



Enacting Environmental Ethics Education for Wildlife Conservation using an Afrophilic ‘Philosophy for Children’ approach

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Abstract

Environmental Ethics Education has in recent years emerged as a critical tool for wildlife conservation research. Despite this, Environmental Ethics Education is paradoxically predominated by traditional forms of western science such as the concept of the Anthropocene which appears to exclude aspects of African life-worlds where the natural environment is considered a heritage component and is linked to onto-ethical understandings of human existence. The purpose of this study is to explore how African heritage-based knowledges and practices are understood by children who identify and understand the relevance of their totems and taboos associated with them, in relation to wildlife conservation. The study from which this paper is derived utilised formative interventionist methodology complemented by a multi-voiced decolonial approach to explore whether children-participants aged 8 to 11 years understand the purposes of their totems and associated taboos. To achieve this I used an Afrophilic Philosophy for Children pedagogical approach, which foregrounds dialogical learning and development of critical reflexive thinking skills. Emerging findings indicated that children associated their totems and connected taboos as tools for protection against environmental pollution and for minimising resource over-extraction. Findings further demonstrated improved learner agency and development of ethical reasoning among children. As participants’ respect for environmental conservation and sustainability was informed by the significance placed on their totems, I recommend the need for schools to develop generative curricula that take seriously context-based solutions to environmental problems. Future research should also consider understanding environmental conservation issues from a context-based perspective, which can inform existing heritage practices and pedagogies.

Keywords: *Environmental Ethics Education, Afrophilic Philosophy for Children, ethical reasoning, heritage-knowledges*

Background and context

Since the 1970s, environmental ethics has been a fundamentally evolving part of formal education (Taneja & Gupta, 2015). Taneja and Gupta (2015) have defined environmental ethics as a sub-field of philosophy which focuses on environmental values that include cultural attitudes, practices and approaches to securing and supporting biodiversity and ecological frameworks. During the same period that environmental ethics was becoming a recognised component of formal education, a new educational approach emerged known as 'Philosophy for Children'. Mathew Lipman (2003) is among scholars who have been accredited for introducing this philosophy as an educational approach to promote critical thinking in children.

Research within the field of education has pointed to beneficial outcomes of the Philosophy for Children in enhancing learning in schools. D'Olimpio (2014) for instance has argued that it is useful as it exposes children to group dialogue thereby opening avenues for them to become active thinkers with the potential to develop a variety of critical reflexive thinking skills along the way. My research has shown that Philosophy for Children is a creative pedagogy that has potential to improve learner agency which conventional imperial colonial pedagogical approaches in Africa had previously excluded and obliterated from classroom activities (Bhurekeni, 2021a). Ristiniemi et al. (2018) have associated Philosophy for Children with a creative pedagogy of Environmental Ethics Education which could improve existing environmental sustainability practices.

International agencies such as the United Nations Educational, Scientific and Cultural Organisation (UNESCO) have also endorsed Philosophy for Children as an empowering pedagogy for learners. For instance, UNESCO (2005) has noted that Philosophy for Children could play an important role in meeting the expectations of the United Nations Sustainable Development Goals (UNSDGs). This is particularly relevant if we consider SDG 4 on 'inclusive and equitable quality education', SDG 13 on 'urgent action to combat climate change and its impacts', SDG 15 on 'sustainable ecosystems, re-forestation and increasing biodiversity'.

In many countries, the practice of Philosophy for Children is seen as an ideal pedagogical approach in shaping moral/ethical standard measures associated with environmental problems (Cam, 2011). Zimbabwe has policies in place that support the UNSDGs such as the Zimbabwe National Environmental Education Policy and Strategy of 2003 (Chimbodza et al., 2004). However, it appears as if little has been done to support the practical implementation of this policy. Against this background, the purpose of this paper is to explore how African heritage-based knowledges and practices are understood by children in Sebakwe resettlement area who identify and understand the relevance of their totems and associated taboos with regard to wildlife conservation. Wildlife conservation challenges in the Sebakwe resettlement area include an increase in uncontrolled poaching, destructive veld fires, and visible signs of human encroachment into wildlife areas. In the following section, I discuss literature on Philosophy for Children, situating it as a potential tool for

enacting Environmental Ethics Education, as well as literature on education philosophy that can support Environmental Ethics Education in schools.

Philosophy for Children and Environmental Ethics Education

The Philosophy for Children pedagogical approach utilised in this study was extended via Afrophilia learning artefacts. As explained in previous research (Bhurekeni, 2021b), the artefacts were selected during formative intervention workshops with parents and educators. The goal of selecting heritage-based learning lenses that are socially situated was to explore how children understand these knowledges and practices and as well as how they inspire development of critical reflexive thinking skills in children.

Over the years, practitioners have discovered that the ‘community of inquiry’ which supports pedagogical growth within a Philosophy for Children approach, exhibits the following characteristics: inclusiveness, participation, the quest for meaning, questioning, and discussion (Lipman, 2003; Mohr Lone & Isrealoff, 2012). The community of inquiry approach was used in this study as a collaborative learning process aimed at allowing learners to take responsibility for their own learning with support of parents and teachers. According to Harpaz (2005), learners assume more responsibility through working together as a community to discuss multiple viewpoints to reach an eventual conclusion as a “community of thinking” (p. 136). Within a community of inquiry, Philosophy for Children facilitators often use Jackson’s ‘Good Thinker’s Toolkit’ discussed in the methodology section below (Bhurekeni, 2021a; Jackson, 2013).

