

The Affordances of an Applied Arts Intervention for Sustained Environmental Good Practice in the Township of eSizameleni

Carol Preston

Person number: 694899

Supervisors: Professor Yvonne Reed and Professor Christopher Odhiambo

Abstract

The Constitution of South Africa guarantees its citizens the right to a pollution-free environment, and this is supported by legislation. Furthermore, formal education ensures that the hazards of environmental degradation are taught at school. However, the extent of littering and dumping countrywide shows a deep chasm between what citizens know and do in this regard.

This study investigated the possibility of bridging the gap between environmental awareness and action within a small group of children in the village of Wakkerstroom, Mpumalanga. With a theoretical background of deep ecology and eco-feminism this was a multimodal study, using applied drama over three cycles of action research as methodology. Through journaling, a deep reflexive stance was taken, leading to the development of the ‘inside I’. Here the position of the critical friend commonly used in action research to provide an outside perspective, was taken by the researcher, thereby turning the eye inward. The researcher was intent upon protecting participants from eco-anxiety but failed to safeguard herself from this vulnerability, further complicated by COVID-19 which also disrupted the study’s final stages.

Despite little change perceived in participants’ behaviour, the study revealed that the arts are an appropriate means of raising awareness, developing skills and forming relationships which have potential for long term impact on environmental behaviour.

This study has the potential to be replicated in other rural areas of South Africa, after thorough reconnaissance of each specific site, and the identification of local champions of the environment. Inclusion of adults is essential as in this study their initial exclusion was erroneous, since children’s enculturated behaviour occurs in the home. Further to this, no implementation will be successful unless a bottom-up approach is taken with community needs and inclusivity being the primary focus.

Key words: deep ecology, eco-feminism, action research, applied drama, multimodality, littering, environmental behaviour, eco-anxiety

Plagiarism declaration

1. I know that plagiarism is wrong. Plagiarism is to use another's work and to pretend that it is one's own.
2. I have used the author date convention for citation and referencing. Each significant contribution to and quotation in this thesis from the work or works of other people has been acknowledged through citation and reference.
3. This thesis is my own work.
4. I have not allowed and will not allow anyone to copy my work with the intention of passing it off as his or her own work.
5. I have done the word processing and formatting of this assignment myself. I understand that the correct formatting is part of the mark for the degree and that it is therefore wrong for another person to do it for me.

Signature:

Date:

Table of contents

1. Chapter One: Introduction

- 1.1 Mapping the chapter
- 1.2 Situating the study
- 1.3 The physical location
- 1.4 Projects in which the researcher and the local community are engaged
 - 1.4.1 Wakkerstroom Animal Group (WAG)
 - 1.4.2 Wakkerstroom Natural Heritage Association (WNHA)
 - 1.4.3 Festivals
 - 1.4.3.1 *Wakkerstroom Music Festival (WMF)*
 - 1.4.3.2 *Art and Craft Ramble*
 - 1.4.3.3 *Fairs and markets*
- 1.5 South Africa and the environment
- 1.6 The aims, research question and rationale for the study
- 1.7 An outline of chapters to follow
- 1.8 Conclusion

2. Chapter Two: Theoretical framework and literature review

- 2.1 Mapping the chapter
- 2.2 Environmental theory
- 2.3 Eco-feminism
- 2.4 Social change and community development theory
- 2.5 Gender and development theory
- 2.6 Environmental behavioural theory
- 2.7 The arts and social change
- 2.8 Multimodality
- 2.9 Conclusion

3. Chapter Three: Methodology

- 3.1 Mapping the chapter
- 3.2 Research paradigm
- 3.3 Action research
- 3.4 Participatory and applied research
 - 3.4.1 Applied arts
 - 3.4.2 The role of applied theatre in informal education in South Africa
- 3.5 Description of research participants and research site
 - 3.5.1 Children
 - 3.5.2 Adults

- 3.5.3 Description of the site
- 3.6 Research instruments
 - 3.6.1 Play making
 - 3.6.2 Puppetry
 - 3.6.3 Site visits
 - 3.6.4 Sculpture and craftwork
 - 3.6.5 Drawing
 - 3.6.6 Interviews, informal conversations and focus group discussions
 - 3.6.7 Reflective practice
 - 3.6.7.1 *Journaling*
 - 3.6.7.2 *The critical friend or 'inside I'*
 - 3.6.8 Surveys and questionnaires
 - 3.6.9 Participant observation
- 3.7 Data capture and analysis
- 3.8 Ethical considerations
- 3.9 Conclusion and outline of Chapter Four
- 4. Chapter Four: The Reconnaissance Phase**
 - 4.1 Mapping the chapter
 - 4.2 South Africa and the environment
 - 4.2.1 Legislation pertaining to waste in South Africa
 - 4.2.2 School curricula
 - 4.2.3 NGOs (Non-Government Organisations)
 - 4.2.3.1 *Plastic*
 - 4.2.3.2 *Paper*
 - 4.2.3.3 *Glass*
 - 4.2.3.4 *Tins*
 - 4.2.4 Informal waste collectors
 - 4.2.5 Informal education on the environment and waste in South Africa
 - 4.2.6 Local government policies and practices in relation to environmental pollution
 - 4.2.6.1 *Local governance*
 - 4.2.6.2 *The public library*
 - 4.2.6.3 *Service delivery*
 - 4.3 Environmental awareness in the community
 - 4.3.1 Environmental awareness of adults
 - 4.3.2 Environmental awareness of children
 - 4.3.3 Toys from waste

- 4.4 Previous and current projects with a focus on environmental awareness
 - 4.4.1 Previous projects
 - 4.4.2 Current and on-going projects
- 4.5 Sites predominantly littered by children
- 4.6 Conclusion

5. Chapter Five: Action Research Cycle One

- 5.1 Mapping the chapter
- 5.2 Planning
 - 5.2.1 Sourcing research participants
 - 5.2.2 Ethical considerations
 - 5.2.3 Venue
 - 5.2.4 Transport and catering
 - 5.2.5 Art supplies
 - 5.2.6 Engagement of professional theatre practitioners
 - 5.2.7 Research assistants

5.3 Interventions

- 5.3.1 Play making workshop with Craig Morris, and rehearsals
- 5.3.2 Site visits
 - 5.3.2.1 *Clearing of waterway under the auspices of the WNHA*
 - 5.3.2.2 *Visit to the town dump*
 - 5.3.2.3 *Clearing of the grounds around the municipal offices, library and the school*
- 5.3.3 Art and craft workshops
 - 5.3.3.1 *Body mapping*
 - 5.3.3.2 *T-shirt painting*
 - 5.3.3.3 *Banners*
 - 5.3.3.4 *Paper packet puppets*
- 5.3.4 Parade
- 5.3.5 Process drama by Susan Hall
 - 5.3.5.1 *Planning of the process drama*
 - 5.3.5.2 *Process drama*
 - 5.3.5.3 *Process drama performance*
 - 5.3.5.4 *Reflection on the process drama*
- 5.3.6 Concurrent work with the children of The Potters' Place
 - 5.3.6.1 *Response to 'What should we do with pampas?'*
 - 5.3.6.2 *Response to 'Why do you litter?'*
 - 5.3.6.3 *Response to 'If I know not to litter, why do I still do it?'*

- 5.3.6.4 *Tourism workshop and drawings*
- 5.3.6.5 *Soundscapes and story*
- 5.3.6.6 *Plastic bottle drumming*
- 5.3.6.7 *Reading articles from National Geographic*

5.4 Learning from Action Research Cycle One

- 5.4.1 Participant attendance
 - 5.4.2 NIMBY
 - 5.4.3 Political factors affecting the study
 - 5.4.4 Knowledge-building
 - 5.4.5 Engaging with adults
 - 5.4.6 The challenge of attempting to be value neutral
 - 5.4.7 Ethics and the researcher
- 5.5 Findings influencing planning for Cycle Two
- 5.6 Conclusion

6. Chapter Six: Cycle Two

- 6.1 Mapping the chapter
- 6.2 Cycle One findings that informed Cycle Two
 - 6.2.1 Work with adults could strengthen the interventions
 - 6.2.2 Opportunities for children to be decision-makers
 - 6.2.3 Changes to the structure of the workshops
 - 6.2.4 The political dimension of community-based informal education programmes

6.3 Interventions

- 6.3.1 Interventions with children
 - 6.3.1.1 *'What is at stake' process drama*
 - 6.3.1.2 *Desert scenario*
 - 6.3.1.3 *Pipeline proposal*
 - 6.3.1.4 *Payment for work*
 - 6.3.1.5 *Crisp packets and letters to the President*
 - 6.3.1.6 *Response to 'If I have a snack packet and there is no bin, what do I do?'*
 - 6.3.1.7 *Rod puppet story telling*
 - 6.3.1.8 *Personal space and embodied environment*
 - 6.3.1.9 *Texture workshop*
 - 6.3.1.10 *Performance at the end of semester one*
 - 6.3.1.11 *Year-end parade as part of an anti-litter campaign*
 - 6.3.1.12 *Other interventions at the research site*

- 6.3.1.13 *Interventions with children beyond the research site*
- 6.3.2 Interventions with adults
 - 6.3.2.1 *Power point presentations*
 - 6.3.2.2 *Questionnaires*
 - 6.3.2.3 *Clean-up campaigns*
 - 6.3.2.4 *Inclusion of political entities*
 - 6.3.2.5 *Eco-bricks and tops and tags projects*
 - 6.3.2.6 *Champions of the environment*
- 6.4 Personal challenges
- 6.5 Findings
 - 6.5.1 Children
 - 6.5.2 Adults
 - 6.5.3 Self-preservation
 - 6.5.4 The need for a critical friend
- 6.6 Conclusion
- 7. Chapter Seven: Cycle Three**
 - 7.1 Mapping the chapter
 - 7.2 Cycle Two learning that informed Cycle Three
 - 7.3 Interventions
 - 7.3.1 Interventions with children
 - 7.3.1.1 *MiniSASS*
 - 7.3.1.2 *Water creature puppets*
 - 7.3.1.3 *Galela*
 - 7.3.1.4 *Litter Lion water performance*
 - 7.3.1.5 *Drawing*
 - 7.3.1.6 *Other interventions with children*
 - 7.3.1.6.1 *Site visit to the vlei*
 - 7.3.1.6.2 *Reading group*
 - 7.3.2 Interventions with adults
 - 7.3.2.1 Questionnaires
 - 7.3.2.2 Champions of the environment
 - 7.4 Impact of COVID-19
 - 7.4.1 Impact on the research
 - 7.4.2 Personal impact
 - 7.4.2.1 *Illness*
 - 7.4.2.2 *Eco-anxiety exacerbated by the pandemic*

- 7.4.3 Community upliftment enabled through the study during the pandemic
 - 7.4.3.1 *Construction of a glass recycling drop off point*
 - 7.4.3.2 *Installation of swing bins*
 - 7.4.3.3 *Eco-brick making*
 - 7.4.3.4 *Recycling depot in eSizameleni*
- 7.5 Emergence of results of the interventions
 - 7.5.1 Clean-up drives initiated by research participants and champions of the environment
 - 7.5.2 Selling items made from waste
- 7.6 Critical analysis from Cycles One, Two and Three
- 7.7 Conclusion
- 8. Chapter Eight: Conclusions and recommendations**
 - 8.1 Introduction
 - 8.2 Findings
 - 8.3 Limitations
 - 8.4 The building of knowledge this study affords
 - 8.5 Recommendations for further research
 - 8.6 Conclusion

List of figures

Figure 1.1 work in progress *A Wave of Plastic*

Figure 1.2 *A Wave of Plastic*

Figure 2.1 Theoretical framework mind map

Figure 2.2 *The Crucifixion* by Giotto

Figure 2.3 *Guernica* by Picasso 1937

Figure 4.1 children at work

Figure 4.2 example of drawings

Figure 4.3 another example

Figure 4.4 Save the planet image

Figure 5.1 The Litter Lions taking a bow after the performance

Figure 5.2 image showing man with a saw

Figure 5.3 image showing dog eating waste

Figure 5.4 image showing girl throwing waste

Figure 5.5 image showing waste, the dog, waste pickers and the man cutting tree

Figure 5.6 image showing the man with saw, the dog and waste

Figure 5.7 image showing the fence around the dump, the mountain behind, and waste

Figure 5.8 image showing waste in the water

Figure 5.9 image showing hazards of littering

Figure 5.10 image showing an animal eating waste from a bin

Figure 5.11 image showing the connection between waste and wildlife

Figure 5.12 image showing waste at the school grounds and an animal eating from a bin

Figure 5.13 image showing writing on the body

Figure 5.14 detail of figure 5.13

Figure 4.15 image showing writing on the body

Figure 5.16 detail of figure 5.15

Figure 5.17 the Litter Lions painting their t-shirts

Figure 5.18 children with their paper packet puppets

Figure 5.19 one of the banners for the parade

Figure 5.20 words on recycling by the Litter Lions

Figure 5.21 Ms. Hall in the process drama workshop

Figure 5.22 ground plan in preparation for the process drama intervention

Figure 5.23 mind map of the characters in the preparation for the process drama intervention

Figure 5.24 list of characters to be allocated to the participants

Figure 5.25 seed packet props

Figure 5.26 image showing children cleaning water

Figure 5.27 image showing a dog eating pampas, pampas in water, person throwing pampas in water

Figure 5.28 some graphic suggestions as to what to do with pampas

Figure 5.29 written suggestions as to what to do with pampas

Figure 5.30 younger child's response to the question

Figure 5.31 younger child's response showing

Figure 5.32 two images showing personal behaviour, drawn by the same child

Figure 5.33 image stating laziness and tiredness as being reasons for littering

Figure 5.34 image stating that the respondent drops litter before class

Figure 5.35 image stating that the respondent litters because h/she does not see a bin

Figure 5.36 textual response stating laziness as a reason for littering

Figure 5.37 image showing visitors enjoying the natural environment

Figure 5.38 image showing visitors enjoying nature, including animals, and mentioning Wakkerstroom as an international birding hotspot

Figure 5.39 image showing tourists, the vlei, and the mountain including mention of the hotspot

Figure 5.40 image showing a tourist bird watching

Figure 5.41 image of tourists bird watching

Figure 5.42 image of American tourists watching and photographing birds

Figure 5.43 image of Ossewa Kop

Figure 5.44 image of a bird hide

Figure 5.45 image mentioning the hotspot and littering, but no mention of tourism

Figure 5.46 poem response asking to keep the wetland free of litter

Figure 5.47 image of the train with interesting perspective

Figure 5.48 Blessing visiting his uncle

Figure 5.49 cityscape of Gauteng where Blessing went to

Figure 5.50 Blessing in the city

Figure 6.1 the chart that was added to but the children with their suggestions

Figure 6.2 cards with the children's arguments

Figure 6.3 image showing the pipeline and textual suggestions

Figure 6.4 textual response presenting suggestions

Figure 6.5 image showing the pipeline and the water cycle

Figure 6.6 image showing Martins Dam, the pipeline, and water pumped into homes

Figure 6.7 the action plan consolidating all the children's suggestions

Figure 6.8 letters to the president by the Litter Lions

Figure 6.9 image showing the reuse of plastic to make a mat

Figure 6.10 image showing putting the packet into a pocket

Figure 6.11 image showing a thought bubble

Figure 6.12 image showing one person instructing another to put the packet into a pocket

Figure 6.13 image showing a person asking for a bin

Figure 6.14 image showing a person looking for a bin

Figure 6.15 image showing person putting packet into a bag

Figure 6.16 image showing a person throwing a packet on the ground

Figure 6.17 the recipient of the wheelchair and the bakkie load of bottle tops

Figure 6.18 textual response, showing the understanding of the recycling in exchange for a wheelchair

Figure 6.19 textual response, showing no understanding of the recycling concept

Figure 6.20 image by a young child showing the wheelchair recipient

Figure 6.21 image showing the wheelchair recipient

Figure 6.22 mapped image showing the path of the bottle tops to receiving the wheelchair

Figure 6.23 image by a young child showing the wheelchair recipient and the bakkie load of bottle tops

Figure 6.24 image showing the bags of bottle tops and the recipient of the wheelchair

Figure 6.25 image by a young child showing the bags of bottle tops and the wheelchair recipient

Figure 6.26 image of the rod puppet and the puppeteer

Figure 6.27 suggestions by the Litter Lions for placard messaging

Figure 6.28 image of some of the children at the parade

Figure 6.29 impromptu puppet show in Morija (photograph courtesy Mari Hyokyo)

Figure 6.30 eco-bricks under construction

Figure 6.31 people waiting for a taxi at the eco-brick bench

Figure 6.32 mind map showing the thinking in the planning of an anti-litter campaign

Figure 7.1 the children busy with the MiniSASS

Figure 7.2 examples of the water creature images

Figure 7.3 copies of images for puppets

Figure 7.4 completed water creature rod puppets

Figure 7.5 images from the WWW performance of the Litter Lions water play

Figure 7.6 some of the work that the children produced on the uses of water and the water cycle

Figure 7.7 details of the long drawing of the water cycle

Figure 7.8 the recycling depot at S's home

Figure 7.9 the glass drop off point, and a section of the fence

Figure 7.10 bins prior to installation, and an installed bin

Figure 7.11 eco-bricks made during lockdown

Figure 7.12 children cleaning up

Figure 7.13 image showing the waterway once it was clean

Figure 8.1 mind map: key findings

Figure 8.2 mind map: contribution to knowledge

Figure 8.3 mind map: key findings and contribution to knowledge

List of tables

Table 1: Theme: response to the visit to the town dump; Litter Lions

Table 2: Theme: response to clean-up at the library and the school; Litter Lions

Table 3: Theme: body mapping

Table 4: Theme: response to “What has Carol taught you?”

Table 5: Theme: “What do I do with pampas?”

Table 6: Theme: response to “Why do I litter?”

Table 7: Theme: response to “If I know not to litter, why do I still do it?”

Table 8: Theme: response to tourism workshop; Potters’ Place

Table 9: Theme: response to Blessings story; Potters’ Place

Table 10: Theme: response to water pipeline issue

Table 11: Theme: response to “If I have a snack packet and there is no bin, what do I do?”

Table 12: Theme: response to rod puppet show

Table 13: Theme: adult questionnaire on knowledge of waste-recycling



Chapter One: Introduction

1.1 Mapping the chapter

The doctoral research that is the focus of this thesis is one of a number of long-term initiatives aimed at improving the natural and lived environment in the eSizameleni and Wakkerstroom areas, in which the researcher plays a part. The chapter begins by locating the research in relation to these initiatives. This contextual work is followed by an outline of the aims of the doctoral project, the research questions that inform it and the rationale for the research. The chapter ends with an outline of the chapters to follow.

1.2 Situating the study

At a lecture given at the University of the Witwatersrand in 2014, Dr Jane Goodall asked: *what are the consequences of little choices made?* Here she was referring to environmental issues and specifically to the small things that individuals can do that have the potential to make a big impact. Lehtonen et al (2019), quote Margaret Mead who “[o]nce said, “Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it’s the only thing that ever has” (p.366). With increasing evidence of global warming and destruction of the environment that sustains all life on the planet, changes in actions and attitudes are desperately needed. Conservation of our natural environment has become a social problem as well as an environmental one and, with the explosion of the world’s population, comes greater need for wise use of the resources the planet can offer us and infrastructure to support this increased population.

This describes the global problem, but also applies locally. In this research site specifically it was the importance of protecting the natural resources that required attention. As Robert Zipplies has stated: “The destruction of prime tourist destinations as a result of climate-related events and the associated pressures of a growing stressed human population, could well rob Africa of one of the greatest opportunities the continent has...” (2008 p.64). This research project aimed to respond to Dr Goodall’s question by investigating the possibilities of changing actions and attitudes, specifically among children in eSizameleni the township of Wakkerstroom village in Southern Mpumalanga.

1.3 The physical location

Wakkerstroom and eSizameleni are situated in Mpumalanga on the border of KwaZulu-Natal in the Highveld, twenty-seven kilometres east of Volksrust. Grassland and wetland form the biomes of the area. The wetland, which is fed by the Utakha River, is approximately one kilometre wide, ten kilometres long and four meters deep. The wetland attracts large numbers of water and land birds as well as mammals such as otters, plus reptiles and amphibians. The wetland, or vlei, is a huge tourist attraction in that it is an internationally recognized birding destination and there are six bird species endemic to the area. It is a protected breeding ground for the crowned crane, while migratory birds such as the amur falcon and white stork can be seen in the summer months.

Approximately three hundred people live in the village of Wakkerstroom, and 3000 in eSizameleni. The demographics of the area are diverse, as is the case in most rural parts of South Africa and there is a marked disparity between the incomes of people in the village and the township. The predominant languages spoken in the area are isiZulu followed by Afrikaans and then English. Indian, Pakistani and Bangladeshi shop owners make up a small portion of residents, some having been resident for generations and others transitory.

eSizameleni can be described as a typical township in rural South Africa with houses that are mostly Reconstruction and Development (RDP) homes. Unemployment sits at approximately sixty percent. Although this is the ‘official’ estimate the true level of unemployment is conceivably higher. The incidence of teenage pregnancy is high as is the level of HIV infection. Statistics on these are difficult to obtain as there remains a level of secrecy around these social issues. However, information can be ‘unofficially’ obtained through the clinics and the hospitals in Wakkerstroom and Volksrust.

Some families grow vegetable gardens on their properties and some families plant more extensive gardens on the outskirts of the village. Here the focus is on mealies and pumpkins. Residents keep cattle, goats, sheep, chickens and pigs.

An informal settlement lies adjacent to eSizameleni. Here houses are made of mud bricks, wattle and daub or corrugated iron. There is one tap that services a community of approximately fifty homes. The settlement extends up a mountain where there is no access to water except for a stream that runs between the houses on the mountain while those that are on the lower lying areas are serviced by the tap. There is thus also no sewerage system in these areas, and nor is there waste collection.

Many bed and breakfast and self-catering establishments in Wakkerstroom, plus eateries, shops and bars, provide employment, as does the local retirement village. The natural heritage, specifically the wetland, is a huge draw card which provides revenue from tourism and supports most of the people in employment. Festivals and events throughout the year bring in extra revenue, and this is also why it is vitally important that the wetland and the village are taken care of properly. Without the attraction of the natural heritage of this area the only revenue would be from the local farmers, which is not enough to sustain a rural area with unemployment already too high.

1.4 Projects in which the researcher and the local community are engaged

As background to the doctoral research, I outline my involvement in a number of community projects and events before turning to the aims, research questions and rationale for the study. Since many of the residents of Wakkerstroom are retirees, there is much scope for voluntary work that feeds the various interests of the residents and at the same time benefits the village and these have a bearing on the study in the relationship-building they afforded.

1.4.1 Wakkerstroom Animal Group

My interest in litter and informal dumping that occurs in the area began when I started working for a volunteer organization called WAG (Wakkerstroom Animal Group). The purpose of WAG is to take care of the animals in the township, in the village and in outlying areas, most specifically dogs. From the onset of my time with WAG I was astonished by the level of litter in the township and the conditions in which people were living, litter in the gardens, on the roads and pavements, and in

areas informally earmarked for dumping that have become areas of disease, especially in the rainy months. This situation existed despite the municipality's provision for household waste to be removed once a week. Questions began to arise as to why people drop litter in the first place, why people dump waste when it is efficiently collected and why people appear content to live in an environment where toxic waste is found in yards where children play and livestock forage for food. These questions were informally put to a number of local people in the area who had been living there for some time. Most answers were short and of a racist nature, if asked of a white person, and vague and non-committal if asked of a black person.

My work with WAG enabled me to develop relationships with many residents of eSizameleni and Wakkerstroom, including children. Insight into the demographic layout of the township from geographical mapping to socio-economic levels of families, and the identification of possible assistance from residents, was invaluable.

1.4.2 The Wakkerstroom Natural Heritage Association

The Wakkerstroom Natural Heritage Association, or WNHA, is a voluntary organization that serves to take care of the natural environment in and around Wakkerstroom. During the wet season, where flooding is a common occurrence, there is much waste in the form of litter and raw sewage that runs into the wetland from eSizameleni. This chokes waterways and has a negative impact on the fauna and flora in the area, besides being an eyesore. My portfolio on this committee is that of litter monitor, which I volunteered for in early 2016. Various aspects of the work I do on this committee are designed to reach the various sectors of the society that make up the broader community as a whole. It was felt that different approaches were needed for each specific demographic group since there is so much diversity that exists in this area. These were broken down into: adults in eSizameleni, children in eSizameleni and Wakkerstroom, and adults in Wakkerstroom and surrounding farms. In some of the activities there is overlap and this serves to reinforce messages that it is hoped will be absorbed in the course of ongoing projects.

