences (interpretivist approach)³³. ‘Positivism’ entails a philosophy of progress through the advancement of scientific knowledge and its ultimate embodiment. Positivists maintain that knowledge consists of a set of absolute facts that, once discovered, remain unchanging and unchangeable. ‘Interpretivism’ is the construction of knowledge depending on one’s view. Interpretivists opine that knowledge consists of a set of interpretations of observations. This suggests that two people can draw different conclusions from the same set of observations. Bryman³⁴ summarises several assumptions of positivism:

- Only phenomena and knowledge confirmed by the senses can be warranted as knowledge (phenomenalism).
- Theories are used to generate hypotheses that can be tested and allow for explanations of laws to be assessed (deductivism).

- o Knowledge can be produced by collecting facts that provide the basis for laws (inductivism).
- o Science must and can be conducted in a way that is value free and thus objective.
- o There is a clear distinction between scientific and normative statements.

This then means that positivism promotes and favours formal and mathematical methods where researchers depend more on scientific procedures, numbers and statistics for clarification of meanings and shared realities. According to positivists this describes the world adequately. Contrary, interpretivism ascribes to independent thinking of researchers because it fulfils the principle of the world being socially and successfully constructed. Both are concerned with ‘objective truth’, however, positivists refer to ‘objective truth’ only when such is an ‘independent reality’ that is, truth with validity claim that cannot be uncertain.

The assumptions of interpretivism, according to Glaserfeld³⁵ in his work *Radical Constructivism*, include:

- o Knowledge is seen as a construct.
- o It seeks to establish how social, historical, local and other factors influence scientific discovery in such a way that scientific fact may be regarded as social constructs ('local products').
- o It abandons the claim that cognition is 'true' in the sense that it reflects objective reality. Instead, it only requires knowledge to be viable in the sense that it should fit into the experiential world of the one who knows.

The implications here are manifold, but among the most important ones is that positivism and interpretivism are contradictory routes to realities. Both are however, sure means of knowledge generation even when objectivity height of realities comparison is questionable and irreconcilable. While both may offer alternative ways of ‘knowing’ or ‘thinking’, they are not fully competent when separately used to refine how ‘judgement’ is learnt and taught in institutions of learning. This possesses a question – how then can interpretivism and positivism shape the ‘judgement’ – ‘sensibility’, and ‘sagacity’ of African scholars towards that required for accomplishment of Africanisation, knowing that positivism and interpretivism inculcate in scholars linear ways of thinking? On this ground, I contend that a major implication of their combination opens our eyes to the possibility and acceptance of quantitative methods usage from an interpretivist point and qualitative methods from a positivist stance; for it is our ‘judgement’ perhaps conclusions from research findings, underpinned by contextual ontologies, in this case Africanisation, that should be supreme.

The different assumptions that underlie positivism and interpretivism could be attributed to the distinction between quantitative research methods and qualitative research methods. This distinction has caused much debate concerning the accuracy, validity and reliability of each methodology, data, and results/findings. Yin³⁶ argues that the distinctions apply to the data rather than the methodology and also that the underlying paradigms are

incompatible. On this latter point, there is a view within social research that the two are equally informing³⁷.

In contrast to Yin's argument, I draw on the writings of Creswell, who maintains that mixed methodology is longitudinal and can be used in a single study, that is, mixed methodology is not just informing but also compatible with different types of research. However, compatibility and usage depend to a large extent on the paradigm(s) a researcher seeks to adopt or employ. A 'paradigm' is 'a basic set of beliefs that guide action'³⁸. Crotty³⁹ refers to a paradigm as philosophical assumptions, epistemologies and ontologies. In short, Creswell⁴⁰ describes a paradigm as an alternative knowledge claim. A paradigm is also referred to as a 'worldview'. Paradigms used by researchers vary with the set of beliefs they bring to research.

Whatever the paradigm, worldview or beliefs (which are essentially the same thing) referred to by different researchers, it is important to ensure that the right research method is used with the right paradigm. For example, methods that are commonly positivist are passive observation, measurement/statistical analysis, survey/questionnaire, experiment, simulation and case study. For interpretivism, the methods include interviews, content analysis, ethnography, grounded theory and participant observation. There are many examples of mixed method approaches to research. They include phenomenological research, confirmatory studies or evaluation research, as well as exploratory studies. Moon and Moon⁴¹ indicate that a mixed research method is successful because of its solid grounding in methodological theory and, as such, it has been applied in practice and the results of its application have been published as papers or included in successful doctoral theses.

10.5 The curriculum and Africanisation

It is inevitable that the ever-changing nature of society will find resonance in the rationale of curriculum issues. This inevitability has resulted in robust debates around the quality of curriculum aimed at ensuring that the eventual curriculum is not out of tune with the needs of society. The foregoing partly informs the focus of this chapter which discusses research curriculum and the call for a paradigm shift in educational practice, that is, the infusion of mixed methodology approach in research curriculum. Different scholars define the term 'curriculum' differently. These definitions include the following:

A 'curriculum' is a course of study offered in schools, colleges and other institutions. According to Danmole⁴², the focus of this definition is on the subjects to be taught. Danmole⁴³ continues by describing a curriculum as a set of learning experiences planned to influence learners to bring about the objectives of education. In other words, a curriculum is a structured plan of action that guides the process of education⁴⁴. Using the work of Fred Lunenburg, in his book *Theorizing about curriculum: Conceptions and definitions*,⁴⁵

concur in search for a working definition of curriculum for this chapter, that there are many conceptions and definitions of curriculum – as content, as learning experiences, as behavioural objectives, as a plan for instruction, and as a nontechnical approach. Like Lunenburg⁴⁵ my proposition for the infusion of a mixed methods approach in the research curriculum fits more with the non-technical approach to curriculum, which represents a rethinking of curriculum and a rejection of traditional curriculum planning/methods as depicted in the speech by the Lagos State Governor, Babatunde Fashola⁴⁶.

In drawing up a curriculum, content is selected that represents essential and critical issues in institutions of learning and society for teaching and learning. The curriculum forms links between institutions of learning (classroom), knowledge and the society. Walker and Jonas⁴⁷ argue that the curriculum provides a link between classroom, knowledge and the environment in which the schools are situated, and identifies ways in which human agents can resist and overcome social injustices. In line with a non-technical approach to curriculum, African elites, for example Ngqakayi-Moutang⁴⁸, proposes a model for the Africanisation of the educational curriculum based on 'Afrokology' (Nabudere⁴⁹) rooted in Asante's⁵⁰ theories of Afrocentrism. As Zegeye and Vambe⁵¹ note, the most abiding tenet of Afrocentrism is that an Africanised curriculum should, in its entirety, be carved from Africa and the diasporan experiences from which it draws its cultural resources. This implies that the African experience in its totality is simultaneously the foundation and source for the construction of all forms of knowledge. As a result, it maintains that the African experience is by definition non-transferable but nevertheless communicable⁵².

In an attempt to summarise Ramose's⁵³ work, Zegeye and Vambe⁵⁴ suggest that Afrocentrism locates the value of Africanising African education in orature (oral literature), which refers to any perspective held as containing irrefutable evidence of the purity of African identity. There is repetitive emphasis on the relevancy of African values in the works of African curriculum experts and its noticeable highlight in the Nigerian national education policy. This warrants the need to see it alongside the African environment as core features of curriculum design. An argument is advanced to the effect that, since these values are not genetically transmitted or transferable (see, Ramose) and, given the significant role of the school in present-day education⁵⁵, the reconstructionist approach to curriculum design/planning and implementation is the sine qua non of meaningful education through institutions of learning⁵⁶. A reconstructionist approach to curriculum design/planning and implementation involves the incorporation of the significant values and ideologies of the community into the school curriculum⁵⁷. Therefore, in designing the curriculum, an important element is the centre of organisation used⁵⁸ and the goals the national policy on education of a country aims to achieve.

The elements of the curriculum are numerous and their presence and relative importance depends on the educational philosophy and policy. Odubunmi⁵⁹ stresses that, if elements of sequence, scope, depth, balance, continuity and integration are adhered to, the

curriculum should not be difficult for the teacher to implement. Similarly, these elements of the curriculum, when applied to research methodology, will enhance and develop better research skills and performance; and consequently result in better educational processes and outputs. With this, the quality and number of research publications in Nigerian institutions of higher learning and across Africa is more likely to increase. Zegeye and Vambe⁶⁰ describe research as a key component of Africanising curricula. In this regard, both authors opine that Africanisation demands willingness from visionary drivers to establish and perhaps produce useful knowledge in publication form, not simply for the promotion of individuals but also for the purpose of enhancing the quality of life of Africans in general. Accordingly, this task requires a different level of research, that is, meta-research which generates forms of knowledge that consciously align with the goals of Africanisation⁶¹.

10.6 Nuptial of mixed methods research and Africanisation

In this section, I offer an explanation of possible linkage of mixed method research and Africanisation. In this explanation, justification of mixed method research for Africanisation could be deduced. Research is crucial for the actualisation of the African dream because through it reliable knowledge for effecting desired changes is attained. The knowledge generated through research is true to the extent that it helps society to understand new information with a view of modifying the existing practices. I recall here that the teaching and learning process starts with identification of numbers and letters/alphabets. These numbers and letters form the basis of meanings and knowledge at all levels of formal and informal education. On account of this thinking, I opine that the degree of truth derivable from research that utilises both as a combination (mixed methods) would certainly be higher.

The crux of the matter with regards to mixed methods research justification for Africanisation points to prevailing general attitude of Africans towards the solution of the continent's problems, particularly, economic, social and political problems through reliance on such sources as tenacity, authority, experience, tradition and deductive as well as inductive reasoning. This process is an unending innovation and contradicts practices of centuries ago where Nigerians as Africans sought solutions to problems mainly through assumptions, beliefs, rationalisation and untested generalisations.

More recently, African societies have become more complex, especially in their quest of promoting African dream that is fundamental built on 'Ubuntu' – truly good things Africans unthinkingly do for each other and for community in contrast to the Western way of life (see, Holdstock⁶²; Boon⁶³) and skills development of Africans for the purpose of development and growth of the African continent. West-Olatunji an African-American

woman suggests a personal commitment to understand issues affecting the black academics of which, in my view, is central to Africanisation, the concept that houses all Afrocentric issues. West-Olatunji believes that personal commitment of researchers is relevant and will promote professional development of African scholars – major part of the African dream. As Obamehini⁶⁵ puts it, personal commitment is relevant and determines largely the successes and struggles in the academia, which in turn impact on their experiences and productivity as well as their relationship with colleagues and students – stakeholders and drivers of Africanisation realisation. Effort towards incorporation into higher education curriculum and embracing and utilisation of mixed methods research by African scholars particularly in Nigeria would consequently be both institutional and personal commitment respectively.

Being a research approach itself, mixed methods is a scientific method with divergent views and higher degree of truth thus, most suitable for Africa's problems that are not only traditional but scientific. More so, when the fact that Africa like other continents is located within the globalised world and requires scientific solutions to problems⁶⁵ is considered. Societies across Africa share commonalities in economic, social and political values but it is unjust to think of these societies as perfectly and unilaterally same – a major challenge of Africanisation. The Nigerian state typifies rather than represents complex and variegated issues anchored on ethnicity, tribes, languages, religion, etc. spread across thirty seven different states of the federation including the Federal Capital Territory (FCT), Abuja. It is therefore logical to think of an appropriate research method(s) that can reasonable address these complex issues – African problems. One rational to critically look at that can help gain a better understanding of Afrocentric issues that are complex is that research method which is not restricted to limited research designs and frameworks (see, Obamehini⁶⁵). Mixed method research takes into account, and of course encompasses, research paradigms such as that which encourage the use of African sensitive standpoints of the researcher, researched and research location as a framework for research design, data collection and data interpretation that can both provide explanations beyond Afrocentric and Eurocentric issues.

The term 'African' refers to a polymorphous grouping of indigenous people and includes geographical diversity as well as the human diversity of different population groups, linguistic and religious diversity, together with the diversity of ways of life that fall somewhere between traditional and modern⁶⁶. However, as said earlie, there are several commonalities: 'sameness' and 'unity' in the diversity of various waysof Africans' way of life. The commonality of values, ideologies and philosophies suggest a need for expanded conceptual, research frameworks and methods (e.g. mixed method) that more fully capture the range of experiences of Africans⁶⁷. Boykin's assertion suggests that research and practices that reflect experiences of Africans emphasis fundamental solidarity for self-reliance in the African community and specific ways in which knowledge,

practices and values that characterise the historic and contemporary African experience can be drawn upon to improve in particular the education of Africans⁶⁸ and the African dream in general.

10.7 Why mixed methodology research?

The fundamental purpose of research is to create theoretical or conceptual explanations of reality and perhaps to generate new knowledge. Research is the bridge between knowledge generation and the application of knowledge in any society. Through research, HEIs are able to access and attain creativity, innovation and invention for the overall growth and development of society.

Research objectives include describing, exploring, analysing, explaining and understanding problems. In arguing the case for mixed method research I dwell on the assertions of Lynch⁶⁹ and Yu⁷⁰ as my point of departure. Lynch⁷¹ asserts that the differences between the quantitative and qualitative sides of the argument have been based on an overly theoretical approach to research in the social sciences. Yu's⁷² contribution to the argument is from the point of view that there is a misunderstanding of the philosophy that aligns quantitative research with empiricism and logical positivism. In his argument, Yu⁷³ cites a variety of evidence, including the view that pro-observation does not always lead to a realist stance⁷⁴ and that a quantitative research methodology is not always objective. In summarising his ideas, Yu⁷⁵ suggests the use of a variety of methods and approaches. This, by interpretation, is mixed method research.

