EDUCATIONAL RESEARCH FOR SOCIAL CHANGE

Educational Research for Social Change

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Editorial

Africanizing Educational Research and Practice

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This issue is dedicated to the late Wolfgang Nitsch, Professor at Oldenburg University, Germany, Honorary Professor at Nelson Mandela Metropolitan University, South Africa, and one of the initiators of the East and South African-German Centre of Excellence for Educational Research Methodologies and Management (CERM-ESA) at Moi University, Kenya. In addition to being a critical intellectual, Wolfgang Nitsch was a passionate educator and political activist who dedicated his life to building partnerships and networks across southern Africa and Germany to uplift education for those on the periphery of society. His enduring commitment to decolonisation, Africanisation, and social change has inspired many students and educationists in both the global North and the South, and his vision has become the foundation for our collaboration in the CERM-ESA project.

One of the aims of this African centre of excellence is to locate research in African perspectives. This special edition, in part, enables wider dissemination of that aim. The underlying issues in the call for papers for the special edition were: What makes educational research "African"? Are there practices that reflect the identity of the continent? What contributions can African research and practice make to social, cultural, or ecological justice and change? Are there characteristically African responses to globalism in a world that is rapidly becoming interdependent and, often, a more intolerant place in which to live?'

Catherine Odora Hoppers, who holds the Research Chair in Development Education at the University of South Africa, has an honorary doctorate from Nelson Mandela Metropolitan University, and is a member of the CERM-ESA International Advisory Board, provides the first article in this special edition. Catherine shares her view that the basic premises of both education and development require a new level of action and profound rethinking. She highlights the need for a framework for the rebirth of African research and delineates a distinctive conceptual and analytical lens through which a wide variety of issues can be viewed, reviewed, and judged to promote "inclusiveness and coexistence in the field of knowledge production."

Moyra Keane, Constance Khupe, and Maren Seehawer's paper follows one of Catherine's tenets as they argue for research processes and outcomes that benefit indigenous communities. They present examples that highlight the ways in which researchers can ensure authentic representation and sharing of knowledge, and offer suggestions for strengthening knowledge dissemination and reimagining indigenous knowledge for new generations. In a second joint article, Khupe and Keane offer authentic and nuanced suggestions for indigenous knowledge researchers as to what an African research methodology might be, and then present a brief overview of arguments for research methods

that are consistent with indigenous knowledge systems. Their synthesis of some of the knowledge they have gained in this field in South Africa provides pointers towards creative, culturally relevant, and ethical ways forward for Africanising the research enterprise.

Pholoho Morojele uses photo elicitation as a method to provide an interesting discussion of indigenous knowledge held amongst Basotho herders, which not only helps in terms of understandings of indigenous knowledge, but also points out how misaligned "mainstream" education models can be in many contexts. Marelize Marx and Alette Delport provide evidence that dance in the primary school curriculum could be a method to improve interpersonal relations. The originality of their stance is that of making dance a path to encourage the development of participants' self-identity and sense of belonging, while at the same time inviting and welcoming diversity. Avivit Cherrington's argument for the inclusion of a pedagogy of hope in teacher education provides a framework of levels of hope that includes, among others, notions of relational and collective hope: notions which fall comfortably within an African worldview and offer opportunities for new perspectives within an African research agenda.

Malve von Möellendorff, Susan Kurgat, and Karsten Speck's report on the East and South African-German Centre of Excellence for Educational Research Methodologies and Management (CERM-ESA) at Moi University provides a case for internationalisation and higher education engagement as a route to providing an enabling milieu for Africanising research (see http://www.african-excellence.de/centres/south-africa-kenya/educational-research/). In turn, Kholisa Papu and Malve von Möelendorff's conference report on the First CERM-ESA International Conference: Rethinking Educational Research in African Contexts highlights the perspectives of CERM-ESA members such as Birgit Brock-Utne and Catherine Odora Hoppers in terms of the decolonisation of research in African universities.

Book reviews do not usually make major contributions to journal issues. However, I believe the scholarly and deeply thoughtful review by Michael Samuel of the book, *Africanising the Curriculum: Indigenous Perspectives and Theories* (Msila & Gumbo, 2016) is one that does just that. Samuel uses the title, "Elephants and the Grass," a particularly apt aphorism, for his review. He notes that this book generated personal turbulences that moved him greatly, and points out some of the unanswered questions that many chapters evoke, such as "Who is African?" and whether we can, or should, come to a common understanding of African scholarship (Chikoko, 2016, p. 79).

Samuel provides possibilities and perspectives that challenge and attempt to unlock what may be seen as the current hegemonic narrative on issues of the Africanisation of higher education. He calls for wider ranging views and discussions that provide opportunities for "a dialectical interchange between multiple partners who do not necessarily agree, but who help shape each other." I strongly recommend that you do not put aside this special edition without reading Michael Samuel's perspectives on issues of Africanising, be it the curriculum or research.

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Transformation and Change in Knowledge Generation Paradigms in the African and Global Contexts: Implications for Education Research in the 21st Century

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Abstract

There are many things that education and development in Africa was supposed to be about, but which it is still not. To many critical readers, education has stood by, "eyeless in Gaza" (Milton, 1667–1671, l. 41), unable to find the words and strategies deep enough to deal with epistemological disenfranchisement and cognitive justice with untold consequences for the development of the "whole person" in Africa. When it has engaged with "development," education either encourages blind assimilation into it, or it proposes ameliorative responses to the effects of development such as over consumption and environmental pollution—or selectively focuses on particular aspects of development such as economic development whilst underplaying or totally ignoring cultural and intercultural education. For its part, development has been rescued from time to time from itself by such humanising prefixes as *sustainable*, *human-centred*, and *ecological*, and so forth. But at its core, its pungent inheritance has yet to be unpacked. Indigenous knowledge systems impel and compel profound rethinking of the actual templates upon which both education and development are premised, and challenge both conceptually, methodologically, and ontologically a new level of action in response to the rebirth of Africa.

Keywords: knowledge, development, transformation, African perspectives, rethinking thinking

The Developmental Challenge for Africa

The developmental challenges for Africa in the 21st century are many and multifaceted. At the end of the 20th century, the continent stood at crossroads, with bitter memories of its colonial past, and a future it was destined to determine. It is a future in which knowledge has become a key transactional currency. In the circuits of never-ending bandwagons, we find one set, the "knowledge economy" and "information society," quite central to the present and the future.

But while in general parlance the product of skilled professionals is the information or knowledge they provide, the point of departure in this paper is that the information revolution that has greater significance for Africa is not a revolution in technology, machinery, techniques, software, or speed. It is a revolution in concepts and thus, the way we think about issues.

We need to ask in a candid and strategic manner: What is the meaning of information, and what is its purpose? In what way or ways does the existing flood of information actually assist Africa find its bearings in a globally competitive, but also globally predatory world system? Which concepts have outlived their usefulness and have to be reframed?

Through the four to five development decades, it has been difficult to crystallise a vision of Africa that has progressive and generative points of departure from the well-worn platform of denial of the continent's heritage and knowledges (Odora Hoppers, 2002). Africa wanted to modernise, but was never sure about on whose terms this should occur.

We wanted our people to learn to read and write, but instead of looking at literacy as a continuum in different modes of communication from the oral to the written, we equated being ignorant of especially the Western alphabet, with absolute ignorance. We had no qualms in pitting what is not written as thoughtless, as a weakness, and at its limit, as primitivism (Hountondji, 1997).

 Instead of putting education at the service of a complex range of African knowledges—in botany, crop and animal husbandry, climatology, medicine and midwifery, philosophy and pedagogy, architecture and metallurgy—knowledges that we know have been subjugated by the processes of colonialism and modernity, we promoted a default drive in education that arraigned education tailored on Western cosmology as the only way to progress.

Instead of letting education serve an organic function to enable our societies to engage in the critical but active reappropriation and authentication of our cultures and knowledge (i.e., to strengthen what we have), and to put this shared resource alongside that of the rest of humanity, it was our absolute conviction that education was some neutral business, and was not a cultural matter at all.

In the combined cleansing and purgatory, even the bits that had not yet been touched by colonialism— for example, the deep philosophies, the ethos of solidarity, of extended family support systems, and so forth—nearly ended in the rubbish pile (Odora Hoppers, 2002).

We did not link our acts in educational institutions with the vestiges of social Darwinism embedded deep in the groins of development practice that had, in the first place, turned us into an inverted mirror of Western identity, a mirror that belittled us, and sent us to the back of the queue (Esteva, 1992).

But What Is the African Perspective?

To me, an African perspective implies more than acknowledging that a particular person is African by descent, which may be a starting point, but on its own it is not enough. Rather, an African perspective should entail delineating a distinctive conceptual and analytical lens, and demarcating a mental

position or plane of projection from which a wide variety of issues are viewed, reviewed, judged, or propositions for new visions or directions are made.

Thus when one talks of looking at the world through a woman's, or a prisoner's, or a king's perspective, it is expected that a distinctive lens emerges through which the same set of facts, once revisited through this new lens, produces new dimensions or propositions for action that was not possible from the old plane of view.

In order to do this, I take a step back and share Ashis Nandy's statement in his contribution to the fascinating collection of reflections entitled "What Does it Mean to be Human?" (Franck, Roze, & Connolly, 2000). In that seminal piece, Nandy (2000) said that every age has a prototypical violence. Every age also has a cutoff point when the self-awareness of the age catches up with the organising principle of the age, when for the first time the shared public consciousness begins to own up or rediscover itself.

Once we begin from this standpoint, we begin to recognise the importance of acknowledging that knowledge primarily rests in people rather than in ICTs, databases, or services, and thus that for Africa the challenge has to be how to build on local knowledge that exists in its people as a concomitant to working with global knowledge and information. We also begin to contemplate what a knowledge society with equity would look like. As we survey the wreckage and note the unprecedented evacuation of billions of people from the arena of substantive innovation essential to their existence, we need to turn with force to the task of redefining key concepts such as *innovation*, its link with the goals of building sustainable societies and cognitive justice as key to the attainment of long-term, and sustainable, development (Odora Hoppers, 2002; 2009).

Once we begin to see innovations differently, innovation would then go beyond the formal systems of innovation done in universities and industrial research and development laboratories, to innovations from below—by which is meant, taking into account the full participation of all producers of knowledge including those in informal settings of rural areas.

Democracy and Dialogue Revisited

Perhaps to begin, let's recreate this scenario in any African country. The elections have taken place. It was a great moment. Modalities for democracy have been put in place. The constitution is ready. The parliament is doing OK. The policies for transformation are basically in place. All very good things. But the stomach still pangs. The muscles still ache . . . an uncomfortable restlessness tells you of something still not being quite right. For the African academic, the freedom to sing out loud is still a bridge kind of far away.

One examines the processes of discourse formation and the differential authority with which groupings participate in them, the way in which meanings are crafted onto processes, and the discourses that are permanently excommunicated from those realms in which real power is played out. One goes back, sifting through the notions of education. Education for all, based on the growth of democracies; and liberal education, a justification based on the economic argument of industrial property. None of these come close enough.

As one seeks further, one hears of education for liberation, an education that seeks self-realisation and empowerment. It is an education that is placed in the midst of a struggle to create a just social order. It is one that enables one, even the "wretched of the earth" to also participate in naming the world. At last this begins to sound like home. But no sooner has this happened than one recognises that this was yet home away from home, as Freire's words on the right to participate in "naming the world" begin to ring loud:

Dialogue is an existential necessity. And since dialogue is the encounter in which the united reflection of the dialoguers are addressed to the world which is to be transformed and humanized, this dialogue cannot be reduced to the act of one person's "depositing" ideas into another. . . . Dialogue cannot exist . . . in the absence of profound love of the world, and for people. The naming of the world, which is an act of creation and recreation, is not possible if it is not infused with love. Love is at the same time foundation of dialogue and the dialogue itself. (1970/1996, pp. 61–62)

But how is it possible to love, to dialogue and at the same time to have faith in humankind when one feels a suppression and subjugation as the order of one's day? Conversely, how much should one love, before one can finally begin to participate in naming the world? What is dialogue in this sense actually?

To this, Freire had a response:

Dialogue cannot occur between those who want to name the world and those who do not want this naming—between those who deny other people the right to speak their word, and those whose right to speak has been denied to them. Those who have been denied their primordial right to speak must first reclaim this right and prevent the continuation of this dehumanizing aggression. (Freire, 1970/1996, p. 62)

Of dehumanising aggression, Africans, more than any other race, have certainly had their share.

The problem is how to participate, as an African, in a dialogue on terms and norms established by conquest and subjugation; especially when all of this is purposefully obscured, and made to appear quite benign by scientific discourses which permeate through all tertiary institutions? How can one participate in naming the world within frameworks that have difficulty with dealing with the idea of equality itself? The problem then becomes, not just one of harping on the problem, whining about it, or indulging in hapless polemics about it, but to work strategically to usurp the very tools that have been inculcated in us, and to collectively transform it with the goal of seeking self and collective empowerment (Odora Hoppers, 2007).

But more than that, the challenge becomes that of humanising the very perspectives, methods, processes, and thereby knowledge content: in short, the epistemological machinery that feeds the broader academic field across its spectrum, and the practices that follow from it. It is within this broader agenda for humanisation of the knowledge generating field that is the basis of this paper.

Creating Regeneration in Higher Education: A Dose of Ethical and Moral Sensitivity to Local Conditions

The development paradigm had been dominated for at least half a century by the idea that the role of the state or civil society is only to provide what "poor people lack": that is, material resources, opportunities for gains in skill or resources, or employment. The strategies fail to build upon a resource in which poor people are rich: their own knowledge—so much so that the development lexicon in the last decade adopted a term with great alacrity: *resource-poor people*—as if knowledge is not a resource, or as if poor people have no knowledge.

The knowledge systems that enable economically poor people to survive, particularly in high risk environments, have involved blending secular with sacred, reductionism with holism, short-term options with long-term ones, specialised with diversified strategies in individual or collective material pursuits. The environmental ethics of these communities has also reflected these.

The higher the physical, technological, market, or socioeconomic stress, the greater the probability that disadvantaged communities and individuals generate innovative and creative alternatives for

resource use (Gupta, 1988; 1991). These innovations, whether originating in tradition or using modern awareness, are evolved by communities—as by individuals. In fact, an overemphasis on communities as opposed to the individual may well contribute to the widespread indifference towards entrepreneurial potential of the knowledge rich, but economically poor, people. Innovations in technological, cultural, or institutional subsets often remain isolated and unconnected despite an otherwise reasonably robust informal knowledge network in existence.

The argument in this paper, therefore, is that the failure to develop an organic intellectual infrastructure to adapt, translate, and retool borrowed knowledge cannot be attributed only to the government posture in postcolonial Africa or to a lack of resources. Rather, it is a consequence of the failure to perceive the full depth, scope, and what Visvanathan (2001b) has referred to as the *tight architectonic*, woven together by the confluence of the ideologies of science, development, and modernity and which have, over time, created a cognitive prison wall into which were cast the academic and policy communities all over Africa.

Trapped within the framework of modernity, accepting the Rostowian scale—ranking societies from premodern to takeoff, maturity and mass consumption—as the only legitimate yardstick for measuring the development trajectory of nations and peoples, it was very difficult for universities modelled on these Western precepts to break their paradigmatic umbilicus. The limitations that arose from this situation spilled over into the policy domain in a circular flow that slowly began to resemble a vicious cycle.

In order for substance and content to be added to the political economy analyses that dominated postcolonial scholarly work, it was important that renewed scrutiny should be accorded to the labyrinth of myths, metaphors, methods, models, and techniques that science and modernity have created: the lattice-turned-paradigm that determines what is relevant and irrelevant, what one can see and not see, what one can say and not say, or dare not be heard to say. This paradigm that is cruel, blind, and has no place for defeated knowledges or alternative theories of knowledge needs to be exposed for what it has done, and continues to contribute to the violation of human rights (Visvanathan, 2001a).

The role of universities is once again being rethought, this time in the light of the contradictory objectives of globalisation, the information society, and economic growth on the one hand and the clearly intensifying poverty, widening inequalities, and the demand for social justice on the other. At this time, new imperatives for the definition of quality, relevance, accountability, and responsiveness begin to be asked afresh of these knowledge-generation, knowledge-accreditation and knowledge-legitimating institutions. Fresh stock, for example, needs to be taken of the full implication of these romances and silences for higher education itself, and especially for the reproduction of vicarious paternalism and blindness in the institutional cognition of local development and renewal issues (Visvanathan, 2001a; 2001b).

To illustrate, recognition that Africa is cast as an epistemological vacuum precisely because of the history of colonialism, coupled with the way the present paradigms of development and of knowledge are constructed, could compel rethinking, and demand the cultivation and assertion of reverse but empowering discourses in many domains. For example:

- Following Gupta (1999), the continent can be affirmed as knowledge rich, but economically poor.

- In biodiversity, it can be factually noted that while the North may be awash with the information explosion, they have less and less biological and genetic information (Visvanathan, 2001b).

- Becoming cognisant of the fact that species extinction at a rate of one thousand species a year, coupled with the genetic truncation of major crops and the loss of cultural information due to the depopulation of rural areas—all in the name of development—threatens humanity's survival in this century and in our very lifetime may, of itself, heighten our moral sensibilities and push us towards more ethical debates around responsibility and commitment to more ecologically coded behaviour.

- Acknowledging that African models of farming and systems of healing might embody different notions of community and science, and that within such a framework African agriculture and systems of healing might be alternative paradigms, elusive and elliptical to current modes of science (Visvanathan, 2001b)—turning Africa around from a "void," a "black box," to an alternative list of possibilities and epistemologies—would take us some way on the path to a genuine African rebirth and renaissance. (Hountondji, 1997; Odora Hoppers, 2002)

Such regeneration efforts in higher education and in universities in particular, of course require concerted and courageous intellectual work. But more importantly, it would enable us to decipher that it is precisely the holders of this indigenous knowledge, this "informal" community of expertise located in rural areas of Africa, Asia, and other parts of the world that the official application of science and development has destroyed.

It is here that revisiting the concepts of culture and of indigenous knowledge provides poignant content to the idea of a developmental university. Tertiary institutions in Africa are challenged to make their positions known on the integration of knowledge systems, social and intellectual capital of local communities, the critical evaluation of indigenous knowledge, the reciprocal valorisation (Hountondji, 1997) of knowledge systems, and cognitive justice (Visvanathan, 1997) as Africa seeks to find its voice, heal itself, and reassess its true contributions to global cultural and knowledge heritage. The idea of the developmental university emerging from this process would, in the first place, contemplate development in human terms as rehumanisation within the framework of restorative justice.

Therefore, when textbooks and formal institutions designated to produce and legitimise knowledge become cognitive regimes that acknowledge only the victor, and defeated knowledges are erased or condemned as unscientific, then we witness a system of complicity in withholding freedom from those who need it the most—those on the receiving end of knowledge apartheid. Research must lead the way and the university, out in the field, engage in mutual learning, a give and take, a reciprocal valorisation of indigenous knowledge systems (IKS).

The University and the New Cultural Commons

A general consensus is forming that universities are failing in the tasks for which they were first created. To begin with, meetings of minds no longer take place in the context of universities. Universities, originally the transmitters of culture, learning and independent thought, are changing. In the past, scholars acted as arbiters who accredited knowledge. But today's universities are producing knowledge in a hothouse atmosphere characterised more by the corporation than the campus. Profoundly influenced by financial and institutional pressures, respect for the bottom line and an emphasis on short term results that satisfy corporate sponsors and government support, the University is turning into a factory that prepares students for jobs. Its business has, over time, become that of transacting mainly in data and information, but not knowledge, insights, or wisdom; "increasingly its

traditional role of fostering scholarship, original research, and critical thinking is losing ground" (Peat, 2000, para. I.1).

Secondly, in the traditional disciplines around which faculties and colleges are organised such as physics and chemistry, in the humanities and social sciences, in the professional areas of medicine and law, as well as within the newer fields of biotechnology and bioengineering and the range of genetic endeavours, there are a number ethical issues that need to be discussed, if not resolved. Where will this be done? In whose interest is it to convene these discussions? Moreover, there is less and less room for truly fundamental reflections on knowledge, methodology, and in particular, for speculations that lie outside mainstream areas (Peat, 2000).

Thirdly, a tension exists between the role of the university as, on the one hand providing a platform for engaging and critiquing elite global economic interests, but on the other hand, it is steeped in the elite culture, and is a product of elite interests than community ones. It is also a major credentialing institution for a certain social class rather than an intellectual community bound by social contract to less formally recognised intellectual ones (Odora Hoppers, 2009).

Furthermore, the "culture of expertise" characteristic of most university settings, a culture that is necessary to finding a place in the international knowledge economy is of uncertain or even dubious merit to communities wrestling with more essential and practical if not "lower status" problems. What emerges from all of this is recognition that the culture of the university does have tenuous, if not frayed connections to the rest of society (Odora Hoppers, 2009).

What then, are the conditions for a new social contract between universities and society? At issue here is the African university—that is, what does it mean to have universities in Africa? What are the cultural and epistemic identities of universities in Africa? What constitutes the ecology of a university in Africa, and how can this be reworked to respond to the human question in Africa? What is the "moment of crisis" in Africa? How can African universities give academic and scientific dignity to third-world problems? What are the conceptions of education that should underpin these explorations? When we talk about supporting community outreach, the question arises: How to determine the methods for reaching that goal? What should this new social contract consist of in Africa? Are universities becoming more closely linked to societal needs?

The linkage between commons and the reclamation of citizenship in the knowledge production and ownership arena, including the right to different forms of time, of living, and of dreaming becomes very important. In doing this, the university itself becomes a kind of cultural commons (Madison, Frischmann, & Strandburg, 2008), that is, a place for realising this citizenship in knowledge production.

As a constituent part of this cultural commons, in collaboration with various individuals, groups, or colleges, embark on a critical examination of a broad variety of institutional and disciplinary contexts and associated practices from the point of view of human development and the commons—and make propositions as to how those fields and practices may need to reform or transform. The research and community engagement specialists should think about

what the commons means for them. My view is that the position of the university in Africa is that it needs a "commons of community, lived time" with its people.

But we need to go further—by pushing for new philosophies of practice, clearer and more coherent methodological strategies in inclusive partnership building, and the recognition of place in the African context.

Raising the Bar: New Imperatives in the Ethics of Practice

Research should not shy away from issues that affect society closely. Rather, it should begin to open channels through which people can discover themselves, clarify their own experiences, and find vantage points from which to put new content, meaning, and strategy to whatever developmental visions and provisions in legal frameworks have been made available to the citizen (Odora Hoppers, 2009).

The absence of bicultural experts at the epistemological level has made it next to impossible to break the cycle of hierarchisation of knowledge endemic in the structures of the university. IKS cannot be done by the academy alone. The bringing of IKS into the formal institutions is what will enable this contesting of scientific methods of producing knowledge and interrogating the knowledge production paradigms as a whole (Odora Hoppers, 2002).

Therefore we have to take research out of the university and place it where knowledges are produced—where modernity axed some people out of the knowledge production system. Secondly, we have to make universities aware of lifelong learning, which takes on what people know: knowledge rich but economically poor.

In summary, the following can be made clear:

- If we are to develop knowledge and skills and values for the development of the African continent, we have to provide a forum for contemporary social science research that examines its own origins in order to review current practice and work to promote a new social contract between African higher education and African society.

- All universities have to develop research and training areas with a view to building transdisciplinary leadership.

- We have to critically examine through research, the legacy of Africa's relation with international systems. Introduce interdisciplinary focal areas for theoretical, applied, and strategic research explorations, for example, education policy studies, peace studies including peace education, lifelong learning and citizenship education, indigenous knowledge and the integration of knowledge systems, science and society—with focus on the link between culture and science education in Africa, and gender from an African perspective.

- We have to engage critically with issues of democracy, values, human rights, and human wrongs and the place of responsibility of different cultures, including peace building from an African perspective. By drawing on, and exposing the researchers to concrete cases in Africa, the global South, and internationally, develops in the graduates the capability to traverse theoretically and methodologically these diverse fields of human endeavour.

In the field of science:

- Constant attention must be drawn to the dual nature of the scientific enterprise. On the one hand, science is the generic development of human knowledge over the millennia. And on the other, it is the increasingly commodified specific product of a capitalist knowledge economy. When we so routinely refer to the popular parlance—for example, information society, knowledge economy—we are referring to the commodified leg of the scientific enterprise.

- We have to be aware that what results from this is a peculiarly exclusionary and uneven development with increasing sophistication at the level of the laboratory and the research project, alongside a growing irrationality of and intolerance within the scientific enterprise as a whole—especially when it comes to tackling the less "sexy" issues facing society. This gives us a pattern of insight and blindness that leaves us helpless when it comes to the big problems facing our societies: the gap between the academy and society in Africa, managing diversity, tackling root causes of poverty, practising inclusiveness and coexistence in the field of knowledge production (Lewontin & Levins, 2007).

- This dual nature also gives us a science that is impelled both by its internal development, as well as by the very mixed outcomes of its applications. This is further complicated by the degree to which science is held back by the philosophical traditions of reductionism, the institutional fragmentation of research, and the political economy of knowledge as a commodity. One should therefore explicitly work towards opening up science to those who have been excluded, and insist on a goal of science that is aimed at the creation of a just society compatible with a rich and diverse nature. Rather than espouse bland neutrality, a working hypothesis could be that all theories are wrong that promote, justify, or tolerate injustice (Lewontin & Levins 2007).

- By emphasising wholeness, connectedness, integration, and reciprocal codetermination—and encouraging students to step outside the specific scientific problems from time to time, examine the nature and use of science more generally—it is hoped that over time one can reintroduce dialectics into discourse on development, education, science, and society; and generate a critical mass of enthusiastic and energised producers and adroit interlocutors of knowledge who can own, and own up to the knowledge they produce (Odora Hoppers, 2009)

In the field of methodology in knowledge production:

- All research undertaken must critically examine existing knowledge with the aim of updating knowledge in the field. A critical perspective is not intended only to generate critique but to foster, simultaneously, a culture of deep reflexivity and a practice of moral salience in the students.

- Potential relevance for policy and practice as well as public education on all research undertaken, that is, the importance of research beyond the confines of the academy to practical application and dialogue around those applications will create the necessary momentum for change.

- Exploratory research and collaboration across disciplines must be undertaken in order to extend the boundaries of inquiry. Throughout this process, the key task is to make the students own and own up to their analysis.

Among practitioners and policymakers:

- Researchers need to involve nonpractitioners and broaden that catchment area of expertise of potential researchers, a majority of whom have a permanent stake in the development of the research expertise of the country.

- We need to join Datta (1990) in debunking the meaning of empiricism, by which is meant blind empiricism without any theoretical frame to hold the pieces together, and which encourages the nibbling at the surface of the reality rather than confronting the deep structures of it.

- We need to desist from the collection of facts, facts, unconnected facts . . . that cannot be compared or added together . . . that does not highlight the manner in which global forces assume the form of microlevel reality. (Datta, 1990, p. 66)

- But we must also recognise that the absence of a theory is also a theoretical position, and African researchers and academicians would do well to reexamine their intentions and their choice of frameworks, and particularly the limitations of the dominant paradigms in research for capturing most aspects of reality in Africa. In other words, researchers need to make manifest what is latent in the concepts, the psychologism inherent in the assumptions and postulates surrounding research and the researcher.

- The asociological tendency classic to survey methods needs to be pointed out not only for its aversion to reality as lived and its insistence on extolling the obsolete virtues of separating subject from object of research, but also for its parochial emphasis on post facto analysis to the neglect of predictive studies. In this connection, the almost nonexistent scope for experimental, exploratory, and experiential research demonstrates the scandalous inertia that has paralysed, if not completely fossilised the process of knowledge generation, freezing with it, both quality and quantity of the knowledge in circulation in Africa.

Conclusion

The search for multiple perspectives and multiple coalitions in confronting the issues outlined above implies becoming part of a bigger struggle to create a more sustainable future for humanity.