The community of inquiry approach is based on a nurturing social environment that provides participants space for co-engaged social innovation through philosophical exchange (Goering et al., 2013, O’Donoghue, 2016). Participant learners develop the tools for ‘talking back’ to the narrative of textbook-focused wildlife sustainability, and are assisted with developing what Scott (2010) referred to as intersubjective knowing. Intersubjective knowing refers to the exchange of experiences, thoughts, knowledges and understandings among a group of people informed by their indigenous philosophies and cultural history of practices (Scott, 2010).

Intersubjective knowledge could be socially situated, encouraging learners to acquire new information and knowledge while also becoming aware of their own prejudices (Mohr Lone & Isrealoff, 2012). This is significant because it allows a community of inquiry discussants to integrate and engage with a broader conception of knowledges as they engage with life’s bigger questions (ibid.). In this case, the discussants are more likely to bring into the classroom knowledges that are not commonly found in their school curriculum. For example, the following questions guided the framing of the community of inquiry sessions considered in this paper: What heritage-knowledges influence children’s perspectives on wildlife conservation? How can heritage practices like totem identification help to advance environmental education in schools?

By incorporating questions from the participant learners' life-world, the community of inquiry pedagogy positions itself as a context relevant approach to teaching and learning (Goering et al., 2013). During the Philosophy for Children sessions, it was usually observed that the community of inquiry had the potential to mediate socially oriented activities towards progressively sustainable ways of knowing and doing things together in a finite world (O'Donoghue, 2016). In this case, the discourse that emerged from a discussion of the questions such as those mentioned above, represents an ontological shift towards dialogic reasonableness (Lipman, 2003). In this study, an ontological shift occurred when learners and teachers re-conceptualised the traditional categorical structure of their classroom reality. According to Freire (1970), in traditional teaching-learning discourse, the teacher is typically regarded as the provider of knowledge to passive learners. However, as a result of the new direction ushered in by the practice of Philosophy for Children, teachers and learners may begin to recognise learning as a dialogue-based process in which they aspire to understand the views of others. In the section that follows, I establish the Afrophilia learning focal point by looking more deeply into the indigenous philosophy of 'unhu/ubuntu' as an Afrophilic frame for Environmental Ethics Education.

Unhu/ubuntu frame for Environmental Ethics Education

The world (including the Sebakwe resettlement area) is looking for an alternative practice-based wildlife sustainability model that also ensures economically low carbon outputs (Clough, 2010). To accomplish this, a new mindset that underscores interdependence and an ethic of care as necessary components of existence, is required (Praeg, 2014). In southern Africa, where this study was conducted, it appeared that a potentially powerful mindset is embodied in unhu/ubuntu philosophy, which promotes human understanding within the unity-in-diversity of life's ecology (Le Grange, 2012). Emphasis in unhu/ubuntu philosophy is on the development of a social disposition of participating in-existence with others (both people and non-human animals). According to Le Grange (2012), the philosophy of unhu/ubuntu emphasises the need to comprehend that being human entails thinking about the self in harmony with people and the entire biophysical world. This study's discussion of unhu/ubuntu is related to a conceptualisation of unhu/ubuntu philosophy as a decolonial philosophy of education. In this regard, unhu/ubuntu has an ecocentric leaning¹ as well as an ethical commitment that nurtures people to consider how they relate not only to themselves but to the entire universe.

According to Le Grange (2012), an ethical obligation is the benchmark that: "doing things for the good of others; to think of oneself as bound up with others; and to value family (in a broad sense of the term) **as well as wildlife (as it is inextricably bound to human beings)** for its own sake and not for its efficacy" (p. 331, emphasis added). Unlike more traditional forms in Western science which have created an abstracted nature-culture dichotomy by failing to connect with context-based heritage-knowledges and practices, unhu/ubuntu has a unique perspective in shaping Environmental Ethics Education as a situated practice

(Maware, 2013). This positions unhu/ubuntu as a potentially interesting frame that differs from inherited colonial approaches, which appear to be biased toward more standard forms of Western science, because it takes a holistic approach to understanding human life and the environment (Le Grange, 2012; Maware, 2013). As a result, there are connections between education and African indigenous philosophy ontological concepts of the human person, which provides a nuanced understanding of a person as a being-in-becoming through 'doing' (here in onto-ethical mode of participation) in communion with others and the entire cosmos (Eze, 1997).

Tymieniecka (2007) proposed that education be asserted as an existential coordinate of the human condition, which in this case is echoed through unhu/ubuntu philosophy. Unhu/ubuntu embodies the existential experiences of indigenous people involved in my study (Bhurekeni, 2020; Praeg, 2014). Thus, the study's goals of Environmental Ethics Education were (re)imagined in this context using unhu/ubuntu philosophy. Unhu/Ubuntu ontology has strong synergies with the natural environment (wildlife), resonating a bond between African being and the natural environment, as stated by Mbeki (2015):

I owe my being to the hills and the valleys, the mountains and the glades, the rivers, the deserts, the trees, the flowers, the seas, and the ever-changing seasons that define the face of our native land. (p. 1)

Mbeki's (2015) sentiments contain undertones of an affirmation that the African child's life world (heritage-based belief systems included) is inextricably linked to water, plants, and animals. This reflects an interdependence between humans and wildlife (Maware, 2013). According to Clough (2010), the interdependence of humans and nature influences eco-friendly behaviours. Thus, the interdependence illustrated here, as embedded in unhu/ubuntu philosophy, creates spaces for a collective sense of responsibility and consolidating active participation with concrete experience and reflection. Unhu/ubuntu offers an ecosophical treatise that acknowledges the interconnected co-existence of humans, the Earth, and other sentient beings (Le Grange, 2012). In the section that follows, I highlight the study's problem statement.

