Green Man You Owe Me: Surprises using puppetry with rural children in environmental education

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Abstract
Wakkerstroom, Mpumalanga, is a rural South African village, set against the backdrop of a wetland, grasslands and rolling hills (Mpumalanga Information Directory, nd). Sadly, children that live here appear to have little concept of the beauty that surrounds them, and do not care for the natural environment. The reasons for this are that they are not exposed to the natural environment other than for available resources, parents are absent due to work commitments or have passed away, and most children here cannot swim, meaning visiting the wetland is dangerous. There are also no parks where they can play. Their view of the environment is litter-infested roads and streams, and informal dumps.

This article explores a single moment of clarity during an intervention using a puppet, that occurred during a programme in 2023 which aimed to reintroduce a group of 31 children between the ages of 11 to 15 from The Clay Educentre to the wonders of nature, using the arts, reflective practice, and immersion into the natural environment. Here I argue that puppetry, in informal environmental education, with reflective practice, has the capacity to be more transformative than other art forms, such as drawing, drama and dance.

Keywords: applied arts, reflexivity, stop moment, environmental education

Introduction: Situating the project
Social ills that were expected to be alleviated under new leadership in post-apartheid South Africa have remained. The Auditor General reported that “only 8% of the total municipalities [257 in South Africa] had a clean audit in the financial year 2017-2018, with irregular spending estimated to be R21.2 billion” (Mishu et al., 2022). Poor service delivery means that the state of littering and informal dumping in underserved areas have become the norm rather than the exception, and this is apparent in the village of Wakkerstroom.

As reported in 2022, the official statistic for unemployment is 38.4% in the Dr Pixley Ka Seme district, in which Wakkerstroom is located (Statistics South Africa, 2022). Child- and woman-headed households are common with 10% of these living in informal dwellings (ibid.). In their study on poverty in South Africa Bhorat and Kanbur (2006) noted that "poverty rates among the non-white population in Kwa-Zulu-Natal increased from 27 percent to 43 percent between 1993 and 1998. Furthermore ... approximately
70 percent of the poor may be dynamically so, unable to escape poverty”. Wakkerstroom is situated on the KwaZulu-Natal border despite being in Mpumalanga, so these statistics apply to the village as well. Poorly maintained infrastructure and a system that cannot cope with new development means that water is available intermittently, with those living at higher lying areas having had little or no water since November 2022.

Having outlined the living conditions of the average residents of Wakkerstroom it is probable that basic survival needs take precedent over a clean and pleasant environment. Furthermore, while natural science and life skills curricula teach children about littering and waste in the environment, this is not followed through with action. The danger of causing eco-anxiety in children is real, where formal education teaches ‘doom and gloom’ and provides little opportunity for solving problems. Finally, even if children understand the concept of the impact of poor environmental behaviour through what they are taught in schools, their behaviour is shaped at home. This means that other methods of teaching are needed in order to change behaviour and to draw children back to an innate wonder of the environment.

**Access to green spaces**

Steyn and Ballard (2013, p. 2) are of the opinion that "South Africa remains a deeply divided society, and even as the fault lines shift and reconfigure, some scholars argue that ‘the spatial distribution of housing and communities in cities and towns, remains relatively unchanged other than in limited areas’ (Foster, 2005)”. This remains apparent in 2023 in Wakkerstroom. They stated too that “small towns offer an interesting site for the analysis of spatiality and identity because people are ‘thrown together’ more intimately, and there is less room for ‘escape’ from ‘others’ than in bigger towns or cities” (p. 3). This is certainly true of Wakkerstroom and eSizameleni, where the disparity of wealth and access to green space is glaringly obvious. Similarly, McConnachie and Shackleton (2010) wrote that "the more affluent suburbs, inhabited mainly by whites, have the lowest density of housing and the highest area of green space per capita” (paragraph four).

The only green space in Wakkerstroom is an immaculate lawn with trees and a rose garden forming the centre of the ‘central business district’ of the village surrounding the Dutch Reformed Church. This is fenced off. The only provision for children in Wakkerstroom is one broken swing next to the library. This is approximately three kilometres from the township meaning that children need to walk distances to play there. Since very few of the children can swim, playing near waterways unsupervised is not an option.