It is in seeking these multiple coalitions for the humanisation of practice that there arises the need to strengthen the alliances between transformative scholars and perspectives, and other social movements; and between those working on a cultural critique of modernisation and those involved in the debate on power and knowledge in the new global context.

This is the beginning of a long road that will traverse bushes, thickets, and even swamps. Through this paper, I ask you, whenever you can, to walk with me and savour the unexpected, the anomalous, and the joyful discontent on the road to putting the scientific enterprise centrally at the service of humanity.

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Decolonising Methodology: Who Benefits From Indigenous Knowledge Research?

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Abstract

It is common for indigenous knowledge (IK) researchers in South Africa to conduct studies within conventional Western paradigms, especially in the field of IK–science curriculum integration. The scientific paradigm usually takes precedence and research publishing follows the rules of the academy. There is an inherent paradox in this practice. An endeavour that aims to redress Western knowledge hegemony and decolonise the school science curriculum often judges its own value in terms of the very system it critiques. While much useful work has been done in IK–science curriculum integration, and calls are made for appreciating both knowledge systems, it is concerning that the research knowledge is available to academics and generally not to indigenous communities who are usually cocontributors (at least) to the research data. This paper argues for research processes and outcomes that could benefit indigenous communities. We present examples drawn from three science curriculum studies in different areas of South Africa. We briefly describe the research contexts, and the ways that the researchers sought to ensure knowledge was shared in relevant representations with each community. We also discuss some of the dilemmas we encountered and offer suggestions for strengthening knowledge dissemination, appreciation, preservation, as well as reimagining IK for new generations.

Introduction

> *"Research was talked about . . . in terms of its absolute worthlessness to us, the indigenous world." (Smith, 1999, p. 3)*

At one time people believed that research had to be objective, with an unseen researcher and hidden "subjects." Data needed to be quantified. Over time, in spite of all manner of qualitative research gaining credibility (Badenhorst, 2007; Patton, 2002), we, as indigenous knowledge (IK) researchers in the field of school science integration still have a leaning to a Western scientific paradigm often justifying IK in terms of its scientific validity. Furthermore, the ultimate judgement of the worth of research comes through peer-reviewed publications, citation indices, and impact factors. Journal articles are often charged for, and are read by those academics who have access. As Smith (2012, p. 74) asked: "Who will listen?" when I speak—when knowledge production is controlled largely by the west? Ironically, the same measures of the worth of research are generally true for indigenous knowledge systems (IKS) studies that aim for redress and supposedly decolonised methodologies.

While some argue for research dissemination that will have a greater impact on civil society (Motala, 2015), research is essentially written for other researchers—an incestuous dialogue within an academic club. Motala went on to point out that such an approach "is disingenuous from the perspective of the public purposes of knowledge and the responsibility that universities have to engage with communities." (2015, p. 29). When convenient for policy makers, politicians, or companies such research may be appropriated—in this case usually quantitative research that lends credibility to a specific agenda, or provides evidence for embarking on certain paths of action. Of course, this is a cynical and provocative view of a system in which we, the authors of this article, too are participating. Our jobs depend on it.

In IK research, especially research focused on science education, researchers usually are still very conservative. The scientific paradigm is the usual framework and the product, an academic paper published in a peer-reviewed journal. Much IK research tries to align with the constraints and dictates of Western gate keeping. We concede that this has worked well in attaining conventional knowledge credibility and raising awareness of IK. Without pioneering IK academics, activists, and intellectual elders (such as Professors Odora Hoppers, Ogunniyi, Shiza—to name just a few) the appeal for decolonised knowledge would probably not have reached the policy levels that it has, nor engendered wide interest in curriculum transformation. We would not have found links to other IK research communities globally. Nevertheless, scholars have identified limitations in research efforts. It is almost two decades since Naidoo (1998, p. 178) warned: "More must be done to improve African educational research." He identified problems such as "narrow and inappropriate research agendas . . . research paradigms, frameworks and methods being inappropriate to the educational problems that face Africa." (1998, p. 179). Smith (1999, p. 85) cited an example of the colonial official Elson Best in New Zealand in the late 1800s: "While Best lives on as an expert, the names of his informants and the rest of their knowledge lie buried in manuscripts and archives." The same is mostly true of research in Africa; it is shocking that for the most part not much has changed in over 120 years. It is not surprising that, as Ramphele (2002, p. 23) noted, "One of the strategies of people who have learnt to mistrust authority is either to withhold information altogether or to give misleading information." A similar point has been made by Archibald (2008) in Canada.

We argue that in the African context we still have not done enough to redress this travesty of disseminating knowledge in ways that have no relevance for the original knowledge holders. Smith

called for prioritising "accountability to and outcomes for Maori" (1999, p. 197). Louis (2007, p. 131) warned: "If research does not benefit the community by extending the quality of life for those in the community, it should not be done." This is a call that still needs to be realised in research in Southern Africa. Louis (p. 135) went on to accuse us with good reason: "Researchers rarely think about sharing their archival research with the indigenous community." The question arises: How does the knowledge generated in IK research contribute to the decolonisation of indigenous communities? To whom should IK research be accountable? Put more simply: Who benefits from the research?

Our starting point assumes that IK is not static and fossilised in time. New debates, contextual discoveries, solving of relevant community problems are included in IK and hence, IKS research, yet these "findings" still end up in the global community of researchers rather than in the community that generated or shared their knowledge. It is incumbent on us as researchers that we do not take community-generated data and wisdom and walk away. Through consultations with participants, culturally relevant processes, resources, and knowledge outcomes can be shared in ways that benefit the community (Keane, Malcolm, & Rollnick, 2004).

Aim

Our purpose in this article is to provide examples of how IK researchers, particularly in science education in South Africa, attempted to share knowledge from research with participants in ways that may benefit and acknowledge the community, or research participants, as knowledge holders. We also raise concerns about the complexity of the process and show how attempts to initiate knowledge sharing innovations have, at times, failed.

Approach

This article does draw on larger projects and argues for greater inclusion of community in deciding on and benefitting from the research outcomes. The type of knowledge generated in IK research should relate back to the lives of those who contributed to the research. It is this approach that we have taken up in the research examples we present of sharing the benefits and knowledge of research with indigenous communities in ways that we have worked on and worked out together. The approach in these projects has been one of transformative or participatory action research, which "has broader purposes than the generation of technical knowledge, and works largely from inside the community" (Malcolm, Gopal, Keane, & Kyle, 2009, p. 194).

Limitations

Some of the limitations of being able to share the research products and dissemination findings are the time and cost involved. In the examples given only partial funding was secured for meetings and catering, printing, photography—all of which may appear to funders as peripheral to the actual research project. In addition, where there are resources to be shared, community politics and competing agendas may hamper the intended delivery. Ethical dilemmas may emerge and indeed, in one example below, a research outcome to benefit the community was not realised.

Furthermore, we argue for a principle that we did not always attain: it is likely that in a practical context some negotiation and compromise is needed. However, we still maintain that *striving* for equitable power sharing in this research is essential.

While arguing for community benefits we also acknowledge the irony of writing in a genre against our very endeavour of knowledge sharing.

Literature and Conceptual Frameworks

We draw on indigenous knowledge research paradigms in Africa (Khupe, 2014; Mpofu, 2016) as well as participatory action research and action research (Marshall & Reason 2007; Reason & Bradbury 2008), and transformative action research (TAR; Malcolm et al., 2009) and respond to the arguments by Enver Motala (2015) regarding engaged scholarship.

Reason (2004, p. 5) presented the extended epistemology of action research as consisting of experiential knowing (which includes knowing through empathy and resonance), presentational knowing (which includes story, dance, drawing, among others), propositional knowing (concepts), and practical knowing. There is a resonance with indigenous knowledge in this framework that may point to a potential fusion of approaches and ways of knowing. Such fusion may help to bridge the divide between disparate scientific research processes and indigenous inquiry. Reason (2004, p. 5) argued: "If we want our research to be truly living inquiry we must go beyond the orthodox empirical and rational western epistemology." This challenging the orthodoxy of research (Kouritzin, Piquemal, & Norman, 2009) is a theme across disparate fields from indigenous methodologies, to peer-reviewed publishing. This paper attempts to link the two arguments we make of needing to bridge the divide between science–IK ways of knowing and the need to break out of conventional representations of research findings. We do this by providing empirical examples.

Marshall and Reason (2007, p. 369) suggested that "all researchers can benefit from exploring the ways in which they are connected to their research." We argue that researches can extend the benefits of research beyond themselves to all those connected to the research. And while Marshall and Reason went on to propose that "quality is about becoming rather than being" (2007, p. 369), this can be extended to the ubuntu sense of, I become because of you; in relation to you. Reason articulated the ineffable nature of such knowing: "Experiential knowing . . . is knowing through empathy and resonance, that kind of in-depth knowing that is almost impossible to put into words" (2004, p. 4). It is perhaps this elusive nature of understanding our becoming that led to the failure of aspects of our project examples. The relationship of the researcher with her research may extend to the products of the research, the knowledge, the presentational knowing and practical knowing—all of which resonate well with indigenous ways of knowing. This leads to a consideration of the publishing of research findings as well as ways of sharing consequences of the participatory inquiry.

Motala (2015) argued for a scholarship of integration (which is what we were aiming for in the research projects cited here) through which the coconstruction of knowledge goes beyond academic knowledge. Unfortunately, through the largely Western–English–academic hegemony it is usually assumed (through a careful gate-keeping process) that only certain knowledge is validated. The consequence of this is the epistemic marginalisation of important ways of knowing and representing knowledge. Hence the call by numerous African scholars for cognitive justice. This call for the re-centring of African knowledge systems was taken up by South African students across the country along with their campaign of #feesmustfall in 2016. While some universities are attempting to review Eurocentric curricula there has been, and continues to be, a slow implementation of decolonising moves from academic structures—at least according to student leadership.[1] While management and government rightly denounce the violence perpetrated by some demonstrators, there is an assumed impunity to the ongoing epistemic violence of the delivered curriculum (notwithstanding attempts by numerous academics to debate the issues). While students may not know exactly what a decolonised curriculum would be, they are certainly aware of the imbalance in the assumed worth of knowledge traditions. We will not find ways to integrate African knowledges into curricula if researchers continue to translate indigenous knowledge findings into conventional modes of scholarly representation

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[1] https://www.facebook.com/WitsSRC/posts/701389943342800
http://ewn.co.za/2016/09/20/Wits-students-abandon-march-to-Hillbrow-police-station
https://theconversation.com/student-protests-in-south-africa-have-pitted-reform-against-revolution-50604

controlled by the dominant systems. That is, however, for the purposes of our argument here, a secondary argument. The main focus is on finding ways to make IK research findings (and processes) of benefit to knowledge creators.

Examples of Research Sharing: Possible Benefits to Indigenous Communities

The examples are drawn from three research projects into science education curriculum in South Africa. Two of the projects (Khupe 2014; Seehawer, 2016) were specifically on IKS–school science integration and one on relevant science curriculum for two rural schools and their communities (Keane, 2006). All three studies used participatory and indigenous methodologies and worked closely with schools, teachers, and students. The studies of Keane and Khupe were situated in rural KwaZulu-Natal, and researchers worked with, and were guided by, the communities of the area.

Our intention here is not to provide detailed examples of beneficial purposes and processes, although these were part of the three projects' methodologies—see Keane (2006), Khupe (2014), and Seehawer (2016). Nor will we describe the studies in detail. Rather, after giving a brief outline of our respective projects, we will focus on providing examples of how knowledge products were reframed in ways that could be of interest to, and useful for, the participants and their communities.

We begin with a brief description of each project; we then present a synthesis of nine features of "decolonised research" that we draw from the three projects. This section gives examples from the three authors where applicable.

Project 1 (Keane, 2006): Relevant science for a rural community

In this study the community and I explored concepts of relevant science curriculum and development through participation and engagement with two schools in the rural area of Chibini in KwaZulu-Natal. The topic of "What is relevant science for your community?" was proposed by me after an invitation "for any helpful engagement" from a school principal. My need for academically acceptable research and the elders' purpose of solving immediate needs for food security and their youths' cultural development meant that we had many meetings trying to find ways to meet everyone's needs. One solution that worked well was involving a farming NGO to contribute to setting up chicken farming projects. This initiative could also then serve as an aspect of authentic curriculum design that drew on IK. A similar tension of purposes exists between classroom learning and assessment, and community life. Again, in bridging this, teachers and community members came together to showcase learning in and out of school, as well as research findings.

While the details of the research are beyond the scope of this paper, during a 3-year involvement, a research team, students, teachers, parents, and farmers, supported by traditional leaders and NGOs, developed a community-based science curriculum. Amongst urgent concerns for health care, employment, traditional values—even survival, profound lessons in understandings of appropriate science, practical skills-development, and ubuntu emerged. Western conventions of frameworks, protocols, goals, identity, even ways of researching, were challenged through engaged transformation. Relevant science has parallels with relevant research in its purposes and processes of contributing to both knowledge and community well-being.

Project 2 (Khupe, 2014): Indigenous Knowledge for science teaching

My study was part of a larger project on science curriculum and development. It was carried out together with elders, high school students, and teachers in Mqatsheni community in rural KwaZulu-Natal between August 2009 and July 2011. I sought to understand—through interactions with the community—knowledge as well as the worldview that underpinned the community's knowledge and

related practices, with a view to identifying indigenous knowledge that could be used for science teaching and learning. Although I initiated the research project, I negotiated with the school and community leaders on the processes and outcomes. Subsequent meetings included matters beyond the research agenda, such as livestock theft and violent crime. I intended that the study contributes to transformation in indigenous knowledge research by engaging processes that placed value in indigenous knowledge, practices, languages, and practical concerns.

Project 3 (Seehawer, 2016): Integrating indigenous and Western knowledges in South African science classrooms

Based on calls to decolonise African education and to make learning relevant for African learners' life realities (e.g., Abdi, 2005; Dei & Asgharzadeh, 2006; Ntuli, 2002), I explored how South African science teachers might integrate indigenous knowledges with the teaching of Western science. Attempting to follow up indigenous critique of Western research methodologies, I chose a participatory action research (PAR) approach because PAR has been recommended as compatible with indigenous methodology (e.g., Lavallée, 2009). The study was carried out in Grahamstown, South Africa, from July to November 2015 with a team consisting of five science teachers as coresearchers and myself, a doctoral candidate from Norway, as the initiator and facilitator of the research. While in our list below we talk about "Project 3's examples" and while I will be the one writing up the research, I wish to acknowledge my coresearchers' contribution to this project. It has been *our* research not *mine*.

The following are nine ways of knowledge sharing and bridging knowledge divides in ways that may benefit the community or those involved in the research. Each aspect is presented from the perspective, and in the voice of, the principle researchers involved. Finally, each of the three researchers reflects (from the perspective of her community's project) on "Who benefits?"

Nine ways of knowledge sharing and bridging knowledge divides

1. Community researcher training and support

Project 1 (Keane) and Project 2 (Khupe).
Two young unemployed youth volunteered to serve as research assistants (for each project). We included them in all meetings and negotiations, trained them on some participatory research protocols, ethics, journal keeping, interviewing, and writing field notes. They each had a mentor. We welcomed their observations, insights, and advice. We acknowledged them by name in publications. In Project 1, one research assistant went on to complete bachelor and master's degrees, funded through a scholarship.

Project 3 (Seehawer).

In participatory action research, people who would otherwise be called informants or, at best, research participants, became coresearchers in a process of collaborative knowledge generation. In our team, neither I nor my coresearchers had participated in participatory research before. Thus, knowledge generating went hand-in-hand with methodological capacity building; for all of us it was a process of learning how to be a participatory action researcher. Moreover, all of my coresearchers were either involved in undergraduate or postgraduate study during the time of our research, or had plans to reengage in academic study in the near future. Participating in our research team aligned well with some of their own study foci or with their desire to develop academically.

In addition, after the research had progressed for some weeks and after personal relations and friendships began to develop, our team also became an unofficial professional support group for my coresearchers. All of them taught science, although at different schools and at different grades, including both primary and secondary school. Before and after our official research meetings, the teachers started exchanging learning materials and their teaching innovation experiences. According

to my coresearchers, it is not common for teachers to work together across grades and school types and they appreciated this opportunity.

2. NGO collaboration—including training

Project 1 (Keane) and Project 2 (Khupe).

Khupe questioned: "How does one enter a community where one may be unknown and to which one may not have even been invited? How does the researcher even begin to initiate relationships in which the community feels comfortable to trust an outsider?"

In these two projects, NGOs became involved. We negotiated entry into the communities through the NGOs, which gave us understanding of the leadership structures and assisted with local protocols. In Project 1, an international NGO was requested to join the project to initiate food security (the main concern of the community elders). The farming project that was set up included capacity building for women farmers and was also used as a curriculum focus.

In both projects the NGOs that became involved were Woza Moya, Heifer, and Khuphuka. Woza Moya and Khuphuka were already established in the community and assisted us with access and guidance. We were able to offer some training and stipends to the research assistants.

3. Community festival

Project 1 (Keane).

The research process and findings were celebrated in a community-wide festival cohosted by the researchers and the *induna* [chief] for 500 people to showcase research outcomes in culturally consonant ways: songs, dance, story, drama, photos, drawings, speeches by elders, artefacts. Teachers displayed lesson artefacts relating to community-centred science, senior students put on a play about AIDS (which would otherwise have been a taboo topic), primary children performed dances and songs and displayed drawings, some students displayed their writings and posters and photos of "Science in my life." NGO representative talked about their farming project, elders spoke about culture, a *sangoma* [traditional healer] agreed to come to classes and talk to the students.

4. Coauthored/designed materials on IK–science integration

Project 3 (Seehawer).

During the course of this research, five coresearchers developed one or several pilot lessons in order to explore the integration of indigenous knowledges into their own science teaching. The lessons were implemented as far as possible (due to the exams that take place in South African schools in November, not all pilot lessons could be taught) and collaboratively evaluated by our research team. Not only was reflecting on the curriculum and planning these lessons an enriching activity, but my coresearchers will also be able to use their own and their colleagues' materials in the future.

5. Issues of language

If you talk to a man in a language he understands, that goes to his head. If you talk to him in his language, that goes to his heart". (Nelson Mandela, n. d.)

Project 2 (Khupe).

From my experience of growing up and working in a rural community, communicating in the local language is particularly valued, especially when speaking with the elderly (Khupe, 2014). Speaking to community elders in a language other than their own could be considered disrespectful. I drew on this experience and committed to take up the challenge of language flexibility. All the interactions with elders, students, and teachers were in the community participants' chosen language—and most chose

to interact in their home language. I had sufficient working knowledge of isiZulu to get along fairly well in all meetings, discussions, informal conversations, and in transcribing audio data. I consulted with research assistants when I came across unfamiliar words or phrases. The elders were particularly gracious and were willing to explain in English. The decision to foreground isiZulu extended to the stage of writing up findings where quotes from participants were presented in isiZulu—in order to present to the reader the speaker's actual words. I did translate the quotes for meaning—for the benefit of non-Zulu speaking readers.

6. **Research reports or commemorative booklets in local language or English, including photos for distribution to whole community**

Two projects published the story of the research in booklets for the participants and community.

Project 1 (Keane).

The rural Project 1 booklet was mainly in isiZulu with some English translation and included a number of students' photo assignments and drawings.

Project 3 (Seehawer).

"I wish we could publish something together!" One of my coresearchers expressed this wish about two months into the research, after we had started developing the pilot lessons and the team was getting excited about the prospect that our work might have an outcome worth sharing with others. Brainstorming on how to realise our coresearcher's dream, the idea of our coauthored booklet was born. The booklet was launched at the end of our research period and contained lesson plans for the pilot lessons, the team's lessons learnt about the integration of indigenous knowledges and personal lessons learnt from each coresearcher. Besides the personal benefit of having coauthored an aspect of our research, the booklet targeted a local audience, namely, Grahamstown science teachers whom we hoped would benefit from guidance on how to integrate IK into their science teaching.

7. **(Conference) copresentation with community teachers**

Project 1 (Keane) and Project 2 (Khupe).

The collaborating teachers, Mrs Mbhele and Ms Anastasia Ndlovu, became copresenters at conferences with the researchers. This was an especially friendly and enriching experience for all.

Project 3 (Seehawer).

To celebrate the conclusion of our research period, our team organised a presentation during which we launched the coauthored booklet. We had invited academia, the local education authority, my coresearchers' principals and colleagues, and science teachers from other schools in Grahamstown. Unfortunately, due to ongoing exams hardly any teachers came, but our audience included academics with an interest in IK research. Nevertheless, the presentation was a true highlight in our research and my coresearchers presented with pride what they had achieved.

8. **Honouring indigenous culture and creating a different space for engagement**

Project 2 (Khupe).

Every homestead in Mqatsheni includes a grass-thatched hut built from local materials. One student described the hut as *insika yomuzi* [the pillar or mainstay of a home]. The elders made it clear that without the hut the home was not complete. I discovered later in the study that the hut is the point of communication with departed ancestors—the meeting point between the living and the once living.

Considering the significance of a traditional hut for the community, and considering this research study's focus on the integration of indigenous knowledge systems and school science, I consulted with the elders, the school principal, and district management of the Department of Education to consider constructing such a hut at the school. The hut would be a "museum" where a collection of valued artefacts and knowledge would be kept—in appreciation of culture and spaces for place-based learning. The hut would symbolise space for the integration of school and community knowledge.

The idea of the museum hut was received with enthusiasm, and funds were made available for its construction. The elders took responsibility for the construction of the hut. In an unexpected turn of events, the money provided could not be accounted for, and it became impossible to continue with the project. This was a difficult place to be: in a place of broken trust and perhaps broken hopes. However, with more experience in such an initiative we hope to take up this proposal in future projects.

9. Publication in community newspapers for lay readers

Project 3 (Seehawer).

When reflecting on how to promote our research, my coresearchers suggested asking the local newspaper to write an article about it. This was good learning for me: while I had not thought about this possibility myself—in my original home country, Germany, the interest in printed papers is declining—I learnt that in Grahamstown, the local paper would be the most suitable medium to inform the public about our work. Unfortunately, at the time of the launch of our booklet, the paper was understaffed and a reporter could not join in, so the idea about an article could not be realised.

Reflections on "Who benefits?"

> Research was regarded as a resource to be harnessed for patronage and power play as part of the survival strategies of poor people. (Ramphele, 2002, p. 25)

In our examples of knowledge sharing we tried to establish ubuntu-oriented resources emanating from our research projects. Each researcher reflects on her own considerations of the quandary, "Who benefits?"

Keane:

I came to my research project (Keane, 2006) by invitation from a school principal and an NGO in a rural area. I came in from nowhere, it seemed. Certainly, I could not speak isiZulu and lived a 7-hour drive away in Johannesburg. I did however have a great deal of varied teaching experience and was keen to learn. I had previously carried out research in rural schools. While I completed a doctoral degree, my actual learning went far beyond the thesis document (another benefit for me). I wrestled with challenges, internal and external, for three years and developed a profound interest in, and appreciation for, indigenous ways of knowing and being even though this was not initially the main focus of my research, which was in "relevant science education." Obviously, this became too narrow for the uncompartmentalised knowing in the community. I was continually asked about the research benefit to the community: from the Chief of the area, Education Department officials, students, parents, teachers, elders, and coresearchers. At the same time a National Research Foundation representative (at a conference) told me I was not doing research, I was just engaging with a community. This dilemma brought to the fore the question: "Whose research is it anyway?" Certainly I could not lay claim to it. Along with the community, we explored ways to make the research relevant and to find immediate benefits for community well-being and knowledge sharing. At the end of it all, I handed in the thesis. The dilemma continues.

Khupe:

I brought into my study (Khupe, 2014) my own life experiences and, many times, I drew on those experiences to guide my relationships with different participant groups. I considered language an important factor for developing relationships.

The benefits for me went beyond achieving a doctoral degree. I had the privilege of being accepted into a community who had no obligations to do so. Relationships lasted beyond fieldwork. The study provided me an opportunity for professional and personal growth—preparing me for studies in similar contexts. I learnt patience and flexibility. I learnt to respect local ethical protocols. In communities with oral cultures such as Mqatsheni, verbal agreements carry greater weight than written documents. Long after university ethics documents had been signed and filed, the secretary of the Traditional Council continued to seek the elders' collective verbal consent at each meeting.

Community participants are not always silent about their expectations of indigenous knowledge research. The elders asked, "*Uzosisiza ngani*? [How are you going to help us?]" Representatives from government departments asked, "How will this study benefit the community?" If there was any way in which this study benefitted the community, I was definitely not doing them a favour. They had more rights than I did to benefit.

The students had the opportunity to practice research skills through interviewing elders. They learnt how to take pictures using disposable cameras and they visited a history museum in the nearby town. The teachers appreciated the exposure to new possibilities of learning outside the classroom, including community-based learning. The teacher who attended a research conference had practical experience of knowledge dissemination. The benefit for elders was perhaps more emancipatory than practical. The study gave them an opportunity to speak about educational, sociocultural, and other issues of importance to their community in ways that are not possible in a tightly framed education research project. As the custodians of indigenous knowledge, the elders were, throughout the study, in a position of knowledge authority as they shared what they loved and valued regarding their land and their customs.

Seehawer:

Reflecting on my research project (Seehawer, 2016), I find it fair to conclude that my coresearchers benefitted from our collaboratively undertaken IK research on different levels: there was academic benefit such as intellectual stimulation, thematic and methodological learning. There was professional benefit through mutual support and exchanging teaching materials, developing and piloting new teaching strategies that were directly relevant for my coresearchers' teaching. On a personal level, we benefitted from the personal relationships that formed through the course of the research and learning about each other's cultures. In addition, through our booklet, other teachers in the area might benefit from the outcome of the research.

My coresearchers participated in the project for different reasons. Three were interested in the subject of indigenous knowledge–science integration. One wished to challenge herself academically and one came because her professor had asked her to, but then stayed because she saw the benefit for her own studies. The participatory and flexible nature of the research enabled us to accommodate the different research interests of my coresearchers as well as ideas that emerged along the way such as coauthoring and presenting together. I like to think that in our research we managed to even out some of the usual skewedness of who benefits from indigenous knowledge research. However, while the above reads as a nice list of coresearcher/community/research participant benefit, I maintain that the main beneficiary is still me, the academic. I entered the scene with a research question that I wished to explore and, while having their own motivation for joining the project, my coresearchers conformed

to my—albeit participatory—research agenda and enabled me to solve my research problem. It is important to remember this.

Discussion

The notion of redescription: "a talent for speaking differently rather than arguing well, is the chief instrument of cultural change." (Rorty, 1989, as cited in Reason, 2004, p. 7)

How may research speak differently? Lavallée explained: "Indigenous epistemology acknowledges the interconnectedness of the physical, mental, emotional, and spiritual aspects of individuals with all living things and with the earth, the star world, and the universe" (2009, p. 23). Such an inclusion of holistic ways of knowing into research processes and reporting is still rare in Southern Africa (with some notable exceptions, see Mpofu, 2016). There is a logical link to the indigenous epistemologies noted by Lavallée and appropriate indigenous-aligned research methodologies. Getty (2010) suggested that conducting research in an indigenous paradigm is in itself a benefit to community because of the promotion of cultural protocols and recentring of marginalised knowledge in respectful ways as well as, of course, relating according to indigenous ethical codes. Lavallée's promotion of the interconnectivities in such research also needs to be taken into account as noted in the following formalisation of ethical ways of engaging.

The University of South Australia (2009) required research involving Aboriginal people to have an ethical review by the College of Indigenous Education and Research. Ethics guidelines included: reciprocity, respect, equality, responsibility, survival and protection, and spirit and integrity (National Health and Medical Research Council, 2003, as cited in Lavallée, 2009). It is perhaps on these qualities and commitments rather than (or in addition to) the bureaucratic requirements of institutions that research dissemination and sharing should stand. Ultimately, in indigenous research, researchers are accountable to community elders and to their coresearchers.