Research problem

As an educational approach, Philosophy for Children has done little to tap into heritage knowledges and practices drawn from southern Africa, such as totems and their associated taboos, to develop a framework for context-based Environmental Ethics Education. As a result, little is known about how such African heritage-based knowledges and practices are understood by children who identify and comprehend the significance of their totems and associated taboos in terms of wildlife conservation. This gap presents a challenge when it comes to implementing a context-relevant Environmental Ethics Education plan.

Research methodology

Philosophy for Children community of inquiry sessions were conducted in Sebakwe Resettlement Primary School and 15 grade 3 children were involved. My role as a researcher and teacher in the study to which this paper contributes was to support the development of a sociocultural approach to context-based Philosophy for Children in Zimbabwe, which translates into the development of a learning culture in schools and critical reflexive thinking in children (Bhurekeni, 2021a). As a result, the research was conducted within the context of formative intervention work, as I worked to investigate a generative curriculum transformation process that was co-led and owned by the participants (Engeström & Sannino, 2010).

According to Engeström and Sannino (2010), formative intervention methodology considers culture and history with the goal of creating a space where researchers and their participants can form collective concepts. In the context of my research, I as the researcher together with participants worked as a collective entity committed to curriculum transformation. I was present in Sebakwe resettlement area as a full-time teacher and later as part-time PhD scholar² over a period of 16 years. Over the last four years, I led formative intervention workshops, participated in community of inquiry sessions, and conducted reflexive interviews with teachers, children, education inspectors and parents. Jackson's 'Good Thinker's Toolkit' (Appendix A), often used in Philosophy for Children, was used to analyse data that was transcribed for this paper (Bhurekeni, 2021a; Jackson, 2013). The toolkit consists of seven letters, W-R-A-I-T-E-C, each of which represents a cognitive skill that is part of becoming a good thinker (Jackson, 2013). According to Goering et al. (2013), the toolkit was designed to facilitate the development of higher order thinking by measuring and fostering progress in an inquiry. Transcriptions and preliminary analyses of these data were also utilised to aid the processes of generative curriculum transformation by being presented to and deliberated with teachers, parents and education inspectors.

This study forms part of a more extensive PhD project that involved an in-depth literature review to scope the history of curriculum in Zimbabwe, and three formative intervention workshops with parents, teachers and education inspectors. These activities were followed by ten community of inquiry sessions with learners and then a sequence of reflexive interviews with parents (seven interviews), education inspectors (three interviews), learners (six interviews) and teachers (seven interviews) over a period of four years. Part of the data that surfaced in this study has previously been published in academic journals (Bhurekeni 2020, 2021a, 2021b). This paper is focused on a need to understand how African heritage-based knowledges and practices are understood by children who identify and understand the relevance of their totems and associated taboos in relation to wildlife conservation.

Children were given start-up activities that influenced dialogical engagement during the community of inquiry sessions. The activities intended to elicit children's understanding of their heritage-based knowledges and practices. In Table 1, I describe two heritage-based

activities that informed the community of inquiry sessions that motivated this paper. The activities are derived from weeks 5 and 6 of the ten community of inquiry sessions I conducted with learners.

Table 1: *Heritage-based activities that informed the community of inquiry sessions held in weeks 5 and 6 with children*

Activity 1: Totems and their purpose	Activity 2: Conservation related taboos
<p>Objective: Participant-children will engage in a discussion about the significance of totems (as a heritage practice) in wildlife conservation.</p> <p>Description: Learners were asked to draw an animal or totem pole symbol. The drawings were inspired by the imagination of the learners, but some learners knew the animals because they live near a wildlife ranch (Iwaba ranch). This activity falls under the topic: Identity, Family History and Local Heritage in the Family and Heritage Studies Primary School syllabus (2015-2022), see also activities in the Family and Heritage studies grade 3 textbook pp. 3-5.</p>	<p>Objective: Participant-children will create a list of wildlife conservation taboos and discuss their importance in and for conservation education.</p> <p>Description: During the activity learners listed conservation taboos, which we divided into aquatic taboos and those aimed at flora and fauna preservation. The list was done in the learners' home language (Shona), and later translated into English for the purpose of this publication. Henceforth, they are presented below giving first the original words and then the English equivalent of the taboo.</p>

Findings

The activities and community of inquiry sessions stimulated learners' interest while also demonstrating their understanding of and ability to apply heritage-based knowledges and experiences in formal education. The findings highlighted how heritage-based practices mobilised learners' agency during formal classroom sessions, as well as how they can be used to protect against pollution and reduce resource over-extraction. In addition, learner participation in community of inquiry sessions appears to have led to a discussion in this study that resonated with Clough's (2010) concept of 'responsible lifestyle learning'. This is because findings of the study point to the emergence of an onto-ethical mode of participation in environmental education. This mode of participation is shaped by questions about how children use the heritage-knowledges and practices with which they identify to influence how they interact with their natural environment. In the next section, I discuss the findings that emerged from the activities and philosophical discussions that took place during the community of inquiry sessions.