In recent times, mixed method research has witnessed development in terms of the number of researchers who employ it in their research. For example, in 2008 the University of Pretoria held a seminar on mixed method research approaches attended by academics across the ranks. Similarly, universities in the United States, Europe and Australia hold seminars and workshops on mixed method research (personal conversation held at the University of Pretoria, South Africa, in 2008 with Professor JW Creswell, an expert in mixed method research). The development of this research methodology gave birth to *Journals on Mixed Method Research*. This development is linked to the development of new computer techniques⁷⁶ and the growing understanding among researchers that the world is not static but dynamic; that is, sophisticated and ever evolving, hence a static worldview (paradigm) would be inadequate for the maximum actualisation of research objectives. Even so, Creswell⁷⁷ asserts that the development and use of mixed method research among researchers is still low compared to the separate use of qualitative and quantitative methods. Moon and Moon⁷⁸ write that mixed method research relates to metaphysical concepts of truth and reality and is a practical approach to research.

Given the advancement in knowledge, spiced with globalisation's effect on economies, I concur with the positivists and post-positivists that there is an external reality, which does

not clearly emerge when a single research method approach is used. To this end, mixed method research seeks to increase the degree of truth, as modern philosophers posit that there is no absolute truth⁷⁹. According to Moon and Moon⁸⁰, the philosophical debate concerning the use of a mixed method approach in research takes us so far but does not answer questions concerning details relating to the methods. Despite this, the importance or advantages of mixed method research, which substantiates the argument in its favour, is inevitable and cannot be overemphasised. As such, mixed method research should be seen as an essential research curriculum issue, especially in a country like Nigeria where its development is still in its infancy. In addition to the above argument, the advantages of mixed methodology research, as outlined by Creswell⁸¹, include: (i) it is complementary because overlapping and different facets of a phenomenon may emerge; (ii) it helps to integrate results; (iii) it helps contradictions and fresh perspectives to emerge; (iv) it is developmental because the quantitative method is used sequentially to help inform the qualitative method; and (v) a mixed research design adds scope and breadth to the study.

Another argument for mixed method research is linked to facts, values and theory. Facts are objective and value free, while values are subjective and theories are independent. These three concepts are prominent in research, and to a large extent interdependent. Facts do not speak for themselves so theories are needed to provide explanations of facts in order for such facts to have value. The relationship between facts, theories and values connote ‘understanding’, ‘exploration’, ‘describing’, ‘investigating’ and ‘explaining’, which are often seen as the purposes of research. Any of this purpose can be achieved using either quantitative or qualitative research. However, a richer result in relation to any of the purposes will be achieved when both qualitative and quantitative research are combined.

Furthermore, in broader or more complex research, where the purpose is to include more than one of the aims mentioned above, mixed method research is suggested. For example, in an earlier study where I sought to ‘understand and explain the academic performance of married women students in Nigerian higher education’, I provided justification for the use of mixed method research. I wrote that one cannot ‘explain’ if one does not ‘understand’. I went further to say that in order for me to understand the research phenomenon I used qualitative research and in order to explain the phenomenon I used quantitative research⁸². Thus, it can be adduced that the use of mixed research method makes it possible for both qualitative and quantitative research approaches to be used in one study.

10.8 Implications of the prevailing trends for research curriculum in higher education

In today's knowledge-based economy, the attention or focus of HEIs has shifted towards research. This has led to an increase in research-centred qualifications at postgraduate level in comparison to taught qualifications (e.g. taught masters versus research/full dissertation masters). In Nigeria, the case or situation differs. As at date, there is no Nigerian institution of higher learning that offers qualifications strictly based on research, for example, masters by research as offered in some qualifications/courses in South African universities and universities in Europe and America. All courses leading to qualifications across faculties in Nigerian universities are taught based. The importance of research is also evident in taught courses/qualifications, as postgraduate students who choose taught masters are also required to complete a mini dissertation/research in partial fulfilment for the completion of the intended qualification. This speaks to the relevancy of research, as well as its interconnectivity with the environment and society at large. Various scholars for example, Okebukola⁵⁴ suggest, among other things, the reduction in the load of educational courses, more time for teaching practice, the shunning of early specialisation and the broadening of the curriculum on research methodology to improve students' project/research working skills.

The quantity and quality of the research output in Nigeria is possibly a cause and could be a remedy if it were to be reversed as 'medication' for unemployment. Rich research would open up opportunities for graduates to be job creators rather than job seekers – the prevailing case in Nigeria and, indeed, most countries on the African continent. With this understanding, the need to revisit or question the research curriculum becomes non-negotiable. Kayode, Ajake, Oba and Ekpo⁸³ write that the most disturbing manifestation of the challenges is the increasing unemployability of graduates of higher education. In these authors' views, there has been a worldwide questioning regarding the preparedness of universities and other HEIs to fit into knowledge-driven economic productive functions built on research knowledge and skills⁸⁴. Following this, Fakomogbon and Adegbija⁸⁵ suggest an intensive review of higher education curriculum to meet the current technological and entrepreneurship needs of Africa. Accordingly, the curriculum should therefore provide opportunities for students to initiate inquiry; students should exhibit creativity and be given opportunities for idiosyncratic specialisation; and a greater diversity of talent should be developed and recognised. These authors conclude that a well-balanced curriculum is capable of providing tools for self-assessment, contact with challenging work projects that promote on-the-job skills and entrepreneurship with a type of curriculum that promote interaction, cooperativeness, and the exchange of ideas and information.

Based on the above, my summarised recommendations following my experience in academia would be the infusion of the elements cited below and of course detailed attention to critical issues in the research curricula in higher education in Nigeria, especially at postgraduate level:

1. **Best practice.** The curricula should conform to international best research practices into which research approaches and designs that include mixed methodology should be integrated. Best practice examination of postgraduate theses/dissertations, especially at the doctoral level, should include an international or reputable scholar serving or appointed as one of the examiners. This seems to be missing in most cases. In short, the politicisation of the examination and awarding of doctoral qualifications or degrees is fast emerging. This politicisation is rooted in tribal alignment, monetary gain/exchange, sexual and relationship bargains, godfatherism, promotional promises/negotiations and political office offers among others.
2. **Ethical considerations.** This centres on the responsibilities of the researcher, ensuring that participants/respondents are respected and not forced to be participants/respondents. It deals with compliance with the legal issues that concern participants, such as consent, reward, remuneration, benefits, identity of participants, withdrawal of participants, publication of findings, reporting of participants'/respondents' views, recording of views, time and place or research sites, copyright, photography, permission from institutions and participants, and so forth. I note here that, as observed in some institutions of higher learning, supervisors should on ethical grounds desist from supervising their wives, husbands and relatives.
3. **Mastering research skills and new knowledge.** There should be an emphasis that research has, among its purposes, mastering of skills and the generation of new knowledge and should be included as such, especially in masters and doctoral level research curricular respectively.
4. **Address the functions of research.** The functions of research include, but not be limited to, describing, exploring, understanding, explaining, investigating, and so forth. The aims and purposes of research must be well articulated. Through this, and at the outset, the importance of any research to the environment and society in general is easily determined.
5. **Accessibility of findings/publishability.** Research curricular, especially at postgraduate level, should state clearly the importance of making the findings available to the public. This by implication suggests that research conducted in higher education should be such that it can be published. This is not the case with most postgraduate research for several reasons. These include an absence of ethical considerations and issues, an absence of a suitable theoretical/conceptual framework if not a complete omission, lack of originality owing to serious plagiarism and a lack of a detailed methodological approach following the incompetency of students and supervisors.

Accessing the postgraduate theses or dissertations of most postgraduate students of Nigerian higher education in libraries and other public domains is difficult because of the shortcomings that accompany the issues raised above, particularly as explained under the accessibility of findings and publishability.

Drawing on the above recommendations and the works of scholars extensively reviewed in this chapter, it is worth noting that there are several gains to be had in redesigning and reviewing the curriculum from time to time. First and foremost, this helps to give clear direction, avoiding both overlapping and omission of important things to be taught, such as mixed method research. It is true, too, that only through research, the exchange of ideas and thoughtful planning can we be assured that priority is given to the knowledge and experiences which are of most worth to Africa and possibly the quest of actualising Africanisation⁸⁶.

10.9 Conclusion

It is evident in this chapter that mixed method research has been the subject of debate for some time and that this debate has been (and still is) referred to as the ‘paradigm wars’⁸⁷. This has provoked change in research design and paradigms among researchers. In an effort to end the paradigm wars, mixed methodology was sought or advocated for. Despite this, there are few journal papers, dissertations and theses employing mixed methods⁸⁸. I therefore suggest that researchers and prospective researchers be urged to develop and familiarise themselves with a mixed method research method and to consider its advantages. By so doing they will be able to broaden their research horizon to improve the quality of their research process and results. Secondly, academics or researchers will be able to supervise diverse and different types of research.

In line with the view of Moon and Moon⁸⁹, I maintain that encouraging mixed method research among researchers may or may not have an impact on the number of journal articles employing mixed methods, however, if robust arguments for their use are presented it will increase the chances of publication. While I do not criticise or condemn other research methods, I suggest further that policy-makers and curriculum experts should consider mixed method research as an essential part of research design that cannot be compromised in the discussion of curriculum issues, especially at higher education level where research is a core task or business.

Mixed methodology research should, however, be seen as an essential curriculum issue because the teaching and learning in any institution of higher education is organised around a curriculum. Research is connected to a curriculum either as a subject of learning, field of study, or as a means of generating and advancing knowledge, which is promoted through policy documents and curriculum. Therefore, the emphasis of mixed method

research in the teaching and learning of research methodology will be a remarkable achievement of higher education goals, as stated in the Nigerian national policy on education, and would possibly increase research publications on the aggregate.

In the light of the absence of a specific research method for 'Africanisation', I recommend mixed method research approach following the argument advanced in this chapter. This research method offers wider and additional paradigms, broader research designs, data collection strategies and interpretation/analysis of data for better understanding and explanation of 'Africanisation' – a means of understanding the African continent (issues) in general and in particular, the environment where the HEIs of Africa are situated. On this note I suggest that researchers and policy-makers alike should look beyond traditional qualitative and quantitative research methods if they want higher validity and reliability, and richer research projects.

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Chapter 11

Indigenous knowledge and science education: What knowledge, whose knowledge and how do we bridge the gap?

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11.1 Introduction

The chapters presented have dealt with issues of Africanisation in the context of curriculum from a theoretical perspective and some have provided important suggestions, guidelines, recommendations, and models for the integration of indigenous knowledge. However, this chapter focuses on the practical aspects of these raised issues. This chapter, much of which was presented at the *Third International Conference on the Integration of Science and Indigenous Knowledge Systems*¹ considers the challenges of integrating indigenous knowledge systems (IKS) into the Science curriculum. It presents arguments for including indigenous knowledge, considers some cautionary tales, examines similarities and differences between science, technology and indigenous knowledge, and looks at issues of identity. It also presents the results of an investigation into isiXhosa speakers' notions of important and relevant indigenous knowledge, attempts to classify this knowledge in terms of earlier arguments in the presentation which fall under the ambit of science and technology and 'other' knowledge, and presents some tentative suggestions towards developing a shared point of departure that better accommodates the beliefs of both resistors and proponents of the inclusion of indigenous knowledge in the school curriculum.

11.2 Arguments for including indigenous knowledge in the science curriculum

Calls have been made over recent decades to broaden the science curriculum to accommodate alternative sources of knowledge known as, amongst others, traditional knowledge, aboriginal knowledge, indigenous knowledge, traditional environmental knowledge, ethno-science and indigenous science². These calls have influenced activities,

instructional practices and curricula in schools in a number of jurisdictions such as Hawaii, (Chin³), Tonga, (Palefau⁴) Canada, (Aikenhead⁵), New Zealand, (Ministry of Education, NZ⁶)⁷ South Africa (Roberts⁸; DOE⁹). Arguments for including ‘indigenous science’ have centred largely on the notion of the devaluing of cultures that traditionally rely on naturalistic observation and insight¹⁰, principles of equality, of respect and worth that underpin multicultural and anti-racist education¹¹, the maintenance of cultural identity¹², the depth of alternative ecological knowledge available¹³, and perceptions that the processes of science and indigenous knowledge follow similar lines¹⁴.

There are data on teachers’ understandings, stances and practical arguments regarding science-indigenous knowledge^{15, 16}, the roles played by teachers and community members in developing science curricula^{17, 18}, and how teachers’ conceptions of, and awareness about the nature of science, and IKS change over the course of an intervention to enhance their understanding of these concepts¹⁹. Other studies have highlighted the difficulties and barriers faced by students of non-Western background when learning science²⁰⁻²⁴ and the clashes in worldview between local culture and the culture of science²⁵⁻³⁰.

Malcolm³¹ has pointed out that the scientific worldview sometime collides with aspects of traditional African cultural worldviews, and that these may discomfort and alienate African students, causing them to opt out of science at school. Ogawa³² argues for the adoption of the traditional cultural context of *Shizen* in Japanese curricula – a distinct worldview, which requires emotional, spiritual and aesthetic engagement with nature. Kawasaki³³ also points to the many problems Japanese students face when learning science, while Jegede³⁴ and Aikenhead and Jegede³⁵ propose a notion of ‘collateral learning’ whereby students hold and develop Western scientific thinking alongside traditional knowledge.