It was sometime during this preliminary work that I began to plan a project using the arts to raise awareness in young children in the village, with specific focus on littering and informal dumping. It was from this that I decided to apply for inclusion into the PhD programme attached to Drama for Life, Wits University. An entry in

my research journal on 15th March 2016 indicates an interest in conducting a study in environmental awareness, as follows:

What about a PhD on litter in the township? What tools do I have? What outcome do I want/expect? How do I go about doing this? Why is there so much dumping and litter in eSizameleni? Why don't people make use of municipal pick up – especially since there is regular pick up? How do we change attitudes without imposing the usual top down white supremacist authority as is historical in SA?

On 29th March of the same year, there is an entry referring to a research study I completed as part of the requirements for an honours degree:

I have gone back to my original study when I did my honours degree, which was on environmental awareness in street children in Hillbrow. It's was most interesting to me that the children had a surprisingly broad knowledge of environmental issues. Many of them spoke about how they'd helped to build compost heaps or pits at home, and also how they ensured that there was no litter in their areas because livestock would eat it and it could be harmful. Yet despite this none of this applies to the people living here, where livestock forages in piles of rotting garbage. How could the street kids have made this up? It was information that was volunteered. So it was even more of a surprise to find exactly the opposite when I arrived in Wakkerstroom.

From interviews with teachers in local schools it has emerged that the children in the village do have a good understanding of the hazards of waste in informal dumps, and have been taught in school that littering is bad environmental practice. This dichotomy between what was apparently taught and observed behaviour was to become the focus of the study. The research study began formally in 2018 once ethics clearance had been granted.

1.4.3 Festivals

There are a number of festivals that occur on an annual basis in the village that afforded both the development of relationships across socio-cultural divides as well as opportunities to add to the work with the children in this study. My work at all these festivals is on a voluntary basis.

1.4.3.1 Wakkerstroom Music Festival

This is a classical music festival that has taken place annually for the past eleven years and sponsors a number of community endeavours as outreach programmes

funded through the WMF Community Upliftment Programme. There are three marimba bands that are in effect and these are run by community members from eSizameleni, Wakkerstroom and Village Primary School in Volksrust. In addition, learners who show enthusiasm for learning musical instruments, such as the piano, are provided with a teacher, and logistics and payment are facilitated by the festival committee. Young people from the local community are being employed to assist with the technical aspects of the festival and some of these have been sent to the National Arts Festival (NAF) in Makhanda, as part of a collaboration between the WMF and the NAF upliftment programs.

I sit on the planning committee for this festival where I hold the position of technical coordinator and health and safety officer. This has afforded many opportunities to develop relationships with a diverse cross-section of the community. As part of my responsibilities for the preparation of the festival, as health and safety officer I work closely with municipal officials in planning the event and meet with the police and service providers on an on-going basis. This has meant that relationships with these gate-keepers were made prior to the research project.

1.4.3.2 Art and Craft Ramble

The Art and Craft Ramble falls on the weekend closest to June 16th, the Youth Day public holiday. Resident artists have the opportunity to open their homes and/or studios for passing trade and viewing. Many other venues are made available for exhibition purposes, and workshops are held over the weekend. An art competition is held in alignment with an annual theme and prizes are awarded on the basis of votes by viewers. The competition has two categories, adults and children, with the children's category divided into sections on the basis of age. The art competition provides a platform to encourage children from eSizameleni, Wakkerstroom and Volksrust to submit artworks, and provided research participants with an opportunity to engage with this activity.

1.4.3.3 Fairs and markets

Various other fairs and markets are held during the year, such as the Heritage Day, Easter and Christmas fairs. These run over one day each and dates are set according to school holidays and the days on which these cultural celebrations fall. The Biobash is an environmental event which invites participants to attend frogging evenings, rock flipping events (turning rocks over to find reptiles), setting of camera traps, birding and birding excursions.

The Vlei Fees is a church fundraiser organized by the NG Church on a yearly basis. Individuals and organizations are encouraged to have stalls as part of this event. For this event I assist with the WAG and WNHA stalls, with other members of these organizations. In this way awareness is raised on environmental and social issues in the village.

Although events and festivals occur throughout the year, it would seem that awareness of these events is limited mainly to members of the white community in the area. This may be due to the heritage of apartheid. However, my contribution to these village events has given me the opportunity to develop good relationships with people from all walks of life here, and this has been invaluable in planning and implementing this research project.

1.5 South Africa and the environment

The stance that South Africa has taken on the environment with regards to legislation, implementation and monitoring of legislation, and school curricula, is discussed in depth in Chapter Four of this thesis, which covers the reconnaissance phase of the action research. However, it does merit a brief mention here.

As will be seen in Chapter Four, there is extensive environmental legislation built into South African governance. The South African Constitution states that:

Section 24 of South Africa's Constitution is dedicated to the environment. ... All persons residing in South Africa have "a right to an environment that isn't harmful to their health or well-being" as well as a right to have the environment protected for current and future generations. Mar 1, 2016

Further, environmental education is built into South African school curricula thus children are exposed to issues that include global warming, environmental destruction, and the hazards of poor environmental behaviour from as early as grade four.

Through a literature review it would seem that in South Africa any attempts to make a contribution in this field are done by Non-Government Organisations (NGOs). Day and Monroe mention this gap between knowledge, attitude and behaviour, thus:

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 (2000, p.3)

In Mind the Gap: Why do people act environmentally and what are the barriers to pro-environmental behaviour, a publication by Kollmus and Agyman, documenting

extensive research conducted in the field of environmental behaviour, it is stated that “[r]esearch showed that in most cases, increases in knowledge and awareness did not lead to pro-environmental behaviour” (2002 p.241). Elaborating on this, they state that:

The oldest and simplest models of pro-environmental behaviour were based on a linear progression of environmental knowledge leading to environmental awareness and concern (environmental attitudes), which in turn was thought to lead to pro-environmental behaviour. These rationalist models assumed that educating people about environmental issues would automatically result in more pro-environmental behaviour... (p.241).

With all of this in mind, the question that becomes glaringly obvious is, why then is there so much littering, dumping and disrespect for the natural environment in this country and specifically in Wakkerstroom and eSizamaleni? Clearly there is a gap between what is known, what is promised by the government and what is enforced, and the behaviour of South Africa’s citizens. It is this gap in this rural village and township in Mpumalanga that this study hoped to address.

1.6 The aims, research question and rationale for the study

Over the years since my undergraduate study, environmental destruction has become exponentially worse, and is impossible to avoid. In my response to Dr Goodall’s question, and understanding that I am unable to make a substantial difference regarding environmental destruction, it is the small difference that I thought I could make that provided the rationale for this study. In a South African publication edited by Robert Zipplies, we read that:

Our planet is on a high-speed track to devastation, fueled by massive over-consumption, unsustainable development, poor governance, and obscene social, environmental and economic inequality. In South Africa, we see a microcosm of this planetary scenario, as the race for personal wealth and materialism by the elite few rapidly grows (2008 p.37).

How then, if the problem is so vast, can we halt this devastation? In solving these problems, the same publication suggests that “[t]he solution to unsustainable management of the Earth demands a move beyond both “business-as-usual” and “politics-as-usual” (p.38). I would add also Dr Goodall’s tenet of one person, or one small effort, at a time. By looking at deep ecology theory that recognises the driving forces of environmental destruction as being exactly those mentioned in the reference above, and then further to this, eco-feminism, which recognises the exclusion of women in environmental issues, I have positioned this study in the

micro-environment of Wakkerstroom. As much as I was aware that it was unlikely that a big difference would be perceived in environmental behaviour within the scope of this study, no action would definitely mean no difference at all.

This action research study focussed on primary school children because, as Roger A. Hart has stated:

We need children to become highly reflective, even critical, participants in environmental issues in their own communities (1997 p.5).

Therefore, the children needed to be shown how environmental destruction has an impact locally, taking information from the pages of text books and bringing it into the reality of daily life. Zipplies and Hart agree that this generation needs to save the problems of environmental destruction, and that children need to be nurtured with the ability to manage the problem. We need to ensure that our children have a solid understanding of these issues and grow into adulthood as sound custodians of the planet and the natural environment, with functioning structures in place to enable this. Clearly this gap between awareness, education and sound environmental behaviour is a global problem.

As a visual artist and puppeteer myself, it made sense to use the arts in these endeavours, and this became a fundamental rationale behind the study. I subsequently positioned myself as researcher/coordinator and also as an individual who remains in the field on a long-term basis.

More specifically, the main question and the subsidiary questions are as follows:

- Could this study contribute meaningfully to the intersection of applied arts and environmental studies, with a specific focus on bridging the gap between awareness and action in young rural children?
- What contribution could applied arts make to the development of sustained environmental good practice in relation to the management of litter?
- Could the applied arts programme designed for Wakkerstroom/eSizameleni be a model that could be applied in other parts of the country?

The rationale behind these questions is that there I believed that the arts could be the means to this end, that other projects in the past, in this village, had failed to do. Importantly too, very few projects of this specific nature existed in South Africa, and

a sustainable programme was needed that was based on South African circumstances and needs, and specifically suited to the needs of the research site.

In addition to the rationale presented above, I find it relevant to mention an arts-based intervention that has raised social awareness. This is the work of artist Benjamin von Wong, who demonstrates the impact that the arts can have in raising environmental awareness. In his website he refers to himself as "...an artist focused on amplifying positive impact" and his "...mission is to make positive impact unforgettable" (www.vonwong.com, accessed 02.01.2020).

Von Wong enlists the community's assistance in collecting waste which he uses to construct massive installations. These installations then provide further opportunity in the form of photographic representation which is accessible to a broader viewership. Contributors from the various communities he works with are actively involved in making the work, and the final products open extensive conversations. Furthermore, through social media, images of the work go viral, which means the messages do so as well. He said, in an interview with Jacobsen for *Orion*, entitled *A Wave of Plastic*, that:

In the social media era, the world has become saturated with images, and the only way to get people to pause in their scrolling activities is to completely draw them out of their element (2019 no pg. num.).



Figure 1.1 work in progress for *A Wave of Plastic*



Figure 1.2 *A Wave of Plastic*

Figure 1.1 shows how an installation was constructed, using 168 000 straws collected by the Vietnamese public, while Figure 1.2 is a photographic representation of the finished piece, titled *A Wave of Plastic*.

This example of an arts-based intervention that was used to raise environmental awareness provided encouragement for me to use the arts in my small study with the children of Wakkerstroom and eSizameleni.

1.7 An outline of the chapters to follow

Chapter Two is a composite review of theory, key concepts and empirical studies which have informed the study from its conceptualization to its completion, and includes the literature review.

Chapter Three focuses on the overall design of an action research study, the research site(s), the research participants, the data collection process, the instruments used and the approach taken to data analysis.

Chapter Four provides background information collected during the reconnaissance phase of this study as the precursor to action research.

Chapters Five, Six and Seven present an overview of interventions conducted during the course of the study, which comprise cycles One, Two and Three. These chapters indicate the learning gained from the respective cycles, which then informs the planning for the subsequent cycle. Chapter Seven includes a critical analysis of all findings.

Chapter Eight concludes the study, with reflections on what has been learned and recommendations arising from it.

1.8 Conclusion

This chapter has provided a succinct overview of the research site and the rationale that has been the driving force in this doctoral study. To end this chapter, I find the following statement poignant in the light of the discussion above: ... “getting people to care and make the environment a real, practical priority – that is a cultural matter, and a desperately urgent one if we take these warnings seriously” (Greg Garrard, ed. 2014 p.366).



Chapter Two: Theoretical Framework and Literature Review

2.1 Mapping the chapter

The design and implementation of the action research project introduced in Chapter One were informed by theory in three different, but inter-connected, domains: (i) environmental theory; (ii) community development and social change theory, including gender development theory; (iii) environmental behavioural theory; and (iii) applied arts, within social change theory.

Theories that inform environmental conservation and the reasons for their inclusion in this study are the starting point of this chapter. Since action research is concerned with ‘improvement and involvement’ (Kemmis and McTaggart, 1986), discussion of some community development and social change theories follows, specifically in relation to eco-feminism. Environmental behaviour theory is looked at for insight into the underlying reasons for poor environmental behaviour. As the arts have been chosen as a vehicle for introducing behavioural changes, applied arts and social change theory is discussed in the final part of the chapter

2.2 Environmental theory

As early as 1997, Heron and Reason stated that:

There is an urgent need to revision our view of ourselves as cohabitants of the planet. As many of us have asserted, with greater or lesser degrees of concern, the current Western worldview has come to the end of its useful life, and, as well as some remarkable achievements in material well-being and human possibility, has left us with a legacy of human alienation and ecological devastation (p.291).

It is the view of many environmentalists, including myself, that loss of connectivity between the natural and human worlds is a major factor in driving the planet towards possible permanent destruction. This loss of connectivity is what underpins the environmental theory that has come to be termed deep ecology. If humanity were to re-establish this connection between the natural and human worlds it is possible that environmental degradation could be limited. However, deep ecologists have been criticized for failing to pay attention to some of the key factors responsible for environmental degradation, some of which are addressed by eco-feminist theory. Eco-feminism is important for this study because of its concern with protection and enhancement of the environment in both urban and rural contexts.

2.3 Eco-feminism

Eco-feminism is but one offshoot from the broader feminist movement, and it shares many of the principles of deep ecology. It is though, an extension of deep ecology, in that it fills an important gap that proponents of eco-feminists criticise deep ecologists for. Before examining the tenets of eco-feminism, the basic principles of deep ecology, and the flaws that eco-feminists are critical of, is examined.

Critique of monotheistic doctrine is central to the theorising of deep ecologists who argue that the colonial powers used the biblical statement in Genesis, where God instructs Adam and Eve, thus: “be fruitful and increase in number; fill the earth and subdue it: rule over the fish of the sea and the birds of the air and over every living creature that moves on the ground” (Genesis, chapter 1, vs 28), as a mandate for taking from the planet whatever they wanted. Deep ecologists claim that such exploitation has been the driving force behind environmental degradation ever since. Concern for the lack of acknowledgement of the value of indigenous knowledge systems is also central to deep ecologists’ critique of the behaviours of those who exploit the natural environment for profit. Throughout the world, such exploitation and environmental degradation has contributed to the disparity between rich and poor, with the poor bearing the brunt of this degradation but also aspiring to what the rich have, no matter the cost to the natural environment. Such economic disparities are apparent in the research site chosen for this study, in that the residents of eSizameleni, who live marginalized existences, also live close to the more affluent residents of Wakkerstroom.

Many consider that Rachel Carson’s *Silent Spring* (1962) was the precursor to the deep ecology movement (Drengson, Devall and Schroll, 2011 p.102), but it was the Norwegian philosopher, Arne Naes, who first coined the phrase ‘deep ecology’, and

this was a reaction to what he also referred to as shallow ecology. Shallow ecology, while concerned with pollution and the depletion of natural resources, ignored the fractured values of humanity that are causes of this. The deep ecology of Naes then took into consideration these values and questioned the driving forces behind mainstream practices into account (Drengson et al, p.103).

Deep ecologists are critical of the human/nature dualism and endeavour to reunite the two in order to create a balance, seeing the natural world as not apart from, but rather as a part of, human existence. According to deep ecologists, it is Judeo-Christian anthropocentric world-views that have justified human dominance over nature (Braidotti et al, 1995 p.50). Within such world views, “Humans are correspondingly ranked on a scale from primitive to modern, based on their apparent ‘distance’ from nature” (Trexler, 2014 p.213). In their critique of dualist world views Lehtonen et al are of the opinion that this dualism is no longer acceptable, and that overconsumption is the result of this, and that the superiority complex within humanity is illusionary (2019 p.373). This, they claim, is compounded by “[a]dvertising, globalisation and digitalisation”, which expands this dualism (p.345). Deep ecologists reject this ‘reductionism’ and ‘dualism’ that drove the scientific and industrial revolutions of the seventeenth, eighteenth and nineteenth centuries, that provided scientists with a paradigm that continued to frame the work of some of them into the twentieth century. Randle argues that reductionism and dualism “were so strong that holism – the assumption that we must treat people and our physical world, as organic wholes, with non-physical matters being important – has had to struggle ever since” (1999 p.20).

It is humanity’s lack of awareness of the richness in the diversity of all planetary life that deep ecologists are critical of, stressing that only basic needs need be satisfied in the use of natural resources. This, rather than the wanton taking of resources beyond what is absolutely necessary. Deep ecologists call for an adjustment of attitude to consider the difference between use and dominance of nature. Included in this is a shift away from the dominance of some sectors of humanity by others (Braidotti et al, 1995 p.159).

Putting it in other words, the artist and teacher van Boeckel has observed that:

[t]he use of the word nature somehow suggests that we can step out of it and look at it from a distance. In that respect it is remarkable that in many indigenous cultures there is no rigid separation between the world of human persons and that of non-human agencies and entities (2013 p.63).

This statement refers to another of the tenets of deep ecology, in that while deep ecologists call for the reuniting of the human and natural worlds, they also call for a return to indigenous knowledge systems. However, their critics claim that they have failed to fully consider divisions *within* the human world that have a fundamental impact on the natural environment. For example, deep ecologists have been criticized for ignoring the patriarchal systems that continue to drive the fractured relationship between humans and nature, and specifically the position and interests of women in environmental reforms (Braidotti et al, 1995 p.171). This is poignantly visible in the chosen research site, in that for the most part, women bear the load of generating income, sourcing fuel for cooking and raising children, while men are still the decision makers.

According to their critics, such as Stevens, Tait and Varney (2018), who refer to the struggle that the United Nations has in trying to deal with carbon reduction within differing member states, the power imbalance that still exists between developing and industrialised cultures is also ignored by some deep ecologists. For example, many development projects are instituted by wealthier, and presumably philanthropic, agencies who fail to acknowledge or draw on indigenous knowledge, or even to consider the actual (as opposed to perceived) needs of those they propose to assist. Meade, Shaw and Banks (eds.) claim that despite the philanthropic nature of these programmes, many people are coerced into adhering to them, where their positions within society are not considered (2016 p.11). This limitation of some well-intentioned development projects is discussed in more depth in Chapter Four, the reconnaissance phase of the study, since a number of projects implemented by various organizations and individuals at the research site had few, if any, positive outcomes.

While the value of the contribution of deep ecology theory for understanding the interdependence of the human and natural worlds is acknowledged, it is the extensions to this theory proposed by eco-feminists that are of central importance for this study. Some years ago, in a conversation with an environmentalist who travels a great deal, I was told that “The moment I get off a plane and I see huge piles of litter everywhere when visiting a new country, I already know that the women, children and animals suffer abuse” (personal communication, February 2016). Given the centrality to this study of children and women, this observation is deeply troubling. In an article for *National Geographic*, Paul Salopek, currently in his seventh year of a walk retracing the steps of humans as they moved out of Africa

and crossed into the rest of the world, raises a question about the most common injustice encountered during his travels and then answers it as follows:

What is the most common injustice seen on a walk around the world? Not the suppression of ethnic minorities. Not intolerance rooted in religion. No: It is the exclusion of women from humanity's ledger of rewards and opportunities. No society is completely immune. Half of the well over seven billion *Homo sapiens* alive today are denied equal access to political power, made to work harder, and compensated less – because they have two X chromosomes (2020 p.89).

Salopek, who has intimate and personal experience of the many cultures he encountered during his travels, claims that the marginalisation of women is evident in all societies, to a greater or lesser extent. As will be described later in the study, the unequal status of women and men is evident in eSizamaleni-Wakkerstroom.

Abouzeid (2020) claims that even in 'gender-neutral, merit-based political systems' equal entry does not guarantee equality of influence and decision-making: "Overcoming barriers to political entry is one challenge. What women can – and can't – do once in power is another" (p. 121). At various times during the cycles of research undertaken for this study my interactions with local council employees led to the observation that while many women were employed in council positions, they were largely hindered in their work by their male counterparts and supervisors.

For eco-feminists the failure of some deep ecologists to focus on the role of patriarchy in many traditional cultures, tribal societies and non-Western religions is problematic (Braidotti et al, 1995 p.155). As Capra explains,

[e]co-feminists see the patriarchal domination of women by men as the prototype of all domination and exploitation in the various hierarchical, militaristic, capitalistic, and industrial forms. They point out that the exploitation of nature, in particular, has gone hand in hand with that of women, who have been identified with nature throughout the ages (1997 p.8).

Capra further reminds us that patriarchal values, such as "competition, expansion, domination" (1997 p.10), result in rewards and access to power. Block takes a similar position, claiming that entitlement (What's in it for me?) is the outcome of a patriarchal culture and that the costs of such entitlement include 'an escape from accountability', softness on commitments and lack of authentic citizenship (2009 p70). With reference to the observation above regarding women in local council positions, it is conceivably this escape from accountability on the part of male workers that prevented these women from working efficiently, with negative consequences for both the eSizamaleni- Wakkerstroom community and for the research project.

In *Ecofeminist Pedagogy: Framework for Ecosocial Justice in Education*, Harvester (2009), places ecofeminist theory in a pedagogical context, which is relevant to this study. Warren (2000), states “that the domination of women, human Others, and nonhuman nature are interconnected, are wrong, and ought to be eliminated” (in Harvester 2000 p.2, upper case O in the original). Central to such ‘elimination’ would be a change from the dominant model of education *about* the environment to a model of education *in, through* and *for* the environment (Harvester p.8, italics original), a model that the action research project at the heart of this study has attempted to use. In Austin’s words, ecofeminists should take nothing for granted because “the things we take for granted are usually those that were constructed from the most powerful view in the culture and that is not the point of view of women” (Austin, 1990 no p.n).

The quotation from Austin suggests that ‘women’ have a single point of view. Many feminists are critical of any eco-feminist writing that ignores race and class differences and that presents a white, Christian, wealthy, albeit a woman’s, world view. These critics ask where the voices of women of colour are to be found, or of those who live in poverty, stating that it is the mainstream voice that is heard. As Abouzeid notes “there are questions of which women gain access to the halls of power and how representative they are of others - questions that several countries, such as New Zealand and Afghanistan, are grappling with” (p. 121). It is thus important for ecofeminists to take into account issues of ‘race’ and class (Braidotti et al, 1995, p.162, quotation marks in the original), particularly in countries in which there is a high degree of inequality, as is the case in South Africa, and most of all in rural communities. Since I am a white, advantaged woman, working with marginalized people in post-apartheid South Africa, I needed to take this criticism of eco-feminist positions very seriously and throughout the research project asked questions such as who was I representing, and how. Was my voice dominant, or was I enabling all voices to be heard as equally as possible?

Eco-feminism sits at the heart of this study, specifically since the research aimed to bring about the social change that Harvester (2009), refers to. Often social change endeavours face issues of suffering within the marginalised sectors of society, specifically women and children of society, linking too to the suffering of the environment (p.24). The inter-related theories of deep ecology and eco-feminism have each informed both the design of this study and the analysis of data collected during the reconnaissance phase and in each of the action research cycles. In the

words of Braidotti et al “[t]o realise the transformative potential of both ecofeminism and deep ecology their mutual links should be stressed” (1997 pg.167).

Deep ecologists call for equality between power-based and marginalized and indigenous knowledges. Eco-feminists though, criticize this call, claiming that the subjugation of women has been ignored, and that this is dire, since women live closest to the natural environment. Theory such as this, along with individual voices such as Greta Thurnburg’s and those of entities such as Green Peace, are still lost in the perpetuated greed of those who have, and those who have not, in order to have as much as possible. And where are voices of marginalised women in eco-feminist theory? Hopefully I can make a small dent in all of this, through my small study. (journal, 19th July 2019)

Eco-feminism is important to my study in that it follows the basic principles of deep ecology theory that seek to alter environmental perceptions, but that it also takes into consideration the marginalised voices that deep ecologists fail to recognise. Further to this, eco-feminism has an element of social change in its theory.

In an extension to this then, social change and community development achieved through environmental behavioural changes, is a central aim of the research. Thus social change and community development theory needed to be taken into account.

2.4 Social change and community development theory

Theories and practices in the field of community development (and by extension social change), have been framed by a vision of a just and sustainable world, a commitment to social and environmental justice and an ideology of equality. The critical consciousness of social change practitioners engaged in practical projects and collective action in local contexts, is informed by theories of power (empowerment and disempowerment) (Ledwith, 2016). In addition to Ledwith three other important theorists of social change and community development are Hart (1999), Roseland (2000) and Sen (2000). Hart and Roseland both focus on development and the environment, with Hart particularly interested in children and the environment. Hart’s theory has been relevant for this study despite having been developed in contexts different from those pertaining to rural communities in South Africa and despite being somewhat outdated.