Context-based Philosophy for Children activities mobilise learners' agency

The heritage-based activities were transposed to a problem-posing approach that seemed to connect well with the community of inquiry approach because it drew on experiences from the learners' life world. This mobilised learners' agency as they were able to draw their own totem pole symbols and list aquatic, flora, and fauna taboos, as illustrated in Figures 1,

2A and 2B and Table 2. The lesson observations and data sets show that learners' active involvement was a result of their agency being mobilised. According to Freire (1970), this empowers learners to initiate, manage and sustain their own learning. The agency reflected in learners' drawings, participation in dialogue in community of inquiry sessions, and their listing of flora, aquatic, and fauna taboos allowed learners to critically reflect on their role in the world and their interdependence with nature. An example of this can be found in one of the learners' responses during the community of inquiry session in week 5:

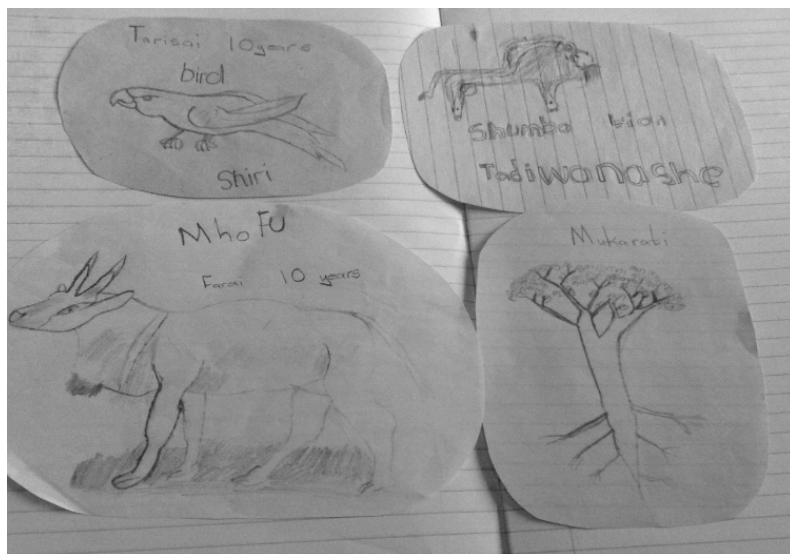
Teacher: Is it possible for humans and wild animals to live side by side without causing problems?

Arnold: I think it is possible because we are all animals, and because we as humans can use our brains, we are the ones who must think of what to do with the animals. ... Before the people removed the fence that fenced Iwaba ranch, we lived next to the animals without even noticing them, but now that the fence has been removed, they are causing us problems...

Arnold's response demonstrated that he knew that humans play a role in determining how they co-exist with wild animals by deciding how and where wild animals can live. However, it is important to note that, while the learners' responses are important in demonstrating how they critically reflect on their role in the world and their interdependence with nature, Arnold's assumption raises ethical questions. Figures 1, 2A and 2B illustrate the learners' mobilised agency, as mentioned earlier.

Figure 1:

A selection of learners' drawings of totem pole animals and or symbols (from Week, 5 session 5): fish eagle (hungwe/nyoni); lion (shumba/sibanda); eland (mhofu/mpofu) and Burkea tree (mukarati/umnondo)



In connection with the totems pole symbols, learners were also asked to list taboos as shown in the table below and also in their work in Figures 2A and 2B. While the children’s work simply identifies the taboos and their implications, the table below illuminates some of the scientific concepts explained in the children’s formal school curriculum textbooks.

Figure 2A: Learner’s work on aquatic taboos

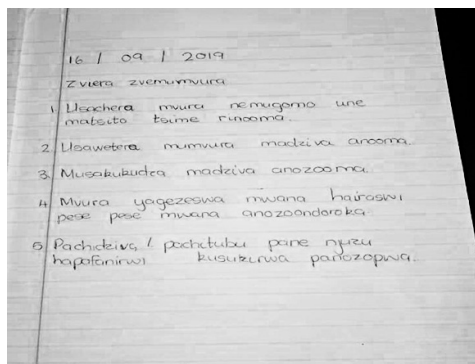
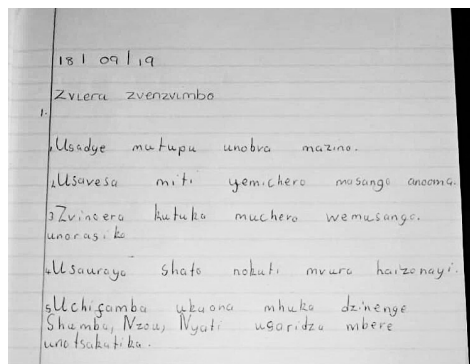


Figure 2B: Learner’s work on flora and fauna



The taboos in Figures 2A and 2B are also presented in Table 2 with an English translation for readers who are unfamiliar with the Shona language. The work was part of the activities leading to the community of inquiry session of week 6.

Table 2: Children’s list of aquatic (*A), flora, and fauna (*F) taboos (see Figures 2A and 2B). The table was developed to demonstrate the connections between the taboos and scientific concepts in the learners’ books.

