



Australian and International Journal of Rural Education

Indigenous Knowledge Systems and Sustainable Learning In Rural South Africa

Dipane Joseph Hlalele

University of KwaZulu-Natal, South Africa

Abstract

Calls for a decolonized curriculum in South Africa are gaining momentum. Contrary to the school curriculum that privileges knowledge from a western perspective, Indigenous Knowledge Systems (IKS) appreciate and draw from local content and forms of knowing. A number of studies have expressed the value of IKS, and the need for educational processes to be properly contextualized within local knowledge and language in South Africa. This paper suggests a break away from the current western modalities in teaching and learning and argues for unlocking and unleashing IKS [local and latent] through decolonizing the curriculum. However, the uptake of such in the midst of a longstanding 'colonized' curriculum seems to be daunting. Guided by Appreciative Inquiry (AI), the paper reports on the narratives of three rural teachers regarding their understanding of IKS as they consciously work against western hegemony, ideologies, epistemologies, ontologies and axiologies. Working against western ideology may require an observation that learning takes place within, across and between contexts. From a learning ecology perspective, schools are seen to exist within an ecology where they are influenced by and also influence surrounding communities (contexts). The Department of Basic Education states that rural learning ecologies in South Africa are constituted by over ten million learners. The learners are expected to learn western knowledge and apply such in search of sustainable livelihoods. Data generated through these stories, was analysed through critical discourse analysis (at textual, social and discursive levels). The study finds that dislodging the dominant western epistemologies demystifies authenticity of learning practices and experiences, learning content and embraces indigenous communities and their knowledge. The implication involves the appreciation of indigenous knowledge systems as genuine and acceptable knowledge that may not necessarily need to be validated through western modes.

Keywords: appreciative inquiry, hegemony, storytelling, critical discourse analysis, rural teacher

Introduction

In our recent work (Dube and Hlalele 2017), we challenge dominant western discourses and epistemologies that amongst others, relegate IKS to the periphery in respect of sustainability. We further argue that by its very nature, rural life has for many years relied on IKS for survival and sustainable learning. It has become common understanding in education and curriculum review circles that western knowledges and western modes of knowing permeate the knowledge landscape

in South Africa and other parts of the African continent. Before the democratic elections, colonized curricula were entrenched through colonialism. Contrary to the expectation that the democratic dispensation would embrace IK, Outcomes Based Education (OBE) was adopted from western countries. In so doing, IK experienced marginalisation and neglect (Shonhai 2016; UNESCO 2018). In addition, the understanding mentioned above has spawned some reaction. For example, the National Research Foundation in South Africa conjured a funding instrument for research that seeks to “promote and deepen our understanding of Indigenous Knowledge Systems [IKS] and its role in community life” (National Research Foundation, 2014, p. 3). Osman (n.d.) sums up the challenge up as follows:

Western domination of knowledge and marginalization of African systems of knowledge continues to be an academic challenge that calls for a comprehensive evaluation, rigorous planning and watchful implementation of policies that ensure the recognition and provisions of space for the local in the existing political, economic, cultural and pedagogical domains. It is only then that IKS may be successfully established and gradually contextualized (p. 4).

Over and above clarion calls for a shift in prominence, the World Bank (1998) provided elaborate information on instances in various African countries where IKS were used to achieve certain outcomes of national importance. The call for IKS prominence does not necessarily mean repeal and replace but argues against the marginalisation of indigenous epistemologies. For example, primary education in West Africa was improved through the use of local language as a means of instruction. In Eritrea and Uganda, the use of IKS in health care facilitated the reduction of child and maternal mortality respectively. Furthermore, it was instrumental in empowering women in Senegal to facilitate the eradication of female circumcision whilst helping communities in Mozambique to manage coastal natural resources. Traditional medicinal plants in Zimbabwe provided treatment for malaria. According to Odora-Hoppers (2005), IKS refers to “a total of knowledge and practices, whether explicit or implicit, used in the management of socio-economic, ecological and spiritual facet of life stored in the collective memory and communicated orally among the members of the community and to the future generations [through songs, stories, myths songs, etc]” (p. 2). In addition, Dondolo (2005) indicates that IKS cannot be fixed and is therefore, fluid and dynamic. I may add that like all other bodies of knowledge and ways of knowing, it is pluralistic in terms of indigeneity. It may therefore be seen to be context-bound and specific.