For each of these theorists, sustainability is a central concept. Ndombi, Ndunge and Mulwa (2020), provide the following definition of sustainability:

Chofreh, Goni, Shaharoun and Ismail (2015) define sustainability as endurance of process and system, Bond et al (2014) simply referred to sustainability as long term programme continuation following implementation and or simply the maintained practice past the implementation phase. From Oina et al (2015) it can be deduced that sustainability refers to the degree of project persistence despite the withdrawal of donors (p.404).

Although they continue by stating that there is no “universal definition of [the] term sustainability” (p.406), they refer to Perini and Tencati (2006) as having combined an extensive list of authors to come up with one suggestion, namely that sustainability of any community-based project needs the ability to towards continue indefinitely, and at the same time “... taking into consideration the economic, social, and environmental dimensions of a project” (p.406). And this concurs with Roseland (2000 p.74), who argues that sustainable community development should integrate environmental, economic and social objectives. He writes extensively on the concepts of natural capital and social capital, which refer respectively to resources that include the natural environment and to the knowledge and connections that communities ‘own’. These are important concepts to consider when engaging in development work.

I agree with Miruri (2015), who is of the opinion that sustainable community projects should have at their core, approaches that are conventional, but should include a view of the long-term. He also refers to Webster (2010), who adds that resource use over time should do no damage.

Sen writes in the introduction to *Development as Freedom* that:

[f]ocusing on human freedoms contrasts with narrower views of development, such as identifying development with the growth of gross national product, or with the rise in personal incomes, or with industrialization, or with technological advance, or with social modernization” (2000 p.2).

These recommendations point to the need for community development programmes and projects to start small with ‘buy-in’ from local stakeholders, and this encourages me in that this aligned to the call for local inclusion by environmental theorists. Block makes a case for “asset-based community development” claiming that “if we want to make communities stronger we should study their assets, resources and talents” (2009 p.13). Block’s ideas informed the design and implementation of this research project which has attempted to take into account the needs, skills and knowledge of the local community, of all demographic backgrounds. Not only this, but the importance of continued work in this field after the completion of the doctoral

study cannot be overemphasized. This is why I have attempted to follow Block's advice, where a difference can be made by viewing theory that is broad, but at the same time is basic enough to be accessible to all who strive to make a difference, and at the same time including all aspects of the community to concretise ideas into simple acts (p.4). Again, inclusivity is an important aspect of the planning and implementation of this research study. Further to this, the ways in which children have potential to contribute to any project cannot be ignored. Children have been involved in environmental work for thousands of years, by virtue of the contributions towards family support, especially in rural areas (Hart p.56). The research site indicates that this is no exception, where children herd animals and collect wood, for example. In an area of high unemployment, many rely heavily on the natural environment for fuel, grazing and crops, and I have often come across little boys as young as five, herding cows substantially bigger than themselves, and little girls carrying large bundles of wood on their heads. Hart calls for community-based sustainable development that includes the involvement of children, arguing that "[w]e need children to become highly reflective, even critical, participants in environmental issues in their own communities. We need them to think as well as act locally while also being aware of global issues" (1999 p.3). While limited in scope and duration, the study reported and discussed in this thesis has attempted to respond to Hart's call.

The lack of voice for the marginalised, including women and children, in some environmental discourses and theories of community development is a concern for a number of theorists (e.g. Braidotti et al, 1995) and thus it is important to consider the role of women in community development in general and in community development with an environmental focus in particular.

2.5 Gender and development theory

Day and Monroe state that "[p]olicymakers have long recognized that gender and environment are inextricably linked and that programmes and projects should formalise these connections" (2000 p.30). and Kolmus and Gyeman report that "demographic factors that have been found to influence environmental attitude and pro-environmental behaviour are gender and years of education" (2002, p.248). Gender and education are fundamental to eco-feminist theory, and certainly pertinent to this study, in that the role of these factors had conceivably not been considered in the implementation of previous projects, implemented by various NGOs and concerned individuals, in the eSizamaleni-Wakkerstroom area.

From studies undertaken in Nepal, Ethiopia and Cambodia, Robinson-Pant (2016) found that primary learning occurred in the home, in the form of informal learning, and that this mostly came from mothers. She states that “[i]nformal learning [differing from formal, or institutional learning and non-formal learning where the learner actively seeks to learn], results from daily life activities related to work, family or leisure” (p.13). Particularly with regards to this study, since it involves waste, Rodda’s (1991) observations are important. She notes that “[w]omen influence the entire family circle, and especially children, in their environmental perceptions, values and attitudes and in ethical considerations, as well as the use of natural resources, energy consumption, and in waste and recycling” (p.104). They are “the invisible managers and practitioners of the environment” (p.211) because they are the ones “who know the best trees for firewood, which plants have medicinal uses, where to find water in the dry season, and the best conditions for growing local crops” (ibid). Since many of the homes in eSizameleni are women-headed households or homes where women are the primary bread-winners, and since much of the time, despite this, male dominance remains, this notion of ‘invisibility’ as mentioned above, is pertinent. Importantly too, Rodda notes that “[t]he source of most of the domestic energy used in developing countries is provided by the burning of biomass and it is the women who are mainly responsible for its collection” (p.47). This is certainly the case in Wakkerstroom, where women and children have the burden of collecting fire wood or dung placed squarely on their shoulders.

Given the role that women play in their families and communities, the large claims made by the Kenya Water for Health Organization are understandable, if unlikely to be realised in practice:

It is common knowledge that as far as the environment is concerned, there is no better person to be informed or used than the woman. As in Education, if the woman is enlightened on the environmental issues, as goes with Health and Nutrition, then the whole Nation will be enlightened and consequently the whole world (no p.n, upper case letters in the original).

However, it would be of great benefit to our world if this claim could become a reality.

Finally, and with reference to community-based sustainable development, Rodda asks:

What, in any given situation, are the crucial factors which determine the possibilities for women to participate in the struggle in a meaningful way? What are their needs, motivations and constraints?

How can their knowledge and experience be taken into account, and how can they be involved in planning and decision-making? (1999, p.150).

I believe that if environmental good practice were to be the overarching consideration when posing these questions, the concerns of both deep ecologists and eco-feminists would be addressed. Therefore, this study has attempted to keep these questions in the foreground, particularly with reference to good environmental practices.

2.6 Environmental behaviour theory

Because of questions about why people behave in various ways with regard to the environment, and specifically because I had established the gap between knowledge and behaviour, I turned to environmental behaviour theory. Theories of environmental behaviour are not new, but much of the earlier theory has been discarded, attested to by the following statement: “The oldest and simplest models of pro-environmental behaviour were based in a linear progression of environmental knowledge leading to environmental awareness and concerns (environmental attitudes), which in turn was thought to lead to pro-environmental behaviour. These models from the early 1970s were soon proven to be wrong” (Kollmus & Agyeman, 2002, p.241).

Kollmus and Agyeman review the work of various theorists who have tried to explain the gap between environmental awareness and environmentally appropriate behaviour. They present possibilities offered by Rajecski (1982) for example, formal learning as opposed to direct experience, enculturation in the home, and attitudinal change over time (p.242). Coincidentally Day and Monroe the following questions:

One woman sorts household waste for recycling, the other throws it into a garbage container bound for a landfill. Why? Do non-recyclers need more information in order to recycle? Do they need a monetary incentive? Or do they simply not understand the link between trash and groundwater quality? Are recyclers motivated by the wisdom from feudal grandparents, or peer pressure from their neighbours? ... What real barriers stand in the way of people adopting this new [sound] behaviour? (2000, pp.7 & 13).

While inappropriate behaviour with regard to the environment is a widespread concern and there is extensive literature on this subject, there seems to be no definitive answer to the question of why people behave ‘well’ or ‘badly’, although there are many theories (Kollmus & Agyeman, 2002). It does seem, however, that many of the reasons put forward are as universal as the concerns that are raised, and many of them apply to South Africa.

Kollmus and Agyeman did a meta-analysis of 128 pro-environmental studies (2002, p.243), which showed that what I had been considering to be the problem all along was correct, in that knowledge and attitudes towards the natural environment did not automatically follow through with action.

With reference to this study, a question to be asked is: What direct benefit would halting informal dumping have for residents of Wakkerstroom and eSizamaleni? Day and Monroe (2000), suggest that one should “[a]void behaviours that are costly for target audiences. Cost may be measured in terms of time, money, and effort” (p.11). If this is considered in the research site, what time and effort may one expect a marginalized person to invest in the environment when basic needs are not being met? Clearly the reasons for ‘good’ or ‘bad’ environmental behaviour are complex, with many factors at play.

Since this study involves children, it is important to consider environmental behaviour with regard to youth. Hart suggests that “[w]e should feed children’s natural desire to have contact with nature’s diversity with free access to an area of limited size over an extended period of time, for it is only by knowing the intimate wonder of nature’s complexity in a particular place that one can fully appreciate the immense beauty of the planet as a whole” (p.18). In similar vein, Chawla (1998) argues that having an emotional connection to a natural environment is important for fostering children’s environmental awareness and concern. The ideas of Hart and Chawla present a considerable challenge to those seeking to encourage ‘good’ environmental practices when the site in which they are working with children and /or adults is already environmentally degraded, conceivably caused by those children and adults themselves. Indeed, I noticed that when I took the children into nature, their eyes were opened, but this was too late into the fieldwork to have had any major impact, and this is discussed further in Chapter Eight.

Environmental behaviour is clearly difficult to define. Timothy Morton, in a description of global warming as a ‘hyperobject’, in his 2013 publication *Hyperobjects; Philosophy and Ecology after the end of the world*, claims that global warming is so vast that it is almost impossible to experience, which he describes as a hyperobject. An example that he provides is that if one is standing in a rain shower, one might wonder why it is raining in winter when one lives in a summer rainfall area, and that even though this rainfall is caused by global warming, one does not feel global warming on one’s face as one feels rain on one’s face. Therefore, unless one is specifically and directly affected by global warming, as many living in the

high mountainous regions of Nepal and Pakistan are being affected by glacial shrinking, one cannot really feel compelled to make an effort to change individual, local or global behaviour. We can equate this with the woman mentioned in Chapter One who dumps diapers in waterways – the bigger picture, or hyperobject, cannot be seen.

In summation, this study has as a key objective, the changing of poor environmental behaviour specifically within a group of marginalised people. Social change theory has the capacity to illuminate my study within this environmental intervention, since it presents theory on changing behaviour, that at the same time is more often than not, aimed at the marginalised of society. These are conceivably the most in need of upliftment and development. Importantly as well, is that eco-feminist theory has a strong element of social change within its theoretical perspective.

Within the context of environmental degradation and poor environmental habits, the significance of social change theory lies in its ability to provide means of combining these tenets with environmental behaviour theory, in order to make the changes needed to adjust these behaviours. Since my intention was to change environmental behaviour within the context of social change theories, by extension, environmental behavioural theory has highlighted reasons people behave in the way that they do towards the environment. The following mind map provides a visual representation of the theories discussed, and shows how the study sits in the area where the theories overlap. It also shows how the chosen methodology, which is action research, is embedded into the theory.



Figure 2.1 Theoretical framework mind map

2.7 The arts and social change

For Block, “[t]heater, movies, song, literature and art are storytelling of the highest order. These are the mediums for building an individual sense of what it means to be a human. The arts are an essential part of the story of what it means to be a human being and a community” (2009 p. 35) Using the arts to promote social change is not a new idea. As early as the mid-nineteenth century the arts, and specifically plays, poetry and prose were used to comment on the social ills of the time in Britain and some of its colonies. One prominent example is *The Band of Hope*, an arts-based programme that began in Leeds in 1847, where children were trained in performance about social issues. As a result, children became a moral societal mirror via the arts. Using contemporary terminology, one could say that the movement went viral at the time, and it is clear that this is a good example of how the arts can be used to promote social awareness and social change. Hughes and Nicholson (2016) sum up some of the key achievements of *The Band of Hope* as “developing young people as critical agents, engaged in making tolerable worlds, characterized by self-respect and compassion for others” (p.52), and this concurs with what Hart states regarding the need to create critical young people. In the action research project undertaken for this study, one of the hoped-for outcomes of raising awareness of environmental issues and of action for environmental improvement, is that the children involved would emerge as reflective and compassionate adults.

According to Taylor (2003) the arts can be used to raise awareness of social issues, to bring home a message, to create a space for the message to reside, and to nurture growth on an ongoing basis. The arts are a familiar means of communication throughout the world and have been so for thousands of years. An example originating in Europe is the puppet show Punch and Judy with characters that provide social commentary that is still relevant today. (<https://wepa.unima.org/en/punch-and-judy/> accessed 08/11/2020). Jurkowski observes that “[s]ince the most ancient times, puppet theatre has been an illuminating source of metaphor, some of which illustrates the relationship between the Creator and His creation” (1988, p.2, capitals original).

Ancient rock art the world over attests to a connection between indigenous cultures and the spiritual world. The Trust for African Rock Art’s website states that “[s]hamans in hunter-gatherer societies created many, or even most, rock art images. Shamans acted, and some still act, as connective channels and mediums between the human and spirit worlds” (Trust for African Rock Art; <https://africanrockart.org/rock-art-in-africa/significance/> accessed 09/11/2020). The visual arts have also been used for social commentary, and to teach through images. In the past the focus was often on religion, but contemporary work deals with many other issues. Figure 2.1 illustrates an early Renaissance religious work and Figure 2.2 shows a contemporary anti-war painting.



Figure 2.2 *The Crucifixion* by Giotto



Figure 2.3 *Guernica* by Picasso; 1937

In my study, several art forms were included, within a multimodal approach, under the umbrella of applied drama. These included puppetry, visual arts, process drama, dance, music-making and drawing. With regard to drama and with reference to what she terms ‘applied performance’ Shaughnessy argues that it is not only the fact that performance is produced in educational and community contexts, but the fact that it has a social purpose (pedagogical/political/facilitatory) that distinguishes it from other types of performance (2015, p.32). According to Taylor, applied theatre performance is a ‘collaborative group art form’ (2003, p.30) which would enable spectators to become spect-actors who ‘consciously and deliberately reflect and act on the implications of their own and others’ actions’ (p.6). More recently Preston (2016) has suggested that active participation and ownership of cultural production are intrinsic to applied theatre – a form of theatre which can incorporate the full scope of drama practices and ideas, adapting them to suit the needs and interests of a particular group. Since the needs and interests of the group, as opposed to those of a facilitator or project implementer, for example, place the work on an equal footing with those involved, this would align itself with the call to action that the chosen environmental theory and social change theory articulate.

Further to this, and also with regard to the theory mentioned above, Etherton and Prentki (2006) argue that the arts have the ability to effect change, and more importantly, to effect change through a bottom-up approach, that is inclusive of all participants. They state that “[t]hrough imagination and creativity, thoroughness of analysis, and participatory methodologies, applied theatre practitioners can contribute significantly to making lasting social change” (p.154).

To end this section, and to refer again to van Boeckel:

Art activities offer a person unique, often non-cognitive ways of interpreting and signifying experiences in the world. They have a tendency to reach the sensory, perceptual, emotional, cognitive, symbolic and creative levels of human beings” (2013, p.67).

It is my opinion that these are feminine aspects of humanity which have the potential to make the changes that this study had as its goal. For all the reasons outlined in this section I argue that applied arts and a range of activities associated with introducing these art forms to children and adults could be a means for effecting social change and that applied arts are thus appropriate for this study.

2.8 Multimodality

My theoretical stance incorporates deep ecology, eco-feminism and social change theory which is enacted, methodologically, through cycles of action research, in which a multimodal approach is taken to a range of arts activities. In order to take a multimodal approach to the arts activities designed for each action research cycle, conceptualisations of multimodality have been drawn on. In *Multimodal Approaches to Research and Pedagogy. Recognition, Resources and Access*, Archer and Newfield state that “[m]ultimodal approaches have the potential to transcend, and embrace, multi-linguistic societies” (2014, p.4), and South African society is certainly multilingual. The authors also explain that “[a] multimodal approach to pedagogy recognizes that teaching and learning happen through a range of modes – image, writing, speech, gesture – and encourages pedagogic tasks that require multiple forms of representation” (p.1). This was the approach adopted for this study, in that it used drawing, puppetry, dance, play-making, poetry, music, performance and self-reflection. Jewitt, Bezemer and O’Halloran (2016) suggest that multimodality can be conceptualised and enacted in a range of ways:

Exactly how the concept is articulated and ‘operationalized’ varies widely, both across and within the different disciplines and research traditions in which the term is now commonly used. Therefore, it is very difficult and potentially problematic to talk about multimodality without making explicit one’s theoretical and methodological stance (2016, p.1, quotation marks original).

Specifically with regard to working with children, Harrop-Allin (2017), states that “[a] multimodal perspective enables insight into the complexity and richness of children’s integration of sound, gesture, language, movement, and visual design in storytelling” (p.27). Kress, in an interview with Lindstrand (2008), states that “[p]eople, whether 3 or 30 years old, are intelligent makers of representations through which they represent how they see the world, whether in the way they make sentences or in the way they shape meaning in other modes ...” (p.65).

Two proponents of multimodality are Susan Harrop-Allin and the late Pippa Stein, who provide accounts of work that they have done with children, and these are mentioned here. Stein (2008), did extensive work with primary school children in

the 1980s in Soweto, for example. Here she was concerned with the disparity between what was being taught in the classroom and what the children were experiencing in the streets and in their homes, since the political climate was fraught with violence and bloodshed under apartheid (p.4). The children were afraid to talk openly about what they were experiencing, as talking was dangerous, and therefore a safe space, which Stein refers to as “unpoliticised zones where children could explore and represent their worlds in playful, imaginative and uncensored ways that combined multiple discourses and modes of representation” (ibid.). Drawing too, was used as a tool to enable the children to communicate what they found frightening to articulate (p.6).

Another example that Stein provides shows the affordances that drawing from the participants’ intimate experiences can have with children. This was shown in 1994, through a process of story-telling with a group of grade seven children, who were encouraged to talk in their home languages, contrary to the authorities’ instructions. Within the safe space provided for them, over a period of a year, over one hundred stories were told, in eight South African languages, using not only speech, but also writing, image and multimodal performances. Of the process and the results Stein has this to say: “It was clear to me that the particular performance styles were deeply familiar, rooted in the children’s everyday lives and that these formed part of a broader histories of communicative practices integral to their social and cultural worlds beyond the classroom” (2008, p.9).

Harrop-Allin’s research in the field of multimodality, had a focus on music and children’s games. Her ethnographic research in primary schools, also in Soweto, aimed to reveal musicianship in children through their own multimodality (2017). Working with trainee teachers in three primary schools, she was concerned about the disparity between what was found in school curricula, specifically Arts and Culture, where music formed a small component, which teachers were ill-equipped to teach. She found that classroom teaching comprised written facts presented to the children (Small, 1998), with no live music, beyond perhaps simple repetition of cultural songs. In analysis of playground games, Harrop-Allin (2011), found that “[c]hildren’s use of rhythm, intonation, words and dance demonstrates their ability to work across expressive modes and use these modes for the purpose of playing a game” (p.5). From there, working with the trainee teachers, she aimed to identify aspects of the games that could be used in the classroom. Free play is mentioned further in this thesis, and thus importantly, another finding in Harrop-Allin’s study was that ...” a further reason why children’s musical games are particularly

important pedagogically ... is because they highlight how and why children learn through play” (p.6).

These empirical studies are relevant to this study in that they show how multimodality has been used affectively with working with children.

Importantly for the eco-feminist underpinnings of this study, Wall (2006) in Newman, states that “feminist research using multiple research techniques, has grown in reaction to the “male-oriented” perspective that has predominated in the development of social science” (Newman, 1994, p.72). In my opinion, the following statement succinctly sums up my research project:

In contrast to the dominant, objective, competitive, logical male point of view, feminist researchers “emphasize the subjective, empathetic, process-oriented, and inclusive sides of social life” (ibid).

As an environmentalist, visual artist and puppeteer myself, this research had its origins in my own experience and is process-oriented as will be explained in the next chapter.

2.9 Conclusion

This chapter has outlined the environmental theory of eco-feminism which, together with social change and community development theory, underpin a study which adopted a multimodal approach to the employment of applied arts in an action research project which aimed to initiate environmental behavioural change.

The research design is described and discussed in Chapter Three



Chapter 3 Research Methodology

3.1 Mapping the chapter

This chapter begins with an overview of the research paradigm within which the study is situated, which is followed by an outline of key tenets of action research, participatory research and applied arts. A description of the research site builds on the information provided in Chapter One and is followed by the process of selecting child and adult research participants. The range of research instruments used is outlined and is followed by a discussion of reflective practice, which played a central role in this project. The chapter concludes with an outline of the approach taken to data analysis and of the ethical considerations taken into account in the research.

3.2 Research paradigm

Given its focus on human interactions, this research is located within an interpretive research paradigm. In preference to large numbers of respondents, as one would find in a quantitative scientific enquiry, a relatively small group of children and adults were selected to participate in this qualitative study.

Padgett offers a succinct account of the value of a qualitative approach for some kinds of research: “[q]ualitative researchers housed in the liberal arts and sciences have greater freedom to be creative and to take intellectual risks whether they choose to or not” (2004, p.3). According to Higson-Smith and Sithole, when a researcher engages in a qualitative study s/he aims to investigate a problem from the

respondent's point of view: "...reality is interpreted from the respondent's frame of reference" (2018, p.16), and this is important to acknowledge with reference to development theory where a bottom-up approach is called for (Padgett, 2004 p.3).

Thus this small-scale study investigates whether a multi-modal arts-based intervention, which works towards credibility and triangulation is productive for changing attitudes and behaviours towards the local environment within one micro-environment in South Africa.

3.3 Action research

Action research was specifically chosen as methodology for this research for its reflective stance. This was important for me in that it provided the infrastructure within which to ensure that the core values of the research were adhered to. Leitch and Day ask the following pertinent questions: ...two fundamental questions arise: "How do I improve my practice? and "How do I live my values more fully?" " (2006, p. 85, inverted commas original).

Answering these questions ensured that the core values of the theoretical underpinnings chosen for this research project were adhered to. Extending this the authors continue by stating that: "The action inquiry is carried out through a variety of means including autobiography, dialogical conversations, fictional stories (Evans, 1994) reflective writing and journals (Holly, 1998)" (ibid), and, since this manner of inquiry is how I have worked from a very young age, it followed that I would continue to do so. The nature of action research providing the platform for pre-planning, action followed by reflection, re-planning and more reflection, enabled me to adhere to the structure of the notions of a deep and critical awareness that I found so appealing in the reading of the theories. This assisted in ensuring that the aims and values, as laid down from the outset of the study were adhered to, which is succinctly put thus: "... researchers become aware of the values that drive their work so that they may be clear about what they are doing and why" (ibid).

Bess et al (2018) state that Paulo Freire "believed that knowledge is created through people struggling, observing, analysing and arguing with each other about how to make the world a better place in which to live" (p.89). I suggest that this Freirean view of the process of knowledge creation describes much of what is central to action research. In this form of knowledge generation and community development, it is the on-going grappling with data that informs planning and fieldwork and the reflection on fieldwork which then informs further planning and action. Jean McNiff

refers to both the democratic orientation of action research and to action research for environmental good:

[a]ction research is universally acknowledged as about change, collaborative and democratic practices, and a commitment towards humans' and other entities' well-being, including animals and the living planet (2014, p.14).

This latter statement resonates with the broad underpinnings of environmental theory and practice discussed in Chapter Two. The centrality of a problem to be addressed through social change, is a common theme in the action research literature, which is outlined by both Marce (2007, p.126), and Small and Uttal (2005, p.124).

I deemed this approach to research appropriate for my study too, because it enabled investigation of the successes and limitations of previous change projects in the area (a reconnaissance phase) followed by cycles of planning, acting, collecting data and reflecting on this data as advocated by the action research literature (e.g. Kemmis & McTaggart, 1988; McNiff, 2014).

The reflexivity within this method of inquiry is an aspect of action research that I value above all else, since it enables on-going revision of plans and practices and promotes a level of 'objectivity', as stressed by Leith and Day (2006, p.184).

3.4 Participatory and applied research

Gaventa (1993) in Sanoff (2000), describes participatory research thus:

Participatory research attempts to break down the distinction between the researcher and the researched ... In the process, research is seen not only as a process of creating knowledge, but simultaneously as education and development of consciousness, and the mobilization for action (p.63).

What Gaventa describes dovetails with the intention of this study in that it aimed not only to raise awareness of environmental issues within the children in the short term, but also to educate and mobilize children to take action towards a sustainable clean environment in the long term. Here the participation of the research group was fundamental in the planning of, and the reflection on, the interventions. Relevant to the pedagogic aspects of the study is the observation of Collins (1999): "An alternative approach to top-down education is one which encourages learners to participate in their own learning processes" (1999, p.7).