Taboo	Category		Minimise against
	A*	F*	
Usachera mvura nemugomo une matsito tsime rinooma. (If you use ash-tainted tins to get water, the well will dry up)	X		Pollution: Ash can cause chemical changes that affects water quality Cruelty and bad behaviour: It is bad behaviour to add a substance that make water taste unpleasant
Usawetere mumvura madziva anooma. (If you urinate in rivers, the water will dry up)	X		Pollution: Urine can introduce bacteria, toxins and other harmful substances Cruelty and bad behaviour: It is a sign of both cruelty and bad behaviour to urinate in water
Musakukudza madziva anozooma (Don’t use nets when fishing, the rivers will dry up)	X		Resource over-extraction: To avoid extinction of some fish species Accidents: To avoid drowning in rivers

Taboo	Category		Minimise against
	A*	F*	
Mvura yagezeswa mwana hairaswi pese pese nekuti mwana anozondoroka. <i>(If you dispose the baby's wash water everywhere, the baby will become thin)</i>	X		Pollution: Soaps and detergents can affect the soil chemical composition and cause plants to wilt
Pachidziva/chitubu pane njuzu hapafanirwi kusukirwa nekuti panozopwa. <i>(People should avoid washing dishes in springs or pools that inhabit mermaids as the water may dry)</i>	X		Pollution: Soaps can decrease the breeding ability of aquatic organisms Resource over-extraction: Avoid extinction of organisms
Usadye mutupo unobva mazino. <i>(You will lose your teeth if you eat your totem)</i>		X	Resource over-extraction: Avoid extinction of organisms. Minimise extinction of some species
Usavesa miti yemichero, masango anooma. <i>(Fruit trees should not be used as forests will droop)</i>		X	Resource over-extraction: Avoid extinction of organisms. Minimise extinction of tree species
Zvinoera kutuka muchero wemusango, unorasika. <i>(It is a taboo to curse indigenous fruit trees while in the wild as you may get lost)</i>		X	Cruelty and bad behaviour: It is cruelty and bad behaviour to show disrespect
Ukaitira tsvina muzhira unoitama mamota pamagaro. <i>(If you defecate on walkways you will have boils on your buttocks)</i>		X	Pollution: Human waste can cause excessive growth of algae and weeds Cruelty and bad behaviour: It is cruelty and bad behaviour to expose human waste openly
Usauraya shato nokuti mvura haizonai. <i>(Do not kill a python, or it will not rain)</i>	X	X	Resource over-extraction: Pythons are a protected species under the Zimbabwe Parks Wildlife Authority Cruelty and bad behaviour: It is cruel to kill something that one does not eat
Ukadya hwowa mupengo unopenga. <i>(If you eat wild mushrooms you will suffer from mental illness)</i>		X	Accidents: To avoid human poisoning through eating mushrooms
Uchifamba ukaona mhuka dzinenge Shumba, Nzou neNyati usaridza mhere unotsakatika. <i>(If you come across lion, elephant and buffalo - the Big Five - in the wild, do not scream or you will disappear)</i>		X	Pollution: To protect the numbers of the Big Five from declining Accidents: To avoid death through direct conflict with wild animals
Ukasenga mwenje musango unozoita muroyi. <i>(If you carry a burning light in the forest, you may become a witch or wizard)</i>		X	Accidents: To avoid causing veld fires Cruelty and bad behaviour: It is cruel to intentionally cause veld fires as this exposes animals to danger
Ukatasva imbwa unoitama muroyi. <i>(If you sit on your dog's back, you will become a witch or wizard)</i>		X	Cruelty and bad behaviour: It is cruel to abuse other animals

Taboo	Category		Minimise against
	A*	F*	
Ukauraya rwaivhi unozofa uchifunuka muviri. (If you kill a chameleon, you will die from scale rot)		X	Pollution: To protect the numbers of chameleon species from declining Cruelty and bad behaviour: It is cruel to kill animals especially those one does not eat
Ukauraya datya hakuzonayi. (If you kill a frog it will not rain)	X		Resource over-extraction: Avoid the over-harvesting of frogs Cruelty and bad behaviour: It is cruel to kill animals that you do not eat

Context-based Philosophy for Children practices minimise pollution and resource over-extraction

From the list of taboos provided above (Table 2, Figures 2A and 2B) and the dialogue that followed, it is evident that the taboos suggested by children appear to have the potential to govern how people interact with their environment by prohibiting use of items perceived as sacred. Children listed the following trees as some of the species that should not be cut down for material (e.g. fencing poles, furniture and firewood) or harvested if fruits are not yet ripe:

- Muzhanje (Sugar plum *Uapaca kirkiana*)
- Muhacha (Mobola plum *Parinari curatellifolia*)
- Mutamba (Natal orange *Strychnos spinosa*)
- Mutohwe (Snot apple *Azanza garckeana*)
- Munhengeni (Sourplum *Ximenia caffra*)
- Muuyu (Baobab tree *Adansonia digitata*)

According to Farai, one of the learners during the community of inquiry (Week 5 – Session 5: Exploring the purpose of aquatic, flora and fauna taboos), it is illegal to use fruit trees such as those mentioned above as this may lead to serving a jail term. Below is a dialogue from the community of inquiry session highlighting some of the consequences of not observing the stipulated taboos.

Farai: If you use some of those trees as firewood or fencing poles you may be arrested.

Tinevimbo: ... especially Muuyu, Chief said anyone caught cutting down the tree will be arrested.