Through the use of IKS, rural inhabitants in Zimbabwe adapted practices in order to be able to reduce the vulnerability as well as improve the resilience of the local people to climatic variability and change (Mugambiwa 2018). In addition, Kaya and Matowanyika (2017) resolved to support the expansion of modern education and monotheistic religions which undermine the claimed the rationality of IKS. Carm (2018) asserts that re-centring IKS and decoloniality has a great potential to lead to sustainability.

Guided by Appreciative Inquiry, this paper reports on three rural teachers’ endeavours towards sustainable learning through indigenous storytelling as they consciously work against western hegemony and ideology (epistemologies, ontologies and axiologies). The dominant western ideologies and epistemologies (what is acceptable knowledge), ontologies (realities) and axiologies (values) permeate over half of households in South African rural learning ecologies. According to the

Department of Basic Education (2010), just over half of South Africa's children (54%) live in rural households, which translate to almost 10 million children who are expected to learn western knowledge and apply such in search of sustainable livelihoods (Hlalele, 2013, 2014; Mapesela, Hlalele and Alexander, 2012). A livelihood is sustainable when it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base (Petersen and Pedersen, 2010). Data generated through these narratives, was analysed through critical discourse analysis (at textual, social and discursive levels).

Indigenous Knowledge Systems

Scholars argue that emerging knowledge societies (for example schools with a decolonized curriculum) must include the indigenous knowledge of diverse human communities as a major component. Indigenous Knowledge refers to the tacit know-how that is community based, unique, multiplex, constantly evolving, eclectic, non-formal and transferred from one generation to another in various contexts to aid indigenous communities in solving problems and making fundamental decisions that are germane to their survival and adaptation in their daily actions within their natural habitat and value systems in distinct geographical locations (Ngulube, Dube and Mhlongo, 2015; Maluleka and Ngulube, 2017). The definition put forward by these scholars on indigenous knowledge shows it to be a participatory genre of knowledge that is not only people oriented, but takes cognizance of their environmental diversities.

Indigenous knowledge is defined as, “a cumulative body of knowledge, know-how, practices and representations maintained and developed by peoples with extended histories of interaction with the natural environment” (Nakata et al. 2014:1; Parasecoli 2017:181). These sophisticated sets of understandings, interpretations and meanings are part and parcel of a cultural complex that encompasses language, naming and classification systems, resource use practices, ritual, spirituality and worldview (Deepak and Anshu, 2008). Mohamedbhai (2013) states that “there is a rich body of indigenous knowledge embodied in Africa's cultural and ecological diversities, and African people have drawn on this knowledge for hundreds of years to solve specific developmental and environmental problems”.

The rural nature, in respect of the context within which the study finds resonance, implies that some or many of the people in such contexts rely on indigenous practices and traditions for survival. However, it appears as if what happens and is official in schools has generally disregarded the authentic realities in rural learning ecologies. In other words, what Barron (2004, 2006) initially conceptualized as ‘learning ecologies’ does not enjoy prominence. Barron (2004, 2006) and Hlalele (2013, 2014) identify the existence of a cobweb of complex and intricate circles of learning associations that cross-pollinate various segments of particular contexts. In a similar vein, Preece (2017) emphasizes the importance of ‘sustainable connections’ (p. 1).

The advent of modernization and western education in rural learning ecologies served to dislodge tried and tested ways of being among indigenous people. Critical scholars (Giroux and McLaren, 1989; Zimmerman, 2002; Weiner, 2016) have argued that different academic resources that are

instrumental to shaping learners' view of their country's historical evolution, ethnic power and racial power hierarchies have been sidelined. The colonial curricula [as knowledge generation and propagation spaces] adopted in South Africa mirrors knowledge from the western perspective consequent on Africa being the mainland on which the Europeans have culturally defined themselves by ignoring the existence of indigenous cultures (See Weiner, 2016: 450). Under such circumstances, European cultures were imposed through colonialism, hegemony and Euro-American imperialism. The colonization of the curricular is not peculiar to the schools in South Africa, but Africa and countries in other parts of the world. For instance, Hess (2015: 336), in her treatise on 'decolonizing music education, moving beyond tokenism', established that many music curricular in Canada prescribed western classical music as the genre of music most appropriate to study. The example find resonance in South Africa from the colonization of indigenous Canadian peoples. Hess (2015: 336) further reported that the music schools gave special importance to basic musical notation and specific constructs of western orientation for expressing meter, dynamics, and belaboured these music elements as essential musical concepts to learn in Canadian schools. It is in response to calls for a decolonized curriculum that this study proposes a break away from the pervasive western modalities in teaching and learning in South African schools. It argues for prominence of indigenous knowledge systems through decolonizing the curriculum. Lazarus (2006:521) claims that educational institutions in South Africa are confronted with challenges in their attempts to metamorphosise into academies of IKS. One of the significant challenges revolves around the contextual relevance of western knowledges as they are less relevant and applicable to the local context.