This means that in a circumference of approximately 25 kilometres there is not one safe, green space for children to experience the wonder of nature, due mostly to the lingering effects of colonialism and apartheid. This is particularly sad because, according to Munien et al. (2015), “there is a growing body of knowledge indicating that the use of green spaces is associated with positive impacts on health and well-being” (abstract; no page number), even more poignant in that Wakkerstroom is renowned for its beautiful nature and is an international birding hotspot.
The Clay

The Clay Educentre was started by Charity Nsibande in 2015 when she identified a need to support children in reading and English. For a small monthly fee children attend the programme from Monday to Thursday, are given a hot meal, assisted with homework, and offered extra-curricular workshops by volunteers. Importantly too, children who are at risk due to absent parents, child-headed households, alcoholism, and other social problems, are identified and escalated to social workers.

The project that is the focus of this article took place through The Clay. Many research participants were sourced from The Clay for my doctoral study (Preston, 2021) which aimed to use the arts to bridge the gap between behaviour and knowledge regarding environmental behaviour, and it was clear that this could not be achieved in the timeframe of a doctoral study. Therefore, work needed to continue indefinitely once the fieldwork was completed, because without a continuation of interventions it would be impossible to establish if there was any change in environmental behaviour over a short period of time. Where there is legislation built into our national Constitution, and curricula included in formal education with regard to custodianship of the natural environment, poor environmental behaviour pervades. According to Day and Monroe (2000): “Knowledge alone doesn’t harm or help the environment. Human attitudes don’t harm or help the environment. Human behaviours, on the other hand, have greatly harmed, yet hold a great deal of hope for helping, the environment” (p. 3).

Planning for continued work meant accessing funding and this has not been forthcoming. Therefore, the question arose as to how the work could continue effectively without funding opportunities. This article describes part of a response to this question.

Project outline

Objectives

Questions that the project sought to address are:

- How may we reintroduce the wonder of nature to children who have lost this through poor formal education, a lack of opportunity to access nature, and fractured social home environments?
- Will the reintroduction to the wonder of nature create custodianship in children as they grow into adulthood?
- How may we do this with no funding?

The innate wonder in children

Many authors are of the opinion that children around the world are born with an innate wonder that is fed by the natural environment. As early as 1956, Rachel Carson wrote: “A child’s world is fresh and new and beautiful, full of wonder and excitement” (p. 42). Wilson (2010) was of the opinion that “we can count on wonder to enrich and ennoble
The loss of wonder

The structure that children experience in formal education does little to assist in nurturing wonder, since this fails to draw connections between children and the beauty of nature. As Van Boeckel (2013, p. 58) stated: “A major criticism of the kind of education about our natural environment as often practiced today is that it seems insufficiently capable of reaching the hearts and the minds of the learners (cf. Russell, 1999; Sobel, 1996, 2008)”.

Randle (1999) stated that “what we want for our children is that they are able to develop their values in a context of reverence for the earth, and for all life, in a context that enables them to deal with their material environment and to make contact with the non-material realities” (p. 61). Considering the discussion above, the question that arises is: How may we do this? Randle suggested that teaching “can be done in an infinite number of places, by an almost infinite number of people, in an almost infinite number of ways” (p. 64). One of these ways is through the arts, and this project is based on the hope that by using the arts and reflective practice with the natural environment as overarching themes, a sense of wonder will be instilled in the children. Because the project is located within informal education it does not have to adhere to formal curricula structures, which means it has the capacity to be fluid, changeable as data emerges, with the children as driving forces. This means that through communicating with the children via their journals, it was possible to gauge what interventions had the best impact on them, ensuring that interest and excitement were maintained, which is not possible with formal pedagogical structures that are prescribed through curricula. This work has a bottom-up approach as opposed to the top-down approach of formal education.

A single moment of clarity during an intervention involving a puppet changed the trajectory of this project. While I do not suggest that formal curricula be replaced, I will show that the fluid nature of informal environmental education, using the arts, has a vital role to play in enhancing what is learnt in formal classrooms.

Methodology

Participants

The group was made up of 31 children between the ages of 11 and 15, and they attended either eSizameleni Primary School or Uthaka High School. Children were in grades six to nine, and only three of them were girls.

Interventions occurred once a week at the eSizameleni Primary School which is where The Clay runs from, for one hour from 4pm to 5pm after the formal activities of the aftercare programme.
Interventions
My doctoral study incorporated many modalities within the arts in order to appeal to all children in some way, to triangulate data, and to adhere to a pedagogical bottom-up approach (Preston, 2021). Furthermore, according to Preston (2022, p. 110):

In writing about the role of the arts in community-based social change, Etherton and Prentki (2006) argued for a bottom-up approach in which all participants are included. On multimodality, Archer and Newfield have stated that ‘multimodal approaches have the potential to transcend, and embrace, multi-linguistic societies’ (2014).