Teacher: Besides being arrested what else could happen if you use these trees as firewood or as fencing poles?

Tinevimbo: I was told that if we fence our garden with poles from these trees our crops will be destroyed by baboons or other wild animals.

Tadiwanashe: ... we were told by my grandmother if we don't obey the rules there won't be rain and people will start experiencing so many diseases.

It is evident from the excerpt above that both the learners and the teacher were capable of inferring the consequences of disobeying taboos, as well as offering examples, counter-examples and reasons as they engaged in an inquiry process. This demonstrates how the W-R-A-I-T-E-C (Appendix A) can be used in community of inquiry sessions and how it may potentially improve higher-order thinking skills. Furthermore, it is evident that taboos govern the types of indigenous trees used in the Sebakwe resettlement community and children understand the function and purposes of these taboos. According to Mubaiwa (parent, interviewed on 17 July 2019), such cultural values are aimed at monitoring human behaviour especially in children when they play alone without the supervision of the elders. She went on to explain:

Mubaiwa: Zviera (taboos) help to transmit to the children the social values expected in the society. It's a way of teaching that forbids bad behaviour in both the young and the old as it warns them of the likely consequences that can befall them or the whole community if not obeyed.

The idea of monitoring human behaviour, particularly that of the younger generation, also surfaced during the community of inquiry session. The following excerpt is a continuation of the above dialogue from week 5 community of inquiry session.

Teacher: If I understand you correctly, it appears that when people break these taboos, bad things happen. Is it always true that bad things happen when people break rules?

Abel: I don't think it's true, last week elephants destroyed crops in our field but we haven't done anything.

Tarisai: What Abel is saying is true, baboons always come to destroy our maize field even when we haven't done anything. Our parents just tell us these things so that we won't behave badly... 'Hanzi ukagara munzira unoita mamota' *You will get boils if you sit on the road.* But it's not true, their fear is just that you may be run over by a car.

Tadiwanashe: I think adults teach us about these things because they only want us to think on our own what really happens if you do something like what Tarisai has said.

The findings demonstrate how taboos that are observed in the Sebakwe community are passed on from one generation to the other for purposes of protecting the environment and also regulating human behaviour. This concurs with the definition of taboos given by Makamure and Chiminge (2015) that taboos are avoidance rules that forbid members of Shona communities from performing certain actions, such as eating some kinds of foods. However, beyond this, taboos also help enhance children's development of critical reflexive

thinking skills as well as development of ethical reasoning as demonstrated in the next section.

Context-based Philosophy for Children activities help children develop ethical reasoning

Findings also show that children were also capable of weighing multiple perspectives in order to make informed decisions. This demonstrates that children understand and can reason about ethical issues related to their life experiences. According to W-R-A-I-T-E-C in Jackson's Good Thinker Toolkit, it is possible that children may offer reasons in support of their opinions (Jackson, 2013). The following extract is based on the week 4 lesson on ethics, exploring the topic 'What makes an action right or wrong?' Here children were positioning themselves as knowledgeable with ethical reasoning to solve problems:

Abel: It is not good to start veld fires or even to put up wire snares because that will kill other animals, even our cattle could be killed...

Tadiwanashe: Yes, I think Abel is right, animals also need food. How would you feel when someone burns your granary?

Tatenda: But can we blame someone who might have caused the veld fire by mistake, if you are clearing your land and then the fire is blown away by the wind. My father also said we must burn grass so that our cattle can have fresh grass when it germinates.

Abel: But when you burn grass you may kill some small animals and insects that live under grass.

Tatenda tried to give what could be regarded as a self-serving justification of an unethical behaviour, but other learners were quick to question him:

Tarisai: So how do we know that it was a mistake because someone can just set a fire alight and claim that it was a mistake?

Tatenda: I think when someone does something bad intentionally, they don't feel bad about it, but when I apologise or try to correct the mistake it shows that that was not what I wanted to do.

Merriam: If that is the case then no one will go to jail because people will just apologise, I think we have to look at what you would have done or caused to happen otherwise people would just give excuses.

Abel: So, Merriam are you saying what could have happened is wrong?

From the excerpt above it could be seen that children contended with a variety of ethical positions as they tried to come up with possible solutions. It could be inferred that the learners' discussion followed the ethical reasoning definition of looking at the right and wrong conduct or approaching the issue from a moral point of view (as when Tadiwanashe asked others how they would feel if their food storage were destroyed). It is easy to see