Unfortunately, the Indigenous Knowledge Systems seem to be dominated, excluded and marginalised from the global efforts to attain sustainable development (Cocks, Alexander, and Donald, 2012:243). Cocks, Alexander and Donald (2012:243) further stated that western dominance, characterized South Africa's 2005 curriculum brokered by the African National Congress, and has aggravated the inadequate attention given by the national schools curricula to Indigenous Knowledge Systems through marginalisation. The introduction of Curriculum Assessment Policy Statement (2011) in South Africa called for the recognition of IKS. However, because "indigenous knowledge systems reside among the majority of South Africans, the topic has not been given the attention in educational curriculum development policies it deserves, resulting in a lack of attention to indigenous knowledge in the discursive terrains of all learning areas/subjects" (Riffel, 2015:909). In the light of the foregoing, this study utilized appreciative inquiry to collate three teachers' understandings in rural learning ecologies.

Appreciative Inquiry (AI)

AI commences with exploring existing solutions and focusing on what works, which allows for greater commitment from individuals to initiate change and create a destiny of choice and possibilities (Skinner and Kelley, 2006). The first assumption that underlies AI is the belief that every person has some unique talents and as such does something right some of the time. The second assumption is that "images of the future are created by social interactions among group members, and once these images are articulated and understood they can guide the individual and group action" (Skinner & Keeley, 2006, p. 82). Inquiring into what works therefore mobilises people into action, which is the third assumption of affirming the power of positive thinking. Cooperrider et al. (1999:10) give a lengthy yet accurate exposition: AI is the cooperative search for the best in people, their organisations, and the world around them. It involves systematic discovery of what gives "life"

when it is most effective and capable in economic, ecological and human terms. AI involves the art and practice of asking questions that strengthen a system's capacity to heighten positive potential. It mobilises inquiry through crafting an 'unconditional positive question' (Ludema, Cooperrider and Barrett, 2001). Through unconditional positive regard, it may not have been as easy for society to abandon, relinquish or overlook indigenous knowledge systems.

I locate our arguments within the appreciative inquiry (AI) realm. As described by Mathie and Cunningham (2003, p.478), AI is a "process that promotes positive change in organisations or communities by focusing on peak experiences and successes of the past". The theory is premised on the notion that all communities (including rural ecologies) possess strong and diverse forms of capital that can be of benefit in addressing community challenges. I contend that our ancestors, through their rural ecologies, were able to sustain their livelihoods by living on and from the land. These sustainable rural livelihoods were, undoubtedly, premised on IK and ways of knowing, doing and being. This article adopts a positive, optimistic and appreciative approach to rural peoples' experience. Drawing on the seminal work of Cooperrider and Whitney (1999), who developed AI in organisational dynamics through the Cleveland Clinic Project, I posit that this inquiry is about discovering new knowledge and new ideas about educational practice, by using a productive and an appreciative approach. AI is a strength-based approach. It focuses on an understanding of the assets of an organisation. Framed in social constructivist-thinking, AI has developed into an established way of inquiring into organisations and change. Its application can be seen in a number of texts, journal articles and research projects (Reed 2006). Openo (2016) adds that Appreciative Inquiry "is unapologetic in its focus on the positive, believing communities can be strengthened through collaborative inquiry as a method to turn problems into transformative change" (p. 39).

Further, Appreciative inquiry may be described as a philosophy and an orientation to bring about difference, which facilitates the actual practice in institutions and is based on the belief that difference can be achieved through focusing on capabilities and successes, moving away from an emphasis on weaknesses and failures (Watkins, Mohr and Kelly, 2011; Mishra and Bhatnagar, 2012). Positive psychology emphasises those qualities and aspects associated with success and, as such, AI parallels positive psychology in focusing on positive questions that will result in positive narratives (Dematteo & Reeves, 2012; Fritz & Smit, 2008). Traditional approaches typically focus on defining and diagnosing the problem and coming up with solutions.