It is important that the work with the children of The Clay continues in this manner.

Art
I have asked the same question that Van Boeckel (2013) has asked: “Can learners connect to nature in new ways through artmaking?” (p. 23). The children of the area have little exposure to the natural environment which is valued only for resources that it affords. My doctoral study revealed, however, that children respond well to the arts, where the interventions included drawing, music-making, and puppetry, among others.

Puppetry particularly is a form of performance that provides the introverted child the opportunity for expression since the ‘one degree of separation’ that a puppet affords means that it is the puppet speaking and not the child. And as Britts et al. (2016) have stated: “A puppet creates a space between itself and the puppeteer, the various roles can encourage even shy learners to become part of the social learning process” (p. 520); this is exactly what occurred in my work.

Furthermore, Britts et al. (2016, p. 519), whose work takes place within the formal education sector, referred to Keogh et al. (2008) in showing that “teachers who use puppetry noticed that it created the opportunity to present authentic problems rooted in children’s everyday experience, enabling them to readily identify with the problem and with the puppet character”. Puppetry has also been used extensively in informal education, as outlined in the writing of Kruger (2008), who listed numerous organisations that have, and still are, using puppetry in successfully disseminating knowledge on issues such as HIV/AIDS, political and environmental issues. Kruger is of the opinion that the puppet’s “combination of lifelessness and imagined life explains the puppet’s extraordinary freedom, which allows it to touch on any social idea and convention” (p. 26), and herein lies the value of puppetry in both formal and informal education. It is the art-form of puppetry that provided the ‘stop moment’ that is the focus of this paper.

Reflective practice
Since I believe that reflection in any form has the capacity to be transforming, this is an important aspect of the project. Despite knowing that journalling is not for everyone, it is important that it is taught to children so that they can learn that this is an option for
them. In this context the children were provided with books where they were encouraged to reflect on interventions either textually or graphically.

The children gave me permission to read their journals. Through this I could gauge their responses, and thus plan for future interventions, meaning that learning could remain fluid and unstructured. This cannot occur in formal education due to the constraints of a structured curriculum.

Using the arts as expression and as a means of reflective practice has many positive implications for me as facilitator: the children love the arts and this feeds into their innate sense of wonder mentioned above, and I could gain insight into perceptions that children have on the natural environment through this and through their journals.

**Structure of the interventions**

If weather permits the children are taken outside the classroom. As much as this is not a natural environment, this does afford the opportunity for the children to be on grass, surrounded by some trees and views of domestic animals. This also enabled me to space the children out; in the classroom the children are often squashed three to a desk.

Warm-up exercises were followed by discussions on topics focussing on environmental themes. The topic chosen for the day was outlined by me, and this was followed by a facilitated discussion; these were fluid and led by the children themselves, and they were encouraged to voice opinions and discuss the topic between themselves. Often discussions began with a question, such as: Do you think that trees can think? Here it is important that the children’s focus is drawn away from litter and dumping and towards the delicate and detail of nature, such as looking carefully at a tree, touching it and examining the textures of leaves and bark, as opposed to the waste dumped at the foot of the tree.

A period of quiet reflection formed the end of the interventions. Here the children sat by themselves and wrote or drew in their books. They were encouraged to respond in any way they chose. The intention here was to encourage personal thought that does not adhere to strict teaching, formal curriculum content or opinion of peers.

**Immersion in nature**

I agree with Lehtonen et al. (2014), who referred to Snaza et al. (2014) when they claimed that “information becomes alive and meaningful, if we experience it with our bodies” (p. 351). It is for this reason that I endeavoured to take the children outside as much as possible. I hoped that the content of interventions could be experienced with all the senses, for example touching the bark of a tree, smelling the ground that the tree lives in, and listening to wind in branches. This is as opposed to the dry text-based information in the classroom which is generally what South African formal education affords. Van Boeckel went one step further saying that “it is nature that shows the way” (p. 84).
Returning to Wilson (2010):

We provide opportunities for them to experience beauty; we draw attention to beautiful things; and we encourage children to create and represent beauty through the mediums of art, dance, and music. These efforts are based on the understanding that putting children in touch with beauty will enrich their lives and foster their sense of wonder... (p. 25)

The interventions in this research programme were based on these principles.