All of our nine examples of knowledge sharing for community benefit were suggested by, or negotiated with, community participants. Louis (2007) acknowledged that it is difficult to write for both an indigenous community and for academia but it is incumbent on us to do so in order to ensure reciprocity as well as to decolonise entrenchment of knowledge products. We take this argument further by arguing for the promotion of other culturally relevant knowledge expressions.

We acknowledge the difficulty of representing knowledge in a way that may authentically draw on indigenous wisdom. Any innovative contribution may be problematic because it is likely to be in a different trans-paradigm form, not in the way that IK is passed on through traditional teachings, initiations, or revelations. While indigenous knowledge encompasses three processes: empirical observation, traditional teachings, and revelation, the examples given here are, rather, an attempt to acknowledge community contributions to research, to forge a hybrid of knowledge representations across school and community, to open up ways for young people to live in two worlds, and to offer teachers alternative expressions of curricula that include the life worlds of their students.

Conclusion

Research outcomes should be "disseminated back to the people in culturally appropriate ways and in a language that can be understood." (Smith, 1999, p. 15)

We concur with Smith (above) and Chilisa's (2012) condemnation of academic imperialism and suggest practical ways to engage respectfully, holistically, and to ensure that knowledge and processes arising from research be shared and disseminated or enacted in ways that benefit the community. In this paper we have provided examples to suggest how this may be done in South Africa.

Research into IK needs to demonstrate in itself what it calls for and what it is attempting to redress. Knowledge and cultural manifestations change but the values and worldview need to be recognised and appreciated so that they can be re-expressed in creative and relevant ways for our 21st century spaces. We cannot keep mentioning iron smelting in Africa thousands of years ago (yet, establishing IK heritage and its global contributions is not to be dismissed); but as the world moves we move with it in ways that connect us meaningfully—with each other and with nature. We dream into a future that rests in ancient wisdom—but rearticulated by bright young people; not for self-promotion, consumerism, personal gain, and greed—but for community well-being and the respect and preservation of nature in all its manifestations. If our research is not doing this, we could ask, "What are we doing?"

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Towards an African Education Research Methodology: Decolonising New Knowledge

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Abstract

South Africa has a number of policies to protect and promote indigenous knowledge (IK). The increasing interest in research into indigenous knowledge and science education in southern Africa has led not only to the production of publications, but also to numerous conferences, seminars, research centres, projects, learning materials, and postgraduate courses. However, research methods that are aligned to indigenous knowledge systems (IKS) are yet to develop to the extent that IK policy, publications, and interest groups have. Notwithstanding some authoritative texts (Chilisa, 2012; Odora Hoppers, 2004; Smith, 1999), there is a need for research-based examples from the southern African context that can offer authentic and nuanced suggestions for IK researchers of what an African research methodology might be. In this paper we present a brief overview of arguments for research methods that are consistent with IKS, propose features of such research orientations, and some examples of research processes. We synthesise some of the knowledge we have gained in this field in South Africa and offer considerations and reflections that will contribute to the conversation and exploration of creative, culturally relevant, and ethical ways forward for participative IK research.

Keywords: indigenous knowledge, cultural values, research framework, language, transformative participation, decolonisation

Introduction

Ironically, research methods that are aligned to indigenous knowledge systems (IKS) are underused in IK research in South Africa in spite of calls for decolonised research methods (Chilisa, 2012; Mkabela, 2005; Smith, 1999), and in spite of suggestions of what such methodologies might be in practice (Keane & Malcolm, 2004; Khupe, 2017; Ndimande, 2012). IK research generally, and particularly in science education, remains conventional whether quantitative or qualitative. Research, as is published in academic journals and validated by peers in the academy, is an enterprise that needs to be adapted to include the very ways of knowing being investigated.

While IKS may be traced back for millennia, and academic writing on it has been extant for decades, the notion of *indigenous research methods* has more recently arisen in response to the often inappropriate Western paradigms and genres of research in African contexts. Thus, indigenous research is an invention that comes from an Afrocentric perspective and the call to decolonise (particularly academic) knowledge validation and representation. We argue here that research methods need to be created to align with the intentions, context, and participatory nature of IK. We echo calls that have been made for researchers to be sensitive to context (such as Dube, Ndwandwe, & Ngulube, 2013; Keane, 2006b; Malcolm, Gopal, Keane, & Kyle, 2009). In addition, we provide practical examples of research methods that may characterise *African research* (as opposed to research on African subjects), with a view to stimulate discussion and, hopefully, to increase the application of flexible, creative, relevant, and ethical ways forward for research among African communities. We assert that African research needs to develop methods that align with participants' lived experiences and cultural values, and we present examples of research methods that recognise the place of local culture in shaping the identities of community participants. In doing so, we support the call by Mkabela (2005) that indigenous culture needs to inform research methods.

In the following sections, we present an overview of some of the rationales for IK research. We reiterate the need for appropriate methodological approaches for different contexts. The overview serves as a background to the argument that more appropriate participatory and community-centred methodologies need to be explored, understood, and supported by funders and the academy.

African Knowledge and Research

A science and technology report on South Africa's Council for Scientific and Industrial Research (CSIR) claimed it is "least well equipped to deal with problems of disadvantaged communities. It has no experience in conducting research whose specific goals have emerged from long processes of consultation and discussion with disadvantaged people" (International Development Research Centre, 1995, p. 26).

While more than two decades have passed, there seems still to be a need to understand what appropriate and alternative research methodologies might look like in communities and in IK research in particular. Studies into IK across the world agree that indigenous ways of knowing are place-based and holistic, and much less for knowledge's sake than for specific purposes directly linked to survival (Aikenhead, 2001; Chinn, 2007). In addition, culture and language are widely acknowledged as playing an important role in learning especially among indigenous people (Lipka, Wong, & Andrew-Ihrke, 2013), and the same should be emphasised for education research among indigenous communities. With respect to knowledge production, Nabudere (2006) questioned the notion that Eurocentric knowledge about indigenous peoples was for knowledge's sake, citing subtle purposes of control of territories and expropriation of human and material resources. Goduka, Madolo, Rozani, Notsi, and Talen (2013) argued that for research to be relevant to, and improve the quality of life of, indigenous participants, it needs to be rooted in indigenous worldviews, cultural values, and languages. Language plays a crucial role in the preservation and transmission of IK (Khupe, 2017). It is therefore prudent for

IK researchers to be mindful of these features of IK and to appropriately align the ways in which they engage with communities so that they are respectful of, and responsive to, sociocultural contexts.

Efforts to understand what is *African* in the context of education and research are closely linked to questions about which knowledge should be described as *indigenous*. The way research is done is often linked to one of two ways of understanding knowledge: it is either universalist or pluralist. While a universalist would argue against the description of any knowledge as indigenous because there is no certainty about the extent to which a framework can be indigenous (Horsthemke, 2004), a pluralist would view knowledge as a sociocultural and historical construction (Turnbull, 1997). From a pluralist perspective, what qualifies as knowledge depends on the ways in which particular societies categorise, code, process, and assign meaning to their experiences. Turnbull (1997) asserted that:

> *Some traditions move it [knowledge] and assemble it through art, ceremony and ritual; [Western] science does it through forming disciplinary societies, building instruments, standardisation techniques and writing articles. In both cases it is a process of knowledge assembly through making connections and negotiating equivalences between the heterogeneous components while simultaneously establishing a social order of trust and authority resulting in a knowledge space. (Turnbull, 1997 p. 553)*

For centuries, Western knowledge has not only been widely disseminated from the point of production to other places and other times, but colonisation and its accompanying political and ideological conquest has also been instrumental in propelling Western knowledge spatially and temporally, and in thwarting the diffusion of other knowledges. It is for this reason that scholars interested in research into sociocultural issues call for production of knowledge in ways that seek to reassert cultural identities (Nabudere, 2006). Acknowledging cultural identities can appropriately showcase the richness of pluralism—where diversity is accepted without hierarchical judgement on the basis of race or culture (Nabudere, 2006). We concur with and reiterate Nabudere's arguments and his call for "knowledge production that can renovate African culture [and] defend the African people's dignity" (Nabudere, 2006, p. 7).

Our paper is situated within IK research methods literature. We contend that research among indigenous African people must be characterised by flexibility, participation, and negotiated purposes (Khupe, 2014), and should seek to interrupt colonising forms of research by focusing on African thought and experience (Mkabela, 2005; Ndimande, 2012). Research aligned to indigenous contexts will seek to embrace inclusivity throughout the research process: from the time of joining the community, to negotiating the research purpose, gathering data, sharing interpretations and findings and outputs. The process will also involve turning the inquiry inwards, so that there is a "reflexive sensitivity to its data" (Mkabela, 2005, p. 181). This also means that ethically and relationally there is an imperative to *act* on the findings in some way. The focus is not solely on the researcher but on the researcher-in-relationship. Asante's writing on Afrocentric method intended to relocate the African person as subject: "To be centered is to be located as an agent instead of as 'the Other'" (Asante, 1998, p. 1). And yet, this needs to be considered, not in the Western context of individualistic agency but in the more complex context of *ubuntu* where the individual is a person through other people: I am because I belong. Mbiti (1969) illustrated the notion of ubuntu well:

> *Only in terms of other people does the individual become conscious of his own being, his own duties, his privileges and responsibilities towards himself and other people. . . . Whatever happens to the individual happens to the whole group, and whatever happens to the whole group happens to the individual. The individual can only say: "I am, because we are; and since we are, therefore I am." This is a cardinal point in the understanding of the African view of man. (Mbiti, 1969, p. 106)*

Ubuntu prescribes desirable and (communally) acceptable forms of human conduct, and this includes how they should relate (Letseka, 2013).

We characterise African research as that which is both transformational and participatory (Khupe, 2014; Malcolm et al., 2009), and which recognises local cultural identities manifesting through language, cultural protocols, and relationships. In the next section, we provide exemplars of how African research might be carried out. Although not exhaustive, the exemplars provide a practical guide for researchers considering collaborating with indigenous communities.

People and Places

We draw on two participatory science curriculum research projects carried out with communities in rural KwaZulu-Natal, South Africa (Keane, 2006a; Khupe, 2014). We describe them here highlighting features such as access into the community, research purpose, data production processes, ethics, and outcomes.

Mqatsheni (Khupe, 2014).

> *When I heard Mqatsheni had very cold winters and sometimes even had snow, I was really excited and greatly looked forward to my first visit, desperately hoping there would be snow. I started creating mental images of myself in snow. My family shared in the wild excitement. On arrival in Mqatsheni, I learnt that the community had been devastated by strong winds, which left a number of families with literally no roofs above their heads. The occupants were left in the cold. As we chatted about this disaster with Skhumbuzo (who had agreed to participate in the study as a research assistant), he remarked, "This place is always facing one weather disaster or another. It's the strong winds, heavy rain or snow." That was a sobering moment. I suddenly realised I had not, for one moment, stopped to think of how the weather impacted the community. I regretted my naïve, "tourist" attitude, and was grateful I had not mentioned to Skhumbuzo how desperately I had wanted to see snow. (Reflections on first visit to Mqatsheni, August 2009, Khupe 2014, p. 21.)*

Mqatsheni is in KwaSani Municipality, Sisonke District in the KwaZulu-Natal province. The village is in the southern *UKhahlamba* [Drakensberg] mountains, about 30 kilometres north of the small urban settlement of Underberg. Not much of the Mqatsheni is known to the outside world because the village is perceived as not offering much of economic importance outside of itself. IsiZulu is the majority language in Mqatsheni. English is the language of instruction for schools in the area but it is hardly spoken outside of school premises. So strong is the presence of isiZulu that it is quite often used in classroom in place of English. Cultural values are strongly present in Mqatsheni. Although I grew up and even worked in rural areas, I did not realise that I had lost a significant number of values from my own culture, perhaps through the years of staying in urban areas. I only noticed when I arrived in Mqatsheni that I did not greet people as spontaneously as I used to—before I lived in the cities. In Mqatsheni I was greeted by adults and children alike—not because I was new in the area. I was greeted because I am a human being, and that is all that mattered.

Rural communities are often structured differently from non-rural ones, and they are often governed by intricate networks of traditional, political, and civil service structures. Mqatsheni is no different. Local governance and service delivery in Mqatsheni are provided through the KwaSani Municipality, which is based in the urban Underberg. In addition, the area is under the authority of a Traditional Council of Elders headed by an *induna* [chief]. The elders are the custodians of knowledge and culture, and are responsible of passing that on into the future.

This study (Khupe 2014) sought answers to the following questions:

- What indigenous knowledge can be identified from interaction with participants in Mqatsheni?

- What constitutes the worldview that informs the community's indigenous knowledge?

- What aspects of the participants' knowledge could be included in school science, and how? (pp. 14–15)

In line with the research purpose, the study followed a transformative participatory design, bringing together the Mqatsheni community and university researchers in co-participation.

This interpretive research study sought to contribute to culturally relevant education by finding and documenting IK in Mqatsheni for use in science teaching and learning, and to contribute to the transformation of IK research through using methods that recognise the role of language and culture in the lives of community participants. The study was part of a bigger project on indigenous knowledge, science curriculum, and development: a project that involved partnering with communities in identifying ways of bringing together IK and science to benefit communities.

Fieldwork for this study lasted 2 years and involved 10 visits to Mqatsheni, each lasting 1 week. All visits to Mqatsheni were arranged with the school principal, participating teachers, and elders. We respected the time that they gave towards the project and we needed to arrange for time that was most convenient and least disruptive of their day-to-day obligations. Project plans and activities remained flexible throughout to accommodate unexpected incidents such as illness, death, and other impromptu community and school events. Indeed, there were deaths in the vicinity: some participants lost loved ones and one participant died during the course of the study. Meetings came up that were previously not on participants' schedules, and all of this extended the fieldwork—an aggravation to an already stretched budget and to postgraduate completion timelines. However, the extended engagement with the community, coupled with a careful negotiation of access and a focus on relationship building, proved valuable in terms of the quality of data and in terms of maintaining respect for the local culture.

Chibini (Keane, 2006a).

> *There is a lovely road that runs from Ixopo into the hills. These hills are grass-covered and rolling, and they are lovely beyond any singing of it . . . if there is no mist, you look down on one of the fairest valleys of Africa. (Paton, 1944, p. 1)*

So it is still: with scattered traditional homesteads, round huts, pretty goats, small herds of cattle, and wide open spaces. The school is a rectangular block with a few pit toilets behind tall wire fences next to a dirt road. Subsistence farming enables the largely unemployed community to eke out an existence with some help from child grants, casual labour, and pensions. In spite of poverty and ill health, community spirit and cultural practices endure. There is a strong sense of identity in the homogenous society where everyone is isiZulu-speaking with an African/Christian worldview. I am particularly indebted to the openness and vision of strong leadership within the community and to all those who contributed. In line with my argument of participative research, giving just tribute to knowledge holders and the research community, I acknowledge the research community below.

Inkosi Ndlovu was the chief of the Ifafa region. Without her wisdom, kindness, and support the research would not have been possible. Induna Chiya, the headman in the area, summoned people to our initial meetings. Induna Ngcobo provided consistent guidance and commitment to the project. The *Isangoma* [traditional healer] as well as elders, parents, farmers and other community members were

generous in their openness, and willingness to participate. Sihle Mchunu and Nomfundo Ndlovu joined us as community researchers while the school principals, Mr Mkhize and Mr Hadebe, were generous in opening their schools to us. They translated between English and isiZulu at public meetings and voiced their public support of the project (Keane, 2006a). The teachers, especially Ms Mbhele of Sinevuso, contributed in many ways, participating in workshops and having us in their classrooms. Students were the heart of the project.

The community hoped that science education would contribute to learning skills to alleviate poverty. My aim, from the start, was to define relevant science in (and with) this rural community, to explore indigenous science knowledge and link school learning with the community. The community's immediate concern was food security. This led to a partnership with an NGO known as Heifer, which started a chicken-farming project with 20 farmers chosen by the community. Our research and curriculum intervention built on integrating this enterprise with the school curriculum, while also developing an understanding of education and research.

As the scope of the research expanded to include the wider community, we struggled with complexity and competing agendas. Our research began to include project management amid all the difficulties of distance and "unstable" environments. Severe poverty means that children often go to school not having eaten, or they stay away from school because of obligations to household chores. It became clear that the project would only have an impact if we could also address the immediate stresses of poverty.

We worked with all sectors of the community over the 3-year period collaborating on data creation through workshops, interviews, student assignments, and school visits. We discussed visions, concerns, and findings, celebrating learning in a 10-day science intervention that ended with a community science festival. Feedback and dialogues continued into the following year, as did the development of the farming project.

Features of an Indigenous Methodology

We base our synthesis of an indigenous methodology on the above two projects (Keane, 2006a; Khupe 2014).

People

As observed by Ndimande (2012) as well as Vakalahi and Taiapa (2013), it is essential to establish respectful, authentic connection with the community, preferably through an invitation by them. The community are a reflection of their culture and language. Respectful relationships were central in our studies. One elder emphasised: "*Inhlonipho ngumuntu* [respect is the core of the human being]" (Khupe, 2014, p. 149). The least the research process could do was to be respectful to the people, their values, and practices. In both projects, relationships were demonstrated through collective coexistence and collective responsibility. In the Chibini project, when children were asked to draw their house, all drew the whole village. One child wrote under his drawing: "A person without a neighbour is not a person" (Keane, 2006a, p. 211). In spite of this demonstrated connection to culture, the elders were concerned about loss of ubuntu.

Sadly, the social fabric is fraying and elders look back with nostalgia:

> *Kwakuyindlela eyayinjalonje ukuthi ingane bezifundiswa ukuphathana. Kwakukhuliswana. Kwakunjalo. . . . Kwakuyinhlalonje eyayinjalo. Abantu babebhekene [That was the way that children were taught to care for each other. We were responsible for the other's growth. That is how it was . . . That was the way of living. People looked after each other. (Mr Zitha, interview May 2010, Khupe, 2014, p. 152)*

The research process is a balance between researcher expertise, the benefit of an outsider perspective, and the main direction given by the elders. In addition, it is necessary to continually consult with research assistants—who may become "cultural consultants" (see Vakalahi & Taiapa, 2013, p. 403). That consultation helps to keep the study aligned to the values of the community's cultural space, as explained by Hornung (2013). Of necessity, this process will take a great deal of time, which is often at odds with research Gantt charts. In indigenous communities, the taking of time is a mark of respect and shows the importance of something. Time is not a commodity that is a variable in "return on investment."

Place

Research planning needs to allow for features of distance, changing conditions, and consideration of the importance and significance of the spaces themselves. Places may be sacred. Distances will be travelled. Approaching a study using a transformative, participatory approach enhances understanding of context. Discussions will include matters that do not directly relate to the research questions such as concerns about livestock theft, crime, and dissatisfaction in the political arena. However, all these matters help researchers understand the context better. The recurrence of the use of collective pronouns such as *indawo yethu* [our place], *endaweni yakithi* [in our place], *umuzi wakithi* [our home], and *intaba yangakithi* [our mountain], all contributed to an understanding of place as collectively owned, and where people are bound by collective responsibility. We learnt through our studies to keep plans open in order to accommodate unexpected events. Collaboration enabled shared benefits, which were empowering, such as opportunity for discussions on local level curriculum matters, conversations on school–community collaboration, and new ways of teaching and learning within a resource-constrained environment.

Expectations

Research purposes need to be codesigned and negotiated. Inevitably this brings problems in terms of a community's competing agendas, possible dynamics of conflict, and constraints on the researchers from the academy and funders. Communities have needs that cannot be ignored as irrelevant to the research agenda: unemployment, crime, disease, and death. For them, the researcher is their ambassador to the outside world:

> *Siyafisa kakhulu ukuthi niwujikele lowo mlayezo nakwamanye amazwe ukuthi siyafisa ukusizwa endaweni yakithi. Siyafisa intsha yakithi isizakale. Siyafisa nathi qobo ukuthi ngelinye ilanga sizibone nathi sihlukile entweni esiyiyona [We wish that you send this message even to other countries that we are looking for help. We wish for our youth to be helped. We also wish for ourselves, that one day we can see ourselves transformed from our present state]. (Ms Majozi, May 12, 2010, Khupe, 2014, p. 37)*

This is why the best compromised solutions regarding what is beneficial and possible, need to be established at the start. These are also likely to change. A high degree of integrity, flexibility, generosity, and resilience is likely to be needed by all in projects that are holistic, exploratory, and inclusive.

Frameworks

An integrative research framework guided both studies that we draw on (Keane 2006a; Khupe 2014). The framework principles included ubuntu (Nyaumwe & Mkabela, 2007; Swanson, 2007), indigenous research methods (Chilisa, 2012; Louis, 2007), and sociocultural theory (Lemke, 2001).

Table 1 shows the focus elements for the research and the multiple methods used to generate data, together with the different groups of participants. The data generated was in the form of video and audio recordings, photographs, artefacts, and various forms of text, many of which were in isiZulu. The first author (Khupe) was researcher–transcriber (Bird, 2005), and this allowed for analysis to begin at transcription stage (Lapadat & Lindsay, 1999). The early analysis was helpful in identifying issues that required follow-up, translation, or explaining. Multistage analysis and interpretation of data was collectively done with participants through deliberation on emerging themes. Each data set was analysed in its original language to avoid loss of meaning in translation. This process brought out the participants' perspective more clearly and also ensured what Louis (2007) termed *respectful representation*. Even in reporting the findings, any direct quotes were in the language that the participants actually used (mainly isiZulu). We only translated the quotes for the benefit of non-Zulu readers.

Ethics

Both projects were granted university ethics clearance. Participants signed consent forms at the beginning of the studies. Unlike what is widely assumed in conventional research, none of the community participants wanted to be anonymous or to have pseudonyms assigned to them. They even agreed for their photographs to be used in the research reports. However, actual ethics issues extended beyond written contracts. Ethics decisions were made throughout the duration of the fieldwork and beyond (Keane, 2008). For instance, in all meetings with the elders, the secretary of the Traditional Council would double check with the elders if they approved of having discussions recorded and if they approved of photographs being taken. For participants in communities with a largely oral culture, written contracts are not as important as the spoken word, but that does not imply the absence of protocols. We had to answer questions such as: *"Inkulumo le, uzoyikhiphaphi? Ungasitshela njengoba sonke sila* [Where are you going to publish this discussion? Can you tell us all as we are gathered here?]" (Elder Cekwane, Khupe, 2014, p. 203)*.

Ethical research is complex and requires moral integrity, and judgements about sometimes abandoning aspects of the data that may cause harm— as was the case for the first author (Khupe).

Data production

In Table 1, we summarise focus elements from the two studies that contribute to African research methodologies.

Table 1: Key Aspects of African Research Methodology

Research focus	Constituents	Participation and data production ideas
People	• Respectful relationships • Role of elders/ancestors • Collaboration/community-centred • Participants' perspectives • Community researchers	Elders: Focus group discussions following structure of Traditional Council meetings, hearing from the elders (by students and researcher), deciding on projects, arranging meetings, providing guidance, sanctioning participation, making ethics decisions.
Place	• Sacred space • Importance of context • Local cultural protocols • Language of communication	
Expectations	• Shared purposes • Shared benefits • Managing expectations	Students: Creative work (drawing, songs, stories, dance, plays), taking and interpreting photographs, playing games, visit to a museum, dialogue, research assistants.
Frameworks	• Participation • Ubuntu	
Data production strategies	• Field work • Community projects • Observations • Stories/songs/artefacts/ dance • Dialogue • Community researchers' journals	Teachers: Stating needs and expectations, informal conversations, interviews, questionnaires, workshops, meetings, co-teaching reflections, attending an education research conference. Options for anonymity or not.
Ethics	• Community-led • Community values • Acknowledgement	All: deciding the language of communication, deciding time frames.
Consequences	• Shared learning (checked with knowledge holders) • Project outcomes • Continued relations	Researchers: Requesting access, sharing knowledge and resources, project management, checking ideas, involvement in community activities (outside the research project).
Representations	• Knowledge benefits for the community • Various ways of disseminating research findings	

Limitations

Africa is rich in diversity. Even within a single nation there is diversity of language, cultural identities, and experience that define different groups (Ndimande, 2012). Furthermore, even in small studies in one area, there are communities within communities. We acknowledge the limitedness of our experiences in bringing out the full richness of the African research experience. In addition, we would like to admit our undeserved privilege of now telling these stories to the academic community when we are in fact not the real voices of these communities.

Discussion

Assumptions that participation is enriching may tend to simplify both the notion of participation itself as well as the investment of time and money. However, the notion of time as a commodity is a Western construct and is of dubious relevance here—provided funders and academics understand this. Understanding everyone's intentions, relating to each other, enabling participants' contributions, being understood, and creating transformative structures, all take time. Community forums are consistent with rural life: the process itself is as important as the goals and products. Furthermore, participation is not unproblematic, nor is it prescriptive. For example, it is common in Western

literature to assume that *participation* is synonymous with *democratic participation*. This may not be the case. Elders may decide for community members whether they can participate or not.

Theoretical frameworks need to be eclectic and draw from indigenous paradigms such as ubuntu. Research that explores frontiers should also stretch the boundaries of the frameworks themselves. These frameworks need to be not only epistemological and methodological, but also ontological and axiological. The idea that local communities should be involved in deciding the research questions, the theoretical frameworks, the processes and interpretations, gives particular authenticity to the research. Standard notions of validity are thrown into question. "Truths" are defined not only as factual truths and representational truths, but also as healing truths. Validity needs to take into account all the research purposes, which stretch beyond knowledge creation.

In the natural flow of projects, many epistemologies work at once: everyday knowledge, science knowledge, intuitive knowledge, and revelation. In one sense these are integrated by the project, but in another they demand border crossings from one way of thinking to another and back, depending on the immediate context and task. In the process, everyone involved has to confront ways of thinking that are new to them, as well as detailed knowledge. This is true *learning*.

Education research aligned to indigenous African culture can be a mix of the more conventional qualitative methods and instruments (such as focus group discussions, interviews, open-ended writing tasks, worksheets) and those that are more eccentric (such as playing games, hearing stories, audiences with traditional healers, home visits). Data is gathered from both intended and unintended experiences (see Mpofu, 2016). Sensitivity to the context requires that the research process is not only guided by the researchers' questions but also by the community participants' day-to-day concerns. The local language plays a critical role as the language of thought, the store and the vehicle of transmission of local knowledge and worldview (Khupe, 2017).

It can be seen that IK in a broad sense (as opposed to perhaps specific content knowledge of fauna and flora in science, for example), is often tacit, intangible, disappearing, or contentious. Thus indirect and negotiated ways of coming-to-know are needed. According to Malcolm (2003, p. 36) representational knowledge "consists of concepts, metaphors and conceptual schemes (and their underlying worldviews, assumptions and processes of legitimisation) used to explain the world." This knowledge is more difficult to recognise or discover than performative knowledge. The open-ended nature of attempting such inquiry can be unsettling, confusing, and incomprehensible to the academy. Participative research processes take time and outcomes cannot be guaranteed. In addition, the very nature of immersion and involvement creates (as mentioned) complex ethical dilemmas—which create high-risk junctures along the way.

Like the research process, data analysis is also a communal, iterative, and a negotiated process. Perhaps surprisingly in data interpretation, the combination of different worldviews opens up new ways of knowing and being. That is, an outsider may be able to see new connections and significances that an insider takes for granted and overlooks. The academic researcher perspective is also enriched and led by indigenous community views of the data and the findings, and consequences of the research become available for critique. The researchers' use of rhetorical conventions and their assumptions about the nature of knowledge is challenged by alternative perspectives. For the research process to be truly participative, respectful challenge needs to be directed across the whole research community's input and assumptions. Such robust engagement guards against romanticising IK systems, helps to acknowledge changing contexts, and allows for multiple truths.

We have tried to present aspects of research projects into IK education in rural communities that may inform an indigenous knowledge methodology. We draw this to a close by reiterating core approaches, and with a parable for scientists.

Concluding

A teacher said in conversation at the end of the project of finding relevant science curriculum: "Children will benefit because it is them who chose what they thought would help them" (Keane, 2006a, p. 318).