Data Generation and Analysis

Data were generated from narratives of three teachers who have extensive experience of teaching and living in rural ecologies. The teachers were born and schooled in rural ecologies, went to teacher training institutions and came back to teach in rural schools. Prompts and probes geared at harnessing rich stories were used. Teachers related their stories orally and these were audio-taped. Rural learning ecologies are characterized by smaller population sizes and therefore sample sizes tend to be smaller. As indicated, the three teachers were chosen due to their length of stay in the rural learning ecology under study. Besides growing up there, they returned to work after completing their initial teacher education qualification. Furthermore, the three participants (coded as T1, T2 and T3) all hold postgraduate degrees in education. They were prompted to reflect on debates around decolonization of the curriculum as these [debates] relate to their rural learning

ecologies with a view to assessing the value of Indigenous Knowledge Systems. According to Mathobela (2015, p.24), following this process assists in enhancing the researcher's understanding of the meanings from the participants' perspectives. This paper adopted Fairclough's Critical Discourse Analysis (CDA) as a tool for understanding, analysing and interpreting the participants' perspectives, defined as "... the study of speech beyond sentences..." (Avidi & Georgaca, 2007, p.158). Seen differently, CDA has been appreciated as both theory and methodology, tasked with analysing the politically, political-economic and socially inclined discourse (Fairclough, 2013, p.178). In addition, Rogers, et al. (2005, p.370) state that it is a scientific paradigm centred on the intention to address social problems. In this paper, dominance of western pedagogies in a rural context is troubled. CDA is chosen since it operationalises AI. AI involves people in understanding the 'best of what is' (Ridley-Duff, 2013). Critical appreciative processes helps deconstruct experience and during the remainder of the AI cycle to construct new realities (Bushe 2011). Bushe further states that Appreciative Inquiry is heavily influenced by theories of discourse and narrative especially as applied to desirable change (transformation). AI is transformational (Meyer, Donovan & Fitzgerald 2007).

Fairclough has developed a three-tiered framework in which analysis is performed on three different levels: interpretive, descriptive and explanatory. The first level involves the analysis of both written and spoken texts. The second level of analysis is of text as discursive practice, with a focus on language structures and the production, consumption and interpretation of texts by the participants. The third level focuses on discourses as a social practice (Myende, 2014, p.92), emphasising how knowledge is perceived by those who receive it. Such explanations are aimed at critiquing, reflecting and understanding how social structures are designed and transformed the way they are (Rogers, et al., 2005, p. 369-371). CDA was chosen because it embraces social change, attempts to understand peoples' perspective and analyses data within social and discursive practices. This paper advocates for change and reorganisation of dominant and dominated western knowledge in relation to IKS epistemologies and practices.

In the analysis of the narratives, three themes emerged. They include marginalisation of IKS in rural learning ecologies, a call for re-centering Indigenous Knowledge Systems for sustainable learning in rural South Africa as well as perceived challenges in re-centering Indigenous Knowledge Systems for sustainable learning. The basic tenet for the emerging themes appears to be migration of IKS from the periphery to the centre of sustainable learning in rural ecologies.

Marginalisation of IKS in Rural Learning Ecologies

As indicated earlier in this paper, IKS remains marginalised in rural ecologies (Nchemachena et al, 2011; Seboalo, 2015). However, teachers are aware of the value and contribution it can make in the survival of rural people. T1 offered the following comment:

T1: Indigenous Knowledge Systems, despite the value and its contribution to the livelihoods of the local people in general and rural people in particular, have been marginalised, seen as outdated and irrelevant to address the lived realities of the local people. This perception has relegated local knowledge to the periphery of human development in favour of Euro-Centric and global North knowledge systems. As such younger generations grow up with a negative perception of the value of IKS, and to change the negative mentality is a gigantic task which

scholars have a mammoth task, which despite the trajectories needs a collective approach to recentre the local knowledge for the survival of the local people.