**The stop moment**

**Green Man puppet story**
Building on interventions where trees were discussed I used a rod puppet to tell a story about a baobab tree. The story tells of a child called Thandi who cannot speak, and is friendless in her village. However, she does have a friend in a giant baobab tree which she climbs every day and communicates with. One day the baobab tree sees a violent storm brewing and tells Thandi to warn the villages. Gesturing, she brings the villagers, including all their livestock, to the tree who opens his trunk thereby saving them all. However, because the tree was hit by lightning, the next morning he is dead. Thandi is inconsolable, but lying weeping at the foot of her friend her hand finds a seed. The voice of the tree tells her that if she plants the seed and tends it, he will return. The child does this with the help of the villagers but it is only generations later that children are able to climb the slow-growing tree.

Importantly, the rod puppet, named Green Man (see Figure 1), is presented as a character that also cannot speak, since he is a spiritual being who communicates with the puppeteer through gesture and emotion. It is thus the puppeteer who tells the story.

**Impact**
Fels (2008), referring to Appelbaum regarding a moment of clarity when teaching children using the arts, described a stop moment in this way:

Appelbaum (1995) calls a ‘stop’ a moment of risk, a moment of opportunity. A stop is a moment that calls us to attention. A stop signals a new awareness of possibility, a recognition of oneself in relation to others and one’s location, as if for the first time. A stop reminds us – as individuals, as educators – how we are shaped by our habits of action, language, authority, location, and context. (p. 5)
For the first time since the beginning of the project the children were attentive, and engaged. When the story was finished, they burst into applause. Again for the first time, when tasked with reflection in their journals they were quiet, did not attempt to disrupt others in their work, and wrote for a comparatively long time. When they were all finished, I asked them what they were feeling. Some said they were sad, others that they felt happy, others that they loved Green Man.

When one boy indicated that he wanted to hold the puppet I said that if he was to hold it, he needed to tell a story. In the end three boys told stories of their own. Importantly, they all grasped the concept of the puppeteer being the story-teller with the puppet whispering the story in their ears. Furthermore, the stories were original and impromptu, all with environmental themes, such as a story about a boy whose best friend was a tree and who went to his teacher to ask for a seed after he discovered that his neighbour had chopped down the tree, and a story about how a child was raised by baboons who then needed to be respected. Finally, a boy who could not write and who was generally the most disruptive was able to tell a story and manipulate the puppet better than his peers. This experience was corroborated by a study on using puppetry in story-telling for learning in children undertaken by Syafii et al. (2021), who concluded that:

...the story-telling technique utilizing puppets is effective in progressing not only the speaking ability of the students in terms of telling a story (narrative texts) but also their participation in the teaching-learning process and their fun in learning English. The utility of medium (puppets) helped both the lecturer and the learners. (p. 338)

The Green Man puppet moment was transformative in the following ways:

- The puppet brought out communication skills in children that they were previously unable to articulate through the written or spoken word.
- Children created their own stories through the puppet; all stories that had environmental themes, which enabled me as researcher to gauge impact of prior interventions more effectively.

Because I was not following formal education curriculum it meant that I could change the trajectory of the planned interventions in a way to continue the learning that was happening.

Fels (2015) referred to a stop moment as “a potential call to action, an in-between space of engagement like the pause between exhalation and inhalation” (p. 478). More importantly for the moment that the Green Man performance afforded, and in the context of my work with the children, she continued thus:

Noticing and attending to stop moments, through reflection, dialogue, writing, creating anew, invites new possible actions of choice. A stop moment offers awareness of possibility; through reflection, we come to consider new possible choices of action in interaction with our environment, context, relationships, ourselves, recreating the worlds we create. (ibid.)
From this stop moment I decided to focus entirely on puppetry. Over the course of the first semester the children were introduced to five rod puppets, each of whom had a story to tell that had either an environmental theme or a moral. For example, the puppet Gogo told a story of how she had rescued a jackal pup whereafter the mother jackal saved Gogo’s sheep from being attacked by hyenas, and the puppet Goat Man recited a poem about twins who cleaned up litter from a river. The stop moment provided insight which changed the trajectory of the project, and led to a structure for interventions for the rest of the year where a puppet would tell a story, the children would use the puppet to tell their own stories, and then they would reflect on this in their journals. Included in this was puppet-making, manipulating and story-telling by the children themselves.