Hodson³⁶ notes that, apart from the argument that the introduction of traditional knowledge may play a major role in personalising learning and assisting border crossing, it can be a crucial element in cultural stabilisation and renewal. Notable political thrusts towards cultural renewal are exemplified by the positions taken in New Zealand and South Africa. New Zealand teachers are urged to make science more relevant and more accessible to Maori students by acknowledging Maori cultural beliefs and values³⁷. Schools are encouraged, where appropriate, to teach science through the Maori language³⁸ and from a Maori perspective by adopting culturally relevant pedagogical practices³⁹⁻⁴³. These are strong arguments for the inclusion of indigenous knowledge in the Science curriculum.

11.3 Caveats and cautionary tales

However, issues of cultural collision are not geographically or ethnically restricted to Africa or Asia or anywhere else, and Hodson⁴⁴ notes that any student with a pre-existing worldview that is not in harmony with scientific perspectives will find it more difficult to learn science when it does not make sense to them in terms of their underlying assumptions and values.

Coborn as well as Roth and Alexander^{45,46} argue further that students who have grown up in a Western culture, but who have strong religious, spiritual or aesthetic conceptions of the natural world, also experience science as a threat to the long-standing beliefs and values that underpin their personal identities.

It must also be noted that, despite political support, achievement of the political aims mentioned earlier have not been unproblematic. In New Zealand there are unresolved tensions between 'science in Maori' and 'Maori science'⁴⁷ and continuing debates over terminology⁴⁸. In South Africa, Horsthemke and Schafer⁴⁹ call for more critical interrogation of things 'ethno' in education and challenge notions of 'Western', 'Eurocentric' and 'ethnic' science'. Ogunniyi⁵⁰ notes that, while progress is encouraging in terms of integrating indigenous knowledge in the Science and Mathematics curricula in South Africa, many teachers are uncertain about what is required, and question their ability to respond to what appears to be radically different teaching and learning pedagogies. Directives to include traditional knowledge to engage culturally diverse students into scientific study place teachers in a dilemma as the introduction of personal views about nature and naturally occurring events involving magic, mysticism, and spiritualism, which may be personally valuable, are not perceived to be science by many teachers and by scientific bodies such as the National Research Council⁵¹. Southerland⁵², in attempting to unravel such dilemmas distinguishes between *instructional multicultural science* education to meet the needs, interests, aspirations and values of diverse students, and *curriculum multicultural science*, which aims at redefining our conception of science (she accepts the former and rejects the latter). Hodson⁵³ feels that the assumption that all members of a cultural group should and do share a particular set of views can be a restrictive one for individuals, and Irzik and Irzik⁵⁴ see this assumption as being potentially damaging for the knowledge itself as it insulates it from criticism and fossilises it in its current form.

Other cautionary arguments are that, although the tenets of the nature of science are tentative and at times vigorously contested by researchers in the philosophy of science⁵⁵⁻⁵⁷ the epistemological underpinnings of the activities of science, and the ontological characteristics of the resulting knowledge, are stable and robust enough to demarcate science as something separate from traditional knowledge or any of its homonyms⁵⁸. Hodson⁵⁹ points out that the substance of the traditional knowledge as science debate often rests on the 'the politics of recognition', namely, redressing the imperialism of the past. While recognising the validity of this stance, he warns of the dangers of the relativism inherent in including 'anything and everything in the curriculum under the banner of science'. Similarly, Southerland⁶⁰ believes that forcing all forms of knowledge about nature and naturally occurring events, and quantity, order and shape, into the construct of science sets no boundaries for the limits of the discipline. Horsthemke and Schafer⁶¹ reject the notion of ownership of knowledge along ethnic and indigenous divisions and argue that the term 'indigenous knowledge' has become a bandwagon-type concept that has been used uncritically by politicians to further their own agendas. They also note

that (indigenous) schoolchildren frequently reject the incorporation of 'African' studies into the school curriculum, viewing it as 'irrelevant, exotic, backward, and culturally alienating' and warn against the assumption that anything using the label 'indigenous will be automatically be accepted and embraced'⁶². All of the above are all serious questions, cautions and challenges that cannot be ignored.

11.4 Distinguishing characteristics and respecting differences

Aikenhead⁶³ states that science and indigenous knowledge are similar in that they both involve observations and data collected by experimental and field studies, and that their claims, descriptions and explanations are based on rational ways of knowing within different culture-laden rationalities. In turn, he acknowledges that there are differences (distinguishing characteristics) between them. For me, the most important being that indigenous knowledge sees the universe as mysterious while modern science sees it as being knowable; IKS values coexistence with the mystery of nature and celebrates this mystery while science attempts to eradicate mystery via description and explanation; and that IKS' content validity is evidenced by tens of thousands of years of survival based on using the knowledge while science's predictive validity forms a cornerstone of the discipline⁶⁴. Also, indigenous knowledge claims about nature and naturally occurring events are place specific and are not intended to be generalised beyond the people and the place, and the holders of the knowledge demand ownership of the knowledge, while scientists publish their findings in journals for all to see and use. Overall it is the ontological base in different cultures that separates the forms of knowledge, namely, that of myth and mysticism versus knowable physical causality, specificity versus generalisation, ownership versus sharing, etc.

Whether technology is a subculture or culture on its own is not clear to me, but what has been made explicit is that technology is not science⁶⁵ and, based on what has been said above, it would be difficult to argue that it is an indigenous form of knowledge. While technology shares the same attributes that science and indigenous knowledge share, it does not share either the mysticism of indigenous knowledge or the explanatory theoretical frameworks that are inherent in science. Yore⁶⁶ reminds us that technology as design is not applied science as designs are: focused on alleviating a problem or human need; are constrained by limits and place; based on similar epistemic processes and procedures as science, but may include 'trial and error'; evaluated on whether or not they address the problem or need; and that designs need not include an explanation. It is for these reasons that he believes that technology may be a better interface than science to address diverse views, such as those held around science and indigenous knowledge.

11.5 Culture and identity

Norms, values and beliefs are strongly related to identity and, as such, criticisms of our beliefs are perceived as a criticism of ourselves⁶⁷. Because of the ego-related frailties that underpin human nature, this understanding is as valid for scientists as it is for members of other cultures. For this reason Chin, Hand and Yore⁶⁸ believe that the similarities and differences between science and indigenous knowledge (and their underpinning values) need to be known and considered when attempting to select culturally sensitive and respectful experiences about nature and naturally occurring events in science curricula⁶⁹. When considering the cultures of science and indigenous knowledge Brian Hand makes a distinction between *within-culture* and *between-culture* views of knowledge about the natural world⁷⁰. The term ‘*within-culture*’ refers to people who remain in a single culture and have a particular way of knowing and believing about natural events (indigenous knowledge), versus a ‘*between-culture*’ view that where people constantly move between their own culture and the dominant culture of practice (in this instance modern science). A *within-culture* view means that particular views of nature are acceptable to those within the culture, while in- and *between-culture* view different interpretations of the same knowledge can be developed and used across multiple settings⁷¹.

Culture (including the culture of modern science) is characterised as ‘an ordered system of meaning and symbols, in terms of which social interaction takes place’⁷² or, more specifically, the norms, values, beliefs, expectations, and conventional actions of a group⁷³ (also see Gumbo in Chapter 3). Aikenhead⁷⁴ points out that cultural subgroups exist that can commonly be identified by nation, tribe, language, location, religion, gender, occupation, etc., with each subgroup being composed of people who conform to a defining set of norms, values, beliefs, expectations and conventions which, barring minor diversity, provide a source of identity. However, Gadicke’s⁷⁵ work with Canadian First Nation people has shown that traditional knowledge can vary drastically across tribes and even across regions within traditional territory. Snively and Williams⁷⁶ point out that indigenous knowledge claims about nature and naturally occurring events are place specific and are not intended to be generalised beyond the people and the place.

Such perspectives and findings suggest that, before attempting to find specific solutions and materials to help facilitate cultural border crossings for what one may consider to be indigenous students, one should be clear as to what knowledge the group (or at least the majority therein) consider to be ‘their’ traditional knowledge, and explore their views on the appropriateness for inclusion such knowledge in the school curriculum. This understanding underpinned the rationale for a study that investigated isiXhosa mother tongue speaking pupils’, teachers’ and adult community members’ (n=294) awareness of Xhosa indigenous knowledge, and whether they believe that it should be integrated into the school science curriculum⁷⁷. A synopsis of the results of the study are presented as an example to consider some of the epistemological dilemmas posed when teaching

science as a clearly demarcated discipline in constructivist-oriented, diverse, multicultural classrooms, which require teachers to both access and challenge prior knowledge about science while honouring and respecting individual students' beliefs⁷⁸.

11.6 What do 'indigenous stakeholders' think? A case study

In this case study, the sample chosen were isiXhosa first language science teachers ($n=73$), their learners (143) and community members (78) from Mthatha, Queenstown, King William's Town and Port Elizabeth in the Eastern Cape. The research design used a multiple source survey comprising of a questionnaire and follow-up interview to document indigenous knowledge and pedagogical insights for incorporating such knowledge into school Science curricula. The teachers were registered on a part-time, university accredited science and mathematics upgrading programme (BEd) offered by the Nelson Mandela Metropolitan University at four sites across the Eastern Cape Province.

Overall the data generated by the teachers, pupils, and community members was sufficiently homogenous across the four sites and various schools and grade levels to be reported as a group response. The responses could be grouped generally as technology oriented activities, health related issues and witchcraft, knowledge about lightning, validation of indigenous knowledge, cultural heritage and dignity, and arguments against inclusion on indigenous knowledge in the Science curriculum.

11.6.1 Technology-related issues

A quarter of the 294 participants in the sample noted agricultural activities; starting fire using stones; brewing of traditional beer (*umqombothi*); the use of limestone (*kalika*) for dying traditional materials, for example blankets and as house paint, and for purifying water; traditional ploughing and construction methods; and traditional sources of energy (grass, wood, and cow dung). These types of responses suggest knowledge that is more technological in nature than scientific, however, which might be used to provide context and interest when teaching science within Southerland's⁷⁹ notion of instructional multicultural science education.

11.6.2 Health-related issues and witchcraft

Health-related issues such as traditional herbal knowledge, extraction of chemicals from plants, mixing of traditional medicines, and HIV and AIDS issues were mentioned by 20% of the respondents. The majority of the responses in this category related to the use of traditional herbal medicines either collected personally or obtained from traditional healers (*sangomas*). A wide range of respondents from all of the sample sites gave specific examples of herbs and their medicinal use. Their effectiveness of these treatments was

noted, the reduction of medical costs was emphasised, and the efficacy of 'Western' medicine was queried. Respondents' knowledge and belief about traditional healing suggests that the topic should be interesting to most isiXhosa-speaking children, and that discussion and comparison of comparative efficacies could provide context, interest and opportunities to examine values when examining issues of health in a Science curriculum. However, statements in the realm of the spiritual healing and superstition leads one into the realm of Southerland's *curriculum multicultural science*, with the attendant dilemmas around the attempts to include such notions into areas that demarcate science as a discipline. For example, slightly more than a quarter of the respondents cited traditional practices to combat weather problems, especially attracting rain and repelling storms and water divining. Witchcraft was noted by 26% of those polled. A further 11% specifically noted superstitious beliefs about lightning. Apart from being prevalent, similar examples of superstitious beliefs were mentioned across a wide geographic area. These included witches causing harm through spells that killed, made people ill, or called up lightning to kill people or destroy their property. The need for traditional healers to exorcise bewitched individuals was also widely noted, as is the case among many tribes and groups in South Africa⁸⁰.

11.6.3 Knowledge about lightning

Issues noted in terms of staying safe from lightning during a thunderstorm included keeping shiny objects covered, not watching television, not washing, not drinking sour milk (a staple item of rural diets), and placing wild olive branches before the front door. Meels⁸¹ notes that there is a high incidence of lightning strikes in the Eastern Cape and many deaths by lightning are reported each year, therefore teaching about lightning in school is not only of interest, but is a matter of life and death. Numerous responses suggested a high level of awareness and an understanding of the importance of lightning in the lives of Xhosa people, and the types of thought that it has engendered, ranging from the practical (carrying *umnguma* sticks and not standing under trees) to witchcraft (calling up lightning), and attempts at explanation and providing links to science (references to electrostatics and electrical conductors).

11.6.4 Validation of knowledge

The notion of testing, explaining and validating indigenous knowledge were inherent in a number of responses, and these expressions of interest in testing indigenous knowledge claims were noted as a possibly useful point of departure when considering what constitutes scientific validation. However, categorising indigenous ideas as scientific versus unscientific can be counterproductive, and researchers such as Smith and Sharman⁸² suggest characterising explanations of events as *more scientific* or *less scientific*, based on accepted criteria of what is considered to be scientific in order to explicitly teach what is expected within the discipline called science.

11.6.5 Cultural heritage and dignity

A frequently expressed reason as to why it is important to include indigenous knowledge in the school curriculum was to remind children of, and develop respect for, their heritage. More than 25% of the questionnaire responses emphasised culture, heritage and dignity, with emphasis placed on the value that cultural identity has for restoring dignity and for protecting a heritage which has been demeaned in the past. The numbers of responses in each category were fairly evenly distributed between the pupils, teachers and community members.

Responses such as:

We need to know and give honour to what these people have done as they were the pioneers of what we have now. Their methods or activities they perform needs to be remembered and respected. Their myths and stories became a way of life by which we can appreciate them.

and

Since man is the artist for the destruction of his heritage only he alone can this to hold onto the last shred of dignity, which remains.

These are highly emotional calls that indicate that, for at least a proportion of the community, the ‘politics of recognition’ is high on their agenda and not something that should be regarded lightly⁸³.