The expression from T1 above makes a few points. Firstly, there is a direct recognition of the marginalisation of IKS as an integral part of the curriculum. In fact, it has been largely ignored and relegated to the state of non-existence. At a social level, the situation of introducing western discourses and epistemologies was more of a tacit ‘repeal and replace’ affair. That is a situation where IK is relegated to the margins and is replaced with the ‘new, alien and fashionable’. In my observation as a rural citizen and teacher in South Africa, the introduction of western curricula contributed to the current inappropriate knowledge not applicable to indigenous communities. Letsekha, Wiebesiek-Pienaar and Meyiwa (2013) state that while the value of IK in education has been recognised, this recognition is yet to translate into practical curriculum processes. T1 regards this as taking away the means of survival for local people.

A Call for Re-Centering Indigenous Knowledge Systems for Sustainable Learning in Rural South Africa

T2 advocates for the re-centering of Indigenous Knowledge Systems by the local people in rural learning ecologies. He says:

The re-centring process of IKS requires a struggle for recognition as means to promote politics of identity, recognition and representation. It is through the struggle that local people can launch themselves as people worthy of respect even when it relates to their epistemologies. The struggle as I have seen is not easy especially among the young generation who have acquired a sense of hopelessness when it comes to IKS. The feeling of hopelessness is sometimes promoted by the fact that the harbingers of IKS in society are seen as poor people who cling to traditional ways without tangible benefits, which can be emulated by the young generation. The fact is that the custodians of the local knowledge remain poor and out dated compared to people who have followed the global north knowledge system. Given the above circumstances, the struggle gets complicated yet desirable and doable as means for African people to remain relevant through upholding IKS.

The quote above reiterates that the locus of IKS remains within communities but fails to enjoy prominence due to poverty and unavailable support through financial and other resources. Perpetuation of the situation where IKS is not acknowledged and appreciated leads to feelings of hopelessness. Therefore, the need for acknowledging, celebrating and embracing IKS becomes desirable.

Perceived Challenges in Re-Centering Indigenous Knowledge Systems for Sustainable Learning

The teachers noted that even though it is desirable to re-centre Indigenous Knowledge Systems in rural South Africa, the endeavor is not necessarily immune to challenges. One teacher stated,

The other challenge is that there is inadequate funding from donor agencies making the struggle for IKS difficult. The amount of funding correlates with the value attached to the funded project. IKS arguably remains underfunded, under researched and under staffed with

people that can champion the cause of the IKS. So the revival of IKS lies on the funding of the projects that relates to growth of IKS (T3).

So, it may be concluded that IKS remains one of the marginalised bodies of knowledge (Ocholla & Onyancha 2013). This is consistent with rurality. Rural communities have been recipients of policies crafted from an urban-centric vantage point and as such policies are found to be less implementable. Furthermore, I also observe that there exists a lack of political will to understand and support these communities accordingly. According to Nkambule, Balfour, Pillay and Moletsane (2011) rurality and rural education have historically been marginalised bodies of knowledge. This was identified as an area of concern for the research participants also,

In my view curriculum remains Western oriented where schools have served as sites to propagate the Global North. The curricula have very little space to cultivate and enrich learners on IKS. This opens a channel for learners to ridicule IKS projects. The curriculum places value on subjects like Maths and Science while IsiZulu and Sotho languages have less value compared to local languages which are a vehicle to enhance the growth of IKS (T2).

One of the documented characteristics of IKS is that it is carried out orally (Letsekha et.al. 2013; Masemula, 2013). This is consistent with the view of participant T3 who says:

The other challenge that complicates the struggle to promote IKS is the lack of documentation when it comes to IKS. Generally old people are seen as living libraries of IKS through oral telling. While this may have advantages, there are problems with the lack of documentation of IKS. The orality of IKS ensures that a limited number of people have access to knowledge and also upon the death of these 'living libraries', IKS faces extinction (T3).

The absence of documentation which seems to be regarded as a setback for perpetuation of IKS may be resolved through audio and video tapes. The tapes may be transcribed and translated. However, scholars in language and linguistics, such as Ralarala (2016), have found distortions, manipulations and huge gaps between the real story and its translated meaning. On the contrary, IKS employs orality and storytelling as knowledge transmission mechanisms (Staffoni 2017). Knowledge is stored by the knowers and passed on from generation to generation.

Indigenous Knowledge Systems and Sustainable Learning in Rural South Africa

In my earlier work (Hlalele, 2012) I drew from a social justice perspective to advance the case for sustainable learning in rural ecologies. I illuminate the fact that the voices of people living in remote and rural are seldom heard, their knowledge is underappreciated and their needs are barely addressed in broader national development strategies. The environment in which they live requires adaptive and differentiated processes, often to be found in their indigenous knowledge and practices (Mukwada, Hlalele, Le Roux and Lombaard, 2016). From a social justice perspective, we need to work to undo socially created and maintained differences in material conditions of living so

as to reduce and ultimately eliminate the perpetuation and privileging of some at the expense of others.