A participatory and bottom-up approach, with the inclusion of participants as far as possible in driving the project with the researcher, is aligned with the inclusivity that both deep ecology and eco-feminism call for. Within the structure of participatory

research, it was applied arts that formed the structure within which the study was based.

3.4.1 Applied arts

On the use of visual arts in research, Huss, Kaufman, Avgar and Shouker, advise the following:

...as visual methods rely less on language to communicate than the traditional interview or focus group, they can be used in cases where participants have limited literacy, or where there are language barriers between the research team and participant (Bagnoli, 2009) therefore ... visual, arts-based methods have the potential to minimize power imbalance between researcher and participant, thereby producing more culturally and context-sensitive information (2015, p.5).

This advice is relevant to this study in that there is a distinct power imbalance between the research participants and myself since it is situated in rural, post-apartheid South Africa, where imbalances remain in place. Additionally language issues are problematic in that we do not share a common first language. And finally, for child participants, there is the power imbalance between adult and child.

3.4.2 The role of applied theatre in informal education in South Africa

There are a number of performing arts companies and organizations in South Africa working in informal education, that have as their focus a range of social issues. Before offering a brief account of the work of some of these companies, I outline the role of applied theatre in this context, since this is, generally speaking, the methodological approach that these companies take.

South Africans still suffer the consequences of apartheid despite its demise more than two decades ago. There remains a patriarchal notion of the elite viewing the poor as less than, as uneducated and unable to take proper care of themselves, and in rural areas this perspective is most visible in the mistrust between black and white people. Sen (2000), and Swanepoel and de Beer (2006), refer to situations where poverty creates helplessness, with the danger of the elite then viewing poor people as being stupid.

For Taylor (2003), Conquergood (2002), and Shaunessy (2015) the benefits of applied theatre are many - community needs are the driving forces, within a bottom-up approach, it exists outside of mainstream theatre, has a level of activism, and involves the engagement of audience.

In this study there was no intention of making theatre with performance as the main objective and final outcome. While there were performances, these were the

culmination of work done with the children over a period of time, that resulted in opportunities to showcase the work to families and friends. The exception was the piece that was made specifically for the Wakkerstroom Water Weekend in 2020, during the first part of the final intervention. These performances did, however, afford some data collection opportunities, despite this not being the prime objective of the interventions. Therefore, the participatory element was the primary objective of the performances (Shaunessy, 2015, p.7).

There are a number of organizations in South Africa that use applied theatre in their work to educate, uplift, transform and provide a platform or voice to the voiceless.

Drama for Life (DfL) is an applied theatre division within the School of Arts at the University of the Witwatersrand and is the academic unit within which this study is located. The programme educates post-graduate students in arts-based methodology, and social issues that are dealt with include HIV/Aids, TB, gender issues and sexual health.

Wellworn Theatre Company is an applied theatre group that specifically focusses on environmental issues. Using song, dance and catchy phrases, this energetic group of play-makers appeals to children of all ages. Wellworn Theatre was brought to Wakkerstroom during the last cycle of this study, to perform their production *Galela*, which focusses on the importance of taking care of water resources. (<https://wellworn.org.za/> accessed 13/11/2020).

Jungle Theatre Company (JTC), highlight the value placed on South African cultural heritage and indigenous knowledge. The connectivity that JTC aims to create between these and the natural environment, are what deep ecologists aim for. Bringing visual arts into the mix, indicates a multimodal approach similar to the approach taken in this study. (<http://www.jungletheatre.co.za>; accessed 14/11/2020).

Another company that uses applied theatre in its work is Magnet Theatre, where all aspects of the arts are incorporated. These artists engage in extensive training of the youth in all art forms, as well as providing a platform for job creation. (<https://www.magnettheatre.co.za>; accessed 14/11/2020). Recognizing that there is a need to bring the arts out of mainstream education, Magnet Theatre takes the arts into rural areas.

One of the longest established companies in South Africa that aims to uplift and educate learners through the arts is arepp: Theatre for Life. Since 1987, this company

has used puppetry, dance, music and play-making to develop social skills within theatre productions. (<http://www.arrep.org.za> accessed 14/11/2020).

These are some of the companies in South Africa that are well versed in the methodologies of applied theatre. Other companies that also work within this framework are the Forgotten Angle Theatre Company in rural Mpumalanga, and Ubom! and First Physical, both situated in Makhanda. Other companies, such as Lunch Box Theatre, are issue-based, with some environmental concerns presented. These organizations and companies show how applied arts can be used as platforms for informal education, in advocacy and in upliftment of marginalized groups in South Africa.

Besides these groups and companies that work within informal education, it should be noted that relevant academic units are emerging in South African universities in response to some of the environmental challenges of our time. DfL now offers a Theatre and Ecology Masters degree. Academic programmes of study are also offered by the Stellenbosch Sustainability Institute, and the Arts Centre at the University of Johannesburg which is collaborating with the Department of Environmental Sciences. Further to this, scientists are increasingly turning to the arts in order to disseminate their findings to a broader ‘audience’, with the Kaalspruit River Project of the University of Johannesburg being one example of this outreach.

It is evident that applied theatre and the visual arts already play a role in informal education in South Africa, and that there are ‘pockets’ of people and organizations that are using the arts to raise environmental awareness.

3.5 Description of research participants and research site

There were two separate categories of research participants for this study: children and adults. In the initial planning phase of the research, adults were included for interviews and informal conversations only, with children being the sole participants in the arts-based interventions. This changed during the course of the fieldwork, where adults were then included in Cycles Two and Three. This section begins with an account of the selection of child participants, and followed by a description of adult participants.

3.5.1 Children

For Solberg (1996), “[s]everal factors need to be taken into account when designing an appropriate methodology [in researching with children]: the research question, age, gender and ethnicity of the children, the setting and context of the research”

(Solberg, 1996 in Mauthner, 1997, p.26). This was particularly the case for this study. Bess et al (2018) state that “[t]he quality of research ... is directly related to the sampling procedures, the adequacy of the technique chosen, as well as the professionalism of implementation and the appropriacy of the sample size” (p.178). One reason why adolescents were not considered as potential research participants is that it was not possible to engage with staff at the nearest high school. I also assumed that younger children would be more receptive to interventions than teenagers, and indeed, over the course of the study as the children grew into their teens and became less engaged, this proved to be a correct assumption. I was encouraged by Hart’s observations about a key difference between older children and adolescents, claiming that young children are outward-looking, while adolescents are more reserved (1999, p.28).

The research participants were selected from primary school children in eSizameleni between the ages of six and twelve. Fortuitously a working relationship between myself and a woman met through the Wakkerstroom Music Festival developed while child participants were being selected. Charity Nsibande, who has agreed to be named in this thesis, runs The Potters’ Place after school programme and was able to assist me in this. Selecting research participants from this programme also enabled me to develop relationships with parents with more ease than would have been likely if the children had come from homes where the parents or care-givers took little or no interest in the development of their children. Communication with parents was made through the database, and this enabled permission, letters of consent and notification of upcoming events. As Holmes (1998), has stated: “[a]cquiring permission to conduct fieldwork with children on school premises is an arduous and time-consuming task” (p.15), so I was therefore privileged to be able to circumvent challenges faced by many researchers who work with children.

My sampling began with criterion-based, or purposeful, sampling which, as Marce (2007) describes, “implies that you decide at the design stage of a study the typical characteristics of the participants to be included (criteria to be met) and the number of participants” (p.80, brackets original), which was followed by a ‘snowball sampling’ – or ‘chain referral sampling’. Here participants already enlisted into the programme ‘spread the word’ and enlisted others who might be interested and appropriate for the study (Bess et al, 2018, p.176).

Selection of children for the research project was based on a command of basic English and an indication of interest in participation. However, this command of

English was not necessarily a firm criterion for inclusion into the project because I had a bilingual research assistant who could assist in the overcoming of language barriers. Further snowball sampling occurred once the interventions began. Snowballing enabled eSizameleni children attending Village Primary and Volksrust Primary School also to join the group. This meant that the final group comprised a broader demographic in terms of socio-economic background, and that the resultant sample comprised children who were very enthusiastic about participating in the interventions.

All the children were isiZulu speakers and all black, except for three girls whose demographic classification was mixed race, and all had English as second language. Interventions were conducted in English with isiZulu translation where necessary. The initial sample group was made up of twenty-five children, but this number fluctuated somewhat during the course of the fieldwork, dropping to eleven and then rising to seventeen in the final interventions.

Another ‘side-effect’ of the assistance from Ms. Nsibande was that she permitted Ms. Garland, the director of the local branch of BirdLife SA, and myself to conduct environmental workshops on Thursday afternoons with the children of The Potters’ Place. The significance of this work was that I was able to reach more than just my research participants with interventions.

Considering that children were the core participants in this study, it was clear that learning and behavioural theory needed to be examined. As much as the work of Piaget, one of the earliest theorists of cognitive development in children, is now considered to have some limitations (e.g. Cohen, 2006), his description of stages of cognitive development is pertinent to this study in that the group of children consisted of various ages, and understanding their likely different levels of cognition was important for engaging with them during the interventions. Piaget viewed cognitive development as “a process of organization, the elements of which are individual operations” (Formanek et al, 1976, p.15). He defined an operation as an internalized action and classified cognitive development into four periods: the sensory-motor period (birth to about two years), pre-operational period (two to seven years), concrete operational period (seven to eleven years) and formal operational period (eleven years and upward) (ibid. p.12).

In terms of Piaget’s stages, the children in the study would be ‘classified’ as operating at either the concrete operational or the formal operational periods. There is a distinct difference in the cognitive abilities of these two groups, and this may

account for some of the differences in child participants' responses to the interventions. In the concrete operational period "[j]udgements of the child in the intuitive subperiod are frequently inconsistent since they lack underlying cognitive principles", whereas "[t]he child in the period of concrete operations is less egocentric and is capable of dealing with two variables at the same time" (ibid). As much as differences in cognitive level may have affected children's responses to the interventions, such differences were enabling for other aspects of learning to be achieved. The guidance and assistance of those children who, during the course of the study, reached adolescence, became most useful. A study by Roazzi and Bryant (1998) where older children were placed in a situation with younger children, found that "social interaction helped the young children to crack the problem which they did not manage when they had no help" (p.69). While Piaget tried not to influence the children he studied, the Russian psychologist Vygotsky argued that children, "being naturally social, were at their best in social situations – and often in social situations where an [older child or] an adult helped them" to accomplish what they could not achieve on their own, (Cohen, 2006 p.68) as was frequently the case in the various activities included in the interventions.

However, Cohen (2006), urges consideration of the effects that media and globalization have had on the cognitive development of modern children (p.55). In this light I had to consider what other aspects of the environment the participants were exposed to, and what effect this might have had on their cognitive development. Certainly, the children in the research site are constantly exposed to the media in the form of television, but at the same time, cognitive development may be impeded by health constraints due to cooking over open fires, acid rain and fallout from local coal fired electricity plants.

Cohen (2006), considers the long running debates on the respective influences of nature and nurture on children's cognitive development, but also deems that "[t]he family environment, social, class, individual experiences, the rewards and punishments a child experiences, determine his or her development" (p.3).

Many of the children in eSizameleni come from violent homes, and some come from grandmother or child-headed households. If primary enculturation occurs in the home, what perception of the natural environment do the children of eSizameleni have if they are only exposed to television at home and informal dumping out of the home?

I conclude this section with pertinent advice from Hood, Kelly and Mayall (1996) who state that “[u]nderstanding children and childhood, if one starts from the social position of adulthood, requires listening attentively to their agendas, and participating with them in the research process” (p.119). This is in alignment with participatory and applied approaches.

3.5.2 Adults

Adults were initially selected only for interviews and informal conversations, with these primarily being for reconnaissance purposes. The adults interviewed were chosen because of their involvement in various projects that had been undertaken in the past in the village, or because they were residents who would possibly have knowledge related to these projects. Other interviewees were teachers who work at various public and private schools in the area. Adult participants enlisted for informal conversations were anyone who was willing to engage in a conversation on the themes of this study. This then included friends, colleagues, labourers and domestic workers. However, analysis of data gathered during the fieldwork in Cycle One indicated that adults needed to be included in the research interventions as well, in order to enhance the possible success of the project.

In alignment with the processes of action research, the adults who became research participants emerged through engagement with champions of the environment and groups of people who work within this sector. Individuals were encouraged by the work I was doing with the children and willingly stepped forward to assist and work on further projects with me. All of the adults who became research participants lived in eSizameleni and were thus part of the community in which the problem of informal dumping existed – the problem that led to this study. Most of the participants were first language isiZulu speakers with some Shona speakers who had emigrated from Zimbabwe. All participants were black, some employed through the municipality, others employed in domestic or hospitality work and others unemployed.

3.5.3 Description of the site

Most of the research participants live in Reconstruction and Development Programme (RDP) homes, some of which were built during the course of the study. All have electricity and water, but it is important to note that the new RDP homes had to wait for up to two years for piped water and up to three years for electricity connection. The relevance of this will become clear in the following chapter with reference to poor community service in the area, and the political dimension that

affects projects such as this one. None of the houses have geysers provided by the council, some have no piped water inside. Older homes have taps and toilets outside.

All residents of eSizameleni live near one informal dumping site or another, and all residents of Wakkerstroom are faced with litter in the streets and on the pavements, and dumping in the form of rubble and garden waste. Domestic animals roam freely and are often seen to be grazing or scratching in waste strewn areas. There is one playground allocated to the children and this is a small swing and slide adjacent to the village library four kilometres from where they live in the township. There are no green spaces for the children to play in.

3.6 Research instruments

A multimodal approach was used within a framework of applied arts, where a diversity of instruments was used in interventions. This is in alignment with Taylor's view that "[t]he more avenues of inquiry reflective practitioners can tap into, the more perspectives sought, the more likely their conclusions can be read as credible ones" (2003, p.53).

3.6.1 Play making

With the guidance of professional theatre practitioners, the children made plays with the focus on environmental issues and performed these plays for their peers and their families. The objectives here were threefold. The children could:

- learn the rudimentary principles of play-making;
- be encouraged to think about the environment on their own and claim their own voices;
- be enabled to transmit messages about the environment to older members of the community.

It is important to note that the focus was on the process of learning acting skills and using applied theatre as a communication and pedagogical tool, with performance being the secondary objective, although it was also important that the parents and care-givers were shown the results of what their children were doing while working with me.

The first intervention of this sort was conducted by Craig Morris, who has agreed to be named in this thesis. He facilitated a workshop where the children were taught

basic acting and mime skills. The second intervention was facilitated by Susan Hall, who has also agreed to be named here, using process drama. The final play-making intervention ran alongside the Wakkerstroom Water Weekend, and focused on the importance of clean water.

The children also made their own plays which they performed for friends, families and community members throughout the fieldwork. In preparing for these performances, they were assisted by myself and my research assistant. The intention was to provide opportunities for the children to implement what they had learnt from the professional practitioners in performing their own interpretation of environmental degradation and its consequences. These performances are described in the relevant sections of Chapters Five to Seven.

3.6.2 Puppetry

As long ago as 1989, Schmidt and Schmidt were advocating the use of puppetry in education to channel children's innate creativity. Perceptively the authors refer to environmental issues, amongst others, when introducing puppetry as a possible pedagogical means with children: "The problems brought on by overpopulation, dwindling resources, ever growing impersonal institutions, and the complexities resulting from the increased interdependence among nations requires that succeeding generations be creative thinkers and problem solvers" (1989, p. 4).

A number of interventions where information transfer was the objective were presented via puppets through story-telling. During one intervention the children were taught how to make paper packet puppets, after which they constructed their own puppet shows and performed these in groups for each other. Since the children had never experienced puppetry first-hand, only ever having seen it on television, this was something new and exciting for them. The nature of 'one degree of separation' between puppet and puppeteer enabled the children to talk more freely and with confidence (Schmidt and Schmidt, 1998). This in turn enabled me to gain an understanding of how they were thinking and how they were responding to the interventions.

In many of the interventions role playing was used. In Schmidt and Schmidt's view difficulties of shyness can be overcome if puppets are used in role playing because using puppetry adds anonymity (1989, p.10). In addition, and in the case of this research project, the difficulties of language differences were also overcome with the use of puppetry, and the disparity between socio-economic positions was set aside when puppets were used. It seemed that the 'one degree of separation'

permitted the children to discuss issues with more freedom than when they talked about them without using puppets. Opinions expressed were the opinions of the puppets while the manipulator remained safe.

It is erroneous to assume that adults are not willing to embrace puppets in their various manifestations, and once I had realized that I needed to include adults in interventions, puppets were used on numerous occasions. For example, in introducing myself to the Delta Park Environmental Group which will be discussed further, I used a rod puppet to tell a story entitled the *Lunch Box Boy* (see Appendix I). It was on this occasion that I first witnessed the power of story-telling with a puppet for adults in this community and from that time onward I used the puppets as much as I could for communicating messages.

3.6.3 Site visits

Since it was felt that the children needed to experience first-hand the effects of littering and informal dumping, and hopefully through different eyes as a result of the interventions, a number of visits to various sites where littering and dumping occurred were arranged. It was hoped that the ‘different eyes’ would enable them to really look and see and, further to that, discuss and reflect through artworks, the destruction of the environment to which their behaviour was contributing. Sites visited were the town dump, ‘stop and hop’, (where we would drive through the township, stop, ‘hop’ out and view the informal dump sites), walks around the school grounds and surrounding areas, and the grounds around the village library and municipal buildings. The latter two sites were specifically chosen because this is where children spend most of their time and where much littering is to be found that is directly due to their behaviour. Unfortunately, the wetland and streams were deemed out of bounds for this study, both by the WNHA and the University’s ethics committee.

3.6.4 Sculpture and craftwork

Various forms of craft work were taught to the children during the course of the study. The purposes of this were threefold: first, to show how objects, either made for their aesthetic value or as useful objects, can be made out of waste materials; secondly, to show how waste can be turned into a commodity for sale; and finally, to provide a new kind of learning experience for the children.

At several workshops children made objects that were used during other interventions. For example, musical instruments were made out of tins and bottles

and subsequently used in performances. Discarded fabric was upcycled and turned into banners for parades, and found objects were glued together to make three-dimensional fantasy creatures.

The children were introduced to papier mache mask making and to clay making for use in sculpting animals. These processes were not necessarily attached to interventions that had littering as a focus, but rather to extend children's experiences of what the arts can afford. It was also through these forms of art that I was able to provide a positive alternative to what could be considered a relentless focus on environmental degradation. These craft and sculpture workshops were conducted at my home, where the children were also given the opportunity to play in a green space, which they did not have at home. The artworks they created were entered in various art competitions held in the village, and many of the children won prizes for their work.

3.6.5 Drawing

After site visits, puppet shows, story-telling, etc. the children were asked to respond to what they had seen and heard by drawing what they remembered and how they felt. This activity enabled them to reflect on information and their responses to it and on the ways in which it had been presented. It also enabled the collection of concrete data on their environmental awareness and how it changed or did not change over the course of the three cycles of interventions. The drawings assisted me to establish whether or not the children had understood concepts, problems and issues. Analysis of the drawings had potential to assist in the reliability of findings from the study, a key concern in research endeavours of this kind. As Kress and van Leeuwen (2006) put it: “[o]ne of the crucial issues in communication is the question of the reliability of messages. Is what we see or hear true, factual, real, or is it a lie, a fiction, something out of reality?” (p.154). For example, the children may have communicated verbally that they understood something, but what appeared in a drawing could indicate something different.

In addition, it should be noted that most children simply enjoy drawing. As Kress and van Leeuwen state, they ... “[drawings] are seen as self-expression, rather than as communication – as something which the children can do already, spontaneously, rather than as something they have to be taught” (p.33). Ya-Huei (2014, p.59) concurs with this too. So there is an honesty in the construction of artwork with children, in that there is nothing at stake for them, simply a natural response on paper. It provides an alternative to linguistic communication on their perception,

which is still developing within children, and, importantly within this study, enabled cross-language understanding which was valuable in data analysis.

With regard to using visual art with children as a research tool, Wilkinson and Ennew (1994), also agree with the authors above, but add:

It behoves us to make use of these different abilities rather than asking children to participate unpractised in interviews or submit them unasked to our observational and surveilling gaze. (Wilkinson 1988: 81-90: Ennew 1994: 67-9) (p.189).

All drawings made by participants in the study were photographed with their permission, some were returned to the children and some kept in a locked cupboard at my home.

3.6.6 Interviews, informal conversations and focus group discussions

Bess et al (2018) state that “[t]he most frequently used method of gathering information is by asking respondents to express their views directly” (p.187). What I refer to as informal conversations began months before the inception of this project, and were the spring board from which the research project took shape. Through conversations with village elders, key role players were identified. These were then sought out and either engaged in informal conversations or structured interviews. Again, these in turn led to an extensive list of further possible interviewees. Engaging the ‘person-in-the-street’ was important for gaining an understanding of the social structure of the area. Informal conversations allowed for non-structured interviews giving participants the opportunity to provide information that may not have been gleaned in a formal situation. Such conversations are similar to what Bolak terms ‘interactive interviewing’:

The feelings, insights, and stories that researchers bring to the interactive encounter are as important as those of the respondents. Interactive interviewing ... may involve participating in shared activities outside the formal interview situation (1997, p.121).

The driving factors here were what Philip Taylor (no date, p.45), refers to as ‘hunches’, which can be followed up on. Teachers were invaluable sources of information on what is taught in the schools and how it is implemented. Other role players in governance and NGOs were also sourced.

Many times, after reflection in my journal post-interview, I returned to the respondent for further conversation. This was a valuable means of gathering more information after the initial contact. Romanyshyn has advised this form of data collection with regards to interviewing as a research method:

After the dialogue is finished, I encourage the researcher to wait some time, perhaps even for a day or two, before he or she begins to examine it for its meanings. ... More often than not the work of reflection sets the stage for another dialogue (2006, p.45).

Focus group discussions were held initially with the target group of children in order to establish how proficient they were in spoken English. These discussions provided guidelines as to what research assistant I needed to source, that is, whether it needed to be someone who was completely bilingual in English and isiZulu or someone who had more of an understanding of environmental issues. Bess et al recommend the use of focus groups with children and adults with low literacy levels, as being a fast and efficient means of collecting data (2018, p.200) with which Holmes agrees, suggesting that “structured individual interviewing is much too stressful for children and perceived by them as threatening or anxiety provoking” (1998, p.61). This was certainly the case with the participants, since I noticed that speaking one on one with me caused them anxiety about their proficiency in English.

Discussions such as these, both structured and semi-structured, have value in that specific answers to questions could be sought, but also because they led to more questions that were relevant to the study that had previously not been considered. It is the incidental knowledge that comes to the fore that makes for a richer research process.

3.6.7 Reflective practice

Eco-feminist theorists call for equality among stake-holders in projects. While such equality is extremely difficult to achieve, a continual process of reflection throughout this study has been productive for my engagement with research participants in ways that have attempted to lessen inequalities. Reflection plays a key role in action research and took various forms during the research process. The research journal was the primary means of reflection, where all aspects of the process were recorded. These included the shaping of the research question from the outset, the planning of interventions, reflection afterwards on what occurred during each intervention and challenges faced.

Guides to action research frequently refer to the important role of a critical friend for obtaining insight through the eyes of another person. Both the journal and the critical friend as means of promoting reflective practice are elaborated on below.

3.6.7.1 Journaling

A research journal was used to accumulate thick description of the research process and to interpret and reflect on what Geertz terms “the culturally specific ‘webs of significance’ people both spin and are caught up in” (2001, p.215, inverted commas original). As a visual artist myself, the use of a journal from a very young age has been pivotal to the manner in which I work. Of all the tools used in this study, the journal has been the most important means of shaping, planning, reflecting on, and re-reflecting on the research. It has been the key tool for promoting ‘objectivity’ and reflexivity, for keeping a record of interventions and their success and failures, and for planning for the following cycle. Of the value of written recording of research processes Taylor (no date) claims that:

If the human instrument is the principal medium for raising the agenda in reflective practitioner research, then the log-book is the place where the agenda is recorded. ... Diaries, journals and portfolios have had a long-established tradition in artistic practices (p.41).