11.6.6 Arguments against inclusion

While one teacher from Queenstown felt that indigenous knowledge could be introduced ‘*by drafting and introducing a new science curriculum that is inclusive of all cultural background knowledge and beliefs based on the immediate surroundings and culture*’, and another felt that it could be used as ‘*background knowledge to introduce new lessons*’. Nearly 20% of all responses argued against the incorporation of indigenous knowledge in the school curriculum. For example, one teacher stated ‘*Indigenous knowledge is not going to be of much use to learners as they do not understand how that old knowledge will help them at school*’, and two Grade 11 learners said, respectively, ‘*No, it is not relevant to today’s world*’ and ‘*Definitely not – how will it help to know anything our grandfathers did*’. Several respondents stated that indigenous knowledge should be introduced at an early stage (lower grades) by the elders (as opposed to teachers), while another Grade 11 pupil simply stated ‘*No, Lightning is not caused by witches!*’

While more than 25% of the respondents noted cultural the dignity aspects of including indigenous knowledge in the curriculum, 20% argued against its inclusion, highlighting a potentially divisive issue when attempting to include what is considered by some to be important knowledge to be included in Science curricula.

11.7 Finding common ground

The data suggests that there is a general shared awareness amongst the sample used in this study of a number of ideas and issues that could be classified as Xhosa indigenous knowledge, for example, issues which include technology, health, witchcraft and lightning. But there were also strong arguments against including indigenous knowledge in the school science curriculum and there were no clear indications of links between Xhosa indigenous knowledge and science, or how it could contribute to better understandings of the subject other than the notions of cultural dignity, relevance and context.

It is the ambiguity within the group towards inclusion in the Science curriculum of knowledge that is shared and valued by a group, and the lack a clear understanding of possible links between this knowledge and modern science that underpins the call for more to be done to illuminate the similarities and differences between science and indigenous knowledge. As finding common ground is usually difficult in any instance when there are competing views and values the following ideas are suggested as a possible starting point (or as 'rules of the game'). They are based on respect and agreement of 'what is' and 'what is not' in order to try to answer questions of what should be included, why it should be included, and where important knowledge that should not be included under the umbrella of 'science' could be placed.

The areas that are proposed as being important starting points are (i) to establish whether what is identified as important indigenous knowledge is actually important to the group that is being targeted, (ii) to come to a degree of consensus as to what this knowledge can be legitimately considered to be – science, technology, or 'other' knowledge, and (iii) agreement as to how the knowledge can be used to strengthen and bolster the subject into which integration is suggested to allow more effective learning to take place. The first issue can only be definitively resolved by the group targeted (believed to be a discrete indigenous group), while the second requires honest appraisals of issues held sacrosanct by scientists and proponents of indigenous knowledge on each end of the continuum towards a more consensual point of departure (common ground). The third issue is shaped to some extent by the degree of importance and whether the knowledge is considered to be related to science, technology or 'other' knowledge.

11.7.1 Is it my knowledge? Is it important?

In the study described above, the participating individuals' statements are the basis for identifying the knowledge believed to be isiXhosa indigenous knowledge. However, while there was clearly a group awareness of what can be considered to be a body of indigenous knowledge, there was not always agreement on its value in terms of its inclusion in school science. In fact, there was implicit and explicit rejection of the knowledge in some

instances. As such, it is proposed that there would be value in further interrogating issues of awareness and value across a wider group of respondents. Such interrogation could be done, for example, by constructing a Likert type questionnaire which asks the respondents whether they agree or disagree with statements (perhaps across five choices from strongly agree to strongly disagree) about the levels of awareness and value attributed to the knowledge identified as ‘their’ knowledge. This would allow a general ‘mapping’, as presented in Figure 11.1, which uses examples based on inferences/assumptions made from the questionnaire and interview data generated by the study above (but only as an example at this stage as the ideas mapped are based on inferences and assumptions, not measurable data).

	High awareness	Moderate awareness	Little awareness
Very important	<ul style="list-style-type: none"> issues of lightning witchcraft 		<ul style="list-style-type: none"> (ideas from sagacious community members)
Moderately important and generally consensual	<ul style="list-style-type: none"> use of traditional herbal medicines 	<ul style="list-style-type: none"> brewing of traditional beer (<i>umqombathi</i>) the use of limestone (<i>kalika</i>) for dying traditional materials ploughing methods 	
No/little indication of consensus, minority statements	<ul style="list-style-type: none"> (ideas that are well known but generally rejected by the group) 		<ul style="list-style-type: none"> (statements made by individual and not known, not supported or rejected by others)

Table 11.1: Possible mapping of IK based on assumptions made from a study on a sample of isiXhosa-speakers’ perceptions of their indigenous knowledge (for illustrative purposes only as actual mapping would require explicit solicitation in terms of awareness and importance using a measurable scale across a wider sample). Comments in [square] brackets suggest how ideas might be generated in particular quadrants.

Mapping of the type shown in Figure 11.1 could then be extended by obtaining data specifically targeting respondents beliefs as to whether they believe that the important aspects should be included in school curricula (in this case particularly the Science curriculum) and how strongly they believe in their responses. These data could then provide an indicator of ‘value’ to the group when considering whether particular aspects of indigenous knowledge warrant inclusion or not. Once there is an idea of what is known and valued by the group the knowledge could be interrogated further in terms of agreed criteria, for example, as per the demarcations of science, technology and indigenous knowledge as presented earlier in this paper.

11.7.2 Is it modern science?

In a similar fashion, the knowledge that is chosen as being authentic and important can be mapped according to agreed demarcations of scientific, technological, indigenous and ‘other’ knowledge. Figure 11.2 is an example of a possible heuristic to help facilitate a clearer perspective. As can be seen from the table, most of the knowledge that was identified from the data generated in the study on a sample of isiXhosa-speakers’ perceptions of their indigenous knowledge fall into the middle quadrant, which can be demarcated fairly clearly as technology (but not science). Just as clearly, issues of witchcraft fall into the bottom left quadrant, which clearly is neither science nor technology (one does not really need a table to work this out, but it is used as an example to illuminate the point). There are more complex challenges however, for example acupuncture, which shows good results if applied ‘properly’, and has a complex theoretical structure based on the flow *qi*. However, there is no systematic experimental verification of its success and acupuncturists screen their patients on the grounds that it is not appropriate treatment for everyone⁸⁴. It has also been hypothesised from another perspective that the acupuncture needles stimulate the release of endorphins and cortisone, and experiments have shown that endorphin suppressors prevent acupuncture needles from working⁸⁵. If an explanation within a more (probably) acceptable theoretical framework than *qi* is developed based on endorphin or cortisone release, will acupuncture be able to be moved from the middle top quadrant (other) to the top right quadrant (science)? Will this also be the case for water divining, which is tested and works for some individuals, but not explained theoretically?

	Not falsifiable and based on ‘faith’	Tested and it works	Tested against clearly falsifiable theory based predictions
Describe, explains and predict within a theoretical framework		OTHER • Acupuncture	SCIENCE
Describes and reliable predictions can be made, but are not explained		TECHNOLOGY • brewing of traditional beer • the use of limestone for dying • ploughing methods • use of traditional herbal medicines	
Description explained by mysticism or not explained	OTHER • Lightning as witchcraft	OTHER • Water divination	

Table 11.2: Possible mapping of indigenous knowledge against demarcations of science, technology and ‘other’ knowledge based on the data from a study on a sample of isiXhosa-speakers’ perceptions of their indigenous knowledge. ‘Other’ knowledge, as indicated in square brackets, provides examples of types of knowledge that may possibly fall in the quadrants they occupy.

11.7.3 How do we use it?

A final question that must be answered once we know that certain indigenous knowledge is important and valued, and we have mapped where it lies on the science, technology, and ‘other’ terrain, is what can we do with it – in other words will it be appropriate and helpful for the learners of the subject into which it might be incorporated? Do we examine it through the lens of Southerland’s⁸⁶ *instructional multicultural science* education to meet the needs, interests, aspirations and values of diverse students? The study quoted in this chapter indicates that a number of respondents felt that certain aspects of their indigenous knowledge could be used to introduce topics and explain and link important issues such as lightning to alternative understandings. There was also the notion of testing, explaining and validating indigenous knowledge inherent in a number of responses, and these expressions of interest in testing indigenous knowledge claims were noted as a possibly useful point of departure when considering what constitutes scientific validation.

A frequently expressed reason in the study as to why it is important to include indigenous knowledge in the school curriculum was to remind children of, and develop respect for, their heritage. The question is are these arguments strong enough to promote Southerland’s other notion – *curriculum multicultural science* – which aims at redefining our conception of science? Hodson⁸⁷ argues that attempting to redefine science does no one any favours, and Southerland⁸⁸ has shown that Cree (Native American) children who draw a clear distinction between science and traditional knowledge are, in general, better motivated to learn the subject. As such, they suggest that the Science curriculum should rather focus on epistemological differences between indigenous knowledge and science than on attempting to redefine the latter.

11.7.4 Everyday knowledge, indigenous knowledge and science

In turn, Lubben⁸⁹ draws attention to the differences and similarities between indigenous knowledge and everyday knowledge and the purposes of including either in the school curriculum. He points out the indigenous knowledge refers to the knowledge of specific groups of people sharing a geographical location who ‘have come to understand themselves in relation to their environment and how to organise that folk knowledge of flora and fauna, cultural beliefs and history to enhance their lives⁹⁰. He points out that the emphasis on useful knowledge is also a major characteristic of everyday knowledge constructed as a result of making sense of everyday experiences with the goal of ‘leading a fulfilling life’⁹¹ and categorises indigenous knowledge as a subset of everyday knowledge. In turn, scientific knowledge aims for optimal power of prediction and explanation through maximum generality, precision and consistency.

Lubben⁹² presents the purposes of including both indigenous knowledge and everyday knowledge in the curriculum within the realms of affect (motivate students to value their own knowledge and to learn science), curriculum philosophy (make links between science and everyday life and open opportunities to learn science for action in society), pedagogic strategies (make the curriculum serve the students and provide opportunities to learn relevant science), and cognitive outcomes (to familiarise students with other knowledge systems and allow them to compare different knowledge systems). Durranti and Goodwin⁹³ describe an everyday context for learning as a 'focal event in its cultural setting' and Gilbert⁹⁴ describes four models of context-based materials, namely:

- Context as the direct application of concepts – applications are tagged on as an afterthought;
- Context as reciprocity between concepts and application – background knowledge provided through reading or video material;
- Context provided by personal mental activity – a strategy often used in fieldwork where the environmental setting provides the context; and
- Context as social circumstances – sustained enquiry into a topic important in the lives of the community where the context shapes the meaning of the content, and vice versa.

Dube and Lubben⁹⁵ found that Swazi teachers identify a hierarchy of different ways learning material may link everyday experiences into science teaching which closely relate to Hammer's and Elby's⁹⁶ epistemological views of learning science and the four bullet points above.

11.7.5 Cognition and Contiguity Argumentation Theory

The Contiguity Argumentation Theory (CAT) deals with how different or conflicting ideas are consciously resolved⁹⁷. CAT incorporates cultural dialectics normally used by people to communicate with people of different cultures to achieve desirable relationships and places particular attention to the context in which they live⁹⁸. It is also can be used for identifying cognitive shifts made as contexts change and recognises five dynamic states that an individual or group may use within various contexts, namely:

- *dominant* – which uses the most appropriate context (science laboratory or church service);
- *suppressed* – where one worldview is subordinated to a culturally dominant one; *assimilated* – a worldview capitulates or is supplanted or subsumed by dominant one (paradigm shifts in science);
- *emergent* – where new ideas are incorporated in the old (everyday knowledge and learning science); and
- *equipollent* – where distinct worldviews co-exist and may exert equal forces on a person's beliefs (religious scientists).

CAT sees the above categories as being dynamic and flexible, suggesting an internal dialogue or argument in an individual's working memory to resolve the conflict between competing thought systems⁹⁹. Aristotelian notions of contiguity underpin the assertion that different ideas and/or worldviews argue with each other to attain a higher level of meaningfulness or consciousness¹⁰⁰ and, as such, form a hybrid knowledge that does not compromise the essence of what each stand for as a legitimate way of interpreting human experience. It is this quest for higher levels of meaningfulness that I believe is an essential argument for the incorporation of indigenous (and everyday) knowledge in science education.

11.8 Concluding remarks

Hodson¹⁰¹ notes the tendency to overgeneralise and stereotype. There is no one all-embracing description of science and one cannot assume that all forms of indigenous knowledge have common underpinnings, purposes and values. There are concepts, ideas and principles that cannot be easily translated into another language or fully understood from a different cultural viewpoint. In turn the use of the terms 'Western' or 'Eurocentric' science is stereotypical and fails to acknowledge the 'complex origins, diverse roots and continuing cross-cultural borrowing' that has led to modern science¹⁰².

How we view the points in the paragraph above, or arguments for or against inclusion, how knowledge that is not in harmony with the principles of modern science should be used, or how important it is to include such knowledge in the Science curriculum, depends on our ontology, axiology and worldview. Cobern¹⁰³ notes that when there is a clash of worldviews about such issues it is like Darwin presenting his views on evolution and natural selection to an audience of deeply religious people of his time – people speaking past each other. Thus tentative suggestions for establishing common ground towards a more mutually shared common perspective, which are aimed at providing a better basis for effective relationships than arguing past one another from value and knowledge frameworks that are often inexplicit (sometimes hidden), unshared and misunderstood, have been presented in this chapter – not with any degree of certainty, but as an attempt to stimulate further debate on the topic that may lead to better shared understandings.

As such, the argument in this chapter is not that one or another stance presented by proponents of the inclusion of indigenous in science, or by the resistors of inclusion, should be taken uncritically over the other. What is argued is that establishing common understandings of issues raised in this chapter should assist in finding ways of making science (and other subjects) more palatable, meaningful and understandable to students who come to the classroom with alternative, and often discordant, worldviews.