Contrary to my view, Letsekha, Wiebesiek-Pienaar and Meyiwa (2013) contend that the Department of Basic Education (DBE) expects these curricula to be interpreted and implemented differently in diverse contexts. Although this is the case, schools in so called 'rural' areas are still unable to take advantage of the opportunities created by the National Curriculum due to the limited resources availed to them. There is a need to start drawing knowledge from organic memories and repositories of IK practitioners in rural ecologies. Fieldtrips and resource person approaches may be employed in various situations to harness IK holders. The authors (Letsekha et al), tacitly or otherwise, confirm discourses of domination and not recognition of IKS. Such discourses tend to overlook the latter in favour of the former. Therefore, local people are expected to conform to western pedagogies, curricula, knowledges and practices and abandon their way of being in a somewhat deceptive rhetoric. I contend that such malalignment when it comes to local content for rural people robs them of their means for survival. From a somewhat conciliatory, encompassing and eclectic vantage point, Masemula (2013) advocates for symbiotic relationship between IKS and the western system of knowing in the rural South African curriculum. I will also add that the suggested co-existence should be grounded on mutual and harmonious underpinnings. In closing, I concede that the entrenchment of western modes of knowing in respect of sustainable learning in rural South Africa may have its roots deep enough to leave a vacuum if they were to be completely obliterated. Therefore, mutual co-existence of both is desirable. Sustainable learning in rural South Africa is desirable for sustainable rural futures.

References

- Avdi, E. & Georgaca, E. (2007). Discourse Analysis and Psychotherapy: A critical review. *European Journal Psychotherapy and Counselling*, 9 (2): 157-176.
- Barron, B. (2004). "Learning Ecologies for Technological Fluency in a Technology-rich Community." *Journal of Educational Computing Research*, 31: 1-37.
- Barron, B. (2006). "Interest and Self-Sustained Learning as Catalysts of Development: A Learning Ecology Perspective." *Human Development Paper*, 49: 193-224.
- Bushe, G.R. (2011) Appreciative inquiry: Theory and critique. In Boje, D., Burnes, B. & Hassard, J. (eds.). *The Routledge Companion to Organizational Change* (pp. 87-103). Oxford, UK: Routledge.
- Carm, E. (2018). Exploring a Third Space for Sustainable Educational Development—HIV/AIDS Prevention, Zambia. *Sustainability*, 10:946-950.
- Cocks, M.L., Alexander, J., and Dold, T. (2012). Inkubeko Nendalo: A bio-cultural diversity schools' education project in South Africa and its implications for inclusive indigenous knowledge systems (IKS) sustainability. *Journal of Education for Sustainable Development*, 6(2):241-252.
- Cooperrider, D.L. & D. Whitney. (1999) *Collaborating for Change: Appreciative Inquiry*. Berrett: Koehler.
- Deepak, A & Anshu, S. (2008). *Indigenous herbal medicines*. Jaipur: Aaviskar.