Recognition of, and sensitivity to, local knowledge, culture, and lived experiences needs to provide guidance regarding the way in which research among indigenous African communities unfolds. The community and not the researcher should be at the centre of the study. Although there are a number of African research studies in South Africa, much more such research needs to be done. Greater effort still needs to be invested into developing and applying appropriate methods for research with, for, and among indigenous communities.

However, in critique of the article's title and our arguments, we have doubts about the term *method*. "Research needs to be messy and heterogeneous because that is how the real world is. That's how life is" (Law, 2003, p. 3). Law made the point that in reporting, method is dressed with "clarity" (2003, p. 3). This is the expectation and genre of scientific reporting, designed—we suspect—to not only reinforce the myth, but also to avoid distracting busy people with messiness that everyone knows about. This is even more the case in deeply engaged research working across knowledge paradigms. In our experience in a rural setting with little control of agendas, method is almost a contradiction. We therefore find Law's position of being "at odds with method" reassuring (2003, p. 3). Perhaps a better term would be *research processes*. We conclude with a parable of scientific research.

The Research Animal.

> One day, Heiseb sent a new animal into the forest. It was clever: more clever than jackal and elephant. It had a huge head, and eyes that could see through things, see tiny things, see even the dust on the shiny moon. And it could hear things too: sounds of bat that even fox cannot hear. And it knew the secrets of long ago: who had walked and what they hunted; it even knew that dassie was elephant's cousin—and how it knew this was strange because it didn't know that he was our brother!

> Perhaps he didn't know some things because he was young. Some said he was greedy. Certainly he ate whole forests and even emptied the river. And he was a moody brother. There was the time when wild dog had nowhere to run and puppies were few. The new animal worked to save wild dog. But then he took the young pups and tore them into bloody pieces. Some say he is mad. Some say he isn't so clever after all. Some even say Heiseb forgot to give him a heart.

> Heiseb says he has not yet found his belonging. (Keane, 2006a, p. 322)

"The contribution African sagacity has to play is . . . in time we shall be in a position to bestow upon South Africa the greatest gift ever—a more human face" (Coetzee & Roux, 2002, p. 85). Perhaps upon research too.

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Indigenous Knowledge/s of Survival: Implications for Lifelong Learning among the Basotho Herding Fraternity

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Abstract

This article foregrounds Basotho male herders' interaction with their environment as a productive platform for informal learning activities poised to address the herders' immediate and context-specific needs. Indeed, understanding how the herders interact and learn through their daily engagements with their environments has a potential to provide substantive baseline insights that could inform Lesotho's nonformal education providers and policy-making forums. Drawing on indigenous knowledge theory, the article explicates the sociocultural perspective of indigenous knowledge with emphasis on how it is acquired and applied by male Basotho herders in order to improve their lives and address their daily herding challenges. The study adopted a qualitative research methodology with a sample of 30 snowball-selected Basotho male herders using interviews, transect walk, and photo voice as its methods of data collection. The data were analysed using the pattern coding method. The findings revealed two main forms of indigenous knowledge that the herders acquired through the herding practice namely, indigenous knowledge as local science and indigenous knowledge as local practice. The study recommends more scientific research that documents Lesotho's specific indigenous knowledge—to develop a holistic nonformal education curriculum and to nurture the rare indigenous knowledge skills of the Basotho male herders.

Introduction

Livestock herding is generally semi-nomadic in nature where families or herders relocate—temporarily or seasonally—from home together with their livestock to spend time away in cattle posts in search of pastures. (Dyer, 2014; Seno & Tome, 2013). The semi-nomadic nature of herding, and the inaccessible herding topography, limit access to social services such as education and basic health facilities for herders because mainstream provisions and policy making do not cater for herding (Makoa & Zwilling, 2005; Pitikoe, 2016; Pitikoe & Preece, 2016). However, the herders are intelligent—as evidenced by their resilience amidst uncomfortable and precarious circumstances. Stories on herding in Lesotho outline how males are initiated into herding at a young age, for example, six years old to look after sheep, goats, and calves within a reasonable distance from home (Pitikoe, 2016; Pitikoe & Preece, 2016) under a close mentorship of the elders. Generally, herding know-how skills are acquired informally through oral transmission from the elders and family members, and continue to be passed on, mainly orally, from one generation to the next.

Herding for Basotho males serves two main purposes. Firstly, to accumulate personal livestock wealth, whereby they either look after the family's livestock or get hired as herders and, in turn, are paid in livestock at the end of a minimum period of 12 months. Secondly, herding is a source of employment for most males (Makoa & Zwilling, 2005). In cases where the family's finances are compromised, the first born male becomes the first resort, by virtue of his social role as the provider, to seek employment from wealthy livestock owners as herder, regardless of age and education (Pitikoe, 2016). Pitikoe further noted that the herder and the employer enter into an agreement on the payment terms for each completed year—generally in the form of live animals, the number varying depending on the owner. For some herders, payment comes in the form of 12 live sheep per year, while others are paid with a live cow. Herders can choose to either keep the animals or sell them for cash in order to provide for family needs (Makoa & Zwilling, 2005). These herders also choose a personalised earmark as identification for their livestock kept as savings or for selling later for income generation.

Poverty is identified as a global impediment to education access, a reality from which Lesotho is not immune (UNESCO, 2012). The Government of Lesotho identifies rural areas as the most poverty-impacted sector of Lesotho, with specific reference to the child-headed, the elderly-headed, and the illiterate-headed households (UNESCO, 2012). Although in 2005, the Lesotho government introduced a pension for all citizens aged 70 years and older in an effort to bridge the poverty gap (Croome & Mapetla, 2007), Human Development Index (HDI) statistics have reported a rapid decline in Lesotho's key development areas of education, health, and life expectancy (UNDP, 2014). Lesotho has recorded a consistently low HDI ranking: 120 out of 162 countries in 2001, 162 out of 187 countries in 2014, and a ranking of 161 out of 188 countries in 2015 (UNDP, 2014; UNDP, 2015). This could be attributed to Lesotho's political instability and the continuing challenge to keep people in school despite the introduction of free primary education (FPE) in 2000. A decline in HDI adversely impacts on poverty-related illnesses, labour force, and the national economy. In an attempt to counter the effects of the escalating economic crisis, male Basotho are compelled to withdraw from their formal educational activities to look for employment, mainly as hired livestock herders because of their low literacy levels.

Lesotho's education system comprises both formal and nonformal education under the guardianship of the Ministry of Education and Training (MoET), with formal education receiving more support than nonformal education (NFE). However, NFE is considered a potential provision for herders in spite of it being the less favoured educational provision. There is an absence of clearly defined policy on NFE and open distance learning to support an effective implementation of NFE in Lesotho (MoET, 2005; MoET, 2008). The data presented by UNESCO (2009) on the planned age distribution of Lesotho's primary education system stipulated the age range for compulsory education as 6–12 years, which means that Lesotho's primary education level extends for 7 years. While Lesotho is applauded for higher reported female literacy in Africa, as well as for implementation of FPE in 2000, in the absence of a policy that

binds parents to compulsory education access for their children, the country's formal education continues to experience challenges pertaining to male retention. Most males drop out of the formal provision due to "lack of parental involvement and poverty" (Zeelen, van der Linden, Nampota, & Ngabirano, 2010, p. 1), to join the herding community. The age-old herding culture has, therefore, rendered formal education in some quarters in Lesotho, inferior to herding—due to the perception that the hardship it entails, better qualifies herding as a rite of passage into manhood for Basotho males (Mohasi, 2006).

The aim of this article is to understand the indigenous forms of knowledge that Basotho male herders have acquired, and to understand how this knowledge is utilised as survival strategies to overcome the challenging demands of their daily lives in rural Basotho communities. The main focus is the application of indigenous knowledge as a coping strategy for the herders' primary health care and nutritional purposes as well as for veterinary care. In particular, the article denotes two distinct but intricately intertwined logics by which the herders creatively engaged with and organised knowledge constructions in their contexts, namely, indigenous knowledge as local science and indigenous knowledge as local practice. These indicated how the herders engaged with the conceptual and theoretical abstractions of local knowledge as well as how they intentionally applied this in their daily practice as a survival mechanism. We also show the implications of the Basotho herders' indigenous knowledge, both as local science and local practice, for the nonformal education curriculum content and pedagogy in Lesotho.

Understanding Indigenous Knowledge

Indigenous knowledge theory (Lekoko & Modise, 2011; Schlee & Shongolo, 2014) guides this article. The concept of indigenous knowledge refers to context-specific knowledge, which is developed and embodied within the confines of culture, usually transmitted orally over time and generationally inherited (Ngozwana, 2015). Nyiraruhimbi (2012) identified three ways of looking at indigenous knowledge. First, as local science where knowledge is consciously developed over time using local technologies that bring about a significant change in the lives of the indigenous people, for example, the use of traditional herbs (Moteetee & Van Wyk, 2011). Second, as local practice where knowledge is developed unconsciously over time through trial and error—for example, arts and craft activities. Finally, the notion of knowledge as local memory, which denotes abstract and memorised knowledge as a result of the socialisation process—for example, folklore. The latest development on the global need to explore the role of indigenous knowledge as a meaningful contribution in development was raised in 2015 through the Sustainable Development Goals (SDGs) as highlighted, inter alia, by Osborne, Cutter, and Ullah (2015).

Indigenous knowledge is characterised as being oral, context-specific, and passed on through generations. The literature highlights that most adult males in Lesotho are either semi or complete illiterates, with higher numbers of illiteracy reported among Basotho herders. Some adult herders enrol in NFE programmes but they later drop out of the provision due to the semi-nomadic nature of the herding practice, coupled with the limited coverage of NFE learning posts reaching out to herders. Low literacy rates, coupled with an overall negative perception of the herders among the wider Basotho society, place the herders in a marginalised position. Nonetheless, their circumstances do not compromise their access to context-specific herding indigenous knowledge. As such, this article established deeper insights on resourcefulness and collectivism in the herder community as a tool for learning indigenous knowledge, and as a coping and survival mechanism among male Basotho herders, despite their low social status and literacy levels.

Methodology

This qualitative study adopted an interpretivist paradigm (Chilisa & Preece, 2005) in order to establish a better understanding of the indigenous knowledges that Basotho herders had acquired—and how

they were generated and applied in order to cope with their daily herding challenges. The study used interviews, visual participatory methods in the form of photo elicitation (Harper, 2002; Liebenberg, 2009; Wang & Burris, 1997), transect walk techniques administered in Sesotho (vernacular language in Lesotho), and the life history approach (Orton, Mitchell, Klein, Steele, & Horsburgh, 2013; Trahar, 2006) as methods of data collection. A group of 30 snowball-sampled herders aged between 18 and 45 years, from the three main geographic zones (lowlands, foothills, and highlands) participated in the study. The selected age range was intended to examine the herders' level of access to FPE, assuming that the younger herders (18–30 years) had stood a better chance of accessing FPE—with the likelihood of providing rich information on the dynamics of their lack of access in spite of the free provision in the country. Additionally, the study intended to explore whether the older herders (31–45 years) had been exposed to any forms of education other than FPE.

Scholars argue on photo elicitation in research, and how it is closely related to the emotional being of the photographer. For instance, Harper (2002, p. 13) posited that visual presentations such as photography "evoke . . . human consciousness," while Liebenberg (2009) argued on how the use of pictorial representations in research places the less empowered participants in the upper positions of "control and self-representation" of the understudied phenomenon (p. 13). However, Wang and Burris (1997) argued on the use of photo voice in research as serving three basic objectives. Firstly, the photo voice provides a recorded reflection of the capabilities and limitations that exist in the community. Secondly, photo voice in research provokes a dialogue on social issues of concern to the society. Thirdly, photo voice is a mechanism that disempowered communities can use to make their voices heard by policy makers. Based on the marginalisation of the participants, the study hoped to use the photo voice technique with an anticipation that we would have enough budget to purchase 30 disposable cameras, one for each herder, followed by a crash course on how to operate the cameras before we left the herders with the cameras to take pictures that would be discussed at a later stage. However, due to financial challenges, we could not buy the cameras—hence the approach diverted from photo voice into photo elicitation (Harper, 2002; Liebenberg, 2009).

Therefore, we engaged in a tedious training exercise using a digital camera and an iPhone on which the herders took turns to be trained. After that, every herder was allowed to take a sample picture to ensure that the instructions were well understood. We also identified a lead herder who facilitated that each herder took at least two pictures depicting their indigenous knowledge experiences and their application in their daily herding lives. The pictures were then uploaded, saved on a laptop in different folders labelled with the names of the herders; then we developed a laptop slide show of the pictures. Next, we gathered the herders around to view the slide show, and gave each herder an opportunity to explain the importance of his pictures. We also processed the sample pictures, labelled them with the herders' names, and handed them to the herders as a token of appreciation for their participation in the study. Most of the herders had taken pictures of themselves and their friends, stating that they had never taken pictures before, and that it was their first time to see what they (the herders themselves) looked like, because most of them did not have access to a mirror. This process was carried out throughout each of the three geographical regions of the study.

The transect walk empowers communities with context-specific problem solving skills (Shar, Kambou, & Monahan, 1999), while also helping the researcher to probe the community's perspective on the historical background of local resources, how the resources are used and distributed, and how they foresee the future of their land use. In this study, three transect walks were conducted—one per geographical region. In each of the transect walks the researchers were accompanied by one herder who was very familiar with the place being toured. The researchers linked the transect walk to the other techniques—interviews and photo elicitation—by explaining that the purpose of the transect walk was to see the reality of what had been discussed about the herding practice during the interviews, and to be more familiar with the herders' work places. CARE (2002) identified the transect walk as a potential ice-breaking tool to kick-start a research process. However, in our study, care had

to be taken for the safety of the female researcher around the herders, to protect her from being hurt; and for the male researcher too, especially in the foothills and highlands, to avoid him being taken to isolated places known for male initiation schools where he could have been forcibly captured to join a Basotho initiation school, as per the local custom. Culturally, males who have not gone through the initiation school can never be seen around the initiation school area while they are in session.

This therefore called for establishing a more solid rapport with herders before going out into isolated environments known to them alone. Before the transect walk, there was a mutual agreement that the herders would reveal the herding environment in as much detail as possible, identify the main resources and interesting things about herding that the herders would like to be known to the outside world, and ensure that the route was safe and accessible. The walks started from the lowest point to the highest, where we could see most of the resources such as cattle posts, grazing areas, dams, and forest trees, to mention a few examples. During the walks, we paused and probed anything emerging that might have not been discussed prior to the tour. We drew a sketch of the route we took, reported the conversation in the field journal, and audio recorded it. At end of the tour, we gathered the herders together to discuss the findings of the tour, and followed this with a schematic mapping of the tour using local resources.

The following steps were undertaken to seek the necessary ethical clearance for the study. One, securing a written ethical clearance from the UKZN Ethical Committee written prior the commencement of the field activities. Two, consulting the relevant stakeholders to seek their consent in conducting the study: the Non-Formal Education inspectorate and the Lesotho Distance Training Centre of the Ministry of Education and Training, the Lesotho Association for Non-Formal Education, and *Monna ka Khomo* [a man by cattle] Herdboys Association, the gatekeeping organisation of herders' issues in Lesotho. Three, observing the rights of the participants: consent to free participation and withdrawal, anonymity, consent for recording the proceedings of interviews and taking notes for future coding.

The different methods build an in-depth picture of the herding lifestyle. The descriptive nature of life history narratives explored the herders' coping mechanisms and ways of learning while herding. The steps we followed in the data analysis were as follows: first, we transcribed the raw data into the vernacular language and translated into English. Second, we engaged an English language teacher to reverse translate in order to ensure coherence in the meaning of the English and Sesotho versions. Third, pattern coding method was used to identify patterns and themes and, deductively, as cited in Arthur, Waring, Coe, and Hedges (2012), through the theoretical lenses to categorise the themes and explain the findings at a more abstract level using English language.

Findings

The lonely and semi-nomadic nature of herding practice limits opportunities of access to social services for herders and hence facilitates a close contact between the herders and the herding environment. As such, they tend to maximise the use of the limited resources in order to cope with their predicament. The findings also revealed that basic numeracy and literacy skills were an important requirement in herding for purposes of livestock monitoring and record keeping. Nyiraruhimbi (2012) asserted that indigenous knowledge could be conceptually organised into three main categories. These are indigenous knowledge as local science, indigenous knowledge as local practice, and indigenous knowledge as local memory. Local science in this case refers to consciously generated knowledge using local technologies for the purposes of improving the lives of those who have access to such knowledge; local practice refers to unconsciously developed knowledge over time through trial and error. We found two distinct categories in how the herders in this study engaged with indigenous knowledge, namely, indigenous knowledge as local science and indigenous knowledge as local practice. We elaborate on these in more detail in the following sections.

Indigenous Knowledge as Local Science

Local science underpins the role played by the elders and other herders in teaching and learning about traditional herbs for various purposes. Much of the herders' knowledge revolved around naming the different traditional herbs as well as their curative use both for human and animal health care. The findings were indicative of how herders' interaction with their herding environment facilitated the acquisition of new knowledge. The subthemes under the local science section included knowledge of traditional herbs for human medicinal use, animal medicinal use, and human nutritional supplements.

Traditional herbs for human medicinal use

The topographical and environmental challenges surrounding herding practice in Lesotho contribute to limited access to social services, including health. Figure 1 features a perspective of the cattle post terrain identified during a transect walk.

Figure 1: The Characteristic Cattle Post Terrain

The situation required equipping oneself with necessary primary or personal health care coping mechanisms by using available traditional herbs. The living conditions, shown in Figure 2, and the harsh weather also posed a health hazard for the herders. This meant the herders had to devise access to, and utilisation of, traditional herbs as immediate curative measures. The significance of these findings has a broader implication for the herder and nomadic populaces of India, Kenya, Tanzania, Nigeria, and other southern African contexts. Indeed, the notion of using traditional herbs both for human and veterinary purposes has wider implications beyond the context of this study. The findings indicated that the herders were also able to harness the use of traditional herbs to cure livestock ailments. The curative potential of some traditional herbs makes a special case for the need to document Lesotho-specific herding indigenous knowledges, and the extent to which these could be tailored and applied in other contexts where livestock herding is an important part of the society.

Figure 2: *Motebo* [A Cattle Post House]

The herders pointed out that the structure of the house was uncomfortable to live in and that, during heavy winter snowfalls, the risk of the roof falling into the house because of the weight of the snow, was high. The topography and the harshness of the weather motivated herders to learn about the traditional herbs and methods of preparation in which their peer herders as well as the elders had become resourceful.

Through photo elicitation (Harper, 2002; Liebenberg, 2009), herders presented that they used traditional herbs for human medicinal purpose:

Alex: The other herders have taught me about the various traditional herbs that I can use to cure some minor illnesses. This bunch [Figure 3] is ralikokotoana [dried and hardened] or monna motšo [a black man] and we mainly use it for servicing the body: curing gall-related problems and discharge. If chewed, it becomes a mild purgative.

Figure 3: A Bundle of Ralikokotoana

Alex: This one [Figure 4] is called moli *[African potato]. This one is good for cleaning the blood, promoting good blood circulation and opening the veins.*

Figure 4: A Bundle of Moli

Comrade: I use hloenya *[a locally well-known and trusted Basotho gall cleansing medicine—see Figure 5] when I feel dizzy or I suffer from gall, aloe when I suffer from stomachache or gall. I mix* letapisa *[closest English meaning for the name of this herb could be illness pacifier, see Figure 7],* hloenya*, and* lengana *[Figure 6, a minty Basotho herbal plant, often used as a nebuliser to treat flu or common cold-associated illnesses] to induce* ho k'hapha *[forced vomiting]. I learned to take care of myself this way from my parents.*

Figure 5: Hloenya Plant

Figure 6: Lengana Plant

Figure 7: Letapisa

While Bourdieu (1985) argued for the resourcefulness of a high number of networks for sharing among the members, he further identified the importance of *habitus*—which are the male herders' socially attained and habituated dispositions, informing the ways they behave, act, and think. The herders lacked social power and hence benefited from the social networks that existed among themselves, particularly the bonding social capital. It was through the cohesive nature of the herding community and the bonding social capital that existed among the herders that the local science indigenous knowledge was generated. This knowledge included the different preparation and administration methods to provide much-needed curative care for the herders' various primary health needs. The effectiveness of these herbs was evidenced by the fact that none of the herders in this study had ever visited a modern doctor or hospital for medical attention. We understand, however, that the herders used these herbs as part of their traditional Basotho indigenous knowledge—not specifically that of herders—as illustrated above when Comrade explained that he learned how to use these medicines from his parents.

Traditional herbs for animal medicinal use

The findings further provided several examples of how herders combined and used herbs as alternative means to provide for veterinary health care needs. These combinations were mainly based on the symptoms of the sick animal. Seemingly, the herders were able to interpret symptoms in relation to a diagnosis and prescribe accordingly. As it was with humans' health procedures, the herders used different methods to administer the medications. The data from the interviews below illustrate:

Linakaneng: I mix the following: mohalalitoe *[Figure 8],* makhona-tsohle *[medicine that cures all diseases, Figure 9], and rough salt, and this mixture is either given to the sheep* komisa *[in its dry form] or mixed with water . . . alternatively, depending on the illness, I mix* sehala-hala-sa-matlaka *[vultures' plant] and* monatja *[popularly believed to be poisonous when swallowed by humans].*

Taiwan: He [my father] also taught me that, since the animal cannot speak for itself, I have to look for the signs in order to be able to help it before the sickness overwhelms it. . . . I then ask the other herders what I can give to the goat, depending on what we [herder community] think it is suffering from.

Figure 8: Mohalalitoe

Figure 9: Makhona-tsohle

Some herders had learned about animal healthcare from their peers and their fathers, and this included the herders' vigilance from the onset of the symptoms and signs of illness. However, as part of the herding community, consultations were made with other herders prior to the administration of the identified herbal mixture, and especially in the absence of established knowledge about the effectiveness or procedural use of a particular herb or combination of herbs.

Generally, learning and knowledge among the herders was not individualistic, but was more a shared collaborative effort (Bourdieu, 1985) in that, regardless of how much one knew, there was still room for consultations among community members for further verification and guidance. This mutual communal interdependence served as a powerful resource for survival because it allowed for errors committed to be rectified not only by the herders who committed them, but also by the whole herding community. Additionally, it ensured that the effective herbs were widely known, free of charge, and used to preserve the livestock. In fact, herders who possessed knowledge of these herbs were more likely to be hired to look after livestock for gainful purposes than those who did not. Moteetee and van Wyk (2011) have also observed that traditional herbs can be used successfully for both human and animal consumption, and that some are specifically for animal or human consumption while others can be used for both purposes. They further posit that the administration of such herbal mixtures may

differ depending on the ailment of the human being or animal and, therefore, possession of knowledge regarding their use was a powerful resource of survival for the herders.

Furthermore, as indicated in the interview extracts below, local science knowledge among the herders extended beyond herbal care into the application of local techniques as seen fit to improve health conditions of the animals.

> *Ducks: My grandfather taught me how to treat a fractured leg of an animal without using traditional herbs. . . . If it's a rear leg, I take some sticks and place them around the fractured area then I take a thin cloth and wrap it around the fractured area and then tie the covered fracture with a thin rope. After sometime when it is able to walk using the broken leg, I loosen the ropes and remove the sticks leaving only the cloth and the rope so that it can be able to bend the tissues in order to prevent permanent muscle tissue paralysis.*

In these accounts, the herders explicitly elaborated on the role played by the others in facilitating acquisition of the local science knowledge they had. The herders further explained that they also learned how to mix and administer different herbs based on the requirements presented by the signs of the sickness. Additionally, a revelation was that local science was not only through herbal practice but also extended into the independent diagnosis and application of local technologies.

Traditional herbs for human nutritional supplements

The interviews data below indicated that the herders were generally entitled to two meals a day: breakfast (in the morning before a long day in the field looking after livestock) and dinner (in the evening when they came back from the livestock grazing pastures). The stories further indicated how challenging it was for the herders to cope with this eating habit, and that it called for the herders to come up with coping strategies through a variety of supplementary herbs that were prepared in different ways before consumption in order to curb their hunger during the day.

> *Semonkong: The herders eat only twice a day: in the morning and in the evening. It is not easy to get used to having only two meals in a day. Therefore, we have our own coping strategies.*

> *Linakaneng: I also ate monatja at times, which can be fatal if eaten raw. However, in my experience, we used to braai it over the fire until kokomoha [it swells]; it is delicious and healthy. . . . I also learnt other different nutritious herbs from the herding practice. During the day we braai likhung-khung, we eat monakalali, we also cook sheqe. Sheqe is bolila [sour plant], which is prepared using fresh milk . . . other wild vegetables such as makhabebe [a rose-like red delicious flower], tjoetla [root that looks like a carrot], monokotšoai [black berries], mabelebele [tiny fruit that commonly grows in the bushes of Lesotho], lioete [a carrot-like root, different from tjoetla], montsokoane and lenolo.*

The interviews further revealed some alternative ingredients supplementary to what was available in the community as a way of ensuring that herders still ate a healthy diet:

> *Linakaneng: I collected bobatsi [Figure 10, thorny wild vegetable found only in distant livestock posts] for relish. . . . In the absence of cooking oil, I used fresh milk instead of water and added a pinch of salt.*

Figure 10: Bobatsi

The findings indicate that the herders were a rich resource of indigenous knowledge, which provided them with more options for decision making in that, despite the known toxicity of some of the traditional herbs, their environment encouraged them to develop their own survival coping mechanisms. Another discovery was the herders' ability to adapt to the different contexts of the herding environment and their level of innovation to ensure that in spite of their circumstances, they still managed to devise means for healthy living. This indicated congruence in part to the literature that argues that there is no absolute truth, and that wisdom provides options to cope with life's uncertainties (Sternberg, 2001). Earlier, this section identified local appropriate technology as another form of local science that the herders used to heal the fractured bones of animals. Seemingly, appropriate technology was also applied in the herders' food preservation and preparation, as illustrated in the interview data below.

> *Semonkong: During harvest time, we select* poone-ea-matšohlo *[partly matured maize] and then bury it deeply in the soil to keep it* letsete *[moist] until the winter season passes. When winter season is over, we identify an anthill and drill some holes, then make a fire for roasting the maize.*

Indeed, the context and the environment equipped the herders with coping mechanisms to supplement their nutritional needs. This shows how the environment influenced learning among the herders (Makoa & Zwilling, 2005). We identify indigenous knowledge as local science where there is the use of technical expertise. This did indicate an existence of local technology in the form of food preservation where the herders used their own strategies to moisten and roast the maize out in the veld. It is one example of indigenous knowledge being a localised form of knowledge and closely linked with wisdom. It implies the need for Lesotho's nonformal education to reevaluate the contribution that indigenous knowledge can make in development (Osborne et al., 2015) and its possible inclusion in curriculum development.

Indigenous Knowledge as Local Practice

We found that knowledge among the herders was acquired through their daily interactions, and required repeated practice until they had fully mastered the skill. Additionally, the herders mainly learned basic numeracy skills through the assistance of their peers—basic numeracy was a requirement for livestock motoring. We further found that the herders compensated for their illiteracy by devising other traditional means of knowing and identifying their livestock for the same purpose of monitoring. The findings under local practice are divided into the following two subthemes: herders' unique counting acumen, and informal learning of basic literacy and numeracy.

Herders' unique counting acumen

The study discovered that the herding lifestyle coupled with their low literacy rates greatly influenced what the herders learned and how they learned it. The herding context also builds herders' capacity in problem solving skills, resilience, and wisdom that could be applied in practical ways and have immediate relevance to their lifestyle. In spite of their inability to read and write, most of the herders were tasked with the responsibility to skilfully look after large flocks of animals. While it could be argued that their illiteracy posed a potential danger of loss of the animals, the findings indicated how the herding environment had capacitated the herders with unique skills that enabled them to carry out their responsibilities with ease. One such skill revealed in the findings was the herders' unique non-numeric acumen in identifying and counting their livestock. When the herders were asked how they were able to effectively manage the records of their livestock, they indicated that because they could not count the animals, they were able to identify the livestock with the earmarks, which were usually unique to each livestock owner.