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Chapter 12

Revival of the university: Rethinking teacher education in Africa

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12.1 Higher education and African values

The calls made around the year 2010 to South African universities' faculties of education to train more foundation phase teachers in indigenous languages are a realisation of the transformation lag with regard to the learning of African languages. Language goes with culture but, unfortunately, many teachers work in schools without the necessary confidence to educate in African indigenous languages and some do not understand the African philosophies that underpin those languages. Indeed, it is implausible to think of indigenous knowledge systems (IKS) in higher education and in schools without acknowledging the crucial nature of indigenous languages. Any language denotes a number of aspects which include history, culture and identity. One misses numerous insights when one studies a group of people but does so without understanding the people's culture. Clearly, the study of any African philosophy in higher education institutions (HEIs) will be incomplete if the African indigenous languages are not accommodated.

For years in Africa intellectuals have stared almost impotently as African languages are taught in foreign languages at HEIs. This in itself can be seen as a way of controlling Africans by manipulating what African philosophy should entail. The African, cannot express what she or he wants to learn and has no say in that content – a condescending approach with its origins in how the colonialists viewed Africa and its inhabitants from the beginning. Wiredu¹ writes about the compulsion for an African philosophy of education to accommodate the African traditional conception of education. Yet this author is not unbending; he acknowledges that for an African philosophy of education to be prosperous in this complex world it must draw from Africa's heritage whilst it also borrows from resources available in other cultures. Furthermore, Wiredu² stresses the importance of African heritage and indigenous languages when he contends:

The first part of the combination requires a good understanding of our African heritage. For this we need to think as much as possible in our own languages. One reason for this is that during the period of colonisation

and domination the accounts of that heritage were generally written by non-African scholars, using naturally, the conceptual framework embedded in their languages.³

The African philosophy of education should address such aspects as entailed by the African heritage. The African Renaissance debate has opened what Kingdon⁴ refers to as "open policy windows" for African philosophies in the past decade. Various institutions in Africa are now talking about the need to Africanise education in institutions. This is an opportunity to transform institutions and Africanise them; yet as Kingdon⁵ points out that this opportunity (open policy windows) will not be there for long. Furthermore, he states that this opportunity comes occasionally hence policy entrepreneurs must act before an opportunity passes by because they do not know when the chance will present itself again. There is thus an urgency to replace the absolute Western tradition in African institutions of higher learning. Again Wiredu⁶ postulates that it is time that African values such as communalism, mutual aid and respect for age have to be systematically brought into HEIs for rational study.

Studying through African philosophy, though, is more than just studying indigenous languages. Waghid⁷ explains that African philosophy of education is concerned about the search to attain reasonableness so that ills such as ignorance and poverty can be resolved. African institutions of higher learning ought to pursue African philosophy because of the hope embraced by this philosophy as we step into the 21st century. Teacher education which embraces African philosophies will reflect hope in the future of the African child. Waghid⁸ posits:

[A]n African philosophy of education demonstrates the potential to promote justice, courage and truthfulness in individuals (that is goods or excellences internal to achieving moral maturity and refinement). In other words, African philosophy of education aims to contribute to the transformation of educational discourse in Africa, in particular empowering communities to participate in their own educational development, since the empowerment of communities, as well as their educational development, could be achieved through the use of whatever intellectual skills (rational and logical) they possess to eliminate the various dimensions of the African predicament.

The demands of the communities in Africa require HEIs that would respond to transformation in society. Teachers in initial teacher training programmes require teaching practices that would define and understand the dynamics endemic in African schools. Answers can be found in African communities but it is unfortunate that the communities are usually marginalised by university systems and curricula.

Van Niekerk⁹ highlights an aspect that is critical for purposes of this chapter when he talks about the socio-constructivist curriculum in teacher education. He firstly points out that the African philosophy does offer answers to current challenges in education. Van Niekerk¹⁰

also postulates that in recent years there have been initiatives to democratise curricula construction by involving all those who have an interest in the curriculum. He refers to this as the socio-constructivist perspective where the curriculum is negotiated among several role-players. ‘Curricula have to be contextualised in order to address problems, topics and issues that face a society’¹¹. This chapter explores the Africanisation of teacher training programmes in South Africa. The main thesis here is that, when universities evolve, they transform the culture and the philosophy, thus rediscovering new identities.

12.2 Knowledge: What knowledge?

The South African HEI has never been under so much pressure to transform. Debates surfacing demonstrate that even after two decades of freedom, there is still less African in institutions of learning. Sometimes, though, the question of whether or not it is necessary to follow the Western tradition or the African tradition in knowledge construction is posed as a debate. In the middle are those who point out that institutions of higher learning should use knowledge from various philosophical backgrounds. Griffin¹² writes about how higher education in the United Kingdom is in crisis: ‘More students with varied backgrounds and attainments have precipitated a crisis in how the teaching and learning process should be both conceived and managed’¹³. There are quite a number of challenges for higher education in (South) Africa today. Higher education students require education that is relevant to their everyday life as it has to provide a transformative experience in developing what is needed in their personal and professional lives¹⁴.

The South African education system is still suffering from the remnants of apartheid, which still renders education to a battleground. For many, education has to serve the purposes of social justice as it addresses social issues. Community values, culture and other societal factors should, however, also be considered in shaping the curricula and building the knowledge base at a HEI. McNair¹⁵ argues that the HEI today has to meet four challenges if it is to survive in the changing landscape. These four are knowledge-based economy; the learning organisation; globalisation and lifelong learning.

All four of these challenges signify the transformative role that higher education must play. Similar to Griffin’s idea cited above, Higgs, Higgs and Venter¹⁶ argue that for meaningful social transformation to occur in South African higher education, indigenised African innovations would also have to be taken into account. Decades after the transformation in the South African education system, necessary facets of this transformation still have not been addressed. It is symbolic to look at the absence of indigenous languages in HEIs today. This shows the reluctance of the system to utilise the indigenous knowledge systems. Arguably, without the recognition of indigenous languages, the indigenous knowledges embraced by language and culture will never be given the serious attention they deserve.

Africa has so many solutions to tackle famine, poverty, conflict and weak management; but all require formal education to activate the responses to these challenges.

Indigenous knowledge is used at the local level by communities as the basis for decisions pertaining to food, security, human and animal health, education, natural resources management and other vital activities. Indigenous knowledge is also a key element of the social capital of the poor and constitutes the main asset in their efforts to gain control of their own lives. Indigenous knowledge, like any other knowledge, therefore, has to be constantly used, challenged and further adapted to evolving local contexts.

Teacher education can learn from these factors, and for education to be liberating, it should focus on relevant contexts, especially the local. Teachers in initial teacher training programmes need to be able to facilitate learning that enhances the learners' ability to respond to pertinent social issues such as democracy and health. African scholarship can illustrate how people can respond meaningfully to various problems such as nature conservation and upholding values of Ubuntu in communities. African knowledge(s) can help the African society to withstand the challenges of a rapidly changing global economy as well.

Cranfield and Taylor¹⁷ point out that HEIs face many challenges in a fast changing global economy. The world has become more interconnected, hence knowledge economy is more crucial than ever. Cranfield and Taylor¹⁸ declare:

Higher education institutions today and in the near future, will experience different and external pressure influenced by globalisation, and the past few decades have witnessed the pressure on HEIs to respond to this global integration (Bloom). Globalisation refers to the process whereby countries become more and more integrated, mainly via movements of goods, capital, labour and ideas.

Furthermore, these authors point out that apart from the above, HEIs have to rethink their teaching, research and management as necessitated by globalisation and marketisation. Without proper or effective knowledge management, institutions of higher learning will fail to respond to the rapid changes in society. As African HEIs tend to present content that is divorced from their reality, African universities ought to take on a central role in combining global outlooks and local African models.

Teacher education programmes cannot afford to avoid the wave of changing knowledge management initiatives. Teachers ought to respond to the needs of society and this starts in initial teacher training classrooms. Rowley¹⁹ concurs with Cranfield and Taylor²⁰, as

cited above, when she draws the propinquity between the changing role of HEIs and the development of a knowledge-based society. Rowley²¹ states:

Universities need to be consciously and explicitly managing the processes associated with the creation of their knowledge assets, and to recognise the value of their intellectual capital to their continuing role in society, and in a wider global marketplace for higher education.

If teacher education accommodates the local as well as incorporating the global aspects, they will enhance the HEIs' ability to serve and be relevant to local communities. But knowledge management has to be a HEI-wide approach. It has to be embedded within the HEIs' vision and reengineering approaches. Laal²² points out that an institution's wide approach to knowledge management can lead to huge improvements in sharing explicit and tacit knowledge. HEIs should adapt to changing circumstances if they are to be effective. When knowledge management is done effectively, it leads to better decision-making, and improved academic and administrative services²³.

Frequently, when the concept of knowledge management is mentioned, people think of information and communication technology (ICT) only, yet knowledge management goes beyond this. However, ICT can be used to enhance African education. Mdlongwa²⁴ argues that in an endeavour to redress the historical imbalances in many African countries such as South Africa, the use of ICT can have telling implications in education. Mdlongwa also contends that African schools can overcome the challenges of low efficiency and productivity of both teaching and learning through the introduction of ICT in schools. HEIs should teach effective ICT curricula in teacher training programmes. Schools cannot stay behind because of the digital divide. Teachers have to be taught the use of computers and technology so that they are able to improve practice in their classrooms. Mdlongwa²⁵ also rightly explains that the introduction of ICT will not be a panacea to all challenges in schools. He contends, however, that not only will ICT improve African schools 'but in the long run will give South African people a comparative advantage in coping with and competing in an ever-demanding twenty-first century labour market and finding solutions to some of Africa's developmental challenges'²⁶. This leads us to the discussion on globalisation.

12.3 Globalisation

The policy brief by Trust Africa²⁷ highlights that Africa risks lagging behind in the global economy unless there is true transformation in higher education. Over the years many questions have been posed about the readiness of Africanisation to play a role within a globalised world. When people talk about an Africanised curriculum, the question of standards as well as globalisation frequently comes up. The main fear has been that

Africanisation of education will stifle the development of education in Africa. This argument is misleading for a number of reasons as it assumes that:

- o African experience is archaic and subordinate to Western values.
- o Knowledge can be gleaned only from the West, as Africa can provide no relevant knowledge.
- o The intellectual traditions in Africa cannot be trusted but should be viewed with suspicion.

Yet African communities and scholars have to assert Africanness as they argue for African philosophies in education. The African will argue from a position of strength when contesting with Western ideologies in education. The African reality should be more pronounced as students in African faculties learn about their experience before they make sense of other (Western) values. Teacher education that embraces these ideals strengthens the nation for the teachers will soon be in classrooms to mould the African children. Luckett²⁸ aptly summarises the need for an Africanised system of education in HEIs by saying that:

Higher education (HE) in Africa in the 21st century has to operate in both a post-colonial and a globalising context. On the one hand African intellectuals are calling for an end to the hegemony of Western thought and culture and for Africanisation of the higher education curriculum – or at least for greater responsiveness and relevance to African identity, culture and issues. In discussing the meaning of Africanisation in current South African higher education debates, Kister traces the genesis of the idea to Pan-African national-liberationist ideals of the 1960s.

The above excerpt demonstrates the necessity to heed the call for Africanisation in South African institutions of higher learning. HEIs that follow these aspirations will be ensuring that curricula encapsulate the African ideals. There are a few HEIs in South Africa that currently demonstrate the desire to Africanise not only in their staff recruitment but also in curricula as well. Frequently, this is illustrated by their vision and mission statements. The University of KwaZulu-Natal in Durban demonstrates its vision in its statement, 'To be the premier university of African scholarship', whilst the University of South Africa points out 'Towards an African University' These two examples demonstrate how the Africanisation agenda of higher education has become crucial in the transformation of post-apartheid HEIs.

In a globalised world, African education must respond to the challenges faced by Africans. Conditions rife in Africa such as poverty, illness, illiteracy, child mortality and conflicts are among the greatest challenges. Education in higher education has to address these issues.

The HEI has been changed by a number of factors in Africa and the world generally. Niang²⁹ writes about an obligation to rejuvenate the African HEIs and return its role to a creative centre that makes possible cultural exchanges and solidarity. He also supports acts of globalising the African HEIs as they attain networks for enhanced dissemination

of information. Furthermore, Niang emphasises the links between the north and the south as invaluable in ensuring that the African institutions will restructure themselves into 'strong regional centres of knowledge as part of a wider policy of African integration for development'. Globalisation of the African HEIs ensures that dialogue between cultures is achieved; that the HEIs, as they strive for Africanisation, do not overlook facilitating the cooperation of cultures.

Zeleza³⁰ also stresses this cooperation as he states:

International education cooperation involves activities ranging from academic mobility, internationalisation of curricula and programs, networking and linking arrangements to research collaboration and joint publishing. To be effective, academic exchanges have to be truly reciprocal and mutually beneficial, based on shared planning, implementation and evaluation process.

Zeleza³¹ argues that, in the case of Africa, there have not been effective academic exchanges. He argues that in African HEIs issues such as gender imbalance, inequities of class, race, location and language all have an impact on knowledge dissemination and consumption. Zeleza³² also underscores the unequal exchange between African HEIs and HEIs from the north. He says that the linkages are usually unequal and unproductive and tend to follow the remnants of colonial ties. Okoli³³ also argues that globalisation in African universities has become an uneven process that has divided the world into the 'haves' and 'have-nots'. He writes about the 'flight of talents' as many promising African intellectuals leave for the North. He contends:³⁴

The forces of globalisation have subjected African nations to a state of absolute poverty and marginalisation from world economy and education. Many African nations do not benefit from opening their economies despite the well-publicised claims of export and income gains. The economic losses and social dislocation that are being caused to many developing countries (especially Africa) by rapid financial and trade liberalisation, the growing inequalities of wealth and opportunities arising from globalisation; and the perception that environmental, social and cultural problems have been made worse by the workings of global free-market economy, cannot be quantified.