- Department of Basic Education. (2010). *Guidelines for the Rationalisation of Small or Non-viable Schools*. Pretoria: Government Printers.
- Dematteo, D. & Reeves, S. (2012). A critical examination of the role of appreciative inquiry within an inter-professional education initiative. *Journal of Interprofessional Care*, 25(3):203-208.
- Dondolo, L. (2005). Intangible heritage: The production of indigenous knowledge in various aspects of social life. *Indilinga: African Journal of Indigenous Knowledge Systems*, 4(6): 110-126.
- Dube, B & Hlalele, D. (2017). Afromontane indigenous knowledge and the renaissance of indigenous knowledge for a sustainable future: a decolonial approach. *Indilinga: African Journal of Indigenous Knowledge Systems*, 16(2): 238-249.
- Fairclough, N. (2013). Critical Discourse Analysis and Critical Policy Studies. *Critical Policy Studies*, 7(2): 177-197.
- Fritz, E. & Smit, B. (2008). "Ethnographic Narratives that Challenge Problem-saturated Stories of Teacher Inefficiency." *Education as Change*, 12(2): 155–169.
- Giroux, A., & McLaren, P. (1989). *Critical Education, the State and Cultural Struggle*. Albany: State University of New York Press.
- Hess, J. (2015). Decolonizing music education: Moving beyond tokenism. *International Journal of Music Education*, 33(3): 336-347.
- Hlalele, D. (2012). Social justice and rural education in South Africa. *Perspectives in Education*, 30(1): 111-118.
- Hlalele, DJ (2013). Sustainable rural learning ecologies: A prolegomenon traversing transcendence of discursive notions of sustainability, social justice, development and food sovereignty. *The Journal for transdisciplinary research in Southern Africa*, 9(3): 561-580.
- Hlalele, D (2014). Creating sustainable rural learning ecologies in South Africa: Realities, lessons and prospects. *Journal of Human Ecology*, 45(2): 101-110.
- Kaya, H.O. & Matowanyika, J.Z. (2017). Developing a Pan-Africa Indigenous Knowledge Systems-Informed Climate Service Platform and Strategy for Natural Resource Management and Sustainable Livelihoods. Workshop, 14-15 June, 2017. Durban, South Africa.
- Lazarus, Z. (2006). Indigenous approaches to health promotion: Challenges for education support in South Africa. *South African Journal of Psychology*, 36(3): 521-546.
- Letsekha, T., Wiebesiek-Pienaar, L., & Meyiwa, T. (2013). The development of context-relevant teaching tools using local and indigenous knowledge: Reflections of a sociologist, a sociolinguist and a feminist scholar. Fifth World Congress on Educational Sciences. Rome, Italy. 5-8 February 2013.
- Ludema, J.D., Cooperrider, D.L. & Barrett, F.J. (2001). Appreciative inquiry: The power of the unconditional positive question. *Handbook of action research: In Handbook of Action Research: Participatory Inquiry and Practice*, edited by P. Reason and H. Bradbury, 189-199. Thousand Oaks, California: Sage Publications.
- Maluleka, J.R., & Ngulube, P. (2017). The preservation of knowledge of traditional healing in the Limpopo province of South Africa. *Information Development*, 1-11. DOI: 10.1177/0266666917723956.

- Mapesela, M.A., Hlalele, D. & Alexander, G. (2013). Overcoming Adversity: A holistic response to creating sustainable rural learning ecologies. *Journal of Human Ecology*, 38(2): 91-103.
- Masemula, M.B. (2013). Integration of modern science and indigenous knowledge systems: Towards a coexistence of the two systems of knowing in the South African curriculum. Unpublished masters dissertation. Pretoria: University of South Africa.
- Mathie, A. & Cunningham, G. (2003). "From Clients to Citizens: Asset-based Community Development as a Strategy for Community-driven Development." *Development in Practice*, 13(5): 474-486.
- Meyer, Donovan & Fitzgerald (2007). Tranforative learning and Appreciative Inquiry: Incorporating Coaching and Action for Deep Organisational Change. *International journal of Coaching in Organizations*, 30(4):30-42.
- Mohamedbhai, G. (2013). Indigenous knowledge must be harvested for development. *University World News* (9 March 2013). Issue 262.
- Mishra, P. & Bhatnagar, J. (2012). "Appreciative Inquiry: Models & Applications." *The Indian Journal of Industrial Relations*, 47(3): 43-558.
- Mugambiwa, S.S. (2018). Adaptation measures to sustain indigenous practices and the use of Indigenous Knowledge Systems (IKS) to adapt to climate change in Mutoko Rural District of Zimbabwe. *Journal of Disaster Studies*, 10(1):47-59.
- Mukwada, G., Hlalele, D., Le Roux, A. and Lombaard, C. (2016). The Afromontane Research Unit (ARU) in South Africa. *Mountain Research and Development*, 36(3): 384-386.
- Myende, P.E. (2014). Improving academic performance in a rural school through the use of an asset-based approach as a management strategy. Unpublished Doctoral Thesis. University of the Free State. South Africa: Bloemfontein.
- Nakata, M. et.al. (2014). Using Modern Technologies to Capture and Share Indigenous Astronomical Knowledge. *Australian Academic & Research Libraries* (2014) | Preprint.
- National Research Foundation (NRF) (2014). Indigenous knowledge systems: Knowledge Fields Development Framework Document. Pretoria: NRF.
- Nchemachena, C. et al (2011). Integrating Indigenous Knowledge Systems (IKS) in Improving Rural Accessibility and Mobility (in Support of the Comprehensive Rural Development Programme in South Africa). *Proceedings of the 30th Southern African Transport Conference*, 11-14 July, Pretoria. South Africa.
- Ngulube, P., Dube, L. & Mhlongo, M. (2015). Towards a cartography of indigenous knowledge systems in library and information science training and education in Anglophone Eastern and Southern Africa. *Indilinga-African Journal of Indigenous Knowledge Systems*, 14(2): 145-168.
- Nkambule, T., Balfour, R.J., Pillay, G. & Moletsane, R. (2011). Rurality and Rural education: Discourses underpinning Rurality and Rural Education research in South African Postgraduate Education research. *South African Journal of Higher Education*, 25(2): 341-357.
- Ocholla, D.N. & Onyancha, O.B. (2013). The marginalized knowledge: An informetric analysis of indigenous knowledge publications (1990-2004). *Article in South African Journal of Libraries and Information Science*, 71(3):247-258.