As I experienced in this study, in the humanities second guessing and second guessing again, with reference to validity of process and findings, is one of the key challenges. Michael Taussig, an avid proponent of the notebook as a research tool, states that “[a] fieldwork diary is like a scrapbook that you read and reread in different ways, finding unexpected meanings and pairings as well as blind alleys and dead ends” (2011, p.47). Through continued writing and referring back to writing, and then writing on the writing as it were, I was able to capture data that would have been impossible to access without the journal. It is the messiness of research such as this study that needs some sort of grounding place, a space where the mess can be ordered and re-ordered.

Enabling neutrality and objectivity is a most difficult task for researchers the world over. Many times during my fieldwork I was faced with issues that forced me to reflect on myself as a white, middle-aged, privileged, female fieldworker working with marginalized people. This mainstream voice being the only voice heard, a phenomenon warned against in the work of eco-feminists, was one that I took most seriously. Agar (1980, 1986/1995), in Holmes states that:

... one of the most difficult tasks faced by fieldworkers is to overcome their own cultural backgrounds so that they may be objective in their interpretive task. Attempts to discard one’s cultural heritage in the field and the subsequent writing about one’s field experience are compounded by methodological problems brought to the forefront by cross-cultural researchers (Holmes 1998, p.84).

It was through my journal that I was able to reflect on the influence of my own cultural background while working in the field.

Bess et al (2018), and McNiff (2014), both advise researchers to be self-critical, aware of bias, and researcher/researched positionality, avoiding the ‘bad Theory’ that could otherwise result (Mitra, 2010, Philips, 2000, p.8, capital T original). Being able to constantly reflect and re-reflect through the journal, I was able to establish what patterns were emerging, and thereby halt bad habits and retain good ones.

Important for this study was the opportunity to use reflective writing from the journal in the thesis. This enabled me to heed this advice from McNiff:

... given the other-oriented nature of action research, it is not enough for a researcher to claim that they have realized their personal values in practice unless they can show how these personal values transformed into accounts that benefited others. This means gathering data to show how your personal learning contributed to others’ sense of well-being and explaining this throughout the text (2014, p.54).

Constant self-criticism within studies such as this is important with regard to interventions and the manner in which they unfold, and perhaps change, contrary to the initial plan. Critical reflection enables interventions to be re-shaped between the cycles of action research, which refers to the manner in which action research can unfold during planning, action and reflection. Preston advises that:

... [r]eflection on action after the event may or may not tell us whether or not this was the ‘right thing to do’ at that time ... (2016, p.84, inverted commas original).

Further to the writing that has been described and discussed above, other means of reflection were incorporated into the journal. Leitch and Day (2006) list a range of reflective tools that have been used by researchers at least since the mid-1980s:

autobiography (Day, 1985) journals (Tripp, 1988; Holly, 1989), image-making (Clandin, 1989), metaphors (Munby & Russel, 1989)... (p.185).

Douglas and Caless (2013) approve of the visibility of the researcher in the work, and indeed refer to these researchers as trailblazers (p.92). As included in the list provided by Leitch and Day, I made extensive use of mind maps for planning interventions, outlining thoughts in preparation for writing, and for consolidating information during the analysis phases of the study. Buzan and Buzan (2003) describe a mind map as “[a] powerful graphic technique which provides a universal key to unlocking the potential of the brain” (2003, p.55). Using this technique enabled me to bring together disparate aspects of the study, from observations, references and collected data which were then combined.

Finally, this vivid description from Frazier (2006) sums up the process and the importance of documenting events (and possibly also the desire to do so):

Everything that happens is fluid, changeable. After they've passed, events are only as your memory makes them, and they shift shapes over time. Writing a thing down fixes it in place as surely as a rattlesnake skin stripped from the meat and stretched and tacked to a barn wall (2006, p.30).

3.6.7.2 The critical friend, or the 'inside I'

According to action research literature, a critical friend can contribute to the research in various ways. Essentially the critical friend looks for 'blind spots' which are the issues, insights or errors that the researcher(s) may be missing, for whatever reason. In the context of this study, my blind spot was an inability to recognise certain themes as they emerged in the behaviour and conversations with the children, because I was too embedded in the work.

As an artist, and working with the arts as tools for the study, I found that I faced the possibility of losing myself in the art, and not focusing on the participants, and I therefore ran the risk of missing valuable data. Since observing the participants, listening to their dialogue as well as analysing and reflecting on their participation was an important aspect of the study, I realised that I needed to step back and remove myself. Stepping away from the activities during some of the interventions, while the co-facilitator and research assistant took more active roles, I was able to take on the role of critical friend.

Costa and Kallick provide a succinct definition of a critical friend:

A critical friend, as the name suggests, is a trusted person who asks provocative questions, provides data to be examined through another lens, and offers critique of a person's work as a friend. (1993, no p.n.).

Since I was at the same time the researcher and the critical friend, which is a combined role that I have not come across in the literature, I began to refer to myself in this context as the 'inside eye', and subsequently as the 'inside I' – perhaps a slightly frivolous play on words. Being critical of the process that I had set up, and at the same time not being an active part of some of the creative processes, enabled me to gain insight into aspects of the participants' behaviour, and also the manner in which the interventions could unfold without my input. Conversations between the participants as well as between participants and the co-facilitator and research assistant became more audible for me, since I was no longer focusing on the practical aspect of the interventions.

I tried to keep the fundamental principles of deep ecology and eco-feminism in mind throughout the fieldwork by recognising the knowledge and skills that others bring to the table, and by promoting as much equality of input among participants as was

feasible. Through being the ‘inside I’, I was able to accomplish this more successfully than I had been able to previously, since the reflective practice was enhanced, and I felt that the quality of my reflection was improved. This is a clear example of the usefulness of action research in which action leads to reflection, and reflection leads to new action, and so on. As Costa et al (1993) observe: “It is only when you change the lens through which you view ... your own practice that you discover whether a new focus is better or worse. But if you never change the lens, you limit your vision” (no p.n.).

3.6.8 Surveys and questionnaires

Initially surveys and questionnaires addressed to adults were not part of the planning for this study, but as the need to involve adults in the research became apparent, I decided to include these tools. A questionnaire was circulated via my research assistant and Ms. Sibande. (See Appendix A), the purpose of which was to establish township residents’ awareness of recycling, reuse and what they thought would be appropriate measures to bring about improvement in the area. Questions were mostly closed-ended with some open-ended questions to allow for opinions to be expressed. To alleviate the challenges of obtaining information from older Zulu-speakers and children, I chose “... *fill-in questions* [which] constitute a transitional type of question between open-ended and structured, since no format is suggested but only a short format is expected” (Bess et al, 2018, p.211; italics original).

With the disruption by COVID-19 of the final intervention in the first term of 2020, a further questionnaire was distributed (See Appendix B). The aim of this survey was to establish how much knowledge residents of Wakkerstroom had about the recycling drop off points that had been set up over the course of 2020. Again, questions were closed-ended with the option of adding comments at the end of the questionnaire.

3.6.9 Participant observation

Observation is a vital tool in research in the social sciences. Research with children especially, but also with people who come from different language and socio-economic groups makes interviews, focus group discussions and written responses rather challenging, as Bess et al (2018) explain:

...respondents must be aware of what they feel and think and be able to express it in order to communicate the information. This may be a problem with young children who are unable to analyse their feelings or accurately describe their experiences. In this case, observation of their behaviour will yield more objective information than direct questioning (p.196).

Participant observation sought to provide further triangulation of the data collected in this study. Observations were undertaken in many different environments and included members of the community across all socio-economic spheres, besides the research participants. Working for WAG brought me into the township at least once a week where I was able to observe practices of littering both in the home and on the streets, to monitor the state of informal dumps and engage with residents from the position of a worker affiliated with a formal organization. Working with the local marimba project also meant that I was all the more visible and known to the residents, particularly the children. All through the process extensive journaling was used to record and reflect on observations, challenges and insights as well as constantly monitoring questions that arose as the research progressed. This also assisted with triangulation with regards to littering and the disparate views expressed by litterers.

3.7 Data capture and analysis

Since this study involved multimodal interventions, analysis of data needed to be undertaken in different ways. Each method of analysis was used in isolation and then the findings were brought together for overall analysis. Underlying the methods used was a set of questions that I put to myself with regard to data analysis during the interventions and after the fieldwork ended. By doing this I hoped to maintain the integrity of the project's theoretical framing. These are the questions that I asked myself:

- Have the marginalized, i.e. women and children, been given a voice in line with eco-feminist thinking?
- Is the project sustainable, with reference to community development theory?
- Was action research an appropriate approach to use for this project?
- How have applied arts contributed to the study?
- Have the arts been successful in raising environmental awareness and, if so, how?
- In answering these questions can I definitely state that I have answered my research question/s?

The answers to these questions relate to two kinds of questions about research: “To what extent have the research questions been addressed and answered? To what extent can these answers be trusted?” (Bess et al, 2018, p.22). These questions refer both to the validity of specific findings as well as to how these findings respond to

the overarching research question. The analysis of data from the interventions within each action research cycle is discussed in depth in Chapters Five, Six and Seven. The findings are considered holistically in Chapter Eight, the concluding chapter.

Regarding play-making, analysis focused on whether the children were able to successfully insert information on environmental issues into the workshopped sections of the plays, and whether performances communicated this information to audiences. As stated previously, performances were ‘side-effects’ of the interventions, since the participatory aspect of these interventions was the primary focus. However, informal conversations with audience members after each performance yielded data that was recorded in the journal and included in the analysis.

The analysis of artwork was more difficult because there were a number of factors that needed to be taken into consideration. Analysis took various forms depending on the theme of the intervention, but the following were considerations that impacted on final findings:

- Who were the children sitting next to when making their artwork? Some children preferred to sit alone and draw, which conceivably meant that the data gleaned from their work had more validity than work that was copied from a peer.
- What was the age of the child who had produced a particular drawing? This was important in that I needed to be able to compare apples with apples, so to speak. For example, in terms of cognitive development theory, it would have been inappropriate to compare a drawing made by a six-year-old with one made by a ten-year-old.
- Which school did the participant attend? Those children who attended Village Primary came from a higher socio-economic stratum, and had been exposed to higher quality education than those who attended Wakkerstroom Primary, and also they had been taught in English from Grade 1. This meant that there was a disparity between groups of children. Access to drawing materials and instruction was common in the former school but non-existent in the latter.

Keeping the above questions in mind, artwork was analysed with a focus on whether the given theme was satisfactorily transferred onto paper, which was then tabulated accordingly. Below is an example of a table in response to a

drawing intervention, in this instance a puppet show, where the content had an environmental theme.

Table 12 Theme: response to rod puppet show

Sep-19

number of responses	71
no response to topic	6
copies	1

images or text responses	
those showing the connection between recycling and donation of tops in exchange for wheelchair	10
those showing the connection between bottle tops and wheelchair but no recycling	21
those who thought that the wheelchair was made out of bottle tops	14
no connection between the wheelchair and bottle tops	17
reference to the puppet, but no reference to the topic	3

Each of these tables differ somewhat, in that each intervention had different objectives, which are included in the tabulation. These tables, and examples of some of the drawings, are presented in the chapters on the three cycles of action research. However from a literature review on how to analyse children’s drawings, the following was drawn upon to assist in the analysis:

Composition ... relates the representational and interactive meanings of the image to each other through three interrelated systems:

- (1) *Information value*. The placements of elements ... endows them with the specific informational values attached to the various ‘zones’ of the image.
- (2) *Saliency*. The elements are made to attract the viewer’s attention to different degrees.
- (3) *Framing*. The presence or absence of framing devices ..., disconnects or connects elements of the image, signifying that they belong or do not belong in some sense (Ya-Huei, 2014, p.177, italics original).

Both the questions posed and the interactive meanings mentioned above contributed to the final tabulation of data captured and analysed with reference to art making.

The questionnaires were first analysed quantitatively and then key themes in the response to open-ended questions were identified. Findings from both types of analysis are presented and discussed and are then related to the reflections in my research journal. These questionnaires related to Cycles Two and Three and are discussed in their relevant chapters.

Keeping a log of waste collected from areas, which was counted in terms of numbers of black bags, and compared to previous numbers of bags collected from the same areas, enabled me to gauge if there had been a change in littering and dumping behaviours over time.

Recordings and reflections in the journal became the overarching method of tabulation of data. Here I continually entered findings in their various forms, for example, commenting on drawings produced during an intervention following a site visit, and then commenting again on tabulated findings based on thematic examination of the same drawings. Ongoing notation of my personal observation of littering behaviour by participants in the study as well as other members of the community, my written recordings of comments made by the participants and other community members, and my reflection on further thoughts regarding reasons for poor environmental behaviour, added to the thick description which Geertz (2001) requires of ethnographic study, but which is also relevant to other kinds of social sciences research such as this.

Returning to journal entries over and over again meant that I was able to ensure that there was constant review of the data generated. For the final writing of this thesis mind maps were created, which brought together key findings, knowledge-building and suggestions for further research in this field. These informed the writing of Chapter Eight, the concluding chapter, and are included there.

3.8 Ethical considerations

Ethical issues needed to be considered carefully since the research involved working with young children, who were further marginalized due to their low socio-economic status in a rural environment. As pointed out by Mayall,

Researching children's lives raises a number of methodological issues to do with consent, access, privacy and confidentiality. Although these are not unique to children, they do present researchers with specific dilemmas to do with unequal power relationships, mainly age related, that exist between adult researchers and children participants (1997, p.17).

The aims and objectives were carefully outlined to both the children and the care-givers/parents prior to the commencement of the first intervention, with letters of consent being issued in isiZulu, Afrikaans and English for care-givers and/or parents to sign. Letters of assent were issued to the children for signing as well. These letters are filed and kept in a locked cupboard. See Appendix C for examples of these.

The research topic and the objective of the research were explained repeatedly to the children, and further letters of consent were signed by parents and care-givers at the beginning of every term, since interventions only commenced during school terms and I wanted to ensure that there was on-going understanding of the process. This prevented the perception that the interventions were simply arts/drama lessons for the children and also informed care-givers and parents of any changes to the programme and any events that they may be interested in attending.

According to Marce (2007), other ethical issues, specific to action research, needing to be attended to, included the following: "... the effect on the participants when the researcher withdraws from the situation on completion of the research should be considered" (p.75) Considering that I have witnessed some unethical actions by researchers moving into a research site, conducting an intervention, and then leaving, I have taken the above statement very seriously. There is always the possibility of leaving the participants in a worse situation than they were in before the intervention, or participants can be left feeling abandoned, vulnerable or confused. Besides knowing that the success of a project such as this was not likely to have a sustainable life beyond the study, which is one reason why I intend to continue working with the children in the village beyond the life of this study, I also needed to ensure that the participants were protected from the abandonment that I have witnessed when researchers leave a research site. In this I am fortunate since I reside in the research site, and have the support of the community to continue the work I have started in this field.

Given that the project aimed to create a sense of custodianship of the natural environment on the part of the children, it was disappointing to me to be unable to take the children in or near water. Since the village depends almost entirely on the benefits of the wetland and the river that feeds it, focus on the importance of clean water is paramount. Unfortunately, scientist members of the WNHA committee and the Wits University Ethics Committee both forbade taking children near the water. Though disappointing, this was understandable since there was a distinct possibility of contracting illness from water which had been found to be high in pathogens in some places, and garbage in the form of rusty tins and broken glass in the water also presented a safety hazard. There was also no way of establishing that the children could swim. This presented some challenges, which are discussed further.

Many years ago, I met a couple who had set up an outreach project for teenagers in the small coastal village of Morgan Bay. The objective of this was to expose

youngsters to the natural environment, thereby instilling a sense of wonder, which would hopefully result in a level of custodianship on their part. When I asked the couple if they ever spoke to the youngsters about global warming and environmental degradation, they told me that they specifically did not. This, they said, was a conscious decision that they had made at the outset, since they were of the opinion that children could potentially become overwhelmed by a sense of despair and hopelessness in the face of looming planetary demise. They believed that exposing young people to the natural environment, and allowing nature to provide its own lessons, would be enough to create the awareness necessary to drive good environmental behaviour. I had remembered this for the twenty years between then and this doctoral study, and protecting the research participants from eco-anxiety, a psychological condition which twenty years ago had not been named, became paramount as an ethical consideration in the planning of the study. It was for this reason that a number of interventions that I conducted were specifically planned to expose the children to the wonders of the natural environment without ‘hammering away’ at them with constant information on environmental destruction.

Unfortunately, I did not consider myself in this process and eco-anxiety became overwhelming in my personal life, further exacerbated by COVID-19. The effects of eco-anxiety are discussed in the chapters covering the three cycles of action research and also mentioned in the concluding chapter where recommendations are presented.

Keeping ethical considerations in the forefront of the research endeavour was one of the most important aspects of the study. It is human disrespect for the planet and for its resources that has brought environmental destruction and the dire situation that we find ourselves in. An end to this disrespectful and unethical view of how planetary resources are used is what deep ecologists and eco-feminists are calling for, and was the reason that I embarked on this research endeavour in the first place. A deep respect for all life, including all the participants, children and adults alike, as embedded in the theoretical positions that framed the study, was paramount in all interventions and was assisted by the careful reflexivity discussed in section 3.6.7.

3.9 Conclusion

The action research design used in this study is not new to the social sciences. However, I would argue that some of the research tools, such as the extensive and reflexive use of a journal and of mind mapping, were used in a more elaborate way than is commonly advised in research handbooks or reported in empirical studies.

Further to this, the ‘inside I’ was developed from the literature on the role of a critical friend in action research in order to gain insight during the interventions. Taking this approach allowed for a critical and in-depth view of the research site and of the data gathered from fieldwork, and enabled triangulation across the various data sources.

The next chapter describes and discusses the reconnaissance phase of the study, the spring board from which an action research study usually begins.



Chapter Four: The reconnaissance phase

4.1 Mapping the chapter

As Swanepoel and de Beer (2006) argue “[w]e cannot even begin to think of the mobilization of communities without the use of information. It is the oxygen of any mobilization effort” (p.114). The reconnaissance phase of the research enabled me to obtain an understanding of the field I was about to enter, and this included what environmental awareness existed in the communities and where this awareness stemmed from, what environmental projects had been instituted, why they were instituted and whether they had been successful or not, and how local government functions with regard to environmental practices. For this study the following were investigated during the reconnaissance phase:

- South Africa and the environment
- Environmental awareness of adults
- Environmental awareness of children
- Previous and current projects with an environmental awareness focus
- Litter sites, with specific focus on areas that children frequent, in order to monitor change over time.

4.2 South Africa and the environment

In order to plan for this study there was a need to establish what legislation is in place in South Africa, on national, provincial and local levels, since this would provide an understanding of the levels of good environmental practice that exists in the constitution and legislation, and how these are implemented. Further to this an understanding was needed to establish what exposure children have to environmental issues through formal education, and finally what NGO contributions to environmental awareness exist.

Literature required for this study is in the fields of (i) South African legislation, specifically with reference to litter; (ii) education on the environment and waste; (iii) non-government organizations that support waste recycling.

4.2.1 Legislation pertaining to waste in South Africa

Governmental bills and regulations related to the environment are vital to understanding what has been legislated, as well as enabling understanding of what measures are in place (if any) to act against transgressors. Relevant documents include the *Programme for Implementation of the National Waste Strategy: starter document for Waste Recycling and the White Paper on Integrated Pollution and Waste Management* (2000) which gives specific detail of the government's policy on pollution. What is important to note is that legislation on dumping and littering has not resulted in solutions to this problem. The persistence of littering supports the claim that there is a gap between awareness and action which has not yet been closed. If, on a national level, legislation is enacted but there is no follow through with action, then such planning and legislation are in vain.

Also in the White Paper it is stated that “[t]he level of recycling is influenced by socio-economic and demographic factors. Monetary incentives are of prime importance in the lower socio-economic income groups and the environmental concerns drive recycling behaviour in the middle to upper income groups” (ibid, p.3), although I have found this to be a generalization. In South Africa there is a distinct connection between poverty and litter, and this has not been explored deeply enough. Dr William Cavendish in his *Empirical Regularities in the Poverty-Environment Relationship of African Rural Households* states that “[a]nalysis of rural households and environmental resources is beset by inadequate data, especially in Africa” (1991, p.1), and even though this is an old publication it seems at this stage that this still remains the case. Interesting studies have been done on litter

awareness that could pertain to this study. One example is Piet Lesibamelepa's Master of Science study entitled *Visitor Perception and Awareness of Litter at the Johannesburg Zoo*, which was conducted in 2014.

Most strategies in place deal with waste after it has entered the environment, which in my opinion, is too late. The *Programme for the implementation of the national waste management strategy* (2000), states that “[t]he key to sustaining recycling is finding the balance between securing the supply of recyclable materials and promoting the demand for products that are made from these materials, ...” (p.ii). This seems to ignore the problems of polluting behaviour, and turns the issue into an economically viable prospect, with environmental concerns becoming secondary, and even tertiary, to solving the dilemma of waste in the environment. Although the *White Paper on Integrated Pollution and Waste Management (RSA 2000)* represents a paradigm shift in South Africa's approach to waste management, where the focus has moved to pollution prevention (p.3).

Extensive studies have been undertaken by the Department of Environmental Affairs and Tourism (DEAT), and various action plans have been put in place, for example the Waste Minimization and Recycling Action Plan instituted by DEAT in 1999 (p.6).

Further to this, if we consider Day and Monroe's statement below, there is more to just the problem of working in silos that contributes to the efficacy of legislation: “... often policy makers focus on only the natural, political, and economic systems and leave out the primary actors – the people” (2000, p.850). One of the pivotal findings in a study undertaken by the Institute of Social Research, University of Michigan, on environmental awareness in South Africa, (Anderson et al; 2010), found that those people who are most directly affected by pollution of any sort are most likely to view it as a problem. Here for example, if water supply is polluted people will take cognisance of it, as opposed to others who have clean water, and this, according to the study, is linked to socio-economic status.

Also, “[h]aving access to land for agriculture tends to make a household more sensitive to the negative effects of land degradation” (ibid. p.13). They continue with findings on perception on littering, which was “[a]lso seen as a community problem by a higher percentage of both African and non-African households than any of the other three environmental conditions, [water, land, air]” (ibid. p.15). I am aware that there may be some validity in this study, but according to my findings there is very little perception of pollution in those who have low socio-economic standards in my

research site, and certainly no willingness to address these issues on a community level. I found that there was little awareness of programmes such as Working On Water, but comparatively more awareness of organizations such as Collect-A-Can (p.20). This was put down to awareness programmes run by government having little or no affect. The Michigan University study mentioned above does not specify what percentage of the respondents were rural as compared to urban, neither does it refer to a community problem caused by the community, a problem in the community or a problem that the community needs to solve.

In my study, as much as most of the littering and dumping was found in areas of lower socio-economic homes, community members with higher economic status also displayed poor environmental behaviour, but it was hidden. In other words, dumping of waste was in trenches and areas not overtly visible, and dropping recyclables at any depot was done only if it was absolutely convenient to do so. Of course, this is a generalization, but for the most part, poor environmental behaviour existed across the board to a lesser or greater extent.

The Waste Management By-Law of 2013, published in the Provincial Gazette no.216, which is still in effect as at August 2020, states:

The main objects of these By-laws are to ensure that waste is avoided, or where it cannot altogether be avoided, minimized, re-used, recycled, recovered and disposed of in an environmentally sound manner; promote sustainable development and environmental justice through fair and reasonable measures for the management of waste within the Council's jurisdiction... (Waste Management By-law, 2013).

The by-law places responsibility for dealing with waste firmly in the hands of local council, also holding residents and businesses accountable. It is important to note here that there is only a small reference to avoiding waste. The crux of the problem is that if waste was avoided there would be no need to have legislation, awareness campaigns, and formal or informal education programmes in place to deal with it. The statement above regarding avoidance is cursory at best.

Although there is legislation in place in South Africa that aims to face the issues of waste, there seems to be no real endeavour to halt poor environmental attitudes and behaviour which create the problem in the first place. The focus seems to be more on dealing with waste once it has entered the natural and built-up environments, and what economic gains waste may generate.

4.2.2 School curricula

There is much that exists in the school curriculum in South Africa on the environment and environmental awareness and concerns. Mapaleng Silas Lekgeu and Nerhene Davis (2017), in a study on *Perceptions of Climate Change Among Grade 11 Learners in the Tshwane Metropolitan Municipality* state:

The school curriculum in South Africa is standardized for the country as a whole, irrespective of whether residences are in urban or rural areas. Further, education in the country is unified around one curriculum policy called the Curriculum and Assessment Policy Statement (CAPS). According to CAPS, by the end of Grade 5, learners are expected to know and explain: the difference between weather and climate; the different climates in South Africa; the climate of their own area; as well as factors that influence both these, namely temperature, wind, air pressure and precipitation (SA, 2012). This is taught in Geography, Social Sciences, but also in Natural Sciences and Life Sciences subjects (p.56).