Despite these arguments, there are myriad persistent debates today that call for the compulsion for Africa to open up for globalisation. Okoli³³ argues like Ajayi³⁵ as they maintain that Africa can benefit from globalisation only if there is use of suitable policy measures. Furthermore, Ajayi³⁶ points out that African countries must take necessary steps towards the evolution and development of a coordinated trade strategy.

12.5 Changing teaching: Fostering lifelong learning

Irvine, Code and Richards³⁷ discuss the inevitability of realigning and reinventing higher education as we move towards multi-access learning. With technology, learning can now happen anytime and anywhere in HEIs. These institutions also have to change because of the nature of the new students that they enrol and the tools that they are exposed to. Irvine et al.³⁸ emphasise the need and emphasis on student attention. These authors also write about the requirement for universities to personalise learning experiences. Furthermore, they argue:

Multi-access learning is different from blended learning because it places the student at the centre of the learning experience as opposed to the instructor or the institution. Further, 'blended learning' is a problematic term due to its multiple interpretations in the literature and in daily practice, leaving one to ask, 'Who controls the blend?'

Multi-access learning, however, has the learner at the centre, with the ability to choose how he/she wants to access the course. The core principle of the multi-access framework is one of enabling student choice in terms of the combination of course delivery methods through which the learning environment is accessed.

HEIs in the 21st century should support the increased access as massification in countries such as South Africa is gradually happening. The student must be pivotal in the planning of university programmes. In restructuring universities, it will also be crucial to rethink the way faculties teach. The rapid and constant changes in society require a different kind of student who will respond to the current and future challenges. Technology is changing the business of higher education as we know it. The traditional teacher-centred classes are being replaced by mixed mode delivery in various sites as learning does not happen in university classrooms only. Perhaps a concept that captures the new aspect of teaching in today's higher education is heutagogy.

Hase and Kenyon³⁹ point out that there are huge gains in moving from andragogy to heutagogy. These writers refer to heutagogy as truly self-determined learning which also builds on humanistic theory and approaches described by scholars such as Knowles. They see the important role of heutagogy in the 21st century HEI. The ideas shared by Knowles in andragogy changed the teacher-centred approaches. Andragogy emphasised the necessity for education methodology to improve the teacher-learner relationship. The latter is what heutagogical principles oppose:

It may be argued that the rapid rate of change in society, and the so-called information explosion, suggests that we should now be looking at an educational approach where it is the learner himself who determines what and how learning should take place. Heutagogy, the study of self-

determined learning, may be viewed as a natural progression from earlier educational methodologies.⁴⁰

Effective open and distance learning (ODL) education, for example, is based on these principles. Heutagogy as implied above has transformed the university teaching where the student will take the centre stage. Universities of the future that are changing their ODL teaching methodologies will seek to move beyond andragogy because of the advanced technological revolution. Hase and Kenyon⁴¹ again contend:

This revolution recognises the changed world in which we live. A world in which; information is readily and really accessible; where change is so rapid that traditional methods of training and education are totally inadequate; discipline based knowledge is inappropriate to prepare for living in modern communities and workplaces; learning is increasingly aligned with what we do; modern organisational structures require flexible learning practices; and there is a need for immediacy of learning.

The introduction of heutagogical principles talks to the building of a responsive campus. Inflexible universities that do not accommodate heutagogical principles might not meet the challenges of the 21st century university. Daniel⁴² listed five accusations that have been levelled against universities worldwide:

- o National university systems are not accommodating the volume and variety of student demands.
- o Higher education is too costly and does not deliver graduates with skills valued by employers.
- o Teaching methods are too inflexible to answer the needs of a diversifying student body.
- o The quality of higher education is not assured.
- o The sense of the university as an academic community is being eroded.

The adoption of technologies associated with heutagogy can address some or all of the above shortcomings. Online learning can be a crucial answer to the technology age of the 21st century. Heutagogy also demonstrates that people have a natural proclivity to learn. The latter implies that the society has strongly stressed the role of the teacher. Heutagogy, as the arguments above show, minimises the role of the teacher. Roger as cited by Hase and Kenyon⁴³ highlights five key hypotheses about student-centred and teacher-centred approaches:

- o We cannot teach another person directly, we can only facilitate learning.
- o People learn significantly only those things that they perceive as being involved in the maintenance or enhancement of the structure of self.

- Experience which if assimilated would involve a change in the organisation of self tends to be resisted through denial or distortion or symbolisation, and the structure and organisation of self appear to become more rigid under threat.
- Experience which is perceived as inconsistent with the self can only be assimilated if the current organisation of self is relaxed and expanded to include it.
- The educational system which most effectively promotes significant learning is one in which threat to the self, as learner, is reduced to a minimum.

All these points show the requisite to magnify the students' role in the teaching and learning encounter. With the demand to transform the African HEIs existing in a globalised world, there is an obligation to carefully scrutinise teaching and learning strategies. Academics debate on the necessity to rebuild the HEIs and form what other authors refer to as authentic universities⁴⁴. In my previous research, I have argued for a change of strategies in teaching⁴⁵. In the past many African universities provided teacher-centred classes and some still are providing them. Lecture halls were all about students regurgitating the lecturers' notes as they reproduced knowledge.

I have, however, argued for the selection of new approaches such as heutagogical principles at universities. Van Wyk and Higgs⁴⁶ aptly put this when they state that traditional African educational thought is characterised 'not only by its concern with the person, but also its interweaving of social, economic, political, cultural, and educational threads together in a common tapestry'. Van Wyk and Higgs⁴⁷ add that education in Africa has a collective and social nature and is very close to communal life. Ideally, modules studied should reflect elements of collective sharing of experiences as the students acquire skills. 'The emphasis on communalism...in traditional African thought and experience also requires higher education in the African context to pay attention to interpersonal and interactive skills'⁴⁸.

Van Niekerk⁴⁹ also spells out the role of community in open and distance learning. He points out that in ODL people should not create an environment that brings forth a culture of teacher dependence but rather one that promotes independent and co-dependent learning. Furthermore, Van Niekerk⁵⁰ contends:

In establishing communities of learning the teacher as facilitator will have to devise cooperative learning strategies and foster a collaborative environment that discourages a teacher-dependent attitude. The teacher's task would be to create a context for learning and to be a mediator in developing a learning culture and establishing a community of learning.

Therefore, even when the students are studying online courses they have to share ideas constantly. This sharing of experiences is a true reflection of the African village. The coordinator leads in a democratic fashion as she listens and follows the groups' discussions. This is the only way that she can help each group develop. For effective learning to occur, each member of the group has to participate effectively. The module

coordinator for assessment looks at the contributions of each member. The study group, like a group of villagers, will only be as effective as the contribution of its members. The village leader will be as strong as the bond of unity in the village. More openness is promoted by heutagogical models. In a group one will not learn effectively if some members of one's group are not contributing. The experiences of all are crucial and this promotes democratic learning as well.

12.6 Democratic learning: Each one teaching the other

There has never been more pressure for HEIs to work closer with communities as it is today. Democracy in teacher education within the African context refers to the collaboration of higher education institutions' faculty with local community settings. Effective HEIs will ask the following questions:

- o What do communities want?
- o How do we want our student teachers to learn this?
- o Who do we involve in shaping the curricula?

When we approach education and ask similar questions, we would need to have relevant systems that serve the needs of the communities. Shaffer⁵¹ writes about the need for deliberation in and through higher education. He points out that this has been used as a tool for HEIs to understand issues of diversity and ensure that students engage in debates about issues of concern. Understanding African issues as understood by society requires students to reach out to local communities. Amongst others, HEIs can promote action research that forms part of the teacher education curriculum. In this way student teachers can learn to address societal challenges whilst they are in initial teacher education. For example, one would understand children better when one understands the community from where the children are coming.

Shaffer⁵² argues about the need for deliberation in the classroom and the community. The new teachers ought to understand the link between school and community. HEIs have to instil certain values in their academic programmes. Furthermore, Shaffer⁵³ contends:

Using deliberation in both the classroom and community adds yet another way to address public issues alongside service learning opportunities that position students and faculty members as co-creators with the broader community around new insight or knowledge. As Doherty puts it, 'Students are not doing for or learning about, but rather are engaged in relationships marked by reciprocity (Doherty, 2012, pp. 25–26).

When higher education does this, it alters the traditional role of a university as an ivory tower and ensures that it becomes a centre for democratic deliberation. This consultation and working together with the community and other role players is the basis of Africanising

the curriculum. The Africanisation of the curriculum is about transformation and democratic education. It seeks to involve all those groups who could not be part of the deliberations before the end of apartheid.

For many decades before and during apartheid education in South Africa did not serve the interests of the learners. It lacked relevance. Chepkuto and Kipsang⁵⁴ argue that curricula have to be harbingers of African values; however, this has not been the case because education in Africa has been undemocratic and merely a production of Western values. These authors point out that any transformation of social sciences and humanities, for example, should regard the African experience as a point of departure. Teacher education has to embrace the local cultures and traditions. It needs to look at possibilities of addressing local problems. This requires solidarity among stakeholders and is the basis of democracy in education.

12.7 Relevance: Studying the local

Sometimes education is dominated by cultural hegemony where the students study through an imposed culture or another perspective rather than their own. This cultural domination is perceived through the use of aspects such as language, methods, content and curriculum. As pointed out above, content presented in African HEIs has to reflect the students' lived experiences.

Louw⁵⁵ states:

It is clear that the time has come to rethink the local content of subject areas. By changing the curriculum in accordance with societal needs, we will change the way in which teaching and learning are constructed. Vilakazi warns that there is an urgent need for education and development policies to be synchronised, and for a specific local curriculum with appropriate knowledge to be designed. A restructured higher education curriculum is therefore needed, where African reality is taken seriously alongside Western ideas.

Teacher education has to accommodate these sentiments to ensure that higher education uses what the students experience in their environments. Furthermore, Louw⁵⁶ sees this as the direction that higher education in Africa has to take as he argues that it should focus on the rebirth of an African voice and identity. Learning about a relevant African experience in Africa leads to the emancipation of the students. The relevant content empowers and frees the students who get to understand and be proud of who and where they are. Nkoane⁵⁷ succinctly captures the requirement for students to be committed African intellectuals. 'Afrocentric education seeks to foster in its learners an African consciousness

and behavioural orientation which will optimise the positive expression of African learners' fundamental humanity and ability to contribute significantly to the total growth and development of the African community of which an African learner is a member'⁵⁸.

12.8 Conclusion

This chapter showed that time is ripe for teacher education to be linked to the African experience. It also shows that this experience frees them from the throes of studying content using a Western view that is so removed from their own experience. The African consciousness instilled by Africanisation in students emancipates the way they view the professional life of the teacher. This is crucial in understanding the local communities where many of the student teachers will teach. Knowing the consciousness of the local communities will make these teachers face the teaching world with confidence and passion. Teachers must have this emancipatory pedagogy where they would clearly see their future role in teaching. In fact, all teacher education programmes in Africa should be able to reflect the students' future experiences in schools. Starting from the relevant surroundings will always feed the teacher with the necessary confidence. ODL institutions in Africa should take the lead in ensuring that higher education liberates and empowers the future teachers.

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Chapter 13

Africanisation: Answering back, a cultural revolution

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13.1 From Makgoba to falling roads

Some of the readers of this book may be aware that the publication of this book has a historical significance in South Africa, for at least two reasons. The first is that since 1995, it is exactly twenty one years since the then Wits University's deputy vice-chancellor, Malekgapuru William Makgoba, called for the 'Africanisation' of institutions of higher learning in South Africa. The reaction to Makgoba's call, as will be shown later, was both dramatic and vicious. This historical feature in the struggle for the Africanisation of education has not been given attention in this book. Leaving it out will deny a historical context to the researcher interested in the development and struggles for Africanisation. This chapter attempts to fill that gap so as to understand how the quest for Africanisation in South Africa has been embraced or rejected. But this chapter does not end there – it compares how Africanisation has been addressed in the greater African continent and the African diaspora, and what the African family scattered all over the world can learn from sharing notes regarding their experiences in the struggle for self-determination. Another significant event of historical significance, twenty one years since Makgoba's call is the dramatic action that began at the University of Cape Town (UCT), where one black student, threw faeces at the statue of Cecil John Rhodes, and called for its removal. But not only did the black students, who called themselves the Rhodes Must Fall Movement, call for the removal of the statue. They called for an Afrocentric education, as opposed to what they perceived as a Eurocentric education. The call for an Afrocentric education soon spread out to other universities in South Africa that are historically white. Against this background, the publication of this book is timely. To appreciate its timeliness, we must take a journey into the past of the struggle for Africanisation of education, and situate this into a historical context.