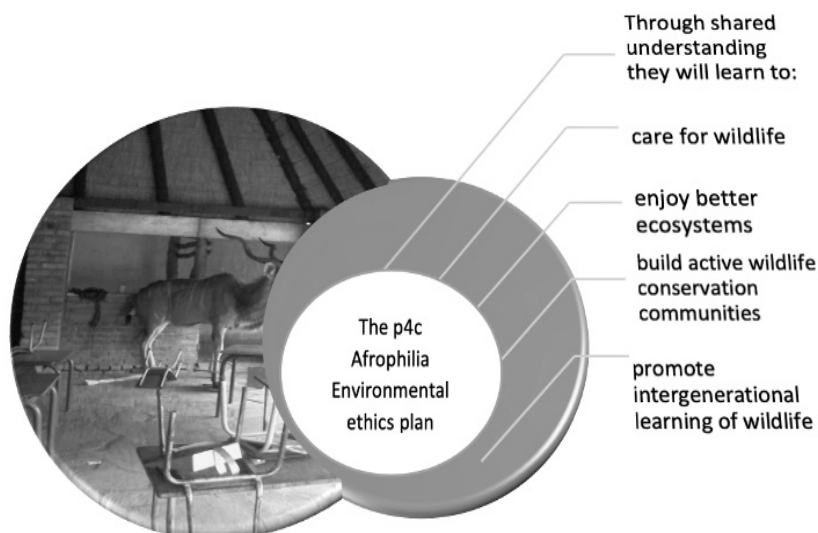
how the dialogue accords with the W-R-A-I-T-E-C letters of the Good Thinker Toolkit (Appendix A). Learners, for example, were able to provide Reasons to support their claims or assumptions. Abel provided reasons for why he thought it is undesirable to cause veld fires at the start of the dialogue, and others were capable of making Inferences like Tarisai and Merriam did. The findings expand on and deliberate a key dimension of the broader study, namely that of situated-intergenerational-significant learning. The next section reflects on this aspect of the study.

Discussion

Nexus between unhu/ubuntu, Philosophy for Children and Environmental Ethics Education

This nexus is illustrated in Figure 3. An onto-ethical mode of wildlife conservation participation emerged through the study which supported the ability to enhance development of ethical reasoning and facilitate a shared understanding of the purpose of heritage-based practices. The figure also shows a kudu that was photographed in the classroom after escaping from dogs that were chasing it, disrupting an ongoing community of inquiry session.

Figure 3: *Nexus between unhu/ubuntu, Philosophy for Children (p4c) and Environmental Ethics Education*



The findings, especially the learner dialogues, indicated the need for integrating into the school curriculum knowledges that are significant to the learners' life world as these

potentially allow children to make sense of the world around them (Clough, 2010). This was reinforced through use of culturally oriented artefacts such as totems and taboos drawn from the learners' life-world (Table 2) that were aimed at stimulating the learners' imagination, which Vygotsky (2004) described as an essential aspect of one's cultural life and thought system. Furthermore, the dialogues demonstrated how learners learn to care for wildlife as they build toward a shared understanding on the function of totems and taboos (see Figure 3).

The philosophical dialogue through the community of inquiry enabled the learners to make use of the shared understanding of their learning through totems and taboos. Emphasis in the learning activities was not on enhancing individual understanding, but on enhancing knowledge-building within the group that resulted from joint meaning-making in a shared context such as the community of inquiry (Stahl, 2015). This and the fact that the activities were drawn from the learners' everyday experiences point to the fact that learning need not be opposed to the social practice in which it is taking place (Engeström, 1996). Thus, learning, or education in general, should take root in the context in which it is meant to be utilised in order to ensure its relevance. This also helps teachers to avoid curriculum abstraction.

For the activities reported in this paper and in the broader study, the learning process was based on Vygotsky's three key themes: culture, language, and the zone of proximal development³ (Vygotsky, 1978). As an example, the Afrophilia artefacts (totems and taboos) that were used evolved and emerged from the cultural histories of practice of the people in the Sebakwe community in the study. These practices subsequently broadened the knowledge base of the learners involved because the community of inquiry process allowed them to approach the discussion from a broader conception of knowledges as shown in Table 2 above where the learners' assumptions are linked to the formal curriculum knowledges.

According to participants such as Mubaiwa quoted above, part of the knowledge and conservation techniques that were shared in the study are inherited from the ancestry of the people in the area and are passed from one generation to the next. These inherited heritage knowledges such as taboos (*zvia*) and totems (*mitupo/isibongo*) utilised in the community of inquiry resemble what Masuku (2018) referred to as trans-generational impartation of knowledge. This, according to Masuku (2018), is essential in helping learners recognise their own epistemological backgrounds.

The generative onto-ethical mode, as well as the dimension of situated-intergenerational-significant learning, represents a relational and interactive achievement because the learning is not hierarchical but rather synergistic, with success in one strand of learning resulting in success in other strands. Learner participation in a community of inquiry makes it easier for them to share their experiences (learning as shared understanding) and as a result, they can make sense of their own world (situated learning). This creates space for critical reflection on how they exist in the world (reflexive learner agency) potentially allowing them to care for wildlife, enjoy better ecosystems, build active wildlife conservation

communities, and promote intergenerational wildlife learning. The implications of this for teaching and planning are that teachers should not prioritise one strand of learning over another strand, nor should they prioritise one goal of the generative onto-ethical mode of wildlife conservation participation over another.

Concluding reflections

Children actively participated in community of inquiry sessions in which it was revealed that totems and taboos play a number of roles in the Sebakwe community in Zimbabwe. According to Tadiwanashe, a learner-participant during a community of inquiry, totems “help them learn about their relatives and family history” (week 5, session 5). This is consistent with literature stating that totems represent the clan’s history and are used during rituals to communicate with ancestors (Shoko, 2007). As evidenced by the findings, members of the Sebakwe resettlement area are expected not to eat or abuse the plants or animals from which they received their totems in particular.

The Afrophilia activities illustrated in the research as start-up capital for philosophical dialogue in a community of inquiry demonstrated how the pedagogical approach was compatible with the local context and could be a useful strategy for supporting wildlife conservation (Kideghesho, 2008). In this regard, the paper suggests that Environmental Ethics Education emerges when local community heritage knowledges and practices are integrated into the curriculum through enacting pedagogical approaches that are compatible with their application. The research has revealed that the community of inquiry pedagogy and the Afrophilia experiences create space for generative and networked epistemic engagement with a broader conception of knowledges.