These are taught from grade five to grade eleven. From grade ten more detail goes into greenhouse impacts, global warming, (especially pertaining to Africa), but also includes desertification, flooding and rising sea levels (ibid; p.56). In discussion with the various children and in a short survey undertaken with adults in the research site, I found that this was the case in eSizameleni, and indeed, there was no reason as to why the curricula in this village would be different to the rest of the country.

There is no follow through between learning and action at all, so there is no solid teaching of the application of what is taught in the classroom, even though Hart is of the opinion that there is little connection between awareness and action and that this bridge can be made at school level (1999, p.58).

I concur with Lekgeu and Davis when they state that:

Vujovic (2013) makes a compelling argument that the nature of perceptions and misconceptions about climate change among South Africa learners could be the result of “inconsistencies, misconceptions and gaps in the knowledge and perceptions of teachers who instruct the learners (2017, p.54).

This study included interviews with geography teachers who had a general understanding of climate change risks that was rudimentary at best – furthermore, what is being shown to the children in eSizameleni by the example set by the teachers contradicts any possible learning. Here I refer specifically to the state of the classrooms in the Wakkerstroom High School, which I found strewn with fruit peelings and garbage; the floors had not been swept for weeks and the windows were filthy. The state of the learners’ toilet facilities was shocking. The teachers’ facilities were marginally better. By being content to work in environments such as these, the teachers show by example that this was acceptable, and that if these issues were not

being faced by anyone else, then the issues would remain unnoticed and unchanged. In the primary school, however, the classrooms were swept out and cleaned by the learners on a rotational roster, as stipulated by the headmaster, and the toilet facilities were in a far better state than those of the high school.

One should not ignore the challenges that formal educators face in South Africa. Considering the sub-standard education that educators received during apartheid, which still affects the country, Vujovic's statement above holds true. There are conceivably many reasons for disparity between what is taught and what is implemented in this regard. Archer and Newfield state that "[a]ccording to Ramphela (2012), educational achievement is disabled by the context in which it finds itself – one of poverty, unemployment, high levels of crime, poor governance, a patronage-driven system, corruption and inadequate health care" (2014, p.3). I am of the opinion that, in the context of the research site, it is generally a combination of poor governance and corruption that has resulted in the state of eSizameleni, despite what is being taught in schools.

Although this is an opinion and, knowing that there may be, and probably are, additional reasons that disable educational achievement and follow through with appropriate behaviour in this context, it is true to say that people in this research site do know better, as has been shown in the discussion above. Whether information is provided to the learners in the research site through formal education, and whether they have access to digital media and television or not, there was no care for the environment. Day and Monroe agree with this when they state that

[b]ehaviours, of course, must be supported by knowledge and attitudes. But research in the field of environmental education and in commercial markets have shown that there is no cause-and-effect progression from knowledge to attitude to behaviour as educators have long believed. In fact, the relationship among these three is puzzling (p.3).

Indeed it is puzzling, and clearly another means of communication was needed if poor environmental behaviour was to be changed in this study. In extension to the discussion above there is another possibility. Eckert states that

[i]n South Africa, academic disciplines which deal with environmental issues usually concentrate on particular (biological and climatic) aspects, and are interested in demarcating eco-niches in which sustainable management operate. Research on environmental degradation has thus often ignored issues central to an understanding of underlying human rationale which materialise when human beings deal with natural resources (2000, p.7).

If this is taken as such then one can possibly surmise that South African school curricula parallel this, and that aspects of environmental issues are seen (and taught) in silos, with no real connectivity between them, and this seems to follow the same lines along which legislation in South Africa functions, as discussed in section 3.2.1 above, where government agencies act independently of each other. This may also extend to the disconnection between these issues and what is occurring in reality on the ground. Clearly there is something fundamental that is missing in school curricula in South Africa, since there is no follow-through from what is taught to what is acted upon out of the classroom.

4.2.3 NGOs (Non-Government Organizations)

Non-Government Organizations in the environmental sector seem to have more impact and focus on the upliftment of the youth than school curricula and are engaged in ongoing follow up with regard to environmental awareness and action. One example is One More Generation (OMG) South Africa. This began as a move towards saving the rhino from poaching but focuses on all conservation and environmental challenges that this country faces. Littering and recycling are topics included in the programmes this organization presents to schools. OMG SA seeks:

to create in the youth a heightened environmental and conservation awareness, responsibility and behaviour pattern for the benefit of themselves and future generations. Our wish is for every child to be afforded the opportunity to incorporate this knowledge into their personal identity and lifestyle and develop pride in knowing that they are contributors and potential change makers. ([One More Generation » Youth Empowerment](#) accessed May 2016)

The Eco School programme is an international programme with similar aims. The programmes that are run through this organization include a “Litter Less Campaign”, which is in line with this research endeavour. However, this is an international organization that is not specifically focused on African countries, although it is worth a brief mention here to enhance understanding of what other organizations do in the same field, since their motivation includes ensuring that “young people have the power to be the change for sustainability that our world needs by engaging them in fun, action-oriented and socially responsible learning” (2014, [About the Campaign — Eco Schools](#), accessed 14/03/2019).

NGOs in South Africa form a valuable service to the country in recycling of waste; they create jobs and they facilitate the movement of waste away from the environment. Before looking at some of these NGOs it is important to understand exactly what the concept of recycling entails. The following excerpt from

<https://brainly.in/question/11149381> (accessed on 12/11/2020), provides a definition of recycling and the ways that it is accomplished.

Recycling is the process of converting waste materials into new materials and objects. It is an alternative to "conventional" waste disposal that can save material and help lower greenhouse gas emissions.

Recycling is a key component of modern waste reduction and is the third component of the "Reduce, Reuse, and Recycle" waste hierarchy.

Recyclable materials include many kinds of glass, paper, cardboard, metal, plastic, tires, textiles, batteries, and electronics. The composting or other reuse of biodegradable waste—such as food or garden waste—is also a form of recycling. Materials to be recycled are either delivered to a household recycling centre or picked up from curbside bins, then sorted, cleaned, and reprocessed into new materials destined for manufacturing new products.

In the strictest sense, recycling of a material would produce a fresh supply of the same material—for example, used office paper would be converted into new office paper or used polystyrene foam into new polystyrene.

South African NGOs generally each focus on one specific recyclable, in other words, one company will focus on glass while another company will focus on plastic. As stated by the *Programme for the implementation of the national waste strategy of 2000*, “[r]ecycling activities are mainly undertaken by private recycling companies, especially those associated with the packaging industry” (p.i). What follows is a brief breakdown of four of these recyclables and the NGOs that deal with them.

4.2.3.1 Plastic

Plastic is conceivably the worst of the waste that ends up in the natural environment. Plastic that is not recycled or reused ends up in landfills, streets, rivers and the sea where it takes hundreds of years to break down. Unlike other recyclables, such as glass which is recycled as bulk altogether, plastic has to be sorted into its different categories according to its make-up. Unfortunately the recycling of plastic is the most labour intensive of all recycling enterprises but also the most important aspect of waste that needs to be dealt with.

In the *Programme for the implementation of the national waste management strategy (2000)*, we see that there is a potential for much recycling of plastic in South Africa, as attested to by the following statement:

There are approximately 100 companies recycling plastics in South Africa. Under the auspices of the Plastics Federation, the Plastics Enviromark was launched in January, 1997. This initiative aims to: join the companies within the plastics industry in an environmental responsibility initiative; provide a tangible expression of the plastics industry's commitment to environmental responsibility; highlight, and as far as possible, address the problem of plastic littering; educate relevant target audiences on recycling and reuse; spread a positive message about plastics through the media, at exhibitions and through dissemination of educational material (p.16).

Considering the high expectations of this initiative it was disappointing for me to have found very little evidence of this, especially considering that education and awareness programmes are a focus in this organization. If the programmes put in place had experienced any success, there would be at least some indication of this on the ground.

Barbara Creesy, the Minister of Forestry, Fisheries and the Environment has put out a call to comment on her intention to adjust the policy on waste management with regard to plastic shopping bags. Her aim is as follows:

The plastic carrier bags and plastic flat bags must be made from a minimum of 50% post -consumer recycle from 01 January 2023 and must, from 1 January 2027, be made from 100% post-consumer recycle (<https://www.gov.za/documents/constitution-republic-south-africa>; accessed 12/11/2020).

The document continues with a proposed plan of implementation that includes a more extensive timeframe than what appears above. This is a clear indication that there is intention in government agencies to halt environmental degradation, and in this case, over a relatively short time scale. This is but one example of the intentions of government agencies to make the necessary adjustments to legislation that are needed to ensure that our environment is protected. However, one could argue that this is not enough.

4.2.3.2 Paper

Paper and cardboard are conceivably the easiest of all recyclables to manage. There are a number of companies in South Africa that produce paper, and some of these companies are involved with recycling in this sector. Again, referring to the *Programme for the implementation of the national waste management strategy*:

Paper and fibre recycling is well developed in South Africa, with four large paper companies (Sappi, Mondi, Nampak and Swazi Paper) utilizing waste paper products.” “Almost every type of

paper in South Africa has a recycled content. For example, newspaper contains 25% recycled paper, cardboard boxes 50% and cartons 100%: (p.13) ... The initiative also disseminates information about effective recycling and educates people about the benefits of recycling through the use of plays, puppet show, videos, and slide presentations. It is estimated that paper recycling has created about 10000 jobs, the majority of which are small entrepreneurs (p.14).

Examples of companies are Mondi and Sappi Waste Paper, and the programme mentions a campaign with the slogan “War on Waste”. Considering the extent to which these recycling initiatives aim at educating, one can question why there has been little visible result. It is interesting to note though, that here we can see the use of the arts in the dissemination of knowledge.

4.2.3.3 Glass

Glass is recycled by cleaning, crushing and using it to manufacture other commodities and, unfortunately, very little of it is reused in its original form as was the previous practice. Again referring to the *Programme for the implementation of the national waste management strategy*, we read that “[t]he Glass Recycling Association was formed in 1986 by Consol Glass and Metal Box Glass with the objective of developing an industry approach to the recovery of glass containers from a wide spectrum of the domestic and industrial sectors” (p.14), and that “[g]lass can be reused in the manufacture of abrasives, road-marking paint and as an aggregate in road making” (ibid).

Glass recycling companies pay good money to those who collect glass, and considering this one wonders why there are not more people working in this field. Indeed, during the course of the fieldwork for this study, a glass recycling depot was erected for a woman who supports her family in this way. One also wonders why there still remains so much glass that is dumped when it is clearly a valuable resource.

4.2.3.4 Tins

In *Collect-a-Can offers lifeline to unemployed South Africans* (Velaphi, 2013), we read that “[f]or thousands of unemployed South Africans, Collect-a-Can's Cash for Cans initiative is a life-saving means of earning an income” (<https://www.bizcommunity.com/Article/196/361/95566.html>; accessed 12/11/2020).

Collect-a-Can also pay for other metals such as aerosol bottles, paint drums etc. and again, one wonders why there are not more people collecting waste metals and thus making an income in this way. This company also has a schools programme which is twofold: schools compete against each other for prizes awarded for the highest

weight of collected cans, and money is paid for cans as an incentive to generate income towards projects that each school chooses to work on. According to Velaphi, “[t]he can recovery and recycling organisation has been working closely with schools for 22 years to teach them the importance of recycling and that waste has value” (ibid). The success of this organization is neatly summed up in the *Programme for implementation of the national waste management strategy* thus: “The greater public awareness of Collect-A-Can appears to be a function of its use of financial incentives and its extensive network of collection points” (p.22). None of this, though, propagates the notion of not generating waste in the first place.

4.2.4 Informal waste collectors

Informal waste collectors are a constant visible entity in cities and rural areas countrywide. These people live on the margins of the recycling sector and yet their contribution is valuable in the removal of waste from the environment and towards recycling. Self-employed, they scavenge through dustbins set out on pavements for garbage collection and on landfill sites for items that they can either recondition and sell, or sell to recycling companies. Unfortunately, their contribution to society is under-recognized and their endeavours are hardly perceived as work.

Although this work is regarded as a last resort to employment in a climate of unemployment, competition for these resources does occur, and when other entities, such as municipal authorities, see that there is substantial money to be made, then competition is escalated. As Theron has stated in a booklet (no date), published by WEIGO (Women in Informal Employment Globalizing and Organizing), there is little security in this sector, and waste pickers depend on “local authority as well as other divisions of government who can facilitate their work ... or restrict them. Waste pickers are also dependent on being able to sell what they collect to middlemen and others, who pay them according to the volume of material delivered” (p.8). This shows that at all levels of waste management there are challenges that include political ones, and this was found to be apparent in the research site of this study as well.

4.2.5 Informal education on the environment and waste in South Africa

Various organizations, such as BirdLife SA have published resource books for teachers to use in the classroom, such as *Learning for sustainable living: An integrated learning resource for environmental education*. BirdLife also engages in extensive outreach programmes, focusing on birds, aimed at primary school

children. Another useful publication is *Engaging Young People in Conservation and Education; A Toolkit for Site Support Groups* (2014). Although this was published in Kenya it is relevant for all young people in Southern Africa and provides facilitators with tools to enable children to learn about their specific environments within those environments. The WWF (World Wildlife Fund), produces an informative publication entitled *Down2Earth* which includes ideas on how to save the planet by being water wise, consuming wisely and wearing environmentally friendly clothing. Then there are one-off publications such as *Feeling and Learning Nature with Children; the Guidebook for Volunteers and Trainers* (2003), which resulted from an international environmental training course held at the Middle East Technical University in Turkey. This gives a concise outline on how to engage children in learning about their environments, with information on geographical and physical ecology as well.

The Wildlife and Environment Society of South Africa also produces material for teaching and raising awareness in young people, such as *The Greenhouse Effect; A Teachers' Activity Guide*. Although this was published in 1999 it is still relevant today and presents detailed activities for children to learn about their environments during play. Privately published manuals are also available, such as the very insightful publication *Emthonjeni: Come to the Wellspring. Rewilding: the call of the 21st century* by Marilyn Aitken (2016). This gives information on a broad spectrum of environmental topics as well as providing guidance for facilitators about group work with participants, including play acting, with specific outcomes in mind. The South African National Biodiversity Institute (SANBI) provides numerous publications on environmental awareness. For example, *Bridging the Gap, A handbook for environmental educators and interpreters: Ideas and activities for making meaning of our environment*. Here compiler John Roff notes that [p]eople retain “90% of what they do, 50% of what they see, 30% of what they read, 10% of what they hear” (p.12). This observation is relevant to this project because children participating in applied drama and arts were more likely to retain information than children simply being taught the same information school.

Archer and Newfield state that “[i]t is generally held that the ideals of our progressive and humane national policies remain largely unachieved and that a huge gap exists between policy and practice, as well as ideals and their actualization” (2014, p.3). This is a most poignant statement and one with which I strongly concur. The discussion above highlights a massive disparity between legislation, enforcement, education (both formal and informal) and reality in the field of

environmental custodianship in South Africa. Frankly, also, no matter what may be written on the subject, the fact of the matter is, that if there is strong legislation, solid material in school curricula, effective environmental education in informal sectors, and functioning NGOs, then there should not be any visible littering or dumping in the country. Further to this, the manner in which all sectors work in silos are exactly what the proponents of deep ecology and eco-feminism are speaking out against. There needs to be a closer working relationship with all stake-holders, including government agencies, environmentalists, educators, parents and NGOs for any real change to be made concerning the problem of waste in South Africa. This, then, is the intersection wherein this research study sits, in that its aims, within its small research site, are to close the gap between legislation, education, information and knowledge within society and communities and their practical implementation level

4.2.6 Local government policies and practices in relation to environmental pollution

As has been shown, there is strong legislation regarding custodianship of the environment in South Africa, but there is little practical follow-through in reality, which the state of affairs in rural areas attests to. What follows is a journal entry reflecting on implementation failures:

I'm astounded at how much legislation there is on waste; white papers, acts, amendments to acts etc.. there are also some very interesting reasons given for the failure of programmes ... one of the problems is that there are overlaps between national, provincial and local government. So it seems that there's confusion as to where the authority lies.
(journal, 6th May 2015)

This of course is a reference to national legislation which is meant to filter down to local level. Planning for the intervention stage could not begin without a thorough knowledge of what environmental policies are in place on a local level, and what exposure to environmental issues children have via libraries and council-initiated or council-supported initiatives.

4.2.6.1 Local governance

Wakkerstroom is administered by Volksrust which prioritizes Volksrust and Vukuzakhe (the township attached to Volksrust) in terms of budgeting. Tourism

related policies are administered from Mbombela, which creates major challenges because tourism is a major income source for employment. The distance between Wakkerstroom and Mbombela also affects efforts to halt potentially destructive proposed mining initiatives which are ongoing, since such distance makes meeting with relevant personnel difficult, and the issues are out of the sight of key tourism administrators.

Municipal employees and residents in the local communities were either formally interviewed or engaged with through informal conversations. Visits to the municipal offices and to the public library attached to these offices, also yielded information. What emerged was a general state of apathy and/or superstition among most of the employees, community buildings in a disgraceful state and a bankrupt municipality. After an informal conversation with a young builder who lives in the area, I noted the following in my research journal entry:

The council holds meetings during the day when they know that people are at work. It is therefore the elderly that attend the meetings, who do not have the education to absorb information and make proper informed decisions, so they are bamboozled and lied to by the councillors. Decisions the councillors make are based on personal greed and pay-offs. (journal entry)

The municipal offices are seriously understaffed and under-resourced. There is one cleaner who cleans the offices, the toilets and hall in Wakkerstroom and who is sometimes called up to the eSizameleni Hall if there is a function there. The Community Works Project (CWP), which is a job creation initiative, can be called upon to assist at times, but its workers do not report directly to council. There are few cleaning materials, (consumables and tools) to clean with. No toilet paper or tea etc. is provided for either staff or visitors at the municipal offices. The Town Hall is run down and receives basic maintenance when large functions are booked for the venue. The eSizameleni Hall is barely usable, with running sewerage pouring from the toilets, broken windows and perimeter walls, and litter strewn over the surrounding gardens from the two taverns across the road.

I wrote the following journal entry after an informal conversation with a council employee:

The councillor's position is deeply steeped in superstition and ANC politics. He won't even use his cell phone in the offices because he suspects that there is a spell

that has been cast on the area. There is a wide rift here in the ANC and those who don't support him are, according to him, waiting for him to make a mistake. A previous councillor had his house burnt down, so there is some cause for concern by the current councillor. (journal, 13th February 2018)

Other challenges faced by the council are a rapidly growing population that has to rely on limited resources, and an infrastructure that cannot support the present demands made on it. Various administrative bodies seem to exist independently of each other and to work in contradictory rather than complementary ways. After a committee meeting of the WNHA the following journal entry was made:

Organizations function in silos for the most part here. For example, the Working On Water team put gabions on the waterway where erosion was taking place, but then planted kikuyu on them. Kikuyu is horribly invasive and the Bird Club, BirdLife SA and the WNHA are all trying to eradicate it. Then also the issue of sewage. For example, [a friend's] tank is overflowing. This is because the honey sucker [a truck that sucks sewage out of underground tanks attached to some private homes and restaurants] can't get to her house because the road is in such a bad state, and roads fall under a different department, so sewage is going into the vlei from the village and not only from the informal settlement. (journal, 3rd April 2016)

The aim of this description of the state of local governance is to provide an insight into the challenges that all residents face in the area. It also provides a background to the research project, which is important for understanding much of what has contributed to the state of the environment here.

4.2.6.2 The public library

There is one public library attached to the municipal buildings in Wakkerstroom, in which there are many books in the children's section that cover environmental issues. Most of these, however, are in Afrikaans, and, from the dates of issue over the years, it is clear that these books have not been read regularly, some not at all. The children from the local high school frequent the library since they have free access to its four computers. Five consecutive afternoons were spent in the library in order to see what the children were looking for, what assistance they received and whether they found the library useful or not. Most of them were looking for information on the computers but, without exception, the staff did not assist them. This included those children who were looking for books. Many of the children said

that they now prefer to go to Wakkerstroom Central, which is the local internet café, because they get more assistance there.

4.2.6.3 Service delivery

Each home in eSizameleni has been issued with a dustbin, and garbage is removed once a week. Many of the homes use their dustbins for ash from cooking fires, however, and other means of placing waste out for collection are used, for example used paint drums. The challenge with these is that for the most part they do not have lids, and therefore goats and dogs turn them over and spill the contents onto pavements.

Despite there being regular waste removal by the council, eSizameleni residents still continue to dump waste into areas that have become informal dump sites, of which approximately eight have been identified. Some of the locations seemed specifically chosen based on the proximity to water. Children often play in these waterways, and animals use them for water and for foraging for food.

Dumping of diapers is a particular issue. One informant whom I questioned while she was in the act of dumping bags of diapers into a waterway, told me that she cannot put the diapers into the bin as the dogs knock the bins over and then there are diapers all over the road and in her garden, and dogs then tear them apart. This, she said, is unhealthy for the children. When I asked her whether she thought that these diapers dumped in waterways were possibly unhealthy for all the community, she shrugged. Swanepoel and de Beer (2006) quote Gautier (1994: 49) who states that “[d]irty water is responsible for four-fifths of all sickness and one out of every three deaths in the world today”. While this is a somewhat dated statistic polluted water supplies are still a major health issue. It would seem that if a negative impact of polluting water with diapers does not have a direct effect on residents in eSizameleni, then they do not care what further impact there could be.

Informal dumps are cleared periodically by either a council owned front-end loader or CWP employees. Whether the dumps are cleared mechanically or by hand, the resultant piles are then burnt.

Older homes in eSizameleni have outside taps, and toilets outside and a tap in the kitchen. Many of the toilets outside are unused or used for storage. Conversations with residents have revealed that some of the homes have had toilets installed inside, but other people prefer to use the veldt to relieve themselves. New RDP homes all

have toilets inside. Despite the difficulties with communication with the council, burst or leaking pipes are repaired as a priority when reported.

4.2.6.4 Schools

While I agree that formal education can be a means of learning about environmental good practice, as suggested by Hart (1999), I cannot agree with him that most children attend school regularly. In my opinion it would be erroneous to assume that all children attend school regularly in this country, and certainly this is true of this village. With child-headed households and absent parents there is a distinct possibility that children will not attend school. Indeed, there is a child who refuses to attend school, preferring rather to wash cars in the main road where restaurants are situated. He lives with his adult sister and alcoholic father who take no interest in his well-being.

There is a relatively well-run primary school in eSizameleni, but the high school, which is situated in Wakkerstroom, is notoriously badly managed, and drugs, sex and violent gangs have been identified by education authorities to be major problems in this school. On a visit to the school, it was discovered that there is one dustbin in the grounds and no waste paper baskets in the classrooms. The municipal waste removal truck does not service the school for reasons unknown, and there is no money for repairs to toilets.

There are no libraries or computer rooms at either of the schools. Children from better off families (encompassing all demographics) are sent to schools in Volksrust, where there are two primary schools, three high schools and two private primary schools. The long journey presents challenges for parents as it means transport costs and engagement with zoning issues. The zoning issues are a particular problem because local municipal individuals use threats to remove the children from these schools in order to have parents comply with proposed projects that are not in the interests of community members. This has caused some minor skirmishes, with children protesting.

4.3 Environmental awareness in the community

Before formal planning of the research project could begin, attitudes, knowledge and behavioural practices in the local population with regard to litter had to be identified in order to understand what existed and could be built on. While children are the focus of the study, adults play a vital role in children's socialization and so environmental knowledge, attitudes and behaviours of adults were also investigated.

4.3.1 Environmental awareness of adults

There were a number of ways in which I was able to examine the awareness that adults have regarding environmental issues, I was easily able to introduce myself to people as the WNHA litter representative, and with the visibility that my work with WAG had given me, I was able to engage with people in a non-confrontational manner. Formal interviews were conducted with teachers at private and government schools, with members of voluntary organizations, and with council workers. With the permission of the interviewees, all interviews were recorded and transcribed and the information from informal conversations was noted and reflected on in my research journal entry.