13.2 Africanisation: A historical context

In order to appreciate this book's timeliness, it would be necessary, just for a moment, to leave Africanisation, in the South African context, and examine this concept in a wider African sense. In Igbo, one of Nigeria's languages, there is a word, *Nzagwalu*, which means 'answering back'¹. This 'answering back' takes place 'when you have suffered an insult'². Distinguishing 'protest' from *Nzagwalu*, Amadiume³ points out that 'protest implies powerlessness, while *Nzagwalu*, affirms confidence and certainty'. On the occasion of the publication of this book, Amadiume's observation and the Igbo word come to mind. That is so because in invoking the word *Nzagwalu*, Amadiume⁴ is addressing the concerns that are central in this book, that is, 'African-centred responses to European imperialist stranglehold on the production of African studies and the interpretation of African history'. To better appreciate the stranglehold that Amadiume refers to, those who do not know need to be informed, and those who may have forgotten, reminded, that initially 'African Studies were invented by Europe and that the ethnographic sciences are an integral part of the heritage of Europe, amounting to no more than a passing episode in the theoretical tradition of the Western peoples'⁵. Driven by a quest, partly 'to understand Africans better in order to make their governance or conversion to Christianity easier, or simply out of curiosity in the presence of new and to the Europeans, strange ways of life, European ethnographers began to study Africans'⁶. The quest on the part of the Europeans to 'understand' Africans was not informed by a desire to genuinely 'understand' but to 'master' knowledge about Africans in order to conquer them. Having studied Africans, European scholars concluded that:

not only were Africans radically different from Europeans in the hue of their skin, but that they were also radically different in their...capacity for rational thinking. They emphasised the irrational, and non-logical nature of African thought'.⁷

Taking this into cognisance, it has been argued that 'given the fact that African studies were invented by Europeans, Africans today should not merely carry on these disciplines as shaped in Europe. Africans must reinvent them'⁸. Those familiar with struggles against colonisation or Westernisation of scholarship tend to assume that the stranglehold on African studies is understood by everyone. We have to, without condescending or patronising the reader, take her/him with us on this journey of appreciating the intricacies involved in the struggle for the Africanisation of education.

No clearer illustration does this better than the case of the Senegalese scholar, Cheikh Anta Diop. In 1951, Diop submitted a doctoral thesis to Sorbonne in which he argued that the ancient Egyptian civilisation was a Black civilisation⁹. The thesis was met with 'hostility, derision and rejection by the Western scholars at the Sorbonne'¹⁰. In 1967, less than three hundred yards from the office of Cheikh Anta Diop at the then University of Dakar, the International Congress of Africanness held a meeting to which Cheikh Anta

Diop was not invited¹¹. In Clarke's view¹² Diop was not invited because the 'sponsoring organisation, the African Studies Association, was then dominated by white scholars, and to this day it has not recognised the scholarship of Cheikh Anta Diop and his contributions to a new concept of African history. Neither his name nor his work was mentioned at the conference.' It took at least two attempts after the initial attempt, and nine years before Diop was able to gain his doctorate¹³. The denial of a passing verdict for Diop was seen by Africans as an act of 'French professors who were dumbfounded, disturbed, and angered that a Black student had the audacity to write that the ancient Egyptians were Black'¹⁴. Diop was an undesirable element to those who continued to seek to have a grip on African studies so as to distort it and to disempower Africans. By putting emphasis on the 'Blackness' of Egypt, Diop was restoring the denied greatness of Africans. For if, as Lefkowitz¹⁵ points out that the purpose of her book, *Not Out Of Africa*, 'argues that the Egyptians were an African people and praises their achievements' then it exposes as lies claims by Western philosophers such as Immanuel Kant¹⁶ that Africans have historically made no contribution in arts and natural sciences. We shall assume here that Kant failed to read the Greek philosopher Plato's *The Laws* in which he points out that 'long ago, apparently, *they realised the truth of the principle we are putting forward only now*, that the movements and tunes which the children of the state are to practise in their rehearsals must be good ones' (italics added for emphasis)¹⁷. Not only does Plato¹⁸ openly admit that the Egyptians were ahead of the Greeks in artistic discoveries, but goes on to point out that:

if you examine their art on the spot, you will find that ten thousand years ago (and I'm not speaking loosely: I mean literally ten thousand), paintings and reliefs were produced that are no better and no worse than those of today, because the same artistic rules were applied in making them.

Not only did the Egyptians excel in the arts, but in mathematics which Plato¹⁹ urged the Greeks to emulate:

So we should insist that gentlemen should study each of these subjects to at least the same level as very many children in Egypt, who acquire such knowledge at the same time as they learn to read and write.

In plain-speak Plato urged that Greek adults should acquire skills that Egyptian children learnt as children while playing. It should then come as no surprise when Lefkowitz²⁰ points out that the ancient Egyptians possessed 'sophistication in geometry and astronomy'. As a result of this sophistication, Lefkowitz²¹ further informs us, 'Greeks tended to be so respectful of Egyptian learning that they were eager to use it whenever and wherever they could'. Lefkowitz is not alone in acknowledging the ancient Egyptians' acclaimed renown. Tyldesley²² informs us that 'Egypt was universally regarded as the centre of the civilised world, and the Egyptian royal court was acknowledged as the epitome of sophisticated luxury'. Without descending into acts of chest-beating, there is a need to elaborate on the Egyptians' sophistication in natural sciences. That is so because often, when African

science, otherwise referred to as Indigenous Knowledge Systems (IKS), is discussed this is done in an apologetic fashion and treated with sympathetic acceptance. Africans have no business to beg for recognition from anyone. Not when we learn from Herodotus²³ that in ancient Egypt:

The practice of medicine is highly specialised: individual doctors will treat individual ailments, rather than the whole gamut of diseases. As a result, Egypt positively teems with doctors; some specialise in treating eyes and others heads, some are dentists and others tend to the stomach; some specialise in obscure illnesses.

El Nadoury²⁴ observes that one 'outstanding example of the genius of the Ancient Egyptians is mummification'. That is because it 'shows their mastery of a number of sciences including physics, chemistry, medicine and surgery'²⁵. In this exercise, they 'exploited the discovery of the chemical characteristic of natron...The compounds of natron have been analysed in modern times as a mixture of sodium carbonate, sodium bicarbonate, salt and sodium sulphate'²⁶. What this points to is that the 'Ancient Egyptian, therefore, was aware of the chemical functions of these substances':²⁷

In the process of mummification he soaked the body in natron for seventy days. He drew the brain out through the nostrils and he also removed the intestines through an incision made in the side of the body. Such operations as these necessitated an accurate knowledge of anatomy, and the good state of preservation of the mummies illustrates this intimate knowledge.

Further, Tyldesley²⁸ informs us that 'All foreigners wished to emulate the Egyptians and the Egyptians themselves were firmly convinced of their own cultural superiority'. Not to leave us in any doubt, Tyldesley observes that 'No Egyptian was likely to see a foreign education as in any way beneficial to an Egyptian prince'²⁹. Taking Lefkowitz and Tyldesley's observation, it is very clear that ancient Africans were the first and second to none in educational standards. Their advanced and advancing civilisation was disrupted and arrested by foreign invasions and occupations. Having said that, the point that this book is not making clear, and which should be made explicit now is that talk of Africanisation of education is not about taking Western or any other type of education and making it 'African'. Rather, Africanisation of education – re-Africanisation would be more appropriate – is about reclaiming what is indigenously African. In the face of overwhelming disempowering disinformation that claimed that Africans had made no scientific contribution to the world, Negritude Movement activist, Aimé Césaire³⁰ proclaimed about Africans:

Those who invented neither powder
Nor the compass
But who ecstatically leave themselves
To be carried away
Toward the essence of everything

Not caring about dominating
But good at the game of the world
The flesh of the flesh of the world
The throbber of the movement of the world itself.

In a similar vein, another Negritude Movement activist Leopold Senghor³¹, declared that ‘Emotion is Negro and reason is Greek’. These Africans succumbed to this distortion because, as Asante³² notes, even though they were ‘pro-African and profoundly anti-European domination’ and ‘sought to express themselves as Africans...they had no scientific base from which to do so in a thorough manner’. This defencelessness on the part of Africans ignorant of their own history is well-captured in a narrative by Amadiume³³ about a painful experience of African students who confronted their all-white European lecturers over the curriculum content of African Studies at the School of Oriental and African Studies. The students were ‘questioning what was being taught, how it was being taught, and who was teaching it’³⁴. After a meeting to discuss the issue, the one white lecturer who bothered to attend felt triumphant because he argued that besides questioning why African studies were taught by white Europeans, the students ‘did not seem to have an answer when asked what they meant by history being taught from an anthropological perspective’³⁵. Such are ‘situations which leave the disempowered so humiliated and wounded as a result of uses and abuses of privilege and power’³⁶. This is so because, as Amadiume³⁷ notes, even though the African students had been very sure how they felt about these issues in their various courses, and quite articulate in analysing them during their meeting, when it came to saying ‘all these things’ to their lecturers, they realised that they did not quite know how to express themselves in an academic manner that would command the respect of their lecturers. So they lost and the lecturers won.

Amadiume’s solution to the African students’ ordeal was the prescription of Diop’s works. It was for this reason that Diop was isolated in the academic environment. Years later, Makgoba³⁸, though not necessarily referring directly to the case of Diop, would sum up Diop’s experience by noting that ‘those who attempt to articulate ideas or think differently from the old establishment are marginalised through systematic victimisation. *What is often forgotten are the pain, the loneliness and frustrations of those who are seeking transformation.*’ (italics added for emphasis) The pain and loneliness that he writes about is from a personal, first-hand experience.

13.3 Africanisation – reactions and resistance

In October 1994, Malegapuru William Makgoba became the first African deputy vice-chancellor at Wits University, a historically white educational institution³⁹. Three months after Makgoba’s arrival at Wits, among the priorities that Wits had to address, in his view, were ‘Transformation, Affirmative action, increased Access and a Cultural Revolution’⁴⁰.

Of these priorities, the one that was to draw ‘more attention or sensation’ was the ‘cultural revolution’⁴¹. This was so, in Makgoba’s view⁴², because:

Liberals do not want to dwell on values and culture systems in their debates on programmes for transformation. Culture is too threatening and too close to home to debate. It goes right to the heart of the identity issue, something all liberal philosophies throughout the world have tried consciously or unconsciously to avoid.

Makgoba⁴³ was fiercely determined that ‘it was about time African values and systems were taken seriously into our academic activities’ because ‘Africans in particular do not come to university to escape or erase the Africanness, but to confirm and articulate their roots’. Makgoba’s mission, therefore, was ‘to put African values and culture on the same level of respectability as those of other nations’⁴⁴. This was crucial for him because many studies had shown that culture is pivotal to education and successful development⁴⁵. His sense and observation though was that not only did Wits ‘not recognise African values’ but ‘in fact despised these’. An ‘African university’ in Makgoba’s⁴⁶ view ‘must be one that draws its inspiration from its environment, not a transplanted tree, but one growing from a seed that is planted and nurtured in the African soil’. He further points out that an African university ‘surely cannot be the same as the one in Europe, the United State, Japan or China’⁴⁷. That is because, Makgoba further notes, ‘when Europeans decide about their institutions, be they French, German or British, the first principle is to capture the essence of France, Germany or Britain’⁴⁸. In explicit terms, in the context of higher education, what ‘Africanisation challenges is the superiority mentality of racism and the imitative philosophy that in the long term will lead to the perpetual albeit sophisticated enslavement of Africans into the future. Africanisation also challenges the imposition of foreign and often alienating behavioural patterns and university systems by others. Africanisation seeks to provide a basis for originality and uniqueness that can contribute meaningfully to global knowledge and civilisation’⁴⁹.

The call for Africanisation of higher learning is a recognition that ‘universities as institutions of society are an invisible powerful force that shape the destinies of present-day nations’⁵⁰. In order to appreciate Makgoba’s observation, it becomes imperative to refer to Rodney⁵¹ about the objectives of European education in Africa. Rodney notes that when Governor Cameron was attacked for trying to preserve the African personality in the educational system in the then Tanganyika, ‘he denied the charge and declared that his intention was that the African should cease to think as an African and instead should become “a fair-minded Englishman”’⁵². The implication of this European educational policy was that ‘those who were Europeanised were to that extent de-Africanised, as a consequence of the colonial education and the general atmosphere of colonial life’⁵³. What this means is that there was a conscious move to turn Africans into honorary Europeans. The project of de-Africanising and simultaneous Europeanisation of Africans should under no

circumstances be confused or mistaken with the notion that Europeans regarded Africans as equals. Rather, the idea was that for Africans ‘to become civilised they must cease to be Africans, but in order to ensure that this should duly and completely happen, they should never be allowed to become Europeans’⁵⁴. Instead, Africans were to be reduced to ‘wander in some no-man’s land of their own until the trumpet of destiny, at some unthinkable time in the future, should swing wide the doors of civilisation and let them in’⁵⁵. European education meant that ‘Europeans thoughtlessly applied their own curricula without reference to African conditions; but very often they deliberately did so with intent to confuse and mystify’⁵⁶. African children were ‘taught about flowers – and about European roses at that’⁵⁷. It has to be stated that Europeanisation of Africans through education transcended the immediate gains. As Rodney observes, there were ‘a few farsighted Europeans who all along saw that the colonial education system would serve them if and when political independence was regained in Africa’⁵⁸. In anticipation of the inevitable regaining of African independence ‘the colonialists were training low-level administrators, teachers, NCOs, railroad booking clerks, for the preservation of colonial relations; and it is not surprising that such individuals would carry over colonial values into the period after independence was gained’⁵⁹. What this implies is that European colonialists meant to perpetuate their stranglehold over Africa through education, or more appropriately, mis-education of their agents in Africa. In answering back to the European onslaught, Africanisation is a move informed by a conviction that the ‘choice of what to teach, who to teach and how to teach and what to research has to be driven by Africans themselves’ from Africans’ own perspectives, a firm statement that it is ‘no longer academically, socially or politically acceptable to define and determine the agenda and purpose of an African university from a remote continent, no matter how well-intentioned’⁶⁰.