- Odora-Hoppers, O. (2005). *Indigenous Knowledge and the Integration of Knowledge Systems: Towards a philosophy of articulation*. Claremont: New Africa Books.
- Openo, J. (2016). Appreciative Inquiry as a Tool for Leadership and Driving Change in Complex Organizations Such as Libraries: A Brief Literature Review and Discussion. *PNLA Quarterly*, 80(2): 39-50.
- Parasecoli, F. (2017). *Knowing where it comes from: labelling traditional foods to compete in a global market*. Iowa: University of Iowa Press.
- Petersen, E.K. & Pedersen, M.L. (2010). *The Sustainable Livelihoods Approach: From a psychological perspective*. Approaches to Sustainability, Institute of Biology: University of Aarhus.
- Preece, J. (2017). Sustainable urban-rural learning connections in Kwazulu-Natal, South Africa. Conference paper presented at PASCAL International Conference, Pretoria, South Africa, 17-19 October 2017.
- Ralarala, M. (2016). *Lost in translation*. Pressreader (2016, January 8)
- Reed, J. (2006). *Appreciative Inquiry – Research for Change*. Thousand Oaks: Sage Publications.
- Ridley-Duff, R. & Duncan, G. (2013). Critical appreciative processes as a methodology for studying the production of consciousness. In: *Appreciative Inquiry: a method of working with disadvantaged people*, St Mary's Community Centre, 17th March 2013. (Unpublished).
- Riffel, A.D. (2015). An Insight into a School's Readiness to Implement a CAPS Related Indigenous Knowledge Curriculum for Meteorological Sciences. *Universal Journal of Educational Research*, 3(11): 906-916.
- Rogers, R., Malancharuvil-Berkes, E., Mosely, M., Hui, D. & Joseph, G.O. (2005). Critical Discourse Analysis in Education: A Review of the Literature. *Review of Educational Research*, 75 (3): 365-416.
- Sebolao, R.R. (2015). *Integrating indigenous knowledge of selected rural areas of the Northern Cape into development project management*. Unpublished doctoral thesis. Central University of Technology: Bloemfontein.
- Shonhai, V.F. (2016). *Analysing South African Indigenous knowledge policy and its alignment to government's attempts to promote indigenous vegetables*. Unpublished doctoral thesis. Durban: University of Kwazulu-Natal.
- Skinner, S.J. & Kelley, S.W. (2006). Transforming Sales Organisations Through Appreciative Inquiry. *Psychology & Marketing*, 23(2): 77-93.
- Staffoni, L. (2017). "Learning from each other". The transmission of knowledge as a form of high-level collaboration. HESAV.
- UNESCO (2018). *UNESCO policy on engaging with indigenous peoples*. Paris.
- Watkins, J.M., Mohr, B. & Kelly, R. (2011). *Appreciative Inquiry: Change at the Speed of Imagination*. San Francisco: Pfeiffer: A Wiley Imprint.
- Weiner, M.F. (2016). Colonized curriculum: Racializing discourses of Africa and Africans in Dutch primary school history textbooks. *Sociology of Race and Ethnicity*, 2(4): 450-465.

World Bank (1998). *Indigenous knowledge for development: a framework for action*. New York: Knowledge and Learning Centre.

Zimmerman, J. (2002). *Whose America? Culture Wars in the Public Schools*. Cambridge, MA: Harvard University Press.