Over a period of six months I began to engage as many adults as I could in conversations on littering and waste in as many social settings as possible. The adults I chatted with ranged from twenty-three to sixty in age and were from a range of socio-economic and linguistic backgrounds. The following are excerpts from a number of journal entry entries where I either wrote verbatim accounts or reflected on conversations afterwards:

[28-year-old male; Mashona speaking Zimbabwean] *I am walking with a coke can and I don't feel like carrying it with me to find a dustbin; I look for a place to throw it. If I see your immaculate garden I won't throw it there. I will rather throw it under a bush where it can't be seen. Or if I see a place where others have thrown their rubbish, that's where I'll throw my can. This is how informal dumping starts. I won't throw my can into an immaculate garden but rather hide it under a bush, because I know that it is wrong.*

[54-year-old man; isiZulu speaker; from Soweto]... *kids litter because they copy their elders. Elders have a don't care attitude. The government does not live in the house: the person lives in the house, so it's nonsense that people will not make adjustments to their homes. I cannot understand why people are happy to live with their yards full of rubbish and nappies. Teach one who teaches five – it is a very long process.*

[40-year-old Sesotho speaker; from Johannesburg] ... *it's a class thing. My mother would have slapped me up-ways if I had done anything like that [littered]. M throws things out of car windows, even though he comes from an OK background, and he speaks nine South African languages.*

[24-year-old woman isiZulu speaker; from Durban] ...*black people don't care about the environment. It's a very selfish community. If rape doesn't affect me or my family directly then I don't care about it. If dirty nappies are in the garden it doesn't affect me directly, I don't care about it. Clean gardens are more of a social indication of social standing – I don't want to be the only person in the street with a dirty yard. Keeping the house clean is because it is owned. But cleaning the yard is not about having a clean yard per se. I only became aware of litter issues when I went to better schools. My family, including me, remove litter from around our because robbers use it to mark homes for burglaries later, but instead of binning the litter we throw it across the road onto the neighbours' pavement. I am now more aware of litter because I now understand the connection between the planet and our lives, and that humans are destroying our planet.*

[28-year-old male English speaker; from Johannesburg] *I also litter. I throw cigarette butts out of the car window. But nappies in the garden? No way!* (journal entry, 26th June 2017, conversations with theatre technicians)

I was most surprised at the lack of understanding of environmental degradation and the impact waste is having on the planet as a whole, specifically with residents of Wakkerstroom. People who have vehicles, and who therefore have the means to bring garden waste and rubble to the landfill, prefer to dump in ditches or the veld, ensuring that it cannot be seen. At times the waste is dumped within sight of the town dump, which is all the more astonishing. I questioned why it could be that if a person has the wherewithal to drive waste and dump it, s/he would dump it in the veld or a ditch and not at the landfill. In addition, I questioned why it is that the residents, becoming aware that I headed up the WNHA anti-litter project, would then come and drop waste (mostly recyclables, but often non-recyclables) at my home, when they had the wherewithal to take recyclables to the depot themselves or put waste out for municipal collection.

Such questions are difficult to answer. One woman in eSizameleni told me that 'the council must pay us to clean this up.' She gestured to an informal dump opposite her home. It was only later that it occurred to me that I should have asked her why she needed to be paid to clean it up, and why it was there in the first place. Some have told me that they litter because it provides work, with specific reference to the CWP workers, saying that without the work they do cleaning up they would not have jobs.

During this phase of the research there were as many opinions on the reasons that people litter in Wakkerstroom as there were people available to talk about this issue.

One of the biggest challenges that I faced in planning the research design can be succinctly summed up by what S said: “[i]t’s very difficult for people not to defer to elders because of a culturally entrenched system of respect. Yet the elders are often ignorant” (journal, 6th May 2016).

The notion of ‘not in my backyard’ was a recurring theme that continually emerged as the reconnaissance progressed and is a complex one. What follows is a journal entry regarding this:

I have instructed E to place garden waste over the fence, but really only the waste that the ponies that graze there, can eat. He then dumped everything there, including litter. When questioned as to why he had done this it transpired that he thought that the field did not belong to me and therefore it was acceptable to throw junk into it. This can also lend insight into what are considered boundaries, both social and physical.

It tells me possibly that ‘not in my backyard’ is being played out here, but this is a gardener on behalf of an employer. I would really love to know what he’d do if I told him that the field belongs to me. Would he move the junk further away and dump it in the street below the field? = parameters/physical boundaries. (journal, 22nd September 2017)

The teachers who are currently working in the sector were able to build on what I already knew about school curricula. For example, there is an extensive research project that the grade twelve learners are given to do on environmentalism. This was particularly interesting to me since it addressed much that I intended to focus on in the course of this study, although my intervention was with primary school learners. The project entails interviewing anyone who is doing work on environmental issues in the village, including council members who are in charge of projects, a thorough literature review and a report, and it is apparently a task given to all grade twelves every year.

With reference to project leadership, the teachers stated that in rare instances where projects run within schools, whether initiated within the school or by an outside entity, such as the Green School programme, there still needs to be a passionate teacher who will drive the project, otherwise it will fail. This was very important information for planning the research project, and identifying champions of the environment became a focus of this study.

Some adults told me about programmes that are run in various parts of the country that place value on litter. One journal entry records such information:

R spoke to me about this system in Utrecht, where the children collect litter, take it to a central point and are given plastic tokens called 'moolas'. These can be used to buy school supplies and basic food stuffs at a shop where these are donated.

W says that it's because poor people don't see value in litter, and the moola system does place value on litter. (journal, 8th April 2016)

There are a number of programmes such as this, which led me to consider the notion of reciprocity. I am of the opinion that as long as the reciprocal nature of a project entails payment of some sort in exchange for picking up litter, a clean environment will only be sustained as long as there is the exchange of commodity. If it is a clean environment, with pride taken in it, that is the only reward for picking up litter, then and only then, can the programme be sustainable. This then means that it is a sense of pride in a litter-free environment that needed to be instilled in the children. The research project was planned so that there would never be reciprocity in the form of cash or goods in exchange for picking up litter. This was a challenge that I gave myself because it became clear that it is difficult to expect a person to take care of his/her environment simply because it is the right thing to do, when he/she is trying to eke out a meagre existence. Due to the COVID-19 pandemic in 2020, however, I had to adapt my attitude to this somewhat, and this is explained in Chapter Seven.

4.3.2 Environmental awareness of children

Shortly after I was assigned as litter monitor by the WNHA, I realized that children form a part of the community who needed to be included in programmes aiming to raise environmental awareness and action to support a clean environment. Initially I worked with four groups of children on an informal basis, and from these I was able to form a core group who became the research participants for the formal study. During this time I worked with the children under the auspices of the WNHA, with the assistance and support of various other individuals and organizations, from the start of 2016.

The first was a short-lived collaboration with Wakkerstroom Central, the local internet cafe, where children were invited to attend craft workshops. The second group was from Happy's after school programme, the third was from Village

Primary School, which is situated in Volksrust, and the fourth was from The Potters' Place aftercare programme.

Through conversations during these workshops the information that the children provided concurred with what has been discussed previously, in that they had been taught about environmental degradation, global warming, and the hazards of waste. However, when I tried to establish from them why there was so much litter and dumping in the village, I could solicit no response. This therefore, provided the springboard from which this study was to develop, since there was knowledge and awareness but no follow through with action. The following is an excerpt of a journal entry reflecting on a workshop:

The object of the workshop today was to collect found objects and litter, and make something fun and aesthetically pleasing (masks). The important objective was to show the children that it is possible to make things out of waste.

At first, we went for a walk around the church grounds, picking up litter along the way, saving what we thought we could use and throwing what we couldn't use into the dustbins. Then we constructed our masks out of this. The children were really shy and reticent to talk to me. (journal, 1st April 2017)

Happy's aftercare programme is co-ordinated on a voluntary basis by a Wakkerstroom resident and provides a safe space for children to come to after school on Friday afternoons. Here they are assisted with homework and reading. My difficulty in working at Happy's was that the women that run the programme are isiZulu speakers and I am English speaking with a rudimentary command of isiZulu. It was also very early on in my investigation and therefore planning for workshops with the children was haphazard and often ended in chaotic experiences with them. The children's ages range from as young as four years to as old as sixteen, which also made workshop planning very difficult. The hall is very small and weather did not always permit working outside in the garden, so it was difficult to split the children into groups according to age. The benefit of this work, however, was that it alerted me to the hazards of language barriers earlier rather than later and to experience first-hand the difficulties of large groups made up of diverse ages. I was therefore able to establish where I was better able to source participants from.

Village Primary is a privately run English medium primary school situated in the adjacent town of Volksrust. After an extensive interview with the owners of the

school, one of whom also teaches there, I was invited to give a talk on litter and recycling to the children. As part of the planning for the talk I decided to present a short play, which was followed by a discussion. It was then that I wrote the *Litter Lion play*. This is a short skit, performed by one person who plays two characters. The play included lyrics that I wrote and put to the tune of “What shall we do with the drunken sailor?” It was this play, the song and the discussion that followed that was the inspiration for the Litter Lions club which later was registered as an NPO. The play was subsequently performed to all the groups of children with whom I have interacted and they have all learned the Litter Lion song. (See Appendix D and E for the play and the Litter Lion song). The experience contributed towards shaping the proposal for the formal study and for planning workshops.

On a follow up visit to Village Primary, a very important piece of information came to light, that was to shape my thinking around planning for the next phase of the study. This information was elaborated on in an informal conversation with friends, who are also teachers. The journal entry excerpt below shows the importance of reflexivity for this study:

I was astonished at Village Primary the last time I did a little presentation, because I realized that the children do not know what the word ‘litter’ means. In discussion with friends it became clearer to me. They know what rubbish is and they know that they shouldn’t drop rubbish just anywhere. They also know about recycling. But the word ‘litter’ is both a verb and a noun. So, THIS is a good point of departure. (journal, 3rd August 2017)

Here it became very apparent that I was not only facing the language barriers that are so often hurdles that need to be overcome by researchers in the humanities, but that simple grammatical issues can unexpectedly become the specifics of language differences.

The Potters’ Place Educenter is an aftercare programme similar to Happy’s, but the difference is that it is a formal education facility which aims to uplift the children who attend by providing formal assistance with learning. The centre was initiated by Charity Nsibande, who has a passion for providing opportunities for marginalized children through education. A small team of teachers, cooks and volunteers provide assistance with homework, reading and a hot meal four times a week. Children who are struggling academically are identified and appropriate assistance is provided for

them. In this way parents are assured that their children have the individual attention that they are not necessarily receiving at the local government primary school. Any willing volunteer is welcome to provide learning experiences for the children so that they are able to benefit from input on diverse topics.

It was through this encouragement of extra-curricular learning that the director of BirdLife SA Wakkerstroom, Ms. Garland, was allocated one afternoon a week with the children, and as a result of this she formed a Junior Bird Club. I was able to work in conjunction with Ms. Garland, and thus began the Litter Lions. We planned our programmes to run concurrently to support the separate endeavours, and plan to continue this collaboration indefinitely. Besides being able to ‘piggy back’ on the BirdLife SA outreach programme I have been able to make use of resources such as reading material and workbooks.

Much data was gathered from the initial work with the children at The Potters’ Place prior to the study. The programme ran somewhat haphazardly in 2016-2017 but was planned more coherently for 2018, in close conjunction with BirdLife SA’s programme. It was in this space that I began to use the arts in interventions with the children. In trying to establish the children’s level of environmental awareness they were asked specific questions to which they were given the option of answering in the form of drawings, cartoons, poetry or short stories. Although all the children responded with a good level of awareness of the importance of keeping their environment clean, the school grounds where they spend most of their time were still full of rubbish.

Despite having a member of staff in attendance at each class there remained a communication problem that was difficult to overcome. The staff attend the classes in order to ensure that the children understand the information and the instructions that are presented to them, since the class is given in English and the children’s home language is isiZulu. Instruction at primary school level is in isiZulu so levels of comprehension in English are limited. However, providing a space for the children to develop reading and comprehension in English is an important aim of The Potters’ Place programme. The children did not seem to grasp the difference between recycling and re-use of waste, (which is quite a subtle difference even for English H1 speakers) and this conceivably was due to the misunderstanding that the staff themselves had of these concepts. It was difficult to determine if what was being

translated was in fact what I hoped was being taught. This was a challenge that the research project continually faced.

During the work with the children at The Potters' Place it became apparent that one of the reasons that the children did not take responsibility for their own waste was because the ladies that run the tuck shop at the break times clean up for the children afterwards, and it seems that the ladies run the tuck shop with the permission from the school authorities with this understanding.

From the previous interventions a group of children was identified on the basis of their command of English, and permission was obtained from their parents for them to attend workshops every second Sunday for an hour and a half during school term times. In addition to learners who attend The Potters' Place aftercare programme some participants were recruited from other schools in the area, and from home schooled learners, with the age of group members varying from seven to fourteen. This formally became the Litter Lions club. The programme on Sundays also, as with that at The Potters' Place, dealt with environmental issues with specific focus on waste, but had been designed to be more fun and lighter than the programme at The Potters' Place. Below are some images from this programme.



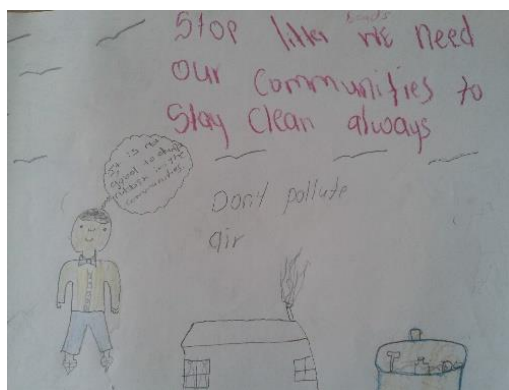


Figure 4.3 Children at work, and some of their drawings

At times other adults volunteered their time to work with the children, for example a house guest of mine attended a workshop with me. Here the children made drawings of the world with the theme being “Save our planet”. Below is an example of one of the drawings.



Figure 4.4 Save the planet image

Work with the Litter Lion Sunday programme was halted once the PhD research proposal was accepted, but got underway again after ethics clearance was granted. It was felt that, since the parameters between work done under the auspices of the WNHA and the research undertaken as part of the study would be blurred, it was best to halt all workshops in the interim. However, the Sunday workshops subsequently formed the official aspect of the first cycle of action research

4.3.3 Toys from waste

Children in the township use waste to make toys for themselves. The cars and trucks that they make out of wire and rubber became popular amongst tourists quite some time ago and are still being made by children all over the country, and in eSizameleni. Another game that children play here is called 'amatin'. Tins that have been squashed flat and an old tin or plastic bath tub are used in the game. First a ball made out of plastic waste is thrown at a person. If the balls hits that person then s/he is permitted a turn with the tins. The idea is to pick up as many tins between the feet as possible and drop them into the tub by jumping up and releasing them over the tub. Children compete with each other to see how many tins they can get into the tub in one jump. The children also play a game called 'passport', where folded crisp packets are used in a game that is similar to marbles, which I learnt while at Village Primary. Soccer balls are made out of bags collected from dumps, wound tightly around each other until a suitable size is achieved, and then tied with string or twine.

However, as much as the children are reusing waste to their advantage to make toys they are doing so because they have no alternative. If they were given commercial toys it is doubtful that they would continue to make toys out of waste for themselves. In other words, they use waste to make toys for themselves due to a lack of finance rather than as an endeavour to recycle or reuse waste in order to create a cleaner environment.

4.4 Previous and current projects with a focus on environmental awareness - reasons for failures and successes

4.4.1 Previous projects

After agreeing to take on the portfolio of litter management for the WNHA, I decided to investigate the history of environmental projects undertaken in the village, because I wanted to establish what type of projects these were, who had organized and funded them and whether or not they had been successful. I felt that such information could lead to the identification of possible key role players in the communities, that it could indicate what was possible and what was not possible, and could make it more likely that projects planned as part of this study did not repeat or overlap with other projects. This investigation turned out to be most useful. All but one project implemented in the past are no longer in existence, and the reasons for failure in sustainability were generally common to all of the projects.

Much information was obtained during an informal conversation with GR, an elderly woman living in Wakkerstroom who has spent many years devoting time to the preservation of birds, specifically the crowned crane, which has its breeding grounds

in the Wakkerstroom area. She has been involved in many programmes with children in order to raise awareness on the cranes, through poetry, writing and dance competitions. While the children entered these competitions enthusiastically and the events were successful, continued awareness of birds is questioned. She also started a vegetable garden initiative, in a field behind the clinic, which was very successful for a long time. This garden was run by elderly women who were able to feed their families and sell surplus produce. However, as the women became too frail to work no young people came forward to continue working in the gardens and the project collapsed. GR also held garden competitions to encourage residents to plant vegetables, and these were a great success.

GR tried to institute a vegetable garden in a field that was attached to the primary school and went to see the head master. While he said that they were welcome to go ahead his experience had been that people were not inclined to work without payment. GR and S approached mothers to discuss the idea of the garden but, indeed, they wanted payment. S also started a wildlife club in the township for children, and 100 youngsters arrived on the first afternoon, around forty the next week, less than twenty on the third – their mothers wanted to know how much they were going to be paid for attendance. This was interesting to me once I began working with the children on the Sunday workshops, as I expected attendance to drop off or a request for payment to be made but this did not occur.

In a conversation with one of the members of the WNHA who is also a member of the Working on Fire (WOF) team, I learned about a project initiated by a councillor who had rondavel shelters built where people could meet and relax where the informal dumps were. How this stopped the dumping he couldn't say, but he said that the areas were pollution-free. When the councillor's time was up and she left, the sheds were destroyed and the dumping started again. Again, it is another example of how projects are driven by champions and when the champion is no longer there, for whatever reason, the project collapses. It is also another example of a woman taking the initiative to make a difference. The following is an excerpt from my research journal entry in reflection after this discussion:

As much as we know that some people here are reticent to work and are not prepared to take responsibility unless they are paid, it IS possible to source individuals who are passionate and better equipped to be ambassadors. (journal, 8th February 2017)

Another source of information regarding projects in environmental awareness and community upliftment was from the manager of the Wakkerstroom branch of

BirdLife SA. There have been a number of projects run under the auspices of BirdLife SA, either in conjunction with other organizations or on their own. None of the projects seemed to have begun with a thorough investigation into what the community needed prior to planning, and this conceivably could be the reason that most of them failed. The programmes were planned from the top down, with little or no financial control being in the hands of the participants, with weak reporting structures and little follow through from organizers. All the programmes ran well as soon as a specific individual stepped up and took control, and the programmes that failed did so because these individuals either left or died.

The relevance of these projects to this research study lay my coming to an understanding of why some projects failed and why some were successful and to use this information in planning my research project. Specifically, it seemed that there was a lack of bottom-up approaches in these projects, with no acknowledgement of local sustainability, compounded by the loss of individual champions.

4.4.2 Current and on-going projects

The first clean-up of the vlei that I conducted as litter monitor for the WNHA occurred on the 16th September 2017. This was an important event in that it generated good data with regards to the waste that had found its way to the wetland, and I was thus able to make comparisons over time. The post clean-up journal entry indicates how it was planned and the outcomes that were observed:

About forty-seven people participated. We cleaned up much more of the vlei than I expected we'd be able to do, and we worked for only two hours or less. The wind was howling and it was really not much fun for those on foot, which was the most of us. [Four people were in two canoes, cleaning litter from the edges of the banks]. I took my map of the vlei, which I had mounted onto a board so that it could be easy to view. I divided the vlei into areas marked from A to I and drew up a spreadsheet for volunteers to report what section they'd cleared, what they had pulled out and how long they had worked. This was to get an idea of what waste is ending up where. I also added a column for time worked. Thus bulk pulled from the vlei could be linked to time. Therefore if someone worked for an hour and pulled out three bags in section A for example, and someone worked for three hours and pulled out one bag in section B, then ergo = there is more trash in section A.

Despite there being recyclables in the mix, particularly glass, it was all contaminated. This is because for the most part all of it has been there for a very

long time and therefore subject to the elements. What information I can gather in order to make comparisons over time, with the bulk of waste gathered during clean-ups, where it occurs regularly, including weather patterns that may affect movement of litter, is important. (journal, 27th September 2017)

In early 2018, as part of my work for the WNHA, I initiated a drive to install swing bins. These are forty-gallon drums which are attached to upright poles which are cemented into the ground. This means that the drums cannot be stolen and that it is easy to empty the bins since they can be overturned on a pivot. This project was undertaken with the permission of the technical manager of the Pixley Ka Seme council who is in charge of waste removal and the landfill. The intention was to install these bins in specific places identified as litter ‘hot spots’; in other words, places where people tended to gather and then throw litter on the ground. Once these were installed the technical manager instructed workers to empty them on a regular basis. These bins have been a success, with residents using them to discard litter and workers emptying them regularly as instructed.

A drive to collect cold drink bottle tops and breadbag tags was undertaken and will continue indefinitely. This is part of the Sweethearts Foundation initiative which trades wheelchairs for those in need, for a predetermined weight of these recyclable items. Another drive was to make eco-bricks by filling two-litre cold drink bottles with non-recyclable plastics such as cling wrap and crisp packets, which are then used for building as with standard bricks. The first structure built with these eco-bricks was a bench constructed next to one of the swing bins situated at the entrance to the village where people wait for transport. The adults have embraced these drives and drop off points have been allocated, with people either donating their time by making eco-bricks or collecting non-recyclables for stuffing bottles.

4.5 Sites littered predominantly by children

By recording what types of litter are apparent in specific areas over time, it was possible to establish who was responsible for littering in each area. For example, many plastic bottle tops are to be found outside the spaza shops. People buy cold drinks, open the bottles and discard the tops in the road. The rubble that is dumped in ditches is put there by people who have vehicles, and beer bottles are dumped in various spaces by men who frequent taverns. During all community clean-ups all waste was monitored and compared to previous waste collected from the same areas.

It was however, the areas that are affected by the behaviour of children that I focused on, since children are the focus of this study.

There were four main sites at which it was clear that children were responsible for littering. The school yard came as no surprise, and this was consistently littered. The bulk of the litter was made up of snack packets, lollipop sticks and wrappings, and paper related to school work. Clean-ups that were arranged as part of workshops at The Potters' Place were followed up by subsequent clean-ups the following week, and the children participated in comparing and tabulating the bulk. This was done by counting the number of black bags that were filled, and examining the contents of the bags. Every week the same amount of litter was collected and the children were questioned as to where they thought it all came from. As much as they all agreed that it was the children that were responsible for the littering, none of them owned up to it.

The second site where children consistently litter is a central point in town, near the shops. Buses bring primary school children to this point from eSizameleni after school where they need to wait for the high school to close before other buses take them home to outlying areas. Many children buy snacks while waiting for their bus. Again, the bulk of the litter is snack packets, lollipop sticks and cold drink bottles and tops.

The third site identified as being littered by children was the town library. Since there are swings next to the library many children spend their time playing there in the afternoons. The content of the litter was the same as at the school and in the road where the buses drop them off.

The fourth site lies on the road outside the primary school in eSizameleni, where children buy snacks before and after school at a spaza shop opposite the school. There is a more than adequate supply of bins both next to the shop and opposite, at the entrance to the school, yet children do not use these. More often than not, though, the waste in the bins blows out of the bin further littering the road.

The four sites mentioned above were specifically identified so that possible change over time could be monitored, as they could provide an indication of changed behaviour in children with regards to littering, and therefore of the efficacy of the study.

4.6 Conclusion

From investigations under the auspices of the WNHA and then during the reconnaissance phase at the official start of this study, it became clear that it was not awareness that needed to be raised in the children, since they had a clear understanding of environmental degradation and the need to halt littering and dumping behaviours. What was needed, however, was a means of bridging the gap between awareness and action, since the children did not behave in a manner reflecting what they had learnt in school.

Informal conversations with teachers indicated that while environmental awareness is taught in schools as part of the curriculum, it is given limited attention. Not only this, but any action that the children or young adults have engaged in at school with regard to litter collection has been in a punitive context. For the purposes of this study one of the most important questions that needed to be addressed was whether it was possible to make the leap from awareness to action with regard to environmental issues, without this involving payment in any form. Further to this, a question that needs to be asked is whether attitudes and behaviours that have been changed remain so, thereby continuing to contribute to a clean and healthy environment.

In the planning of the study, it became clear, through data gathered in the reconnaissance phase, that it was important to ensure that all events, projects and initiatives had to have the participants' needs at the core. Projects initiated in the past in the area, that had not been sustainable, had conceivably failed because they were planned from the top down without consultation or negotiation with participants. These projects appear to have failed because they were planned with a perception of the needs of disempowered and impoverished peoples in mind, yet with no real collaboration with these people. This means of initiating projects is conceivably a remnant of apartheid mentality, which needed to be taken into account for this research, and concurs with the opinions of many of the authors referred to in Chapter Two, where community development was discussed. Unfortunately, South Africa will continue to suffer the legacy of apartheid for many years to come, especially in the rural areas where blatant racism is rife. Indeed, Collins and Hall (1999) corroborate this, saying that, regarding research and project-implementation of this sort:

“[t]he expert planners discovered that the resultant lack of co-operation on the part of the communities was due to these projects being implemented without a feeling of *ownership* by the communities. In the light of South Africa’s history of oppression, we should recognize that empowerment and competence will not come naturally” (p.19, italics original).