However, in cases of large flocks (see Figure 11), hundreds of sheep or goats in particular, the herders had learned to become so intimate to the animals that they could tell without necessarily counting, that a sheep was missing. Indeed, the herders had developed advanced identification capacities enabling them to spot the different shapes of the animals so closely that, at first glance, without going into the numeric, they could establish whether one of the flock was missing or not. This unique skill was evidenced during the transect walk where two illiterate herders were probed.

Figure 11: Caring for Flocks of Sheep this Large Is Common for Herders

Semonkong: I know them [animals]; I check the ears for my personal marks [Figure 12]. I also learn their shapes so that I can distinguish them, especially when they are so many,

you can't hold all of them each to check the ear marks. Learning the shapes is better and quicker, because sheep of the same person have similar ear marks, so I need to know them by looking at their shapes. If one is missing, I can tell by just looking at them.

'Matšooana: Herders are obliged to keep the correct records of our flock regardless of your education level. Therefore, our daily interaction with the animals gives us an opportunity to identify their uniqueness and attach those specifics to the relevant animal. This makes it easy for us to immediately identify a missing one at first glance. . . . You must know that it is not possible to identify even 50 sheep using numeric, because they are moving all the time after you count it moves this way, another one that way . . . so you won't finish, unless you have other people to help separate the sheep in one direction and count as they pass. Learning to identify them is better because most of the time I am alone—so this works for me.

Figure 12: Ear marking Is Another Strategy for Livestock Monitoring

While to the ordinary eye, the sheep look alike, for the herders their level of intimacy developed overtime through looking after the animals daily, established a relationship equated to that of a baby–parent or friend relationship; this enabled them to assimilate the uniqueness of each sheep and further identify a missing one without necessarily counting the whole flock.

The above excerpts indicate the herders' unique learning strategies for personal and alternative learning methods, and their ability to work out solutions by themselves. Their self-determination and self-motivation became powerful survival coping strategies that could be a resource, even in modern society, in helping us understand the dynamics and complexities of life without overreliance of numerical counting. Nurturing and integrating such skills in the nonformal education curriculum in Lesotho would create a broader learning environment of mutual lifelong learning based on indigenous knowledge and skills transference in order to enhance life experiences of the herders in these contexts.

Informal learning of basic literacy and numeracy

Informal learning is identified as a form of learning in its own right, and highlights the importance of collaborative participation as an enabler for learners to become familiar with the subject matter and in the process, acquire relevant skills; it is also a form of emotional support for the herders. As illustrated in the interview excerpts below, the study revealed complex and socially mediated ways in which the herders learned both numeracy and literacy skills through the support of others around them, including friends and family members, with locally available resources facilitating such learning.

> *'Matšooana: T-bose [name of his neighbour] told me how important it was for a herder to know how to count so that I can monitor the numbers of my livestock . . . he taught me to count from one up to ten using the sheep droppings. It was not difficult because I combined my skill to recognise my sheep without [numerical] counting and what he taught me, so within a week I was able to count without assistance.*

> *Linakaneng: The other herder taught me how to count. . . . I picked up some stones from around and stood by the entrance of the kraal to count the animals as they entered: for each animal entering the kraal I would drop a stone until they had all entered . . . twice a day—morning and evening.*

In the case of Linakaneng, the learning was different from that 'Mantšooana in that while 'Matšooana learned the numbers, Linakaneng learned through visual matching where he matched the number of livestock with the number of stones that he had dropped. The findings revealed, therefore, that herders learned different forms of both numeracy and literacy. However, their learning styles were different. For some, the numeracy skills were acquired through the actual counting from one up to a certain number. For others, numeracy was learned through visually matching stones with live animals as they exited and entered a kraal. Their basic literacy learning was further reinforced through context-specific repetition and practice. Their engagement with numeracy illustrated unconventional ways of numeracy practice. Their informal way of acquiring local practice knowledge implies the need for Lesotho's NFE to creatively draw on the existing ways through which herders are already creatively grappling with issues of numeracy in their daily lives, to inform curriculum content and pedagogies aimed for the herding fraternity.

Discussion of Findings

The herders' types of knowledge revolved around their herding role and the environment in which they worked. Their expertise was in developing an understanding of the value of local science, which was used both for human and animal medicinal care as well as for nutritional purposes. In spite of the difficulties that come with herding practice, there was a strong sense of learning and sharing of coping mechanisms to overcome environmental challenges. The findings further indicated the cohesive nature of the herding community, and how this became a resource of learning reinforcement for the herders.

One of the critiques of indigenous knowledge is its oral nature and being context-specific. Yet the findings indicate a close relationship between learning and the immediacy of results to address their daily, specific survival challenges. Likewise, the value of the herders' local science was highly relevant and adapted to local technologies in ways that enhanced the herders' lives. Additionally, there was knowledge and skills transference across specific local contexts within the herding fraternity, which denoted applicability of the herders' indigenous knowledge in broader similar contexts. Indeed, the findings corroborate evidence from Lekoko and Modise (2011) who also opined for the need to apply the African indigenous learning framework as a tool for creating a better understanding of the educational needs of a local society.

While livestock herding is arguably carrying a wealthy resource of indigenous knowledge, limitations lie in the lack of documentation of the knowledge. As such, it is relegated to a much lower status than that of formal education. Secondly, not much effort is made to recognise indigenous knowledge as a resourceful form of learning that could be allotted a considerable amount of resources and political will. Integrating the herders' indigenous knowledge into Lesotho's NFE curriculum would help divert the criticism of overreliance on oral transference of this knowledge. This supersedes current monetary capitalism that is considered the basis for human survival, with its concomitant families' and communities' disintegration—many Basotho men migrate in search of jobs and have shortened life expectancy due to HIV and AIDS, risking an erosion of herding-specific indigenous knowledge systems. The dire need for preserving Basotho-specific indigenous knowledge systems—and their founding value of *Ubuntu Botho* [virtue of humanness], which acknowledges the collective African nature—found to have the potential to enhance the learning opportunities among the herders, is underscored.

Conclusion

This paper argues that for one to know where one is going, one has to understand where one came from. This notion also accentuates the universality of ways through which indigenous knowledge is acquired, and that indigenous knowledge is the root of all forms of knowledge; hence it forms a key to the underpinning cultures. The herders learned and applied indigenous knowledge through the bonding social capital, hence herding lifestyle is regarded as lifelong learning in its own right. However, this knowledge poses a danger of loss due to its susceptibility to memory decay.

The study makes the following recommendations:

- The Lesotho NFE programmes should consider the potential resourcefulness of the herding lifestyle for learning indigenous knowledge and strategise for its preservation.

- The collective nature of herding social networks calls for a collection of Lesotho-specific herding indigenous knowledge documented both in English and Sesotho for inclusion in the mainstream education and wider replication.

- Active engagement of herders in the indigenous knowledge collection and documentation process in order to promote ownership and sustainability.

- An holistic NFE curriculum development that broadens learning into the rare skills found within the herding domain.

- Sustenance of indigenous knowledge skills through relevant programmes and nurturing.

These recommendations are made in cognisance of the limitations of indigenous knowledge that many scholars have identified—oral inheritance, lack of written records, and its cultural and context-specific nature—which makes the knowledge mainly accessible to local communities, relegating indigenous knowledge to a subservient status. They also call for further research on inclusion of indigenous knowledge into the mainstream scientific knowledge systems, as begun by this article.

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"I Am Because We Are" Dancing for Social Change!

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Abstract

In postapartheid South Africa, ideas of self, identity, and one's place in society pose a labyrinth of internal conflict and negotiation. In this article, we discuss the potential of a particular 7-week dance education course, offered to generalist preservice student teachers, as a possible location for self-transformation and, ultimately, social change. Our qualitative case study was rooted in symbolic interactionism, with social interactions becoming catalysts for transforming meanings of self in relation to the other. Participants, mostly nondancers, included 80 culturally diverse preservice student teachers (PSTs) enrolled in a first year bachelor's degree in education (BEd). Students shared personal reflections on their dance education experiences via open-ended questionnaires, focus group interviews, and reflective journals. Our data indicate that the students' dance education experiences generated transformative awareness of the self. This consciousness was primarily evoked by close interactions with diverse others through active, bodily involvement in dance education activities, which prompted more profound engagement with the self, stimulating discovery, liberation, affirmation and, ultimately, transformation of the self.

Keywords: multicultural education, social change, personal transformation, dance education, peace education

Introduction

The South African Constitution (1996) values and promotes the recognition of dignity, equality, and authenticity for all South African citizens. The country's motto, "Unity in Diversity," reflects an ideology aimed at the unification of distinctly diverse groups of people, all living together in harmony without compromising their unique and distinctive identities. The reality, however, is that in postapartheid South Africa, predicaments of the self in terms of dignity, equality, recognition, uniqueness, authenticity, and identity still persist, impeding social change (Soudien, 2012). It is our proposition that these challenges can be addressed through education, with educational programmes focusing on recognition of sameness and difference, equality and social cohesion (Blum, 2014; Luong & Nieke, 2014).

In this article, we discuss the potential of a particular dance education course offered at a South African tertiary institution to generalist, preservice student teachers to promote social change in particular, with regards to transforming notions of self in a culturally and politically diverse postapartheid classroom.

Background

Rather than promoting unity amongst diverse groups, the previous South African apartheid government enforced and decreed segregation of groups according to culture, race, and ethnicity. This separation inadvertently influenced individuals' self-esteem, agency, and aspirations at personal as well as collective levels. It also informed personal and collective stereotypical perceptions of self and other reinforcing, for example, generalised assumptions of white Western supremacy, giving rise to discrimination against all "non-white" people, including indigenous African citizens. Today, many South African citizens, including those born after 1994, are still grappling with feelings of inferiority, anger, resentment, disillusionment, shame, and guilt. The reality is that acute awareness of apartheid-related injustices still prevails as "knowledge in the blood," in other words,

> knowledge embedded in the emotional, psychic, spiritual, social, economic, political, and psychological lives of a community. . . . Knowledge in the blood is habitual, a knowledge that has long been routinized in how a second generation see the world and themselves, and how they understand others. (Jansen, 2009, p. 171)

This discomforting "knowledge" inadvertently informs South Africans' perceptions of the self. In addition, the so-called "new" South Africa remains contaminated with racism, xenophobia, colonialism, imperialism, cultural disparity, and psychological despondence, which further diminishes and disrupts the individual's self-esteem as it chains the individual to the prison of stereotype. Awareness of adverse public generalisations and stereotypes of collective identities invoke a "double consciousness" (Du Bois, 1903, p. 3), leaving individuals acutely vulnerable because it often manifests as internalised self-disgust, diminished self-esteem, or reluctance to identify the self with a particular ethnocultural collective (Smith & Riley, 2009). In this regard, Bell (2007) and Soudien (2008) held that continued experiences of discriminatory practices deprive individuals of reaching their full potential; they give rise to self-doubt and low self-esteem, inhibiting agency, aspirations, and self-determination.

Recent student protests at several South African universities, sparked inter alia by the #Rhodesmustfall[1], #Feesmustfall[2], and #OpenStellies[3] campaigns, confirmed innumerable unresolved social and political challenges experienced by students. South African educational institutions are indeed complex, multifaceted sites of paradoxes and challenges, with students often confronted by

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[1] https://www.facebook.com/RhodesMustFall
[2] https://www.facebook.com/nmmufmf/
[3] https://twitter.com/openstellies?lang=en

distorted and conflicted perceptions of self, other, and society, in particular with regard to notions of association, rights, and privilege (Luescher, 2016; Soudien, 2012). Negotiations and renegotiations of formerly held perceptions about self and other—as inhabitants of the African continent—are thus at present complex personal tasks, leaving many students angry, frustrated, confused, anxious, and despondent (Adams, van de Vijver, de Bruin, & Bueno Torres, 2014; Costandius & Bitzer, 2014). South African society is undeniably in dire need of more effective strategies to bring about social change, "heal the divisions of the past" (Constitution, 1996, p. 1243), and restore the dignity of all citizens.

In this regard, Delport (2009) emphasised that social change should be conceived as a complex, profound, and double-layered process, constituting transformation at two reciprocal levels, namely the *infrastructural* and the *superstructural*. The superstructure denotes the political sphere, evident in structural societal changes including new policies and legislations. The infrastructure, on the other hand, refers to the personal sphere, involving the pre-political dispositions of each individual citizen. Delport (2009, p. 158) explained:

> *At the core of the infrastructure are individuals' needs and happiness, their relationships and their ideas about life and development. At the core of infrastructural transformation are the conversions pertaining to these aspects. The infrastructure is more fundamental to social transformation than the superstructure, because to a large extent, the legitimacy and maintenance of the superstructure depends on the infrastructure.*

Hence, social change is not merely brought about by new, amended policies and legislation. In essence, sustainable social change implies transformation of the self, evident in attitudinal and behavioural changes leading to enhanced social interactions between diverse people. Such inner transformation however cannot be enforced from outside, but needs to be nurtured and cultivated within each individual (Delport, 2009; Oloyede, 2009). In this regard, it is generally accepted that the education domain constitutes the ideal artery for social change, because this is the primary space where ideas of self and other can be nurtured and inner, personal transformation engendered (Blum, 2014; Delport, 2009; Luong & Nieke, 2014).

Dance Education

Dance education is a compulsory component of the Creative Arts learning area currently implemented in South African primary schools. Hence, it is included as a stand-alone component in our preservice student teachers' course work. At this juncture, it is necessary to distinguish between *dance education* and *dance training*. According to Koff (2000), the primary aim of dance training is to equip an individual dancer with the necessary skills, control, and technique to master a performance. Dance training is therefore applied in relation to dance as performance art. The aim of dance education, on the other hand, is to enable *all* individuals to develop the skills necessary for personal expression through bodily movement in a nonverbal manner (Koff, 2000). Hence, whereas dance training is end-product orientated, dance education foregrounds the value of the creative processes involved during the dance-making process. It is aimed at fostering the general holistic development of an individual (Eddy, 2009). It goes without saying then, that dance education teaching strategies differ vastly from those of dance training, as further discussed in subsequent sections of this article.

Theoretical Underpinning: Symbolic Interactionism

This research study is primarily rooted in *symbolic interactionism* as proposed by George Herbert Mead (as cited in David, 2010), Plummer (2004), Herbert Blumer (1986), and Norman Kent Denzin (2009). As theoretical framework, symbolic interactionism served as a lens, in other words, an existing working theory and philosophy underpinning the manner in which we approached this study. Symbolic interactionism is premised on the assumption that human beings have the capacity to produce symbols of meaning, which enable the production of history, culture, and communication (Plummer, 2004).

Meaning here is viewed as *social products* formed through social interaction, hence created "in and through the defining activities of people as they interact" (Blumer, 1986, p. 5). Human beings' reactions towards "objects" (which include people) depend on the meanings these objects hold for each individual.

Cooley (1907/2010) reminds us that a person's cognitive processes are connected to the thoughts of predecessors, companions, and the collective. An individual's interpretation of meaning is consequently related to these. Interpretation, however, requires more than mere application of conventional meanings. Rather, it requires a process by which meanings are reevaluated and adjusted as instruments for generation of action (Blumer, 1986). Of particular relevance for this study is Atkinson and Housley's (2003) assertion that meanings can be transformed in order to adjust reaction and social conduct towards objects (including people). This revision of meaning occurs during an inner dialogue through which the individual communicates and interacts with the self (Atkinson & Housley, 2003). It is through these interactions with the self that individuals are able to construct conscious action towards the other and the world, rather than responding through mere automation (Blumer, 1986).

Symbolic interactionism therefore focuses primarily on ideas of self, how the self adapts to others, how the self constructs order, and how the self constructs civilisation (Plummer, 2004). It therefore conceptualises society as "people engaged in living" (Blumer, 1986, p. 20). Life involves interactions with others, during which persons both designate and interpret meaning in order to develop and adapt to others and society. In other words, reciprocal interactions with others generate acts through which life and society are organised. As interactions with objects, the other and the self change over time and circumstance, meanings also evolve, adapt, and develop (Plummer, 2004). The self is thus viewed as social and subsequently inseparable from social life. In this regard, symbolic interactionism focuses not only on the self, but also on "collective behaviour" and "how people do things together" (Plummer, 2004, pp. 1105–1106). Denzin (1969/2010), accordingly, saw symbolic interactionism as predicated on the following methodological principles:

- Meaning is informed by social construction, which necessitates an investigation into both the meaning making system of individuals, and the implications of interactions between meaning making systems.

- Certain interpretations of meaning are implicit and others are negotiated.

- Meaning fluctuates during interaction, as interpretation of meaning is negotiated.

- The locality of interaction affects behaviour. This includes the specific people involved, the environment of the interaction, associated meanings during interaction, as well as the amount of time dedicated to interaction.

In essence, symbolic interactionism promotes social interaction as a platform where individuals can engage and interact not only with others, but also with the self during inner conversations with the self, in order to change meaning (Plummer, 2004). This study focuses primarily on transformed meanings of self. We argue that dance education can serve as a unique platform where profound interactions with the other (and the self) can promote transformations of the self, in a manner that ultimately can affect social change.

Contextualising this Study

This study focuses on a particular dance education course that forms part of a general teacher education programme for nondance specialist students aspiring to become generalist primary school teachers, teaching diverse South African learners in diverse schooling contexts. The dance education component constitutes one stand-alone section of a compulsory general arts education course. It

focuses on dance teaching and learning strategies aimed specifically at fostering general holistic development of culturally diverse young South African learners (Eddy, 2009; Koff, 2000). This particular course comprises only seven lectures. Each lecture lasts 75 minutes, resulting in approximately nine contact hours in total. Inadequate time allocation unfortunately hampers skill, aesthetic, technique, and pedagogic development, allowing only a brief overview of subject content material. The primary focus of this course is on practical and pedagogical aspects associated with facilitation of creative movement activities and ethnocultural dances, core components of dance education as described in the South African national school curriculum (Department of Basic Education, 2011).

Creative movement in this context involves activities where participants explore and expand their repertoire of natural play movements in expressive and creative ways (Kauffman & Ellis, 2007). In this study, creative movement activities involved collaborative dance-making in small groups of approximately five student teachers each. Students were provided with a set of specific objectives and parameters in which to, collaboratively, create a dance. These objectives usually highlighted a specific formal dance element. Explorations of space, for example, were facilitated as: "Design a dance that includes three different formations plus an ending." Students were allowed approximately 15 to 20 minutes to design and practise the dance, after which they performed it to the class. After each group's performance, formative feedback was shared with all the students, emphasising basic aesthetic criteria for movement evaluation. These creative movement activities constituted the major component (90%) of each lecture session.

The remainder of the study was dedicated primarily to (attempted) Africanisation of dance education through the teaching of diverse ethnocultural dances. The term, ethnocultural dances, is used here to refer to "traditional" South African ethnocultural dances associated with for example Zulu, Afrikaner, and Xhosa cultures. The term also encompasses recently evolving contemporary dances associated with particular indigenous ethnocultural communities, such as the *Kaapse Klopse*—an integrated dance and music style associated with the Cape Malay (Bruinders, 2012)—and the *township jive*, which germinated from the *swing* in Sowetan canteens and social events, spreading to other townships during times of political oppression (Glasser, 2000). Due to limited time, the teaching of diverse ethnocultural dances was basic and rudimentary, with students mainly imitating and mastering movements demonstrated by Marelize, the dance education lecturer.

This dance education study therefore actively engaged students in collaborative dance-making processes and learning a variety of ethnocultural dances. Although collaborative dance-making resonates with African teaching and learning methods, and diverse ethnocultural dances are celebrated, we cannot rightfully claim this course as Africanised. From a critical stance, it is clear that certain colonial influences remain evident because of hegemonic practices. Both authors are white Afrikaners with solid Eurocentric, Western grounding in the arts. Application of a single set of aesthetic criteria—Eurocentric in this case—for this dance education study was inherently exclusionary.

Diverse ethnocultural groups often subscribe to diverse sets of aesthetic criteria that indicate so-called "good" dance practice and performance. In African dance, for example, a main indicator of good performance regards the extent to which the audience participates through verbal encouragement and clapping during the performance (Adinku, 2004; Edwards, 2010). Western traditions, however, require silence and restraint during performances. In a culturally diverse classroom, insistence on such a response during performances can be viewed as hegemonic because it not only gives preference to a Western aesthetic, but also literally and figuratively negates and silences the voice of the African aesthetic, and the African person, for the duration of the performance. Emphasis on a Western aesthetic thus deeply sustains a colonised curriculum. Also, if these dance education sessions result in students adopting a foreign aesthetic, a sense of belonging and identification with their own ethnocultural group gets disrupted, which could indeed inhibit intracultural sustainability, ultimately hampering intracultural cohesion (Rowe, 2008). In addition, such practices can inadvertently

destabilise and subvert notions of self, which can fuel innate perceptions of inferiority with students losing confidence in their unique cultural identities, their own authentic creative works and, subsequently, themselves.

The teaching of ethnocultural dances through demonstration, as was the case in this study, can also be problematised as hierarchical, reinforcing unequal power relations in the classroom (Rowe, 2008). Such dance movement demonstrations could be interpreted as inauthentic, necessarily influenced, informed, and affected by Marelize's own internalised, Western-based cultural and social orientations (Ashley, 2014; Bond, 2010; Rowe, Buck, & Martin, 2014). At a more practical level, we also admit that time constraints during lectures did not allow appropriate contextualisation of each ethnocultural dance, raising concerns regarding essentialism and exoticism (Ashley, 2014; Bond, 2010; Risner & Stinson, 2010). Simplistic and superficial teaching of ethnocultural dances potentially disregards the aesthetic value that the particular dance has for its members: the specific meaning that the dance holds for the particular ethnocultural group (Risner & Stinson, 2010). Such absence of contextualisation can devalue both the meaning of the dance and the worldview of the represented ethnocultural group (Ashley, 2014).

Mindful of the shortcomings of this particular course during the current Africanisation discourse, we now shift our focus to the impact of the dance education course on our student teachers—a group of culturally and politically diverse students in postapartheid South Africa. We however still contend that, despite the shortcomings of the course as explained above, participation in this particular dance education programme provided spaces for profound social interaction between culturally and politically diverse students. Every creative movement activity, for example, required all individuals to participate in social interactions, bodily interactions, verbal negotiations, bodily negotiations, and cooperation with the other in order to cocreate and perform a dance. In our study, through the lens of symbolic interactionism, we explored these profound interactions as potential catalysts for personal transformation, in particular, with regard to notions of self in relation to the other, in a post-conflict culturally diverse South African classroom.

Research Methodology

This research project was qualitative in nature and designed as a case study. Participants included 80 preservice student teachers (PSTs) enrolled in a first-year bachelor's degree in education (BEd) at a South African university, registered for a generic 7-week dance education course. Through open-ended questionnaires, focus group interviews, and reflective journals, students were encouraged to share personal reflections on their experiences in the dance education classroom by responding to the following prompts:

- Reflect on the dance education lectures and describe a meaningful experience you had. (You may describe more than one experience or event if you like.)
- Why was the experience meaningful?

In their reflective journals, students were prompted to reflect as follows:

- Today I felt . . .
- Today I thought . . .
- Today I noticed that . . .

Data were analysed by applying the open coding method (Schurink, Fouché, & de Vos, 2011). We attempted to overcome any bias through conscious application of the hermeneutic circle (Higgs & Smith, 2002), as well as by drawing on the assistance of an additional independent coder who analysed the data. Marelize, Aletta, and Mia, the independent coder, analysed the data separately, after which

final themes were determined during a consensus meeting. Each of us also kept the data sets produced by the different data generation methods separate for initial analysis and triangulation purposes. All three of us, however, concurred that these categories overlapped in a manner that would justify assimilation of the three data generation methods into one set of findings for the discussion.

Marelize's dual role as teacher-researcher posed various concerns with regard to ethics, bias, trustworthiness, and reliability (Dahlberg & McCaig, 2010). For example, her particular position of influence as lecturer, and her personal assumptions and propositions with regard to the impact of this particular dance education course, might have forcefully or subliminally influenced the students' responses and interfered with the neutrality and reliability of the data. In this regard, Marelize was meticulous with her verbal and nonverbal communication to participants. As sole dance education facilitator, she could determine activities and discussions in class, ensuring that students' responses were not influenced and contaminated by means of deliberate discussions related to cultural diversity, awareness of self, self-esteem, intrapersonal development, and so forth. Her role as teacher-researcher provided us with meticulous control over information provided to participants, reducing non-contamination of the data due to a third party involvement.

A limitation of this study, however, is the absent negative voices in the data, affecting credibility (Bazeley, 2013; Morse, 2015). Reanalysis of the data revealed limited incidents of negative experiences, and most of these were resolved constructively. We ascribe this to the absence of a strategic inquiry into the challenges experienced during these dance education sessions. That being said, it is our contention that this case study, despite its limitations, supports the proposition that dance education experiences can promote social change.

Discussion of the Findings

The primary theme emerging from the students' reflections was that this particular dance education programme generated "transformative awareness of the self." This consciousness was primarily evoked through close interactions with diverse others by means of active bodily involvement in dance education activities, which further prompted students to engage more profoundly with the self. These self-reflections stimulated affirmation, liberation and, ultimately, transformation of the self.

The following abbreviations qualify the source of each response: Q = questionnaire, J = journal, and FG = focus group interview. Each abbreviation is followed by the student's number. Focus group interviews indicate the number of the focus group before the student number, for example, FG3.4.X. Because this study concerns issues of social change in a culturally diverse classroom, we believe it is also relevant to indicate the ethnocultural affiliation of the students via symbol (X = Xhosa, C = coloured, I = Indian, Z = Zulu, E = white English-speaking, A = white Afrikaner).

Affirming the self

The data indicated that dance education interactions affirmed the participants' sense of self. Student FG6:2.A experienced dance education encounters as "some form of expression and reflection of who we are." During a focus group interview, student FG5:2.E asserted:

> *Because obviously if you're a young adult, you still don't fully know basically how to express yourself. You don't always have the best way expressing yourself. . . . So, it's an interesting thing to see for yourself, look here, if I do this movement I can express if I'm angry or if I'm happy, whatever . . .*

Many students referred to increased self-confidence and affirmed self-esteem. They described how they managed to overcome personal reservations, inhibitions, and reticence through involvement in the dance education activities. Student J10.X, for example, recorded in his personal journal:

Week 1: Today I felt bad when I was on stage dancing with a partner . . . which made me to be interested to know dancing.

Week 2: Today I thought I did pretty well and . . . to improve. Today's performance has lifted me up and made me believe that I can be a good dancer.

Week 3: Today I noticed that that I'm more comfortable and able to express myself when working in groups. I'm starting to be creative in my own dancing.

Week 4: I felt like I'm growing in confidence as I was in the first few days in the class very shy.

Week 5: My confidence grew more and more and I think this will eventually help me in the classroom as well as in church. Before these dance lessons I could not express myself the way I would. Many times I thought about something but was unable to say it. These dance lessons have increased my confidence.

Week 6: Today we were given an opportunity to teach our dance movements, which has added and increased my sense of belief that I can stand in front of many people.

Week 7: Group work has increased my communication skills. Also the ability to interact with others. My overall impression of the lesson is that it was exciting, morale boosting, also playing a major role in building up my self-esteem.

This student experienced increased self-confidence, not only in the lecture hall but also beyond (at church). Dance education experiences enhanced his interactions in the lived world, enabling him to develop voice and unearth his own potential as a human being. This awareness empowered him to transcend feelings of insecurity, inferiority, and incompetence. During one of the interviews, student FG2:1.X also referred to enhanced self-esteem:

It might be hard for me to do something or to say something to you in front of the whole class, but when I get a chance to work with my classmates [during creative movement] it kinda like becomes easier.

Similarly, student J4.C mentioned in her journal that dance education "made me relaxed and I wasn't afraid to give my opinion [during group work]. . . . Now I'm confident." This was also evident in student J15.E's journal:

Weeks 1 and 2: I am also very shy to perform in front of my classmates. I felt uncomfortable and unhappy with the second activity when we had to make a dance in groups. . . . There was much difficulty in communicating with people in my group.