This insistence on an African-centred and determined educational agenda is an appreciation, as pointed out by Amadiume⁶¹, that ‘scholarship and the classroom are spaces of political struggle, just as much as anywhere else’, and echoed by Asante⁶², that ‘the academy is also an important place of contestation, and that liberation required preparation of the people on every front’. In as much as Makgoba and those who echo his views understand that the university is a contested space, those opposed to this vision, would not sit by silently, arms folded. In the letter section of *The Star* newspaper, Louw⁶³ took it upon himself to tell Makgoba that the ‘university is a Western concept dating from the Middle Ages, not an African concept. Nor is it a trade union. Its very nature is hierarchical and it was never intended for the masses.’ Further, Louw⁶⁴ wondered aloud that considering Makgoba’s call, ‘how will Wits shape as a university in ten years’ time since academic standards are no longer a sine qua non, and excellence has departed.’ In plain-speak the call for the Africanisation of a university was tantamount to a call for the lowering of excellent standards. Echoing similar sentiments in the same edition of *The Star* newspaper, engineering consultant and Professor Emeritus, Dr I.S. Shaw⁶⁵, pointed out that that it was ‘undeniable that to date a great deal of the world’s progressive ideas

in science and philosophy have come from Europe, notwithstanding the colonialism, oppression, racism, and exploitation that often accompanied it'. With reference to the issue of academic standards, Shaw unequivocally stated that 'no matter how Makgoba intends to transform our local universities, the proof of quality will be in how our graduates will be accepted by the world at large and how our research will stand up to overseas peer reviews'⁶⁶. Makgoba needed to know, Shaw further pointed out, that the 'scientific world uses European standards as evaluation criteria to judge countries that engage in the search of knowledge and run institutions of higher learning'⁶⁷. Shaw insisted that 'if we do not meet world standards, our degrees become worthless; if we stop doing research or acquiring 'knowledge for its own sake', the world community will write us off in these areas'⁶⁸.

To a visiting professor in the political studies department at Rhodes University, Robert E. Dowse, Makgoba's articulation on Africanisation, 'sounded like hot air escaping'⁶⁹. He felt that it was his duty to inform Makgoba that 'A University is no place for mere verbiage'⁷⁰. Engaging with Makgoba's call for the encapsulation of the 'essence of Africa' into the African university, Dowse took it upon himself to lecture and inform Makgoba that 'Africa is a complex place', further telling him that 'for a start, no one seems able to define its boundaries', and noting that 'no one I have ever read seems to believe that Somalia has much by way of culture in common with Ghana or even with Ethiopia'⁷¹. Mockingly, Dowse further observes that 'Professor Makgoba himself, when writing of South Africa, refers to its African, European and Oriental roots. So much for the 'essence of Africa'⁷². For those familiar with debates around 'African culture' Dowse was repeating the charge that Africa is no homogeneous but a heterogeneous continent with nothing in common that can be referred to as 'African culture'. Makgoba was not without answers to these arguments. To begin with, he pointed out that 'international recognition' should not be confused with 'foreign qualifications'⁷³. Furthermore, Makgoba, pointed out that international recognition 'is prestige that is accorded by your peers in the field in which you profess to be an expert. It is authority that is based on first class scholarship.' On the other hand, the worship of foreign qualifications is the tendency of colonies seeking recognition from former colonial masters, be they French, Portuguese or English⁷⁴. With specific reference to South Africa's quest for foreign recognition, Makgoba notes that there are at least two logical reasons for this 'imitative approach'⁷⁵, namely, to maintain international standards and recognition that are acceptable to the colonial power and to facilitate the education and subsequent return of the colonists back to the motherland.

Within nine months of his arrival at Wits, 12 of the university's dons, including eight deans and one registrar signed a petition that challenged Makgoba's curriculum vitae⁷⁶. He later left Wits and became the University of Kwa-Zulu Natal's vice-chancellor.

Almost two years after the fire started at Wits, the University of Cape Town (UCT) declared itself a 'world-class African University'⁷⁷. The term 'world-class' meant scholarship

that 'covers the extension of the university into the community into which it is situated at a regional, national, continental and international level'⁷⁸. The term 'African' meant 'commitment to the African continent as a geographic entity and a political entity in a world where geopolitical forces are in competition for scarce resources'⁷⁹. Nineteen years after the UCT declared itself a 'world-class African University', its students went up in arms, declaring that it continued to be a Eurocentric university despite its claim to being a 'world-class African University'⁸⁰. The UCT students demanded to know why this institution in 2015, despite being known as a world-class African University 'still has no black female professors...Ask students how many black lecturers they've had since they began university, compared with white lecturers'⁸¹. This, the students rejected and called for an Afrocentric university.

13.4 The call for Afrocentric universities: Examining implications

The call for Afrocentric universities spread to other universities. At Wits, 'a group of South African students...compiled a 12 000-word document about what they think an African curriculum should look like'⁸². This move was taking place twenty one years after Makgoba called for an African university. At the University of Kwa-Zulu Natal, whose mission is to make it a premier university in African scholarship, where Makgoba was the vice-chancellor since 2012, stepping down in 2015, the students at the university were not happy that while the institution is 'known for striking and every strike has raised issues of transformation and the syllabus... the campus is still not Afrocentric – look at the examples in our courses, and the case studies. It's all about European life'⁸³. Come 2016, the students envisaged that 'the curriculum will be changing and with the help of certain progressive lecturers and heads of school it will change to become Afrocentric'⁸⁴. The observation by Mazama⁸⁵ that others 'seem to take it for granted that the term Afrocentrity is self-explanatory, and as a result, do not bother to define Afrocentrity' seems to have been the case in South Africa, with particular reference to the Rhodes Must Fall Movement. This is so because while it is perfectly right that the Rhodes Must Fall Movement has called for an increase in the presence of African lecturers in institutions of higher learning, they did not critically engage with this issue. The interrogation of the Afrocentric African-American experience in this regard would be useful. Asante⁸⁶ notes that 'in our rush to establish the perspective, we even demanded that only Black teachers teach in the programs until we discovered that perspective is not a biological issue. Some of the Black professors taught from a white perspective.'

So as to avoid confusion, the Afrocentric movement named its educational project 'Afrikology', spelt with a 'k', or 'Africology' spelt with a 'c'. It is a concept that has not been given the necessary attention it deserves in this book, but equally true is that no single book can address everything that is there on its subject. Nabudere⁸⁷ defines 'Afrikology' as

an ‘epistemology – a philosophy of knowledge production – emanating from the Cradle of Humanity in Africa’. It is ‘not an ethno-centric philosophy but geographical in that it was located on the African continent and historical in its origins on the African continent’⁸⁸. Asante⁸⁹ defines Africology as the:

Afrocentric study of phenomena, events, ideas, and personalities related to Africa. The mere study of African phenomena is not Africology but some other intellectual enterprise... Afrocentric is the most important word in the definition, otherwise one might think that any study of African phenomena or people constitutes Africology. It is the commitment to perspective and method that distinguishes the discipline from others.

Karenga⁹⁰ defines Afrocentricity as ‘a quality of thought and practice rooted in the cultural image and human interests of African people’. At its base, Asante⁹¹ notes, Afrocentricity is ‘concerned with African people being subjects of historical and social experiences rather than objects in the margins of European experiences’. It should not be taken for granted that everyone understands what is meant by being a ‘subject’ and an ‘object’ of study. The former implies being active in this exercise, and the latter implies being passive. The concern of Afrocentricity, therefore, is that Africans must have a voice and authority on issues relating to the totality of African experience. This includes speaking with authority and clarity on issues of African culture, and a rejection of an imposed definition of African culture by those outside the African cultural experience. If Africanisation is to have any meaning, there must be boldness in the definition of ‘African culture’ by Africans. This is especially so if advocates of Africanisation such as Makgoba⁹² argue that it is ‘essential to recognise that true development occurs only when scientific thought and technological practice become part and parcel of a people’s culture’ and that ‘education of whatever form becomes successful when it is user-friendly and underpinned by the people’s culture’.

At this point it needs to be recalled that before scholars such as Cheikh Anta Diop emerged on the scene, ‘African culture was typically examined by Western-trained scholars from a European perspective’ who ‘often wrapped in the swaddling clothes of a fully emergent European ideology, were often incapable of understanding the unity of African culture’⁹³. Not only were these Western scholars incapable of understanding the unity of African culture, but they insisted that ‘Africa was not united in culture; that Africa south of the Sahara was ‘Black Africa’ and north of the Sahara was the Middle East, that ancient Egypt was not in Africa and that the people of ancient Egypt were not Africans’⁹⁴. The argument against the unity of African culture by ‘those of the anti-African culture school is that the African culture cannot exist because Africa encompasses too many ethnic groups’⁹⁵. With precision, Asante further notes that ‘such an argument is not made with regard to European culture or Asian culture’⁹⁶. Asante is spot on if we consider that the respected and prolific British historian, Basil Davidson⁹⁷ uses the concept ‘European culture’, and Michel Foucault⁹⁸ also uses it in one instance, and in another instance both ‘European

culture' and 'Western culture'⁹⁹ without even a whisper in reaction, yet when Africans speak about 'African culture' they are subjected to storms, thunder and lightning. Demanding to know 'What sort of double standard is this?', Soyinka¹⁰⁰ eloquently articulates this inconsistency by noting that while the 'Arabs are free to formalise, structure, and defend a united concept of their own culture, in spite of self-evident diversities...a similar right is denied to black Africans'. For Soyinka¹⁰¹ it is not amusing that 'on the one hand, the 'plurality' of culture in the black African world is positive and wholesome, while the unified concept of the same cultures is retrogressive'. Refusing to retreat, Soyinka¹⁰² advances the argument that:

in the same way as the Arab peoples have defined what they mean by Arab culture, in spite of even its occasionally fratricidal pluralities, have given it such cogency that they can participate in transcontinental events of cultural cooperation such as the German-Arab Cultural Week (1974) and others, so do we who are not Arabs and who inhabit the African continent insist on the right to determine what is 'African culture'; to determine who may properly be considered to manifest its essence.

While this 'answering back', defiant attitude is healthy, it, on its own, is inadequate. In the struggle for Africanisation, African scholars have to clearly define what is meant by 'African culture' so that the African children of tomorrow, will not, like the African children of yesterday be found defenceless when their African identity is discussed as if they are not there. In this regard, Soyinka¹⁰³ has not failed the African child. He points out that 'when we speak of a black African culture, therefore, we refer clearly both to a sum of its various parts, and to its unifying essence. Just as there are minorities in every political state so are there cultural minorities in any convenient cultural division.'

As we near the end of this chapter, a number of issues need to be reiterated. The first is that African culture is being resisted because of its potency to reinvigorate Africans. Amilcar Cabral¹⁰⁴ reminds us that when Goebbels, the brain behind Nazi propaganda, heard the word 'culture', he reached for his pistol, a clear indication that 'the Nazis – who were and are the most tragic expression of imperialism and of its thirst for domination – even if they were degenerates like Hitler, had a clear idea of the value of culture as a factor of resistance to foreign domination'. That is because, as Cabral¹⁰⁵ lucidly points out 'for as long as...people can have a cultural life, foreign domination cannot be sure of its perpetuation'. Sharing Cabral's logic, Rodney¹⁰⁶ similarly notes that 'so long as a society has the opportunity to define its own ideology and culture, then the people of that society have some control over their own destinies'. In the face of de-Africanisation and Westernisation of Africans, the quest of a cultural revolution and reclamation is a quest for re-Africanisation, a spiritual reconversion of mentalities, as Cabral notes¹⁰⁷. Without this

reconversion, reclamation, Africans cannot go far in their struggle for self-emancipation, because, as Cabral¹⁰⁸ correctly observes:

A people who free themselves from foreign domination will not be culturally free unless, without underestimating the importance of positive contributions from the oppressor's culture and other cultures, they return to the upwards paths of their own culture.

Africanisation seeks to embolden Africans to answer back, because in doing so, they are celebrating the fact that 'African culture, though repressed, persecuted and betrayed by some social categories who compromised with colonialism, survived all storms, by taking refuge in the villages, in the forests and in the spirit of generations of victims of colonialism'¹⁰⁹. Africanisation is a manifestation of a recognition that 'like the seed which long awaits conditions favourable for germination, in order to conserve survival of the species and its evolution, the culture of African peoples flourishes again today across the continent in the struggles for national liberation'¹¹⁰.

13.5 Concluding comments

This chapter has sought to trace Africans' struggle for the Africanisation of education both at home and abroad. It did so by tracing the struggles of scholars such as Diop and Makgoba and the vicious reactions they suffered. Effort was made to interrogate the motives behind these struggles and the implications for Africans if the struggles succeed. The argument is that Africanisation on the part of Africans is a defiant act of answering back to an arrogant world that treats Africans with undeserved disdain. Africanisation is a call to Africans to advance with speed towards a cultural revolution.

My arguments have reinforced many of the debates raised by several contributors in this book. The quest for an African identity is a project not only for us but for the coming generations as well. The reaffirmation of culture is the basis for the search for relevant African education. The editors at the beginning emphasised this aspect in a number of ways. Amongst others, they highlight the need for democratisation to encapsulate the African ideals if it has to be complete. Furthermore, Steve Sharra in introducing the book stresses the importance of relevant African education for Africans. All the authors in various ways demonstrate how we need to challenge the status quo and other 'ordinary' ways of knowing.

Yet, as we continue to develop these theories we also need to be entrenching and enhancing the practical aspects. The struggles and the spirit of the Africans I have mentioned here need to be sustained and eventually be implemented. We cannot be talking about theories as the village dies. It has been a long winding road since Makgoba's defiant but welcome stance. The time for Africanisation of our institutions has arrived.

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