**Discussion**

My doctoral study (Preston, 2021) showed that the arts have an important role to play in environmental education. I found that awareness can be raised in both children and adults through applied drama. The building on knowledge that I outlined was the bridging of the gap between legislation, and formal and informal curricula that do not consider implementation or follow through, and this gap was filled using the arts (ibid.). The moment described above shows how powerful puppetry can be in comparison to other art forms. Children that are unable to articulate in second language, both verbally and/or written, were able to not only make up a story confidently in the moment, but also tell the story through a puppet. This shows the power that the one degree of separation a puppet provides: it is the puppet that tells the story and not the child. Furthermore, in this context where the puppet character is unable to speak, the children were able to embrace this with ease. The children engaged with the puppet as it ‘whispered in their ears’ and then engaged with their audience as they told ‘its’ story.

The impact of the puppets was corroborated by the written and graphic responses of the children in their journals, and herein lies the value of reflective practice. Without these responses, which I was able to refer to at any time and reflect upon in my own journal, I would not have gained valuable insight into successes or failures of the work. Furthermore, I could change the trajectory of interventions if there was no indication of success. Regarding the Green Man story, the entries clearly showed that the children understood the story, the message, and the notion of a puppet that tells a story. Two boys wrote letters to Green Man; one rather poignantly wrote “Green Man, you owe me. Where can I see this giant baobab trees [sic]?” while the other boy wrote:

Green Man I write you this letter because your story was great and that BioaBere tree and saved the people and got stroke by lightning it was very sad because the tree lived many years (where you at Thandi I feel very sorry for you) good by Green Man until we meet again. [sic]
Another child showed compassion for Thandi, saying:

Green Man I like your story but I do not like that Thandi cannot talk. I like to have friend like Thandi have. I like to talk with the tree if I was Thandi I will give him a name I will call him Jack. [sic]

This entry was important as it showed the child had made a connection to an earlier discussion around the possibility that trees have feelings and the ability to communicate. It is often said that if we name something then we have to love it, and if this is true, it is even more meaningful that the boy wanted to give a name to his tree friend.

Some of the children chose graphic reflection, and these are discussed below.

![Figure 2: Drawing 1 of Green Man puppet](image1)

![Figure 3: Drawing 2 of Green Man puppet](image2)

Figures 2 and 3 are images of the internal workings of the puppet. This indicates an interest to learn about the mechanism of puppet-making and manipulation.

![Figure 4: The new baobab tree](image3)

Figure 4 is of the descendants of Thandi’s village sitting in the new baobab tree.

![Figure 5: Baobab being struck by lightning](image4)

Figure 5 shows the baobab, people taking shelter from the storm, and the lightning that killed it.
If we examine these in terms of the aims of this project, it is clear that a sense of wonder was instilled in the children through this intervention. This is both in the wonder that the puppet itself afforded, and in the content of the story. How does the puppet work? Can a baobab tree really be that big? Can a tree be a friend? These are questions that the children grappled with in post-intervention discussion and in their journals.

It is not possible to definitively make conclusions from the children's graphic and textual reflections to the story and the puppet. That the children embraced puppetry as a preferred art form over others cannot be disputed. Their reflection showed remarkable difference in structure, thought, articulation and ability when reflecting on the puppet compared to other interventions where entries were short, nonsensical, or mentioned other non-related topics. Their ability to reference the story and retain the message was apparent, reinforced by what was found in their journals. The physical reaction to the puppet was also completely different in that the children became attentive and engaged, and this did not abate when I continued to use puppetry after the stop moment. Whether this means that the children will become custodians of the natural environment in the future remains to be seen, but it is clear that small achievements can be made with no funding. Whether the children will actively take note of the beauty that surrounds them having been exposed to these interventions, specifically puppetry, and whether they take action to alleviate the littering and dumping that surrounds them also remains to be seen.

Conclusions

In my work with the children of The Clay, where all art forms have a place in informal environmental education, puppetry has emerged as one of the strongest and most effective. Indeed, Brits et al. (2016) are of the opinion that "this resource [puppets] and pedagogy [puppetry] can be used in student-teacher education, teacher training, presentations for learners and community outreach projects" (p. 516). The use of puppets engages the children in ways that seem to transform their responses from apathy to excitement, and to enable them to tell their own stories, both with environmental and social content. It is for this reason that the interventions planned for 2023 changed, and will continue to do so as responses from the children emerge.

The importance of the stop moment cannot be underestimated. Here I argue that it is informal education using the arts, immersion into nature, and reinforcement of content through reflective practice that has the capacity to bridge the gap between knowledge and action, despite this only being visible in the years to come as they grow into adulthood. This, too, is why the work with the children of The Clay will continue indefinitely. Possibly more importantly though, is the fluidity that informal interventions afford, where children are the drivers of the process as opposed to top-down curricula that prescribe teaching in formal education.
Notes on Contributor

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References