Week 3: Even though I am very shy. . . . The group activities went well today. I felt that my group members communicated a lot better than usual and I was pleased when my suggestions were heard.

Week 4: I also feel that I can participate in a group dance with more confidence . . . I feel confident that I will be able to teach dancing to Intermediate Phase learners.

Week 5: I had so much fun and I felt confident.

From the above it is clear that dance education experiences afforded students opportunities for self-affirmation. Since this happened in a culturally and politically diverse group, it subsequently affirmed

individuals' sense of dignity and equality. The data also indicated that students' sense of themselves as inherently creative individuals was affirmed (Keun & Hunt, 2006). They experienced "a sense of achievement" (FG5:4.E) "when you realise you're quite clever at thinking out these interesting ways [to move]" (FG5:2.E).

Co-participation in dance-making during small group creative movement activities further enhanced individual self-esteem as it affirmed the self. Student FG3:2.E, for example, mentioned, "I feel worthy and useful during the creative movement activities." Similarly, student FG3:3.E observed that "everyone's ideas were relevant, and everyone could add [contribute]." In her journal, student J4.C wrote, "Today I felt that I mattered in dance class." Student J2.C believed that "it makes each individual feel special." Of particular significance for our study were responses indicating students' confidence expressing themselves in the presence of others: "As each lesson passed I became more comfortable in front of my fellow classmates" (Q16.A). Another student (Q27.E) reiterated in her questionnaire: "Dance helped us as a group to feel more comfortable in front of each other." The data thus also confirm Mans' (1994) assertion that active involvement in dance activities empowers participants, as it enhances the dancer's self-confidence and sense of self-worth. Dance activities "allowed everyone to let go of their fear and social awkwardness and to be in the moment of something new and exciting" (J19.X). Dance education experiences restored some students' confidence in their capacity to make a meaningful contribution in a culturally diverse environment. The awareness that "everyone's ideas are relevant" (FG3:3.E) concomitantly enhanced faith in their own as well as others' capabilities, thus affirming equality. Individual contributions were seen as unique, valuable, and acceptable to the other. In essence, the dance experiences restored and affirmed their sense of equality and dignity, unleashing their potential as active agents in a multicultural group (Bernard, 1999; Constitution, 1996; Soudien, 2012; Taylor, 1994).

The data also indicated that participation in their own ethnocultural dances enabled these students to experience a sense of pride and belonging to their affiliated ethnocultural group because it reaffirmed the value of their own ethnocultural identities in a multicultural context. A Zulu student (FG2:1.Z) observed during an interview:

> *Ja . . . and we also did the gumboots one. That was fun because that one I'm familiar with. In my culture we do it. So . . . it was kind of like my culture also came in. I was not only being exposed to different cultures . . . also something that I know, that I know, I got to express myself in it, so for me it was fun.*

Similarly, an Afrikaner student (J8.A) admitted that it "meant a lot" that all her classmates participated in "Afrikaners is plesierig," a *volkspele* [folk dance] associated with the Afrikaner culture. She explained, "it was so much fun because I am Afrikaans." Another Afrikaner student (Q3.A) concurred, admitting that it reinforced her own sense of affiliation, identification with and pride in her own ethnoculture:

> *I really loved to do that . . . it was meaningful because I'm Afrikaans and I didn't know how to dance it and thought it was a thing that grew out, that did not exist anymore, but I was wrong. I really learnt something about my culture.*

Ethnocultural identity is informed by the manner in which one makes meaning of one's ethnocultural heritage (Castells, 2006). In contemporary South Africa, reinforcement of Afrikaner identity within a multicultural environment is often frowned upon and interpreted as hegemonic, reinforcing unequal power relations associated with the previous regime. Student Q3.A appreciated the opportunity to celebrate her own ethnocultural identity alongside those of ethnocultural others, despite potential internalised feelings of white Afrikaner guilt. The data thus suggests that participation in ethnocultural dances encouraged the students to embrace their respective ethnocultural identities, regardless of the particular ethnocultural group's association with political history of the country. Embodied rituals, such

as ethnocultural dances, enable meaning making as it upholds and reestablishes the collective values of a particular ethnocultural group (Durkheim, 1915). Participation in one's own ethnocultural dance reinforces the values of one's ethnoculture and, in so doing, facilitates cultural sustainability (Oliveira et al., 2012).

In addition, the data confirmed that collective participation in ethnocultural dances also reestablishes ethnocultural identity when fellow dancers do not share the same ethnoculture. In the multicultural classroom, co-participation of diverse individuals realises the reestablishment of particular ethnocultural identities. It is therefore the other who, through co-participation in the ethnocultural dance, enables a particular individual to reaffirm and take pride in his or her own ethnocultural identity. As such, it is the other who assists the individual to restore the dignity of both the individual and the associated collective. Moreover, the other enables the restoration of the self's dignity. This is significant for negotiations of notions of self in a society formerly segregated on grounds of ethnicity because it indicates the possibility for restoration of dignity for both the former "oppressors" and "oppressed"—important landmarks on the journey of inner transformation (Delport, 2009; Jansen, 2009). Also, this is particularly significant through the lens of *ubuntu* [I am because we are]: my dignity has been restored because of the others' co-participation in my dance. The other enables me to "become human" (Mbiti, 1969).

The data thus suggests that students experienced dance education as a means to express and affirm the self in the presence of the other. Student Q18.A held that "dance is an individual's way of expressing themselves, their thoughts, their emotions and represent their culture." Dance education experiences provided students with an opportunity to recognise and embrace their own potential, affirming their personal, social, and ethnocultural identities (Taylor, 1994). In our study, active and interactive participation with culturally and politically diverse others clearly nurtured the students' inherent sense of dignity, cherishing their own potential and value as a unique human being (Taylor, 1994). Consequently, it enabled students to regard themselves as equal to others—a critical requisite for the restoration of dignity in a post-conflict, transforming society (Bernard, 1999; Green, Janmaat, & Han, 2009).

Liberating the self

The data clearly indicated that active engagement in these dance education activities abetted students to explore and unearth their innate personal potential. These encounters were inherently liberating because they empowered students "to be open and express ourselves" (FG4:1.C) so that "people will really see what type of person you are" (FG3:1.X). Dance education provided a nonjudgemental and nonconforming space, allowing and empowering students the freedom to express their selves to the outside world as active participants in a multicultural South African classroom, irrespective of individual differences, and without fear of condemnation or rejection.

Our data thus intertwine dance education experiences to experiences of freedom, in accord with Susan Stinson's (1997) postulation that dance education enables experiences of freedom. Students experienced dance education as "fun" and "enjoyable" because it made them feel "you're in a better mood, you are more free" (FG3:1.X). For student FG5:4.E, it was "like therapy." In a similar vein, student FG6:3.I experienced that "you generally feel better, it's a release." Student J4.C recorded in her journal: "When we did the traditional dances I felt great and free." Her view was confirmed by student FG5:1.C who mentioned, "It helped me just to free myself . . . just . . . let go and just try things, even if it doesn't work." The experience of freedom was articulated by students FG4:3.E and FG4:C who both expressed their sense of liberation as "everything sort of let go." Student FG6:3.I mentioned, "I don't have to worry about what others expect of me . . . I can just go and give whatever I have . . . it's like a sense of relief." As a result, the students were not inhibited by culturally diverse fellow students because they seemed to be "without the fear of being judged" (Q29.E). Student Q12.E, for example, believed that "because of dance we all began to loosen up and become less afraid of what

others thought of us." Another female student described her sense of liberation as follows: "It brings you out of your shell type of thing. . . . I'm a very shy person and for me to get up there and dance in front of people, is a big thing for me (FG5:2.E)."

Student FG2:3.X experienced dance as revitalising: "It like freshens up our minds and our thoughts." For student J8.A, dance "made me relax and I felt good the whole day," while student FG2:3.X specifically mentioned that dance education experiences enabled her to "free her mind" from her emotional stresses at home. This helped her to "think clearly" in order to make important decisions. Student FG1:1.A furthermore mentioned that, since creative movement activities compelled him to apply his imagination, it also enabled him to transcend the ordinary and mundane, allowing him to escape into an imaginary, "different world." This gave him the opportunity to engage more profoundly with himself as an autonomous human being, reevaluating the impact of others' opinions on his sense of self: "It took me out of my world, into some other reality. So, why care what people think."

These responses are particularly significant in postapartheid South Africa, a post-conflict society still grappling with social injustices such as prejudice, discrimination, disadvantage, and internalised feelings of inferiority, guilt, and shame. Mental stress associated with abject poverty (Department of Education, 2002), crime, domestic violence, child abuse, dysfunctional families (van Niekerk, 2008), and the rapid spread of HIV and AIDS (Wood, 2009) confront South African citizens on a daily basis. The responses indicated that dance education not only provided the participants with a channel for tension release, it also provided a mental space where they could escape the stark realities of everyday life, confirming dance's therapeutic value (Karkou & Sanderson, 2001).

Our data further indicated that these liberating experiences enabled students to uncover a hidden aspect of themselves, in particular, with regard to their creative capacities. "We did not know how we were going to do it but we ended up with something in the end" (FG5:4.E). In her reflective journal, student J2.C admitted, "When given the chance [we] can be far more creative than we think." The dance education sessions taught them that when they are placed "on the spot" (FG4:3.C), they can "think on their feet" (FG6:5.E). Student J4.C noted that dance education "just taught me to think fast and to respond quickly." The success experienced by the students confirms Keun and Hunt's (2006) notion that dance education activities can unleash personal creativity and problem solving abilities. In this regard, students also had to negotiate spaces of cooperation, encourage active participation, and manage diverse views and opinions of diverse others in order to cocreate the dance. "We all think differently so we must all come up with the dance routine we can all agree on" (Student J4.C). Dance education experiences subsequently also provided a space where individuals' creative capacity to solve problems, and their creative capacity to negotiate with the other, could be practised in a multicultural environment. This, in turn, increased the belief in the self to confidently voice opinion and "stand in front of many people" (J10.X). Thus, dance education experiences facilitated self-realisation, freeing the potential of the creative self to act as an able and active agent in a multicultural negotiation. Student FG4.3.E commented as follows:

> That was really interesting to see when you've got like . . . all these different ideas coming through, it gave you such a good idea, to see that these people can have such different ideas and see how groups work so well together. That was really cool, for people who didn't know each other that well.

In this regard, several students mentioned that group activities made them open and receptive to others' creative ideas. Diverse opinions and suggestions were consequently considered as valuable resources, providing innovative alternatives to normative ways of thinking.

Transforming the self

Engagement in this particular dance education programme also challenged the participants to revisit and transform previously held beliefs and perceptions. Responses indicated that interactions in the dance education classroom disrupted students' existing thinking, effecting perspective transformation and, ultimately, personal transformation. This happened through inner dialogues with the self (Atkinson & Housley, 2003). Student FG4:2, for example, recounted:

> You've all got ideas about people, "ah, that's the girl that went to that school." But when you're in this little group and you have to work with them, you can just see that she's just being as silly as I am and it's nice.

Dance education experiences enabled her to recognise a common, shared humanity that prompted her to transform her perspectives of her classmate. Reflections and inner dialogue with the self, brought about by interactions such as these, transformed interpretations of the world, ultimately altering behaviour towards others. Various students also reported transformed perceptions of peers after joint participation in dance activities. Student Q17.A referred to seeing "a new side" whereas Student FG3:10 alluded to experiencing a "different side" of peers.

Several responses indicated the students' transformed awareness of the class groups' sameness, despite its diverse composition in terms of ethnoculture. Dance education activities provided "a common ground" (FG1:6.E) where "the playing field is levelled" and where "everybody is exactly the same" (FG6:3.I). Student FG6:3.I explained, "We dance before we speak . . . I think there's an innate human need or want to express yourself through movement, and it happens so soon. . . . We learn it before language." During the same interview, an Afrikaner student mentioned that, "because dance is just like those universal languages that everyone . . . it doesn't matter what culture . . . we all can interpret, as some form of expression or some sort of reflection of who we are (FG6:2.A).

Similarly, student J12.E explained: "At first I felt a bit insecure to dance in front of everyone but then I realised that I'm sure most of the class felt the same." The students clearly perceived dance as a universal, shared form of communication and expression of the self, confirming the views of Merleau-Ponty (1945) and Kauffman and Ellis (2007), namely, that human beings share an inborn capacity for and desire to move. Student Q12.E stated: "I believe these dance lessons made us all realise that we are all similar in one way or another," whilst Student Q22.A observed that the dance education experiences "made me realise that everyone is just human." The data indicated that these students' notions of self in relation to the other were transformed, as they experienced a common humanity. An awareness of sameness amongst a group of culturally and politically diverse students, according to Taylor (1994), constitutes the foundation for human dignity, a key requisite for social change in post-conflict, postapartheid South Africa.

In the context of current Africanisation discourse in higher education, the potential of dance education to "unfreeze" old ways of thinking (O'Hara, 2003, p. 74) is significant. Individuals' revisions of their perceptions, as demonstrated above, stimulated amendments of individuals' disposition, orientation, and behaviour. In essence, these dance education interactions induced perspective transformation, provoking personal transformation resonating with the aspirations of social change envisioned for South Africa.

Conclusion

In conclusion, we contend that the students who participated in this study's dance education sessions experienced a transformative awareness of the self in a manner that promoted the social change envisioned for South Africa. This awareness was essentially prompted during interactions with diverse others through active, bodily involvement in this course's dance education activities. These

interactions prompted students to engage more profoundly with the self in a manner that affirmed the self, particularly in relation to the other. It concomitantly emphasised sameness and difference, resonating with South Africa's motto of "Unity in Diversity." The dance education experiences seemed to liberate participants' ideas of self through enabling physical and mental experiences of freedom, and also by liberating the potential of the self as an active agent in a multicultural environment. Ultimately, dance education provided constructive spaces where students' awareness of themselves and of other participants was sharpened to the degree where they were prompted to revisit and transform their perspectives of the self in relation to the other. This sense making led to revalidations and transformations of personal meanings of self in relation to the other, ultimately affecting behaviour during social interactions and, in so doing, promoting social change. It is thus our contention that this particular dance education course, despite its shortcomings, provided interactive spaces conducive to social change. These interactive spaces, in accordance with symbolic interactionism, enabled alteration of perspectives with regard to the self, in relation to the other, and also in relation to society (Plummer, 2004).

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Positioning a Practice of Hope in South African Teacher Education Programmes

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Abstract

Schools are described as ideal settings for nurturing and fostering children's hopes, and the teaching profession as rooted in hopefulness. However, there is a paucity of research linking hope theory and teacher education in the South African context. Using evidence from my own transformative, visual participatory research with rural South African children on hope and well-being, I argue in this position paper that hope theory, in particular an African perspective of hope, should be positioned alongside discussions on practising an engaged pedagogy to enable teaching practices that are more congruent with an Afrocentric worldview. This article argues a need to infuse relational hope in teacher education practices by encouraging collaborative, participatory learning engagements that create safe and creative spaces for critical dialogue, allowing for multiple voices and experiences to be heard. Such practices could in turn foster a sense of collective hope—characterised by the values of connectedness, caring, and collective agency—thereby equipping student teachers with the tools to build communities of hope in their classrooms and schools. The article concludes with implications of mobilising such a practice of hope through an engaged pedagogy in student teacher education in the South African context.

Keywords: Afrocentric perspective, engaged pedagogy, hope, teacher education

Introduction

The classroom, with all its limitations, remains a location of possibility. In the field of possibility we have the opportunity to labor for freedom, to demand of ourselves and our comrades, an openness of mind and heart that allows us to face reality even as we collectively imagine ways to move beyond boundaries, to transgress. This is education as the practice of freedom. (Hooks, 1994, p. 207)

In her renowned book, *Teaching to Transgress* (1994), hooks endorsed the need for a pedagogy in the discipline of education that can bridge the gap between theory of education as freedom and its practice. She lamented the way educational institutions talk about the power of education to transform society and liberate learners from the grasp of poverty, while the oppressive *banking system of education* (a phrase borrowed from Freire's work) still dominates. She advocated an *engaged pedagogy*, where educators focus on connecting with their learners' lived experiences, hence creating a sense of community in collective learning. Thus, educators should not only strive to transfer knowledge from books, but also bring the ideals of cultural diversity and social justice into the classroom: they should jointly generate and reflect on knowledge about how to live as active citizens in the world (hooks, 1994). While she critiqued the American education system for its failure to provide a just and democratic learning context for marginalised groups, and for the imposition of the patriarchal Western knowledge systems that prevail in universities, her ideas are relevant for concerns about South Africa's current education context. Discussions on poverty and inequality in the country's schooling systems dominate many education journals, while institutions of higher education continue to grapple with the necessity of equipping student teachers with pedagogical tools that can foster culturally inclusive teaching contexts.

Drawing on Freire's work, hooks (1994) further emphasised the way a liberatory pedagogical process in the classroom can foster a sense of conscientisation in both the learners and their teacher "when one begins to think critically about the self and identity in relation to one's political circumstance" (p. 47). However, to achieve such a progressive, holistic, and engaged educational environment requires teachers who are "actively committed to a process of self-actualisation that promotes their own wellbeing" (hooks, 1994, p. 15). Accordingly, hooks (1994) voiced her concern as to how a teacher who is not aware of her own development and being in the world could be expected to support her learners' struggle towards self-actualisation and empowerment. According to Waters (2011), who noted the positive influence of teachers who demonstrate high levels of social and emotional well-being, "teaching for wellbeing is a key aspect of 21st century education" (p. 76). My personal experience with young student teachers is their mounting frustration as a result of feeling underprepared in handling the socioemotional barriers that the learners bring into the classroom. Their vision of being teachers who can make a difference is soon dampened by the realities of overcrowded classrooms, underresourced schools, and uninvolved parents. This is consistent with Lopez's description of students whose hopes are diminished and who thus lack the energy or sense of efficacy to enact change:

These students may give up when encountering barriers to goals simply because they can't think of other pathways around the obstacles or can't get the support they need. This often results in frustration, a loss of confidence, and lowered self-esteem. (2010, p. 41)

Given that teaching is a profession rife with challenges and expectations, fostering the well-being of teachers becomes a necessity (Jacobs, 2005; McInerney, 2007; Nolan & Stitzlein, 2010).

What is inherently implied but seldom mentioned outright in hooks' discourses on the practice of an engaged pedagogy is the place of hope—as a key facet for positive human interaction and development—for bringing about change in education. Yet, according to Webb (2010), education and

hope share the same ontological root and therefore are "inextricably tied" (p. 327), while Jacobs (2005, p. 799) stated that hope and education "are wrapped up in a kind of horizontal relationship of mutuality." In the introductory quote, hooks, like many others, referred to education as the "practice of freedom" (1994, p. 207), an expression often associated with the experience of being hopeful. Scioli and Biller (2010) stated that the hope system is enabled when an individual experiences empowerment and a feeling of liberation or release from oppression. Similarly, it has been noted that "hope is a necessary condition" for an education aimed at bringing about social change (Jacobs, 2005, p. 794). Schools have been described as potentially ideal settings for nurturing and building children's hopes and, therefore, it is important for teachers to root their practices in hopefulness (Nolan & Stitzlein, 2010). According to Lopez (2010), hopeful educators create an energy that produces ripples of hope for others: "Those hopeful principals and teachers spread hope by encouraging autonomy, modelling a hopeful lifestyle, promoting strengths-based development, and telling stories about how students and educators overcome big obstacles to realize important goals" (p. 42).

This holds implications for teachers' roles in supporting their learners' hopes, especially in communities facing adversity. Furthermore, it provides support for Hooks' (1994) earlier contention that teachers should first and foremost be capacitated to enable their own hope, well-being, and identity development. It is therefore puzzling that there is such a paucity of literature in South Africa on hope research and praxis in the field of teacher education.

When relating Hooks' ideas to my own experiences in the South African education context, I wondered how student teachers could be equipped to practise such an engaged pedagogy and to create a sense of collective learning in the classroom. Therefore, this article is driven by the question: "How can a practice of hope be positioned in teacher education programmes to equip student teachers to build communities of hope in their classrooms?" In agreement with Hooks (1994) that combining the theoretical with the experiential offers a richer way of knowing, I have made use of both literature and findings from my research study with 12 rural South African children exploring hope to inform my arguments. I seek to position a practice of hope in student teacher education, not only as a means of fostering emerging teachers' sense of self-efficacy and well-being (which in itself would be advantageous), but also as a practical tool for mobilising an engaged pedagogy in the university classroom, thereby enabling communities of hope to emerge in the learning process.

I begin the discussion by unpacking the concept of hope, exploring a framework of hope from an African perspective, and referring to literature on the value of hope in teacher education programmes. I then outline some practical suggestions of how a practice of hope, combined with Hooks' engaged pedagogy, could enable spaces for student teachers to become aware of their own developing identities and learn to listen to the multiple voices that contribute to the learning process. I further show that when such practices are combined with participatory collaborative engagements, a sense of community can be fostered in the university classroom, encouraging a shared spirit of learning. I consider how such teaching and learning practices connect with the values embedded in an African philosophy to life and education. I conclude the article with a discussion on the possible value and implications of fostering hope as praxis in teacher education programmes in the South African context.

Hope from an African Perspective

According to Nolan and Stitzlein (2010), it is often assumed that hope as a universal construct is a commonly understood concept with a common meaning; however, this is not the case. While the capacity to hope is regarded as universally human, its definition and expression are significantly influenced by many factors; these include upbringing, worldview, cultural and social norms, as well as personal experiences. Most established hope theorists agree that the construct is multidimensional, is significantly linked to human well-being, and can be strengthened or weakened according to one's biological and social circumstances. Scioli and Biller (2009) described hope as a "manner of

experiencing yourself, the world, and the future" (p. 204). It can therefore be described as involving an active orientation that enables agency and interpersonal engagement directed at pursuing purpose and well-being.

Du and King (2012) argued that the dominant theories of hope stem from Western individualistic cultures that emphasise personal agency; however, these theories are limited because they "cannot capture the more relational aspects of hope which are assumed to be more salient in collectivist cultures" (p. 1). This proclivity in collective-oriented African cultures towards a relational way of being (referred to as *ubuntu*) and towards collectively held aspirations of well-being has been documented (Mkhize, 2007; Mokwena, 2007; Venter, 2004). It is a way of life based on the values of respect, compassion, and connectedness, all advocating that an individual's humanity is made possible through the humanity of others. Living communally—from an Afrocentric perspective—is founded on an awareness of the fundamental interdependence of people (Venter, 2004). Therefore, a sense of communal well-being exists if "people mutually recognize the obligation to be responsive to one another's needs" (Mkhize, 2007, p. 46) in conjunction with meeting their own needs. The philosophy of ubuntu is a deeply rooted African value system that also promotes an awareness of one's purpose and meaning in life (Venter, 2004), which links directly to the experience of hope.

Owing to the lack of hope theories that represent the construct of hope from an Afrocentric worldview, I used the findings from my study with rural South African children to adapt the Integrated Theory of Hope (Scioli & Biller, 2009) to a framework of hope from an African perspective. Over a period of a year I engaged with 12 rural primary school children in QwaQwa, South Africa using a variety of participatory visual methods (drawings, collage making, Mmogo-method®[4], and photovoice) to explore their conceptualisations of hope (Cherrington, 2015). According to the framework, African hope is represented as a multilayered and multidimensional experience, and founded on the description of hope as an emotional, future-directed system made up of three complex interrelated subsystems (attachment, mastery, and survival), which develop and function along six hierarchical levels:

> Level 1: *Biological motives*—comprised of three hope subsystems (attachment, mastery, and survival), which are all inherent human drives.
>
> Level 2: *Contextual hope*—refers to external physical, psychological, and social resources, which an individual can access to guide and strengthen his or her hope subsystems.
>
> Level 3: *Personal hope*—exists in the individual's thoughts, feelings, and behaviours, all pursuing a meaningful personal future, and adopting the values and character traits of a hopeful person.
>
> Level 4: *Belief system*—the individual's worldview (includes cultural and social norms) that shapes and guides how the personal hope is extended beyond the individual.
>
> Level 5: *Relational hope*—representing manifestations of the individual's hopeful thoughts, feelings, and behaviours extended outwardly through hopeful interactions and sharing hope with others.
>
> Level 6: *Collective hope*—where hope becomes a collaborative process of pursuing a collective well-being by promoting togetherness, harmony, and mutual respect.

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[4] http://veraroos.co.za/contributions/mmogo-method/

In this framework, hope is described as "simultaneously existing in one's context, within one's identity, in one's interactions with others, and in the pursuit of meaningfulness in life as part of a hopeful, connected community" (Cherrington, 2015, p. 274). This view emphasises that hope in an Afrocentric context can be fostered and nurtured by promoting a foundation of care, respect, and trust through a collective pursuit of authenticity, inclusiveness, and connectedness. While the framework itself is discussed in more detail elsewhere (Cherrington, 2015), this article focuses specifically on only the last two levels of relational and collective hope, and their link to putting an engaged pedagogy into practice in teacher education programmes.

Positioning Hope in the Context of Teacher Education

The notion that explicitly working with hope can develop or enhance an individual's understanding of her or his hope process is well supported in the literature (Larsen & Stege, 2012; Marques, Lopez, & Pais-Ribeiro, 2011; McDermott & Hastings, 2000). Hopeful thinking arises in the context of relationships with others who teach and enact hope (Snyder, 2000). As such, the hope process can be continually strengthened through its engagement in praxis; thus, the more it is enacted the more it is reinforced (Cherrington, 2016; Cherrington & De Lange, 2016). Therefore, educational institutions are ideal settings for fostering and increasing a learner's hope. In fact, according to McDermott and Hastings (2000) it is not only the education context but also the curriculum itself that lends itself to hope enhancement because many learners can then be reached simultaneously.

International studies have shown that hope-based interventions in schools can have far-reaching benefits for learners, educators, and school communities (Lopez, 2010; Marques et al., 2011). Children's hopeful thinking has been positively associated with perceived competence and self-esteem or self-worth. Children and youth with high hope tend to be more motivated and thus more successful in pursuing goals; as a result, they tend to experience more positive emotions. These strengths translate to higher levels of scholastic achievement and social competence, and a better ability to cope with future challenges. For example, a 5-week hope-based intervention conducted with learners at a Portuguese middle school determined that the measured benefits of increased psychological strengths (hope, life satisfaction, and self-worth) had been sustained even 18 months later (Marques et al., 2011). Hope-oriented thinking also has an active component and therefore programmes aimed at increasing hope also engender agentic thinking and active citizenship in pursuing a desired change (Cherrington & De Lange, 2016; Snyder 2000). This implies that introducing hope-based activities into educational contexts could have numerous benefits for the school system as a whole.

Like Jacobs (2005), I too liken Hooks' proposed engaged pedagogy to hope in practice, "both in its orientation towards the possibility of a better, changed future through collective, pedagogical action and its overt invocation of Freire's *A Pedagogy of Hope*" (p. 784). Both hope and education are about the process of human becoming, driven by the exploration of our incompleteness and longing for a better self in a better world (Freire, 1970/2005; Giroux, 2004; Webb, 2010). Consequently, if education is regarded as a key driver for changing the world and our place in it, hope contributes a vision of our active role in the "process of an unfinished, rather than historically determined, world" (Jacobs, 2005, p. 799). Similarly, Giroux (2004) spoke of *educated hope* as a subversive force that "pluralizes politics by opening up a space for dissent, making authority accountable, and becoming an activating presence in promoting social transformation" (p. 39). These are only some examples of literature in the field of education that highlight the need for a hopeful education. The problem is not that hope is seldom mentioned in education discourses, in fact, it is "so much a part of our conversations that we take little notice of it" (Jacobs, 2005, p. 799). However, hope has seldom been discussed practically in terms of its potential as an educational practice or pedagogy. Yet, hope is essentially critical and reflective and therefore involves praxis, making it "a powerful tool for fostering engagement and dialogue between educators and learners, students and lecturers, schools and their communities" (Jacobs, 2005, p. 799).