While this research is based on only one case, it reveals some implications for re-thinking school-based conservation education. As shown in the case, school-based conservation policies and Environmental Ethics Education can be enriched via considering the potential role those indigenous cultural histories of conservation practice play in shaping future conservation research, education, and practice.

The implications of this case also point to the potential for exposing more teachers, parents and learners to the theory and practice of Afrophilia-based Philosophy for Children, which, as demonstrated in this paper, is a “critical pedagogy and methodology, not only of teaching but also as a mode of general inquiry and research” (Gregory et al., 2017). In this way, education could be practised in a way that differs from the teacher-textbook-based form of teaching and learning that places a strong emphasis on examination success. As shown in this case, implementing an inquiry-based approach to teaching and learning will ensure that school activities are focused on assisting learners in making sense of the world around them by gaining deeper understanding of their immediate context and broadening the curriculum to include other relevant knowledges and practices.

Notes on Contributor

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John Bhurekeni holds a M.Ed (Philosophy of Education) and has recently submitted his final PhD thesis for examination at Rhodes University, South Africa, where he is studying Philosophy for Children and Afrophilia learning processes. John is passionate about philosophy, environmental ethics and the decolonisation of knowledges.

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Endnotes

- 1 Le Grange (2012) used the concept 'ukama' (relatedness) to sharpen his argument that ubuntu is not limited to the anthropocentric definition, but that it also embodies ecocentric leanings.
- 2 The Rhodes University ethics approval tracking number for this study is 2017.12.08.04, and I also received approval letters from the MoPSE head office on 9 May 2017, and the Midlands provincial office on 22 May 2017. I also received consent letters from all the participants.
- 3 The Zone of Proximal Development is defined as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). In this study the connection between the Vygotskian zone of proximal development and the indigenous heritage-based practices demonstrates how these facilitate the development of higher-order thinking.

APPENDIX A: Jackson’s Good Thinker Toolkit WRAITEC (Adopted from Jackson, 2013)

Good Thinker’s Letter	What is it used for?	Question Stems & Claim Starters
W What do you mean by...?	<i>Seeking clarity</i> - “W” is essentially meant to capture the aspect of thinking that involves sensitivity to complexity, possible ambiguity, and multiplicity of meanings. “W” questions are clarifying questions.	<ul style="list-style-type: none"> • What do you mean by...? • What does the author mean by? • What is the...? • What have I forgotten to ask? • What else do I need to know?
R Reasons	<i>Thinking about why</i> - “R” reflects that for a philosophical thinker it is not enough to simply offer an opinion. Opinions need to be supported by reasons. Are some reasons better than others? When we want to know WHY we ask reason questions.	<ul style="list-style-type: none"> • Are reasons being offered to support claims? • What are the reasons...? • One of the reasons...
A Assumptions	<i>Acknowledging/making clear what we take for granted</i> - “A” recognizes that an important part of philosophical thinking is becoming aware of and making explicit assumptions that underlie a discussion, position, argument or presentation. Identify assumptions, recognize how those assumptions are influencing what we are seeing and judging, and identify other assumptions that can be made.	<ul style="list-style-type: none"> • Is it reasonable to assume...? • Are we aware of and identifying key assumptions being made? • An assumption embedded in this argument/claim is ... • The author is assuming...
I Inferences	<i>Thinking about “if...then”</i> - “I” represents “If ... then’s...”, inferences, and implications. IF, for example, we do, or don’t pursue a particular line of action, THEN what follows? What are the consequences? Inferences have a starting point (something seen, heard, smelled tasted or touched) and an ending point (a “place” the mind “moves” to that is beyond what was presented at the starting point). I may see a person frown (STARTING POINT) and infer they are sad (ENDING POINT).	<ul style="list-style-type: none"> • Is it reasonable to infer _____ from _____? • If _____ then is it reasonable to infer _____? • From _____ I infer _____.
T Truth	<i>Thinking about what is true, and the implications of what we think is true</i> - “T” concerns is what’s being asserted in fact true? How can we find out? What we take for granted as true must meet certain standards? What are those standards? How do we measure what’s true? Even if we aren’t sure if something is true can we imagine what might be the implications if it is true?	<ul style="list-style-type: none"> • Is what’s being said true, and what are the implications if it is true? • If _____ is true, then what does that imply? • If _____ is true does that imply _____? • When _____ is true it implies _____.
E Examples Evidence	<i>Offering evidence to prove a claim is true</i> - “E” is one way in which clarification of a position or assertion can be accomplished. It is a way of making a general claim specific or testing a claim by presenting an illustrative example. Equally important is the offering of evidence to support assertions. What is the evidence? Evidence looks different depending on the discipline you are in. What does evidence look like in science? Social studies? Math? Language Arts?	What are some examples of _____? Are EXAMPLES being given or is EVIDENCE being offered to support or illustrate claims? _____ is an example of _____.
C Counter – Examples	<i>Offering counter-evidence to prove a claim is not true</i> - “C” reflects the important task of testing the limits of a claim or position by searching for a way to prove it false or at least to test the limits of the claim.	What are some counter-examples to _____? Are there any COUNTER – EXAMPLES to the claim being made? _____ is a counter-example to _____.