My positioning of hope in teacher education programmes is guided by two key shortcomings when integrating education practice and hope studies. Firstly, while various theoretical discussions exist about the significance of injecting hope and well-being holistically into the foundational core of education institutions (not simply as once-off interventions), few have anchored such notions in praxis by fleshing out exactly how this could be achieved. Hooks' (1994) critique on theoretical postulating in education once again bears relevance: "Theory is not inherently healing, liberatory, or revolutionary. It fulfils this function only when we ask that it do so and direct our theorising towards this end" (p. 61). Thus, simply theorising about teachers as agents of hope and of education as a practice of hope, does not simply make it so. This notable gap between theory and practice also points to the second shortcoming: Is there sufficient capacity and willingness among South African educators to enact such an engaged pedagogy? To implement and maintain hope enhancing school systems implies that all school stakeholders are open to, and have the capacity for, promoting meaningful school-wide hope practices. The following section offers suggestions on how a practice of hope could be mobilised pedagogically in teacher education programmes to equip student teachers with the tools and means for building communities of hope in their own classrooms.

Putting a Practice of Hope to Work in Teacher Education

A discussion around the need for an engaged education practice that places value on both the learners' and the teachers' senses of identity, self-determination, and voice, encapsulates the key dimensions of relational hope. Further, the conceptualisations of places of learning as fostering a sense of community and mutual regard, which "creates a sense that there is a shared commitment and a common good that binds" (Hooks, 1994, p. 40) reflects the dimensions of collective hope. Practices that foster relational and collective aspects of hope connect more closely with an African worldview and can thus be conducive towards creating a more diverse and Africanised learning environment.

Creating spaces for interaction, collaboration, and voice: Fostering relational hope.

Hooks (1994) argued that to open possibilities for hope, teachers need to critically examine their own positioning in the classroom, and reflect on how far their teaching practice promotes or hinders the ideal of freedom and social justice. Giroux (1993), a founding theorist of critical pedagogy, referred to educators as culture brokers, highlighting the important role they play in a democratic society as engaged critics able to "understand the nature of their own self-formation, have some vision of the future, see the importance of education as a public discourse, and have a sense of mission in providing students what they need to become critical citizens" (p. 15).

This relates to Venter's (2004) description of education from an Afrocentric perspective as one where

> *students should have an emotional learning experience where they could express their viewpoints; thus, teaching towards transforming the head as well as the heart. Teachers on the other hand are change agents and they should be aware that they can transform the students. (p. 157)*

While South African institutions of higher education seem to espouse the value of teachers as critical thinkers and proponents of hope, it is unclear how far these visions are being carried through into pedagogical practices and the teacher education curriculum.

Hooks (1994) related stories of personal disappointment on entering university and expecting an atmosphere of critical insight and inclusiveness, but instead discovering that: "Most of my professors were not the slightest bit interested in enlightenment. More than anything they seemed enthralled by the exercise of power and authority within their mini-kingdom, the classroom" (p. 17).

She therefore advocated an engaged pedagogy that could minimise power struggles between educators and students, thereby making the university classroom an inclusive space where knowledge is coconstructed through collaborative engagements. However, for a pedagogy that places value in how all parties contribute to learning through their personal experiences and stories, two key conditions are crucial: teachers concerned with their own well-being and developing identities, and learning environments that foster spaces for open and critical dialogue where multiple voices and experiences can be shared. These conditions can be promoted in teacher education programmes, through hope praxis, in the following ways.

Learning about the self: Fostering positive teacher identity and development.

Hooks (1994) was quite critical about the lack of support at all levels for teachers to engage in a process of self-actualisation and personal development. Emphasising Freire's concept of conscientisation, she believes that liberation in the classroom can only begin to take form when "one begins to think critically about the self and identity in relation to one's political circumstances" (1994, p. 47). She further reminded the reader that Freire "never spoke of conscientisation as an end in itself, but always as it is joined by meaningful praxis" (p. 47). This praxis refers to a continual cycle of action and reflection with regard to the individual's positioning, and repositioning, in the world in order to change it. Central to such discussions on teacher conscientisation are questions of "how identity itself is constituted and what the enabling conditions might be for human agency?" (Giroux, 1993, p. 26).

Bringing hope explicitly into counselling sessions has numerous benefits for personal development and awareness (Larsen, Edey, & LeMay, 2005). According to Larsen and Stege (2012), because individuals (re)created ways of being in the world which they perceived as personally hopeful, this "supported new understandings of themselves and their potential. These aspects of identity contributed to a sense of purpose and self-worth, offering an anchor to self during difficult times" (p. 48).

I observed a similar connection between the exploration of hope and personal identity development in my own study with rural children, which led to the identification of relational hope. In exploring their own hope, the children started becoming aware of their own agency to influence not only their own well-being, but also that of those around them through positive thoughts and behaviours (Cherrington & De Lange, 2016). They also began relating their own orientation of being hopeful to various personal characteristics and relational behaviours that they aspired towards: being kind, helpful, trustworthy, and contributing towards promoting a better community. This empowered the children not only to redefine their own identity as being hopeful (rather than vulnerable), but also fostered a sense of agency and self-confidence that they were eager to extend outwards towards their friends and family. One of the participants, Edwin, explained excitedly that he wanted to share what he had learned about hope with other children in his community:

> When I am [a] teacher, I teach small children . . . I am going to tell this, what is hope? Hope is like what? . . . and they know it. I want to tell like when you teach me and then me, I am going to take my words and give it to other children who are need to it. (Cherrington, 2015, p. 261)

Edwin was not only passionate about sharing what he had learned with others, but saw himself in the role of a teacher, possessing the knowledge and skills to help other children develop their hope. Thus, it seems that learning about his own hope not only equipped him with a positive self-identity as hopeful, but also built his confidence about engaging with others. Moreover, it showed Edwin a

way of sharing his knowledge with others, and perhaps even provided him with a purpose or role in the community. As Jacobs (2005, p. 788) affirmed: "Seeing oneself as part of a larger social fabric of responsibility provides the impetus for people to consider how the exercise of their individual agency affects the world and the people in it." Such benefits from exploring hope could be transferred to the classroom setting where student teachers are encouraged to engage in ways that promote the development of their hope and sense of identity, as well as equipping them with a sense of agency to build the hope of those around them. This aligns with Higgs' (2016) view that in the South African context a higher education curriculum concerned with integrating indigenous African epistemologies should be "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" (p. 95).

Learning to listen to multiple voices.

Through an engaged pedagogy, Hooks (1994) encouraged lecturers to view their students as whole human beings who bring into the university classroom, complex lives and experiences. This requires paying attention to the issue of voice: Who speaks, who listens, and why? She premised her argument on Giroux's (1993) notion that students' experiences must be situated within the pedagogy of learning. He believed that incorporating multiple voices into the learning process opens opportunities for engaging differently with others, and with the world: "Students have memories, families, religions, feelings, languages, and cultures that give them a distinctive voice. We can critically engage that experience and we can move beyond it. But we can't deny it" (p. 16).

Roux and Becker (2016) extended this argument further by emphasising the need for enacting open dialogue in higher education to disturb inherent conditions of power, privilege, and otherness in the classroom. They described dialogic practices where multiple voices not only have the right to be expressed and authentically heard, but also where "disruptive questions" are dealt with truthfully (2016, p. 136). The significance of opening dialogue is further supported by Higgs (2016) who asserted that indigenous African voices and indigenous ways of knowing have been negated in educational discourses.

The need to recognise the emerging identities and voices of students in the learning process connects with Freire's writing on pedagogy, which assumed humanness as a necessary condition for transforming a "dehumanising system" into education as freedom (Roux & Becker, 2016). It also supports Venter's (2004) statement that in an African philosophy of education, a person gains knowledge "by listening to your fellow human beings" (p. 156). However, a prerequisite for such authentic and transformative conversations to take place is for each participant to be radically open to every other participant, striving toward "a mutual relationship of which mutual trust between the dialoguers is the logical consequence" (Freire 1970/2005, p. 72). Further, to foster such diversity and inclusiveness in education, despair and fear should be replaced by a "shared belief in a spirit of intellectual openness that celebrates diversity, welcomes dissent, and rejoices in collective dedication to truth" (Hooks, 1994, p. 33). In my mind, both Freire and Hooks are alluding to the necessity for fostering hope in classroom interactions to nurture trust and openness.

Hope in practice, as with an engaged pedagogy, is about opening possibilities and opportunities for dialogue. Trust and openness are conditions fostered through hope praxis (Scioli & Biller, 2009; Webb, 2010). In other words, a discussion on hope can be a wonderful platform for opening safe spaces for sharing subjective experiences and perceptions. Building on Giroux's view of the need to acknowledge the multiple experiences that exist in the university classroom, educators and students also bring with them different stories of hope, which could add compassion and intimacy to the critical engagement. Talking explicitly about one's hope has been shown to foster reflective thinking from which broader issues may be examined (Edey, Larsen, & LeMay, 2005). This also emerged in my research engagement exploring hope with rural children as I realised that they began to view issues in their immediate contexts through a hope lens. This enabled them to critically reflect on, and negotiate, social issues

such as domestic violence, crime, illness, and alcohol abuse, which they believed affected their hope. This could be extrapolated to a teaching and learning context where opening dialogue on the role of hope in teacher education could create spaces for multiple voices and experiences to emerge. As Inderbitzin (2015) noted, when students

> come to care deeply and personally about social problems and issues, they are imbued with educated hope and inspired to continue learning so that they can act with intent and clear purpose to improve conditions in their communities and the larger society. (p. 51)

Opening such meaningful conversations would stimulate a hopeful orientation, thus contributing significantly towards fostering cultural diversity, openness, and trust. It could be argued that for meaningful transformation to occur in teacher education, we need educators who are "engaged in hoping to look beyond themselves to the larger context within which they are hoping and to investigate issues at a more global level" (Nolan & Stitzlein, 2010, p. 8).

Storytelling remains a valuable method of knowledge transmission in many African cultures and, consequently, it is a highly regarded virtue for learners to not only be skilled at telling their own story, but also to listen intently as others relay their stories (Venter, 2004). Student teachers who are able to become empathetic to their fellow classmates' hope experiences and challenges, become more empathetic teachers who have a better understanding of the issues facing their own diverse learners. As Nolan and Stitzlein (2010, p. 5) aptly stated: "Storytelling powerfully connects us to the past, present, and future. As education scholars, we must ask what story it is we want teachers to be able to tell regarding their time in the classroom." Similarly, Hooks (1994) believed that creating an atmosphere in the classroom where the value of each individual voice is recognised and validated fosters a sense of community.

Promoting a sense of community in the university classroom: Mobilising collective hope.

Curricula and educational contexts have been criticised for their emphasis on learning as an individualistic and competitive endeavour that negates scholarship as a collective activity (Giroux, 1993; Jacobs, 2005; Nolan & Stitzlein, 2010; Venter, 2004). When lecturers create competitive spaces, stressing individual achievement, they place extreme pressure on students to succeed at the expense of their classmates (Nolan & Stitzlein, 2010). The focus is then on content acquisition for assessment purposes rather than on shared meaning making and authentic dialogue. Further, such practices counter the African value system, which espouses harmony and collectivism rather than individualistic endeavours (Venter, 2004). By reconceptualising the teaching and learning engagement through a hope lens, the university classroom can become a space for encouraging a shared spirit of enquiry and belonging. In this section, I expand on this statement by arguing that to mobilise hope on a collective level requires a pedagogy that facilitates learners to take ownership of the learning process through participatory and collaborative knowledge construction. Consequently, a sense of community is established through the values of togetherness, shared interests, and mutual benefit.

Learning to construct knowledge through collaborative, participatory methods.

Learning opportunities that enable critical dialogue and pedagogical praxis are crucial for encouraging a liberatory education. Such practices, however, require educators to critically examine the way they conceptualise their learning space and their ideas of who holds the knowledge (Hooks, 1994). Hooks (1994) therefore advocated for learning environments that have a dynamic and evolving nature that "invites us always to be in the present, to remember that the classroom is never the same. . . . When the classroom is truly engaged, it's dynamic. It's fluid. It's *always* changing" (p. 158).

Moving away from the traditional view of learners as blank recipients of knowledge requires a shift towards an expectation that all students embrace, and are able to fulfil, their responsibility to

contribute to learning in the classroom (Freire, 1970/2005; Hooks, 1994). For both Hooks and Freire, pedagogical spaces entail partnerships of collaborative and mutual learning and, as such, an engaged pedagogy should emphasise participation and involvement. The classroom needs to be "a democratic setting where everyone feels a responsibility to contribute" (Hooks, 1994, p. 39). One way to foster collaborative learning and encourage an expectation of shared responsibility is by making use of participatory, action-oriented classroom practices. Being fully engaged in the classroom and participating as cocreators of knowledge can lead to an enhanced sense of collective autonomy and responsibility among learners. Strategies such as peer learning and group work, influenced by a social constructivist understanding of education, can encourage reflection and open dialogue (Leshem, Zion, & Friedman, 2015). These practices also support an Afrocentric philosophy of education, which views the teacher–learner relationship as underscored by cooperation and harmony (Venter, 2004). As such, teaching strategies that encourage collaborative educational action (Freire's preferred term) are seen to boost cohesion and inclusiveness, and thus have been referred to as learner-centred, democratic, and discovery-based methods (Rose, 2005).

It is well documented that hope is relational and often nurtured through positive interactions with others. Marques et al. (2011) noted that group work can stimulate the transactional process of fostering hopeful thinking. Similarly, in my own study, making use of a variety of visual methods that encouraged collaborative and participatory knowledge construction played a significant role in enhancing the children's hope (Cherrington, 2016). Collective engagement also leads to collective awareness, which in turn opens up spaces for active citizenship. I particularly like Jacobs' (2005) description that hope is a "collaborative and imaginative process" enabling agency thus pushing individuals forward "to collectively reimagine the future and its possibilities" (p. 800). Therefore, it can be said that university classroom interactions that enhance conditions of togetherness, belonging, and agency can also be regarded as hope enhancing. Such practices also demonstrate for students a hopeful way of being with others, operationalising the values of ubuntu, which encourage all involved to take ownership and responsibility for the learning process.

Learning to strive together as a community of hope.

According to Jacobs (2005, p. 789) an engaged pedagogy represents "teachers and students being wholly present in the classroom with a kind of intersubjective investment in the class and the outcomes of the class." This intersubjective investment in the learning process was similarly described by Nolan and Stitzlein (2010, p. 8) as a "coming together collaboratively over issues of mutual concern." I relate such statements to the idea of fostering a collective hope through the process of learning that in turn promotes the development of a community of hope. My emphasis on the benefits of creating a sense of community in the education context stems from the following description by Hooks (1994) of an engaged teaching style:

> I enter the [university] classroom with the assumption that we must build "community" in order to create a climate of openness and intellectual rigor. Rather than focusing on the issue of safety, I think that a feeling of community creates a sense that there is shared commitment and a common good that binds us. What we all ideally share is the desire to learn—to receive actively knowledge that enhances our intellectual development and our capacity to live more fully in the world. (p. 40)

Linking such a collective learning process with the goal of living more meaningfully in the world, Hooks once again, perhaps unwittingly, positioned hope practice directly in the classroom. She also alluded to an experience of collective hope that resonates more closely with an Afrocentric orientation. As Venter (2004, p. 151) explained: "Belonging to a community is part of the essence of traditional African life." Fostering hope through a shared vision or collective (educational) goal pursuits can stimulate a sense of shared agency among the learners (Lopez, 2010); moreover, it promotes the idea of

generativity (where the individual is positioned as part of a community). Similarly, Snyder and Feldman (2000) claimed "hope is borne out of a sense of connectedness to other people, and moral commitment is fostered when we share important goals" (p. 408). In the field of psychology the benefits of having a sense of belonging and being part of a community with others have been well documented. For example, Larsen et al., (2005) maintained that "there is hope in genuinely being part of community" (p. 516) and, according to Duckworth, Steen, and Seligman (2005), hope thrives in a context of belonging where personal meaning can grow out of "belonging to and serving something larger than oneself, a life led in the service of positive institutions is the meaningful life" (p. 636). It is important to note, however, that the concept of a collective hope transcends the idea of a shared hope that is collectively held by a group of individuals pursuing a common outcome. It is more aligned to Webb's (2012) description of a transformative hope, or a "collective, mutually-efficacious and socially transformative mode of hoping" (p. 409), which is rooted in shared experiences. Such a hope can transform the entire collective group towards a new way of being, thus allowing hope simultaneously to become the process, the orientation, and the outcome.

The notion of fostering a sense of collective hope—and thus building communities of hope—in educational contexts further correlates with South African discourses that call for teaching practices that accommodate collective-oriented cultural groups associating more strongly with shared group values and roles rather than with individualistic ones. Wilson and Williams (2013) also alluded to the connection between the philosophy of ubuntu and the practice of hope from an African worldview. Similarly, in the framework of hope from an African perspective, the collective level of hope also corresponds to values involving generative interactions and interdependence. Prilleltensky and Prilleltensky (2007) maintained that an individual's level of hope is closely related to how social justice, democracy, and citizenship are practised within his or her community. I augment this belief by suggesting that an individual's hope can be fostered by the demonstration of such principles in the classroom—when the classroom becomes one's community.

Hooks (1994) had a vision of creating community in her classroom that respects an openness of thoughts and ideas, thus advancing a spirit of education as freedom. Therefore, could generating opportunities for collective hope in the university classroom, where students experience a level of mutual respect in striving to learn, not serve to strengthen the sustainability and gains of an authentically engaged pedagogy? This would then point to a self-sustaining, generative cycle of interactions. Further, could such a pedagogy, infused with hope, embed in student teachers a hopeful way of teaching to take into their own future practice? After all, when hope is anchored in practice as a way of being in the world, then hopeful actions can truly take hold and genuine transformation can begin.

Discussion

The value of fostering hope in teachers and schools is unquestionable. According to Lopez (2010, p. 43), "our most hopeful schools are nestled in hopeful neighbourhoods, where community members proactively help the school create a desirable future for students." He went on to describe high-hope principals and teachers who model hopeful behaviour to their learners and parents, explaining that their conviction lies in showing—rather than telling—the community how to make hope happen within and beyond the school walls. Scioli and Biller (2009) added that hopeful teachers can become instruments for positive change by putting their hope into practice in their personal and professional lives. It is evident that hope is not only about personal well-being and self-development, but is also intimately connected to social action and the capacity to pursue collective well-being and betterment. What is significant in all these statements is that for hope to be meaningful in educational contexts it has to be about the *doing* and the *showing*—and then extended further towards the *sharing*. Giroux (1993, p. 11) argued that the role of education should be to direct the individual's awareness towards the development of democracy, "in the sense that social betterment must be the necessary

consequence of individual flourishing." In his later writing he asserted this idea more strongly: "Hope is more than a politics, it is also a pedagogical and performative practice that provides the foundation for enabling human beings to learn about their potential as moral and civic agents" (Giroux, 2004, p. 38).

However, the literature linking hope theory and hope practice seems lacking. How do schools become hopeful? Where do principals and teachers learn how to be hopeful, and to put that hope into practice? I argue that teacher education programmes tasked with the holistic development of future teachers should be considering such questions. In this article I have tried to present ways in which student teachers could be equipped with the necessary tools to practise hope through an engaged pedagogy aimed at building a community of hope in the classroom. The discussion in this article thus aims to help enrich Hooks' (1994) pedagogical ideas by interweaving tangible hope practices into her depictions of engaging and liberating classroom practices. As she so aptly stated: "Education as the practice of freedom is not just about liberatory knowledge, it's about liberatory practice in the classroom" (p. 147). Further, I seek to explicitly insert hope into critical thinking about how to integrate African educational practices in higher education and to stimulate possibilities for conceptualising the responsibility of teacher education programmes to foster the capacities of student teachers as agents of hope. Thus, I conclude that hope praxis enacted alongside the values of Hooks' engaged pedagogy in teacher education programmes offers many possibilities and implications for improving school functionality and addressing educational change in the country. As Webb (2012) proposed: "Rather than leading one to transform the world itself, hope leads one instead to transform one's 'inner attitude' towards it" (p. 401); this idea resonates with the purpose of a liberatory education.

The ideas presented in this article are not without limitations. Firstly, I am aware that often university teachers are constrained by what Jacobs (2005) termed, *limit-situations*, dictated by a restrictive curriculum, inflexible policies, and overcrowded classrooms. Even Hooks (1994) recognised that to be truly an engaged teacher required a constant presence and a strong dispensation, which could be "taxing to the spirit" (p. 202). Giroux (1993) too, humbly pronounced that in theorising about the need for schools to drive social change he had greatly underestimated "both the structural and ideological constraints under which teachers labor" (p. 1). However, it is precisely in times of such realities that creative thinking and collective learning should be given more attention. With a lack of applied research to evidence my position, I recognise that my own writing falls dangerously close to a charge of being mere theorising. I therefore acknowledge the urgent need for studies that explore the practicalities and challenges of hope in practice in the South African context. Secondly, while my description of an African worldview is pertinent for understanding the relevance and significance of conceptualising hope through a cultural and contextual lens, I do acknowledge that Africa as a continent is made up of many distinct countries, ethnicities, and cultural groups. Therefore, it would be presumptuous to assume this worldview is shared by all African people. Despite this limitation, what is clear is the need to further explore and understand the praxis of hope from an African perspective in teaching and learning practice.

Conclusion

> *One of the most powerful ways of spreading hope across a community is to help hopeful young people pursue their own ideas for making their schools and their communities better. The most hopeful of the students will create their own ripples that will touch the lives of friends and family. (Lopez, 2010, p. 44)*

This position paper was intended to initiate ripples of thinking about hope in the context of teacher education, and about the possibilities of truly enabling future teachers to act as agents of hope. I have described a framework of hope from an African perspective, paying particular attention to the levels of relational and collective hope which are crucial for developing student teachers' personal and

professional capabilities. I have also sought to address the problem of a shortage of literature linking hope theory and practice in education and, more specifically, in teacher education programmes, by describing how hope can be put into practice when combined with the values of an engaged pedagogy as proposed by Hooks (1994). Therefore, by positioning a practice of hope in teacher education, meaningful spaces can be created, providing a platform for student teachers to critically reflect on issues of personal development and well-being as well as equipping them with a hopeful way of being in the classroom. I have argued that in this way student teachers can truly make a difference and feel empowered in that they are doing so. Because hope is regarded as an intrinsic human capacity, strengthened by critical reflection and generative social action, perhaps it is wise to consider Webb's (2010, p. 329) perspective that the role and duty of education should not be conceived merely as "one of instilling hope but rather of evoking it and providing it with guidance."

Acknowledgements

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Book Review

Africanising the Curriculum: Indigenous Perspectives and Theories by Vuyisile Msila and Mishack T. Gumbo (Editors)

Stellenbosch, South Africa: SUN MeDIA, 2016. 229 pp.
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Elephants and the Grass
Wapiganapo tembo nyasi huumia. (Swahili)
When elephants fight, the grass (reeds) gets hurt.[5]

I fully appreciate the need for a frank debate about "Africanising the curriculum" in our present internationalised context. Knowledges that crisscross the globe originating from one source of world, are re-presented and packaged as emanating from the superpowers of the rich and famous, paraded as evidence of legitimating motivations for ascendancy to the throne of privilege. The host sources of knowledge remain obliterated. This has been the history of conquest for centuries, where victors triumphantly exhibit their spoils of war: the vanquished are exhibited as spectacles of amusement and derision; their goods and property ceremoniously displayed as the new property of the conqueror. So too are the knowledge systems, stolen from one context, exposed in pageantries of arrogance and humiliation. This is a matter of power and privilege intersecting to mark the territory of new heroes and villains. The aftermath of conquest is usually characterised by the victor supposedly generously distributing the booties of conquest, which have included even the donation of whole geographic territories to loyal allies, the bestowment even of people into enslaved bondage, and the ripping asunder of family units as persons were degraded to the status of property and sold in the marketplace. Border crossings are usually about exploitation, and the powerless and conquered are silenced into subjugation. Their voices are relegated to whispers in the wind until new whirling spirits are activated to challenge the injustice. And hell has no greater fury than the rising of those who for centuries have been downtrodden, abused, and made to feel alienated. Their lashing out against the oppressors bears centuries of being muzzled. And the new war is waged. The target of bella nova is to claim back the stolen goods, to accentuate the need for redefinitions of the self, to campaign for a resurrection of the lost world.

Vanquished and victor stare each other in the face. And a complex recognition emerges in the present battlefields of the new century. Neither victor nor vanquished can fully disentangle the centuries of inbreeding of people, knowledges, habits, rituals, and routines. Procedures of cultural heritage are

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[5] https://www.google.co.za/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF8#q=when+two+elephants+fight+it+is+the+grass+that+gets+trampled&*

blurred around the edges as even the vanquished cannot recognise their heritage genetic origins. Every I bears a seed of the others buried deep into the psyche. The project of humanity has taken over to intersect, blur, erase, shape, evolve, and prevent a romanticised hearkening of the era gone by.

We are all witnesses in the modern world of being a part of the fuller island of humanity.

But the elephants will continue to fight. Each marking dominantly their need to claim the right to be king of the tribe. Or maybe their fight is simply about rekindling their lost sense of erasure.

The pattern of African colonialism is not the only story of conquest as the citizens of the Western world increasingly found the need to seek new territories. Colonial expansion had its logic of finding new economic strategies to assert ascendancy across the globe. The Europeans, indeed with the backing of powerful weaponry and technologies in the last century, expanded their marketplace of harvest and plundered territories across the globe: into the Americas, into the Asian and Australasian worlds; even attempts at usurping the East with its own cultures of advanced technological products and patterns of governance and political systems. Each time the rationale of discovery of new territories was reported back to the controlling central Empire, and the marvel of the conquistadores were elevated to heroic stature. Little was said on the devastation of the colonising influence on the local indigenous community; little was said of the exploration of the diseases of the Empire that biologically wiped out whole nations of servile colonies. No mention was usually made of the empires of the worlds conquered. Little official recognition was afforded to the knowledge systems of the local, which were often misunderstood or even belittled (Diamond, 2005).

Migration into the "new world" was coupled under colonial expansion with a disguised mandate of bringing civilisation to the heathens. And migration continues to this day, especially as displaced humanity seeks out new territories as a consequence of natural disasters, economic disasters, and resultant political warfare. Migration of people and ideas has usually been about the path to find new spaces for meaningful habitation. Unlike traditional 19th century colonialism, migration patterns today are not simply about the movement of the North to the South, or the West to the East. Twenty-first century superhighways are being created in all directions facilitated by the rampant exchange of ideas and knowledges through powerful new technologies of communication and dialogue. For example, a remote West Samoan in a small island in the Pacific has, in theory, the potential to connect in real time, to the exploits of a national American election many geographic miles away from the cultural context in which she resides. The blurriness of borders itself escapes nationalistic boundaries and the voyeurs have potential to escape and create new worlds without even leaving their geographic and cultural homes. We are fluid, mobile beings, refusing to be streamlined into historical bondages of past identities and practices. Our menus are infused by the projects of others. We are diverse, multiple, and continually contested beings as new internal and external dialogues about who we are and who we want to be, consciously invade our being. Any attempt to box us is resisted and we too, bear the hallmarks of both victor and vanquished as we mark new territories, new selections for the kinds of knowledges, systems, and rituals of education and entertainment we choose. We can move backwards in time, but we cannot escape to live in the time from which we originated. Our new time is fashioned in the goals of the future, making selective choices about the curriculum of our lives.

So what has this to do with the Africanising of the curriculum and the search for indigenous perspectives and theories, the subject of this book?

This book generates many pertinent questions about the theoretical and practical rationales that could underpin the nature of rebirthing the African identity after a history of Westernised colonial expansion. It openly proclaims that this is not a project of romanticisation of the former precolonial Africa, which bore all the hallmarks of internal diversities of religions, ethnicities, and patriarchy. Moreover, the book claims to move beyond a self-pity project and a celebration of victimhood. Its authors engage the

agenda of how Africans themselves are also complicit in the agenda of their own marginalisation, and how "indigenous epistemicide" (Odora Hoppers' 2002 coinage) is perpetrated by those who have left the continent diasporically, methodologically, and epistemologically. The book offers a series of explorations of how knowledge exchanges across the colonisers and colonised characterise the subjugated African ways of knowing. It even claims that rampant patriarchy is not an indigenous manifestation, and that it is colonialism that brought oppression to African womanhood. Some authors make a case that Westernised feminisms fail to understand African womanisms in a bid to continue (arrogantly) to give mandate to the West to speak on behalf of "the voiceless South." The book constitutes subtle and overt provocations about how Africa will and can redefine an African worldview, an African perspective. The book chooses to elaborate on how the Africans have become alienated from their own cultures and identities, and how the separation between their everyday lived experiences and the learnt worlds of schooling constitute the project of formal modern schooling. The book is a call for an epistemic turn to decolonise the curriculum through a resurrection of former marginalised cultural habits, rituals, routines, and knowledges that have been erased over time. The book acknowledges that the urban African citizens have even been co-denigrators of their own historical roots, with little respect or valuing of their largely rural existences. The urbanised have capitulated to the view that to be educated is to disconnect with an African cultural past. The book provides a foundational reading platform of the range of debates of what constitutes an indigenous knowledge system and the competing theoretical worldviews of their limitations and potential.

However, for me, the book offers a repeated agenda of aiming to resurrect a past. It does not sufficiently trouble the intersected identities of what an internationalised world contends of present day society. Am I too, going to be accused of being a colonised self? The debates are largely located with a critique of the "globalisation" worldview, with its technological and neoliberal hegemonisations. Rightfully so, the book (and its many authors) challenge the way in which the selections of curriculum that currently dominate the schooling and higher education terrain, are subtle infusions of capitulation to the dominant forces of Western hierarchies. However, often the authors do not problematise the complexities of creating a new intersected, interconnected global citizenry, an agenda which celebrates internationality not as a competition between fighting elephants, but about finding the spaces for dialogue and exchange.

The book does not deal with realities that our global context is littered with patterns of oppression not only between the non-African and the African continent, but also within the internal systems of Americas, or between the European continental belligerent partners. The consequences of worldwide migratory patterns reveal a humanity in search of new spatialities to express their sense of self, and their hopes for their future. And this has lead paradoxically to a greater rising up of boundaries and walls of dissent, resentment, and doubt as new cultures intersect to compete for the same pool of physical or financial resources. For example, the borders of Venezuela and Columbia are increasingly being policed as pregnant mothers attempt to cross South American borders where they are more likely to receive better quality health care. The reaction is defensive and territorial, and new patterns of xenophobia emerge across previously harmonious neighbours. The rise of xenophobia is a fundamentalism that characterises not only the religiously Islamic countries warring around rights to economic passageways, but also the triumphant arrogance of conservativism that celebrates homophobia, racism, and religious bigotry in the north American territories of the United States. Present day European elections are premised on the notable increase in the voice of the conservative right who wish to guard and defend monoculturalism and nationalistic patriotism. The Indian subcontinent is marred with new forms of separations between religious factions (Hindus and Muslims), as well as increased anti-African sentiment against foreign immigrants.

Whilst ostensibly the war is against the importation of foreign cultures, such as drug peddling and child trafficking, these agendas are usually constructed around the competition for economic survival tactics in an increasingly technologised and automated economic system that relies more on machines than

human labour. South Africa too, has had repeated agendas of xenophobic attacks perpetrated by those who argue that national identity and resources are being eroded to support foreigners. The world, not just Africa, is a complex amalgam of competing forces, never neutral of abusive power and corruption. The global citizen is a hybrid not of one solid cultural heritage and is likely to be connected to an evolving identity, no doubt shaped by forces of a relatively new 24-hour accessibility to "world news." We live in a Coca-Cola cultural complexity, and our football teams are no longer confined to our localised heroes. But, is this global village something that is accessible only to those with the financial resources to share its hegemonic force, that is, those who can afford access to modern technological communication systems such as televisions and computers? Is this globalising culture capable of being curtailed, especially by the older generation who are less confident of ways to negotiate to become part of the technological networks? How does age and class intersect to produce hegemonic control?

I find that the highly reflective chapter that raises for me, the most pertinent questions about these complexities is the one by Chikoko (2016) who interprets how the African international project is unfolding within the realms of higher education. He reports on an institutional project that attempts to explore, not just the officialised curriculum, the declared or espoused curriculum of advocates of the design of higher education, but also the lived experiences of international students within an African university. Rather than generate heat, the chapter elaborates the insight that the internationalisation of the curriculum in higher education is far from available to those who cross borders into the South African higher education system. He suggests that whilst recognising the need to develop emic homegrown culture specific identities is a laudable goal, this cannot be disconnected from the expectation that we live in an etic world aiming to develop perspectives that span a generic universalist goal. He suggests that there is need to generate a baseline of an asset-based agenda, recognising the self-worth of local contextual specificities, but that this cannot remain fixated on narcissistic glorification. We must embrace the responsibility to affect the rest of the global world in which we live through the process of interconnected dialogues, exchanges, and opening of hearts, minds, and voices to the lived experiences and perspectives of others. We cannot be claiming for an individualistic agenda disconnected from the world of competing ideas and forces. Ubuntu, an African philosophy, by definition requires a dialectical interchange between multiple partners who do not necessarily agree, but who help shape each other.

For me the list of questions generated out of the project described in this chapter, points to the very turbulences that this book generated personally. I list them here for emphasis of continued questioning that remains unanswered by the book:

- Who is African?

- What makes scholarship African?

- What does it take to engage in African scholarship?

- Where do our different understandings of African scholarship come from?

- Can we come to a common understanding of African scholarship? Should we? (Chikoko, 2016, p. 79)

Unlike Chikoko above, the book seems to suggest that singular answers to these contested issues are possible, and can be contained in a solution that will be found. This is despite the professed theoretical claim towards nonessentialism and preferred plurality, yielding a paradigmatic paradox. I think that this is an illusion that cannot be crafted in a sanitised solution. The book in general, proffers a view that a holistic, stable, socially just curriculum will be possible if one attends to an affirmation of the self and a reconnecting with a (rural) African past. I am not suggesting that the resources of these Africanisms should not be a project per se. What I am suggesting is that it is naïve to hope for a world that will not be forever contested with hierarchies and marginalisations. There will always be, in the curriculum selections made, inclusions and exclusions, and this could be overtly manifested or

oftentimes, lie below the surface of the officialised curriculum. References to the hidden and null curriculum are examined in this anthology. Some authors acknowledge that despite the legalised removal of former colonial systems of governance and administration, the education curriculum of many African schooling and higher education systems, still bear the hallmarks of colonial hidden heritages. But the book does not acknowledge sufficiently, the many contradictions even within Africa itself. For example, African identities and worldviews often are hushed even in those contexts that profess to be "anticolonial." The "success" of African countries for emulating and performing in comparative international assessment testing is an example of this continued infiltration of colonial perspectives in the education and schooling system. The masters' voice still defines the hallmarks of quality.

Therefore I need to ask: Why do I, after reading this anthology, feel silenced and celebrated at the same time? I see in the book the choice to contest the powerful hegemonic controls that are imposed on me from outside my worldview. I see the agenda to redefine my selfhood. And my self is celebrated. But the choices of the perspectives and theories make no mention of my own heritage within the African continent. I believe I am African, with roots that are drawn from many historical continental geographic and religious perspectives. But the book does not engage sufficiently the notion that the African continent is patterned with a mosaic of differing intersecting cultural systems of which I am a part. I do not feel that I am invited to be considered as African too. Instead, I leave the reading of the book feeling that the world of being African is already predetermined to belong to only certain groups or kinds of individuals, outside of my existence. I notice this in the choices of the bibliographic preferences which explore colonialism largely in relation to a largely a geographical heritage of preferred continental African authors. I recognise this as a deliberate attempt to celebrate that scholarship in, for, from, and about Africa is the hidden curriculum project of the book. But I see no references to the contested views of Orientalism and its examination of the politics of marginality as part of the decolonial project, even on the African continent. I see no mention of the struggles of many individuals of different racial groups for the dismantling of the intersected oppression of colonialism and apartheid, which fragmented rather than cohered different cultural and religious orientations. I see a silence about matters of sexual orientation and African identities. I see a flirtation with brief accounts from international black American scholars in the USA, and from the African continent outside South Africa. I note the two white African scholars included in the anthology. But does this assemblage of authors reflect the fullness of the Africans of the continent?

Perhaps the choice of English as its preferred medium to lead the academic debate is a means to generate an inclusivity of voices and audiences. But how is this choice not part of the colonised agenda? These are the kinds of contradictions and complexities that the book does not overtly tackle, presumably because this is already a settled agreement that our dialogues can be mediated through the borrowing of the masters' language? English is my only home language. And therefore, I should feel included in this debate. But am I the targeted audience, or a participant in this gaze mediated via the choice of the language of its research? Or am I the one to be converted by the languaged argument? And yet, why then, do I feel silenced?

I think that the book, whilst presenting practical operational ways of infusing into the curriculum space a view about how African identities can be celebrated, still compartmentalises Africanness into certain ethnic and racialised agendas.

I note, for example Higgs' (2016) chapter, which pushes the boundaries to explore for a greater wisdom utilising Mazrui's (2004) characteristics of wisdom. Higgs reports that wisdom requires tolerance, an optimising of the economic well-being of all, the campaign for social justice in broader rather than narrow ascendancies, the questioning of how curriculum choices tend to benefit particular preferred sets of individuals, the need for broader campaign for true equality, a respect for a sustainable environmental context and lastly, the need for interfaith dialogue. This more comprehensive

philosophical view of wisdom and the project of what scholarship should be directed towards, is glossed over by many of the authors, who choose instead to remember the oppression, without adequately suggesting a more dialogical openness based on respect and trust of multiple perspectives around identities of the past, the present, and the future.

To quote Ramose (2004) in this chapter: "Wisdom is openness to unfolding praxis, which also cherishes the logic of co-operation, rather than conquest and competition" (as cited in Higgs, 2016, p. 12). A non-cooperative agenda results in "reductionism, absolutism and dogmatisms" which Ramose saw as "an injury to the complexity of life as a holistic phenomenon" (2004, as cited in Higgs, 2016, p. 12).

I would have liked the book to open up the spaces for this expansionist, complex, and intersected world. Instead, I feel like the grass, trampled and trodden. I am cast as simply a spectator rather than invited to contribute. Nyerere (then President of Tanzania) in the 1970s, commented in a New York United Nations speech, that during the Cold War, the contesting belligerence between the two superpowers of Russia and the United States, it was the poor third-world countries throughout the globe, and especially in the African continent, that were the ones who were the real victims. Whilst the elephants fought, the grass was trampled.

Whilst the elephants of colonised and coloniser fight, it further marginalises those who inhabit the contextual spatiality of the complex interconnected world we live in. The grass suffers most. Curriculum must consciously affirm the possibility that all citizens of the world are able to share in dialogue and respect of the interchange of competing and contested worldviews. This is not a naïve hope of a return to romanticised essentialist past, but a hope that must be infused with criticality (Bozalek, Liebowitz, Carolissen, & Boler, 2014): an agenda of multiple strategies that campaigns towards the forever contested nature of knowledges and knowledge systems, whilst moving towards greater degrees of freedom and assertion.

Elephants cannot dance, without scaring the chickens.

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Project Report

East and South African-German Centre of Excellence for Educational Research Methodologies and Management (CERM-ESA)
A Case for Internationalisation and Higher Education Engagement

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Why This Project?

Various studies and analyses show that secondary and higher education play a vital role in fostering social development, economic growth, and human well-being in particular in developing countries (Altbach & Salmi, 2011; Bloom, Canning, & Chan, 2006; Botman, van Zyl, Fakie, & Pauw, 2009; Gyimah-Brempong, Paddison, & Mitiku, 2006; Majgaard & Mingat, 2012; Meek, Teichler, & Kearney, 2009; Singh & Manuh, 2007; Task Force on Higher Education and Society, 2000). The Task Force on Higher Education and Society (2000, p. 27) stated, "higher education is no longer a small enterprise for the elite. Rather, it has become vital to nearly every nation's plans for development." Education systems in Africa are particularly challenged in the field of higher education and research with large differences between African countries in terms of research capacity and output. As such, the participants of the 2009 World Conference on Higher Education demanded: "Higher education institutions should seek out areas of research and teaching that can address issues related to the well-being of the population and establish a strong foundation for locally-relevant science and technology" (Gurría, 2009, p. 6). Thus, effective impulses are called for through furthering excellence with regard to better data, innovative research and instruction techniques, as well as a better understanding of the unique opportunities of African education institutions such as schools or universities within their respective communities.

Against this background, a consortium of four African and one German university initiated the collaborative research, academic, and staff development project called, East and South African-German Centre of Excellence for Educational Research Methodologies and Management— CERM-ESA (2014–2022). It is funded by the German Academic Exchange Service (DAAD) with support of the Federal Foreign Office (AA) under the umbrella of their Africa Strategy. CERM-ESA project partners are the following institutions: Moi University, Kenya; University of Oldenburg, Germany; Nelson Mandela

Metropolitan University (NMMU), South Africa; University of Dar es Salaam, Tanzania; Uganda Management Institute.

This report provides a brief introduction to the theoretical approaches CERM-ESA employs and to the project's activities and structures relevant to educational research for social change and Africanisation.

Theoretical Approach

Looking from a German perspective, CERM-ESA could be viewed as a development cooperation project and hence, development theory would be the one to refer to. However, the concept of development has been target of much critique in the past two decades as an ideology of the West/North and as a hierarchical concept that promotes cultural imperialism (Ziai, 2007). For CERM-ESA as a collaborative project, development theory would by no means represent a shared perspective on the joint endeavour and common objectives. Rather, CERM-ESA has been conceptualised and is operating within the two broad frameworks of a) internationalisation of higher education institutions, understood as the effort of universities to include an international and intercultural dimension into their teaching, research, and service functions and be responsive to their global environments (Qiang, 2003), and b) higher education engagement, understood as the social responsibility of higher education institutions to form partnerships with other societal actors and communities, to foster interdisciplinary collaboration and impact positively on the society (Fear & Sandmann, 2016; Fitzgerald, Bruns, Sonka, Furco, & Swanson, 2012; Pinheiro, Langa, & Pausits, 2015).

Internationalisation

Most literature distinguishes between four different approaches to internationalisation of higher education institutions: 1) the *activity approach*, which focuses on academic exchange and the curriculum, 2) the *competency approach*, which focuses on the development of skills and competencies in students and staff, 3) the *ethos approach*, which promotes the values and culture of multi-perspectivity and intercultural initiatives, and 4) the *process approach*, which focuses on integrating an international/intercultural perspective sustainably into various activities, policies, and procedures (Qiang, 2003, pp. 250–251).

According to the literature, internationalisation of higher education institutions is mainly based on political, economic, educational, or cultural/social rationales, while there seems to be a general tendency towards a dominance of economic rationales and of global competitiveness that have driven internationalisation at universities for the past 20 years in most parts of the world (Jiang, 2008; Knight, 2007; Qiang, 2003).

Jowi (2009) reminded us that internationalisation efforts of higher education institutions in Africa— just like in the rest of the world—reflect the historical and cultural contexts as well as the needs and priorities of their particular society. In general, he identified the need for institutional and academic strengthening as the dominant rationale for African universities to internationalise themselves (Jowi, 2009).

Higher education engagement

The second conceptual framework employed to explain CERM-ESA's rationale and activities, namely higher education engagement or social responsibility, explains CERM-ESA's underlying model of social transformation. In 1996, Boyer called on higher education institutions to become a "vigorous partner" contributing to solutions for the "most pressing social, civic, economic, and moral problems" (p. 18). Ostrander (2004) described the main concerns of this movement as "grounding academic knowledge in real-world conditions, connecting knowledge to practice, bringing academics and practitioners into closer relationships, improving conditions in local communities, and building democracy and civil society" (p. 74). As the third core function of universities besides research and teaching, engagement

can therefore be described as the universities' commitment to producing knowledge that benefits society and that produces students for productive citizenship in a democratic society (Fitzgerald et al., 2012). Various models and concepts exist for (the scholarship of) engagement that refer to theories like institutional change theory and knowledge transfer or democratisation theory. Bringle and Hatcher's (2011) engagement model comprises four main characteristics which point out that engagement should be 1) scholarly (activities and products), 2) cross-cutting (in research, teaching, and service), 3) reciprocal and mutually beneficial, and 4) embrace values of a civic democracy (Bringle & Hatcher, 2011). CERM-ESA has adopted this model as a conceptual framework for its programmes because it concurs with the objectives of the partner institutions. In their mission statements, the five higher education institutions refer to their social responsibility to form partnerships with stakeholders, for example, "for the betterment of society" (Moi University, n. d.) or that "will make a critical and constructive contribution to regional, national and global sustainability" (NMMU, n. d.).

CERM-ESA Objectives

CERM-ESA's overall objective has been identified as to establish a centre of excellence in educational research methodologies and management that is visible to society and to the international scientific community by delivering excellent academic results, which will serve as a basis for evidence-based decision making for improving educational practice. The specific project objectives within the three programme pillars illustrate the academic rationale of this international cooperation:

- Research Programme: Advancing and expanding excellent and innovative educational research on methodologies, instruction techniques, and management strategies for African contexts.

- Academic Programme: Teaching and training of future educational leaders in terms of research methodologies, innovative management solutions, and instruction techniques at master's and doctoral levels.

- Staff Development Programme: Advancing capacity building and staff development in academia and management of the participating universities in effective university instruction and management for (future) leaders, and sustainable institution building.

In order to frame the research activities in such a way that they contribute to social change and Africanisation, the following four umbrella topics have been identified by the partners:

- Educational research methodologies and higher education in specific African contexts.

- Science education and education for sustainable development.

- Community schools, leadership, and management for social development.

- Languages, intercultural communication, indigenous knowledge, and arts.

What Have We Found out So Far?

After 2 ½ years into the existence of CERM-ESA, we can draw first conclusions on the project's achievements and potentials concerning all three objectives (research, academic, staff development) and the North–South and South–South cooperation between the four African and one German partner. For the purpose of this project report, the main activities and collaboration structures are valued against the project's contributions to internationalisation and engagement in the table below.

Table 1: Significance for Social Change and Africanisation

	Measures and Activities	Contribution to Internationalisation	Contribution to Engagement
Cooperation structure	Bi-annual steering committee meetings: decisions made by all partners	- regular cross-country meetings - visibility at host university	Ensures: - that the programmes are relevant and beneficial to all partners
	International advisory board: experts for Africanisation	- transfer of knowledge and expertise	- guidance and critical reflection is provided on African contexts & methodologies
	Building a CERM-ESA faculty: all alumni and participants	- forum for educationists of all five partner institutions	- a broad collaboration and interdisciplinary basis for the project
	Online learning platform	- online collaboration for staff and students	- sharing of resources and best practices
Research	4 umbrella topics and research teams	- relevant topics for all partner regions	- focus on social change and improvements
	Contextualised & evidence-based methodologies	- internationally comparative topics	- advancing participatory, arts-based, action research and other forms of engaged methodologies
	Co-supervision of theses	- cross-country collaboration in supervision	- mutual support and ensuring best practice
	Participation in international conferences	- support for schools/ faculties of education to be internationally visible	- disseminating research methodologies and results from African contexts
Academic / Teaching	Annual CERM-ESA schools on research methodologies for scholarship holders	- regular student and lecturer exchange - international perspectives	- focus on ethical questions, engagement, leadership and change
	Students' visits to co-supervisors	- international experience	- exposure to other community outreach activities and methods
	New master's programme, Education Research, at Moi University	- joint curriculum development, teaching and co-supervision	- innovative, contextualised research methodologies for social change
Staff development	Short learning programme research supervision	- learning and knowledge transfer in international scientific communities	- engaged supervision practices and skills development
	Principals' and teachers' days	- in-service training according to international standards and with contributions by CERM-ESA partners	- direct knowledge transfer in various directions, transdisciplinary collaboration, mutually beneficial
	Methodology skills development cross-universities	- multidirectional knowledge transfer (South–South and North–South/South–North)	- focus on particular methodologies for social change

The table shows how CERM-ESA has conceptualised *internationalisation* and *engagement* as cross-cutting issues that are central to a) its academic rationale and three objectives, b) the organisational

structure and mode of collaboration, c) the research topics and methodologies, and d) to all its activities within the three programme lines.

With regard to social change and Africanisation, the academic rationale and three objectives (a) support the African partner universities in their efforts to produce more highly qualified graduates to meet the identified societal needs to more teaching and research capacities in the universities. Following the introduction of free primary education (2003) and free secondary education (2008) in Kenya, as an example, student numbers in universities have gone up rapidly and hence, the need for qualified university lecturers is blatant (Gudo, Olel, & Oanda, 2011; Ndirangu & Udoto, 2011). The organisational structure and mode of collaboration within CERM-ESA (b) follows the understanding that a positive impact and change can only be reached if we build a partnership between equals where global conditions of asymmetrical power relations, inequalities, and long histories of injustices are reflected upon and dealt with. North–South/South–South and university-communities partnerships that don't employ a deficit-based and Eurocentric approach to service, cooperation, and education are still at the margins and need to be brought to the centre (Martin & Griffiths, 2012; Odora Hoppers, 2001). A core element of addressing issues of social change and Africanisation are the topics CERM-ESA focuses on in its research and the integration of indigenous knowledge and methodologies (c). The individual research projects of CERM-ESA scholarship holders address issues like gender and sexuality education, mother-tongue based education in multilingual settings, humanising pedagogy, the integration of indigenous knowledge in science education, and early learning advancement through guided play. The employed methodologies are not a mere duplicate of what has been applied and tested in European or US contexts, but they are rooted in and developed or adapted for the specific African contexts. Built into the methodologies are ways of giving back to the research participants and the institutions to support the forces driving change towards more social justice in the particular area of interest (Chilisa, 2011; Denzin & Lincoln, 2008). The capacity building, teaching, research, and community activities CERM-ESA carries out (d) are conceptualised as a comprehensive approach to drive social development and Africanisation from various angles. While the activity and ethos approach to internationalisation has dominated so far, the process and competency approach will become more important in the years to come. A critical reflection and review of how the research projects of CERM-ESA's scholarship holders have contributed to the knowledge about African grounded methodologies and solutions for educational challenges in African contexts that are needed for social change to happen, is still in progress. However, first results suggest that educational research, teaching, and staff development framed by engagement in African contexts can benefit tremendously from international collaboration, especially within Africa.

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Conference Report
Rethinking Educational Research in African Contexts
First CERM-ESA International Conference
24–26 September 2015
Moi University, Eldoret, Kenya

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The first East and South African-German Centre of Excellence for Educational Research Methodologies and Management (CERM-ESA) international conference on *Rethinking Educational Research in African Contexts* took place within the scope of the official opening ceremony of CERM-ESA at Moi University, Eldoret, Kenya. Fifty delegates from the four other CERM-ESA partner universities—Nelson Mandela Metropolitan University (NMMU), South Africa; University of Dar es Salaam, Tanzania; University of Oldenburg (UOL), Germany; Uganda Management Institute—were joined by more than 50 participants from Kenya. The conference consisted of three sessions. First, an official inauguration of the Centre of Excellence, Moi University, with speakers from the host and partner universities, the German Academic Exchange Service (DAAD), the Kenya Commission of University Education (CUE), and the governor of Uasin Gishu County. Second, three keynotes on issues of educational research and management in African contexts followed by plenary discussions, and third, a visit to a county school and interaction with its management, teachers, and learners.

In the first session, the speakers from Moi University—Acting Vice-Chancellor, Nathan Ogechi, Deputy Vice-Chancellor, Bob Wishitemi, and Dean of School of Education, Jonah Kindiki—elaborated on their vision of how the centre of excellence based at Moi University should contribute to relevant, solution-oriented educational research and management in the East and South African regions and beyond. The theme of the conference was motivated by the initiators and project leaders of CERM-ESA—Julius Tanui (Moi University), Paul Webb (NMMU), Karsten Speck and Bernd Siebenhüner (UOL), Proscovia Namubiru (Uganda Management Institute), and Eugenia Kafanabo (University of Dar es Salaam)—who explained that the centre of excellence not only provides a springboard for investigating methodologies and approaches that are both compatible and rooted in the African context, but also issues a challenge to African higher education institutions to adopt approaches that are critical to sustainable human development on the continent. Professor Emeritus Wolfgang Nitsch of UOL was honoured in absentia as one of the masterminds behind CERM-ESA and the driving force behind all cooperation activities with South and East African educational institutions at UOL. Nitsch's written message was read to the audience; he stressed the need to establish a culture of evidence-based or

research-responsive professional management practice in order to link education research and management, and to disseminate and apply relevant educational research effectively. Hence, he argued that the style of education research management that promotes social change is collaborative, inclusive, and participatory, that is, education administrators, school principals, school governing board members, teachers, cooperating artists, and vocational experts should all be partners in a system of participatory and research-responsive education management. Helmut Blumbach, director of DAAD's Nairobi office, Anne Nangulu of the Kenya Commission for University Education, and Uasin Gishu County Governor, Jackson Mandago, congratulated the initiators of CERM-ESA and emphasised the centre's responsibility to not only produce excellent graduates, but also to partner with the schools, teachers, and education managers in the region so that schools from preprimary to high school will benefit from the centre's activities.

In the second session, the keynote speakers elaborated on what makes education research and management in Africa special, and why Africanisation and decolonisation are crucial to better serve African societies. Catherine Odora Hoppers shared her experience of research in South African universities where she has identified changes in the content of academic offerings and in the paradigms of knowledge production towards including indigenous knowledge systems. In her view, rereading, rethinking, and reconceptualising academic content, knowledge production, and justice issues in a democratic dialogue will lead to a shared paradigm shift and to transformation. Julius Jwan, director of the Kenya Institute for Curriculum Development, spoke about transformational leadership as critical pathway to changing educational institutions. Transformational leadership provides intellectual direction within the organisation with the aim of empowering and supporting staff as partners in decision making. It also focuses on problem solving and the need for collaboration with stakeholders in order to be effective. Birgit Brock-Utne of Oslo University also spoke about the decolonisation of research in the African university. She referred to the *Narrative Study of Lives* approach (Coetzee, Elliker, & Rau, 2013) as a way to explore ways to listen to "ordinary people" that is applicable all over Africa. On a more general note, she asserted that if knowledge was to be decolonised in the African university, one could not avoid the difficult and not much appreciated question: In which language should the knowledge be conveyed?

During the third session of the conference, Moi University School of Education staff members took all the delegates to a secondary school in a rural area of Uasin Gishu. Peris Kosgei, principal, and the school management board introduced the school to the visitors, and the principal recalled how the school had changed since she began working there some years back. One of the impressive examples she gave as to how things can be changed, even in a neglected sub-county school, was that of gender. Just a few years earlier, only 10–20% of the learners in each of her classes were girls; boys received preferential treatment with regards to education. Together with the community, Kosgei initiated a process to increase the numbers of girls in her school and successfully managed to reach the situation in which girls now make up 50% of the school's population—and, in recent years, perform better than their boy peers in terms of achievement. She noted that one of the crucial aspects of leadership in the change process was her serving as rare role model for girls in a region where most educational leadership positions are held by men.

In conclusion, we can say that the first CERM-ESA international conference contributed to promoting educational research for social change on various levels, namely:

- All contributions were framed by questions around rethinking educational research, especially in African contexts, and how it can become more relevant to African societies.

- The international delegates were offered a perspective for future collaborative educational research within the ambit of the CERM-ESA project.

- The conference included, and transferred, knowledge to external stakeholders from policy making, curriculum development, and county government.

- It did not remain on the university campus but engaged with teachers, school managers, and learners in a real-life school context where delegates could listen to their needs and expectations and link theoretical deliberations with practical experience—something which is absolutely essential for socially relevant and solution-oriented research.

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