Block states that “...sustainable changes in community occur locally on a small scale, happen slowly, and are initiated at grassroots level” (2009, p.26). Roseland puts this succinctly when he quotes Brohman that:

“[i]n general, sustainable development strategies should favour bottom-up over top-down approaches; redistribution over ‘trickle-down’, self-reliance over dependency; a local rather than regional, national or international focus; (Brohman;1996)” (2000, p.105).

In the planning of the study I learned, too, that it was highly unlikely that I would be able to remain separated from local politics, since most environmental issues include some sort of political agenda, especially where there is money to be made at the expense of the natural environment. Even as far back as the early 1940s researchers were recognizing this unavoidable connection between research in the social sciences and politics. Monica Wilson, influential anthropologist of that time indicates that in “[r]esponding to his [her husband and fellow anthropologist, Godfrey Wilson] view that academics should not involve themselves, as academics, in politics, she [Monica] noted that politics ‘would be difficult to keep out’ in South Africa (Morrow;173).” (p.284).

For all the reasons outlined above, this study could therefore not ignore the adults who have the responsibility of socializing and enculturating their children, the political forces that drive and/or control environmental concerns in the area, or the various pedagogical institutions in which the children learn. However, a rudimentary engagement with adults was initially planned, which was to change in the course of fieldwork, as will be shown.

The following chapter, Chapter Five, discusses Cycle One of action research, with descriptions of the interventions, findings from these, and the learning that informed the subsequent cycle.



Chapter Five: Action Research Cycle One

5.1 Mapping the chapter

The focus of this chapter is the first action research cycle which was conducted in 2018. The chapter begins with an outline of the planning for the interventions, is followed by a description of these interventions and finally analysis of the data generated by them is provided. The interventions in Cycle One took many forms, including site visits, discussions followed by drawings, and two interventions conducted by professional theatre practitioners.

5.2 Planning

Much data had been generated during the reconnaissance phase of this research project and this was invaluable for planning the first intervention. Of particular value were the relationships developed from the beginning of the work for the WNHA and WAG, and also with individuals such as Ms. Nsibande, during which the project was conceptualized, and which informed Cycle One.

5.2.1 Sourcing research participants

The director of The Potters' Place Educentre, Charity Nsibande, who has given permission to be named in this thesis, was most helpful in identifying possible research participants. She provided me with a list of children whom she thought would be suitable for the project, based primarily on their proficiency in English. The initial list comprised approximately forty children. Through a letter and follow up telephone calls to parents I was able to identify twenty-five children who were interested and who had parental permission to attend the workshops. These ranged from the ages of six to thirteen.

All twenty-five arrived for the first workshop. The second workshop had thirty-three in attendance, and this was a surprise as I was expecting that there would be an incremental drop in attendance and commitment as the project continued. In fact, the opposite occurred, as attendance for the third workshop was thirty-eight. During this workshop a number of mothers arrived in order to enrol their children, as they had heard through word of mouth that the workshops were happening.

The final attendance settled at between twenty-five and thirty-five children; some missing various workshops for a number of reasons (family, school commitments and so forth), and these were to attend for the rest of the year with very few dropouts. From the Litter Lion song that had been written, performed and subsequently taught to all the children that I had worked with under the WNHA, the participants came, by default, to be referred to as the Litter Lions.

5.2.2 Ethical considerations

Information forms and letters of consent were sent to the parents and the children via The Potters' Place Educentre before workshops commenced. These letters were in English and isiZulu to ensure that there could be no misunderstandings regarding the project itself, the outcomes, the expectations of both participants and researcher, and the time frame. Consent letters were issued to the children at the first workshop, where the contents were again outlined by the director of The Potters' Place. (See Appendix C). Signed letters of consent were filed and locked away. These letters referred to the first cycle of the project and further letters were issued at the start of each subsequent cycle. This was to ensure there was continuity in understanding what the project entailed, and to accommodate possible additional participants.

5.2.3 Venue

The Old Bioscope was used, which is a renovated movie theatre in the main road entering the village. As there is no charge for the use of the venue if it is for community work, this was an ideal space to hold workshops for this project. The hall is attached to a garden, so work could be conducted inside or outside depending on the activity and the weather. There are also toilets and a kitchen available. As much as this was an ideal space to conduct the workshops, it would have been preferable to have had access to a community space in eSizameleni to avoid any transport challenges, and also to be more visible to the local community. However, there was no such functional space in eSizameleni.

5.2.4 Transport and catering

A lift to and from the venue was provided for the children, since eSizameleni is four kilometres from the Old Bioscope. The children received a cold drink during the morning of each workshop, and if there were any donations of fruit or biscuits these were handed out. The children were made aware that this only happened when such donations had been received.

5.2.5 Art supplies

This was a big challenge to address without external funding, since part of the intervention involved children creating drawings, poems, objects (such as puppets) and fabric painting. Calls for donations resulted in some useful art supplies and other useful material, which were supplemented from my personal funds. For the first cycle these comprised A3 and A4 paper, crayons, felt pens and pencils. Fabric paint was donated for t-shirt painting as were scissors and paintbrushes, and t-shirts were bought from WNHA funds. Any activity that may have resulted in damage to the building in any way, such as painting, was held outside in the garden. This impeded much of what was intended since weather did not always permit work outside. It was for this reason that most of the planning of workshops for this cycle avoided the use of paint and ongoing craft projects over time since it was not possible to store unfinished work.

5.2.6 Engagement of professional theatre practitioners

It was the intention at the outset of the research project to engage the cooperation of one or many of the professional theatre companies that work within community development. There had been some very encouraging meetings with various companies that seemed enthusiastic to come to Wakkerstroom and give workshops,

and it was with this understanding that the proposal was written. Unfortunately, none of this preliminary work with these companies came to fruition, and initially this was most frustrating and discouraging, especially considering that the proposal hinged upon this. This presented a challenge for this research project, especially for the first cycle, since my career in the performing arts has been in the technical side, and I was relying on the performing aspect of theatre making for the interventions. It became clear that, if I was to have the assistance of a professional practitioner or group of practitioners, it would be for payment.

5.2.7 Research assistants

Identifying a reliable research assistant also proved to be challenging. Although the children were identified for their command of the English language, it was felt that a first language isiZulu speaker would be beneficial to make certain that children understood concepts and instructions put to them. I also needed another adult to assist with control of the large group, as the children could easily become unruly and over-excited. The director of The Potters' Place attended the first few workshops, and she was instrumental in assisting with any translation and discipline needed, but other commitments prevented further attendance. A Music Festival intern was then approached, but unfortunately he was unsuitable for the position, in that he did not have the authoritative disposition needed to work with children. In the end Cycle One of the research project was conducted without a research assistant, with the exception of Mr. Tshabalala who assisted with the process drama activities which are described later in this chapter.

In *The Qualitative Research Experience* (edited by Deborah K. Padgett, 2004), we read that "...the influence of the translators and interpreters, who are usually native to the culture being investigated, is rarely discussed (Temple and Edwards; 2002)" (p.179). Later in the same publication we find that "[t]he extent to which issues of cultural linguistic transferability has been glossed over in qualitative research is a major concern given the central role of language in qualitative research" (p.190). This cannot be overemphasized, and was a big challenge that was to have an impact on many of the interventions, both with sourcing the relevant person, but also with translation. Subsequently Mr. Tshabalala was employed for a stipend, to assist in further work in Cycle Two.

5.3 Interventions

A number of activities within the interventions ran concurrently in the first cycle in order to promote and sustain the children's interest and involvement. These were

site visits, drawing activities, t-shirt painting and a process drama workshop. The cycle began with a play-making workshop, which culminated in a performance at the end of the first term. The cycle continued during the second term and culminated in a parade as part of the annual Wakkerstroom Art Ramble. A performance, which had been workshopped during the term, was held at the end of term three and this was followed by the process drama which included an end of year presentation. Since the interventions ran concurrently, they are not presented here in chronological order, but rather described under their respective categories.

Analysis of the various interventions took forms appropriate to each intervention, as outlined in Chapter Three – Methodology. Each intervention below, is provided with a short analysis based on these criteria.

5.3.1 Play-making workshop by Craig Morris, and rehearsals

Since several attempts to engage a professional theatre company to conduct workshops had failed, I decided to approach Craig Morris, a Johannesburg actor, who agreed to conduct a workshop with the children. Please note that Mr. Morris has agreed to be named in this thesis.

I felt that the stakes were very high for me on the morning of the 21st January, since this workshop was the first part of the fieldwork for my study. The following journal entry attests to this:

The first workshop with my research participants is this morning, and I'm terrified! I suppose mostly it's the beginning of the real stuff that is to form my research and if I don't get it right in the beginning it's a mess up.

Having said that though, I just need to relax into the process today, enjoy being with the children and learn from Craig. The hope for me is that I'll be able to form something in my mind to enable me to guide the children towards a performance at the end of term one. (journal, 21st January 2018)

The children were taught basic acting techniques during the one-and-a-half-hour workshop, using warm up games and guidance through a series of exercises that culminated in the formation of a character. Mr. Morris instructed the children as follows, taking them step by step through the process, with demonstrations:

“Think of an emotion or attitude and create the facial expression for this. Add a still gesture which compliments the face. Then add a body shape or posture which compliments the face and gestures. Now press ‘unpause’ and bring this shape to life. The face, gesture and posture determines how the character moves – light, heavy, fast, slow etc.. Now add the

voice. What does the character sound like? Do they make outside noises, or interact with environmental sounds? Add an object, real or mimed, which further enhances the character. Finally, where would you typically find this character? Show us the environment they occupy. Voila! If you play this sequence out from beginning to end, you have the beginnings of a story". (excerpt from Mr. Morris' notes)

From this work I was able to plan the next workshop, and I was able to use this methodology continually throughout the rest of the cycle, building on what the children had learnt and adding activities from various other acting manuals. These manuals are listed in Chapter Two of this thesis. The following is a post workshop reflection on the 28th January:

I had a fairly structured idea of what I wanted to do, but then allowed the process to take its own shape. We played warm-up games and then I split them into two groups. Each group thought up a scenario where a person or persons were damaging the environment, and then showed how they would deal with it. Group 1: a restaurant. Table and chairs made up of bodies; a client who ordered bread, coke and chips; ate and then dumped rubbish on the floor; owner chastised the client who picked up the rubbish and put it in the dustbin. The rubbish was acted by the kids as was the dustbin. Group 2: a group of herd boys herded cows to a pond to drink; while they were drinking the boys relieved their bowels and bladders into the water; the creatures that live in the pond shouted at the boys for polluting the water. (journal, 28th January 2018)

It was very clear that the children made use of what they had learnt from the previous workshop under Mr. Morris. This was most encouraging, since it showed that I was able to build on what a professional actor had taught them, and that the children were able to absorb information and carry it through in action into the next workshop. It was also exciting that they were able to create inanimate objects, such as a dustbin, tables and chairs, using their bodies. This was seen also in the pond vignette where the children acted as animals, reptiles and fish with voices of their own to express their displeasure at the pollution of the water. The journal entry ends with the following:

The overall impression I've come away with is that this process is going to work in terms of participation. The children are enthusiastic and are sad when the time is over. They leave upbeat and excited. (journal, ibid.)

The excitement of an outsider working with the children had worn off somewhat during the third workshop, but the discussion as outlined below allowed me to see

that there was the start of thought as to who was responsible for littering. This was significant in relation to further discussion such as this later on, where the children slowly confessed to being responsible.

The children were taken on a walk around the municipal buildings where all the litter was cleared. Three big bags of rubbish were collected. We then discussed what had been collected and who was likely to have thrown down particular items. The children decided that it was likely that children had thrown down chip packets and lollipop sticks, and adults were responsible for discarding beer bottles. They were adamant that they themselves do not throw litter on the ground, although there are always lollipop sticks and chip packets discarded in my car and on the grounds of the Old Bioscope after workshops. This was in alignment with what I had established in the reconnaissance phase of the study.

The children then worked on the two little plays that they had initiated during the previous workshop. They understood the need to rehearse and get them right for performance, yet they did need guidance. I ended the workshop by telling them a story which they listened to attentively. From here I realized that it was important to break the workshop into sections. Each workshop would start with warmup games, followed either by rehearsing the play or an activity such as a short site visit and subsequent drawing or discussion. This would end with a cold drink break and then continue with either rehearsals or drawing depending on what had been done earlier. Story-telling was a good way to focus the children if they had become too tired to concentrate any more. This became the basic structure of the workshops depending on the requirements of the activities.

The next workshop I had a visitor staying with me who attended the workshop. She participated in the workshop, as well as provided an external eye to the manner in which the children behaved towards me. The importance of the external eye, which could be equated with the action research tool of the critical friend, although she was not specifically asked to play this role, was vital at this stage. The visitor informed me after the workshop that the children seemed deeply committed to the process, that they were attentive and enjoyed the manner in which I engaged with them. As a community worker herself, she said that the children 'just want to be hugged, to be loved' and that they conceivably do not get this attention at home. This was a point that I kept in the back of my mind throughout the research process from then onwards. The visitor also taught the children a Native American song that gives

thanks for the water that Mother Earth gives us, which they learnt very quickly (see Appendix F).

The workshop on the 11th March was awful, because I had to run the workshop by myself with no assistance, and had to hold the workshop space by myself. I found this very difficult and ended the workshop half an hour earlier, as the children were inattentive, disruptive and distracted. I was very despondent about the quality of the play that was to be performed the following week, and was worried that there would not be enough rehearsal time. However, in reflection a few days later I wrote about factors that contributed to my despondency:

An incident happened during the break. I'd given the children apples and at the end of break there were some apple cores and a sweet paper dropped in the yard. I asked why this had happened, and the answer was: "we don't see a dustbin, Carol". I think this was one of the reasons why I felt so terribly depressed on Sunday. I felt as if I'd failed. But now I realize that there were more children asking me for a bin than those that simply chose to drop their apple cores on the ground. It leads me to the next question that I can put to the children: what do I do with my rubbish if there is no bin?
(journal, 13th March 2018)

The performance was staged on the 26th March. There was a disappointing turn out of parents but many of the residents of Wakkerstroom came, including some teenagers, and two teachers. The play ran well after I had provided a short explanation of what the objectives of the project were. The audience and children stayed for refreshments afterwards, and the children were taken home by their parents or walked home as pre-arranged. This enabled me meet with attendees for a 'de-briefing'.

Feedback was positive in terms of the performance and the work that I was doing, especially with regard to the message presented, but also regarding the entertainment value of the piece. Whether behaviour is changing through this still remained to be seen. Through analysis of comments and reflections in my journal, I was encouraged to learn that I was working towards a positive outcome in the research project, despite also reaffirming in my mind that success in terms of behaviour change may only be evident, if at all, long after the research was completed. However, and importantly, as Shaughnessy quotes Abingdon (2010), "[t]heatrical performance has the potential to change our experience of the world and therefore, the potential to change our ability to perceive the world in a new way" (2015, p.71). As much as the performance had not been a focus of the intervention, as has been explained

previously, it was important for a number of reasons. It was important to the children that they were given the opportunity to show the work in a performance setting, and having encouragement meant that they were enthusiastic to continue the work that I was doing with them. It also showed me which of the children were team leaders, which meant that I could call on them to step up into leadership roles in the future. Finally, as Shaughnessy has stated, performance can potentially change the way that the world is seen and experienced, and this could be extended from the children to include the audience too.

I began to consider why it was that the children not only continued to attend regularly, but that there were times when new children arrived. This was contradictory to what I was expecting based on other projects of this nature that I had encountered in the reconnaissance phase of the work. At no point did a child or a care-giver request payment for attending the workshops, and in fact the opposite occurred, with at least two mothers wanting to know how much the workshops would cost. I was unable to establish a definitive answer to this disparity.

A key aspect of this performance, which was the first of a number of performances during the course of the study, and the workshops prior to it, was the development of relationships with the children and their care-givers. Living in rural South Africa means that there is little trust across the various social groups, as was affirmed in the reconnaissance phase, and gaining trust of both children and adults through this initial workshop was invaluable. This also made me, as a representative of the WNHA and WAG, more visible, which benefitted the work that I did for these organizations.

In my opinion, this was a manifestation of an acknowledgement of the tenets of eco-feminism. In this context it was the development of relationships based on an equal standing that I am referring to, and this is what one of the aspects of the chosen theory in this study hinged upon. Figure 5.1 is an image from the performance.



Figure 5.1 The Litter Lions taking a bow after the performance

5.3.2 Site visits

Each site visit entailed a short walk to the area in question, an activity in that area, a discussion of the children's experience and observations during the visit, and a final representation in the form of art or writing. The objective of these exercises was to provide the children with a concrete experience of the concepts that were being presented to them during the workshops.

5.3.2.1 Clearing of waterway under the WNHA

Despite this visit not falling under the official auspices of this research project, since at the time I had not registered for the PhD programme, I feel that it is important to add information on this visit as part of Cycle One. This is because the event was a clear and useful learning experience for both me and the children. During a trip bringing children from eSizameleni to a workshop, while driving over a culvert containing a shocking amount of dumped waste, one of the children suggested that we clean up the waterway the following Saturday. Each time I drove the children over this culvert I spoke about the state of the water, and questioned why so much waste was dumped into these areas. It was therefore most exciting to me when the child suggested that we clean it up, and I acted on the suggestion and arranged the clean-up. I met the group at a specified time and brought dustbin bags and my trailer. The children were arranged into groups to ensure safety with each group having an older child as team leader. During the morning there were many other children who are not part of the WNHA Litter Lions who were intrigued as to what we were doing,

and a number of them joined in the clean-up. In an hour or two twenty-four bags of rubbish were cleared from the waterway, and we stopped only because we ran out of space on the trailer. Clean water and soap were provided for the children to wash their hands and then they were all given cold drinks.

This was a very important activity for a number of reasons. Participants as co-researchers is an important aspect of action research, and as Hart states specifically with regard to children, that they "... may be able to change people's notions of what is possible ..." (1999, p.89). It was therefore most important to me that the research participants were as much a part of the research process as I was, and this was also an intrinsic component of eco-feminist theory that I was adhering to. It was meaningful that one of the children had suggested the clean-up, and secondly, that awareness was raised in the wider community, because the activity was occurring outside the community as opposed to behind closed doors in the workshop hall. Finally, it gave me the opportunity, when I fetched the children the following weekend, to point out to them dumping that had occurred in the same area subsequent to our clean-up. This enabled the children to see first-hand how much is being dumped and the difference between how we had left the area after the clean-up, (i.e. clear of waste), and how polluted it had again become in such a short space of time.

Now the children were able to visualize exactly what I had been talking about during the WNHA workshops. Importantly too, when we all saw how much waste had been dumped into the waterway in the week between our clean-up and the next workshop, and I asked if the children would continue to clear the site, the children said that they would never do it without me, stating that they would be teased and bullied by the other children if they were seen to be doing this without adult supervision. Whether this would have been an adult from their community or me specifically was not clear at this stage, yet this was pivotal in understanding a little of how difficult it may be to make a stand for the environment, especially for children.

5.3.2.2 Visit to the town dump

The second of the site visits that the children were taken to was to the town dump. Here they were issued with rubber gloves and tasked with picking up bottle tops to donate to the Sweethearts Foundation programme. The intention was primarily for the children to see first-hand what the town dump looks like, what is thrown there,

and to understand how much of what is discarded can be recycled or reused. Specifically, the collection of plastic bottle tops to be recycled in exchange for a wheelchair was focused on so that a particular object, which was quantifiable, could be observed in bulk form, as opposed to a general look at the dump with a view to what is discarded that can be recycled or reused. Fortuitously for the purposes of the workshop, there had been a family of ‘waste pickers’ there, sorting through garbage to find items to sell. There was also a dead cow, plus a dog and a cow both foraging for food. These had an impact on the children and they were all visibly shocked at what was occurring there. After an hour the children were taken back to The Bioscope and were given paper and crayons to document their experience at the dump. The following table indicates what specific aspects of the town dump had an impact on the children, and this is followed by three drawings from this intervention, which are discussed in further detail.

Table 1 Theme: response to the visit to the town dump; Litter Lions

Sept 2018

number of drawings	14
unusable drawings	0
copies	2

focus of images:	
the dump itself	3
the dog	4
man/family of waste pickers	5
the mountain behind the dump	3
waste	7
no reference to the dump	8
no reference to the dump or waste at all	1
reference to dead animals	0

textual additions by the older children
"we drop things in the dump"
"it is not good to drop things on the ground"
"reuse, reduce, recycle; doing our best to avoid this"
"we must not throw rubbish in the dams"



Figure 5.2



Figure 5.3

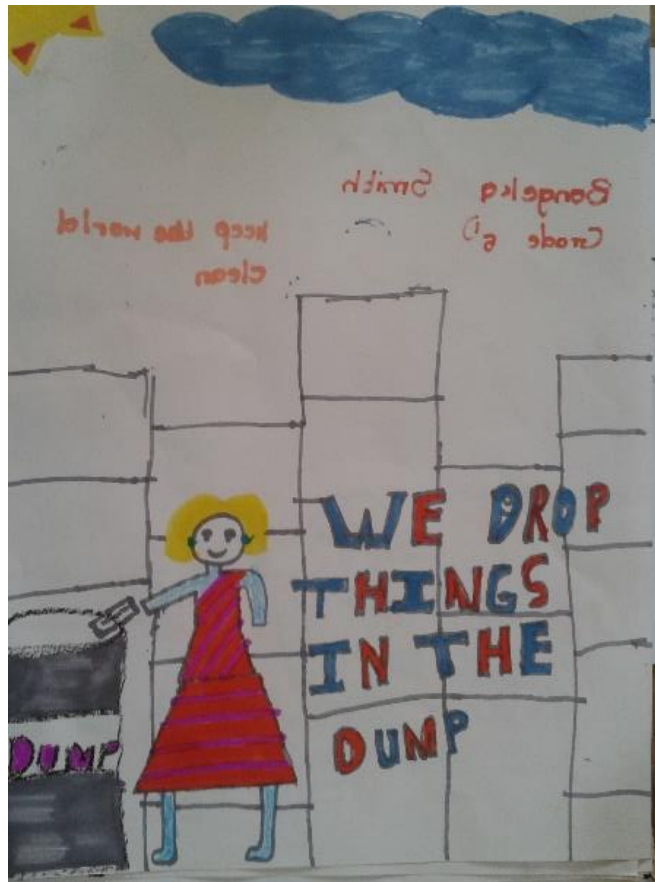


Figure 5.4

In analysis of the drawings, the focus was on what components of the site visit had come to the fore. As can be seen in the top image (figure 5.2), one child had observed the waste picker using a hacksaw to cut firewood, and he had also included the mountain situated behind the dump, and known as Ossewa Kop because of the ox wagon and dates written in stone on it. In the drawing we can also clearly see the addition of waste in the bottom left-hand side, and, although this is not in a salient position, it indicates that the child took cognizance of the nature of a landfill. In figure 5.3 we see the dog foraging through waste, and in the third drawing there is clear indication of the understanding that it is humans that are responsible for dumping. This detail in the drawings enabled me to understand a little more of the grasp that the children had of their environment.

Altogether the drawings showed a clear reflection of the experience at the dump; the children had grasped the concept of the effects of human generated waste, they had seen first-hand how it is possible to source objects from the waste of others to make

a living, and, by collecting plastic bottle tops, they had perceived how many bottle tops had been discarded when in fact they had a use beyond the initial use for which they were made. Again though, understanding these concepts and seeing the dump first hand, still did not mean that they would necessarily refrain from littering themselves, nor did it mean that they would continue to collect bottle tops for the wheelchair drive.

One significant observation that I was able to make was that the children were all, without exception, visibly horrified at the state of the dump. They found the site noxious, were upset about the family and animals foraging in the waste, and clearly found the waste altogether unpleasant. This was astonishing to me in that there are many informal dump sites in eSizameleni, which are as noxious as the town dump, and where animals forage for food, and I was surprised that they seemed not to have experienced this before. Secondly, there were a number of children that picked up items from the waste that they wanted to keep, and asked why anyone would want to throw these items out in the first place.

The drawings and the discussions showed that there was an understanding of the possibility of the usefulness of the waste of others, the amount of waste that is discarded that can be recycled or reused, and the hazards of a toxic landfill. Subsequent to the workshop no bottle tops were collected by the children, unless they were specifically asked to do so, and it is not likely that they would have foraged in informal dump sites near their homes for reusable items, perhaps because of the fear of teasing as has been previously mentioned. Below are more images from this workshop.

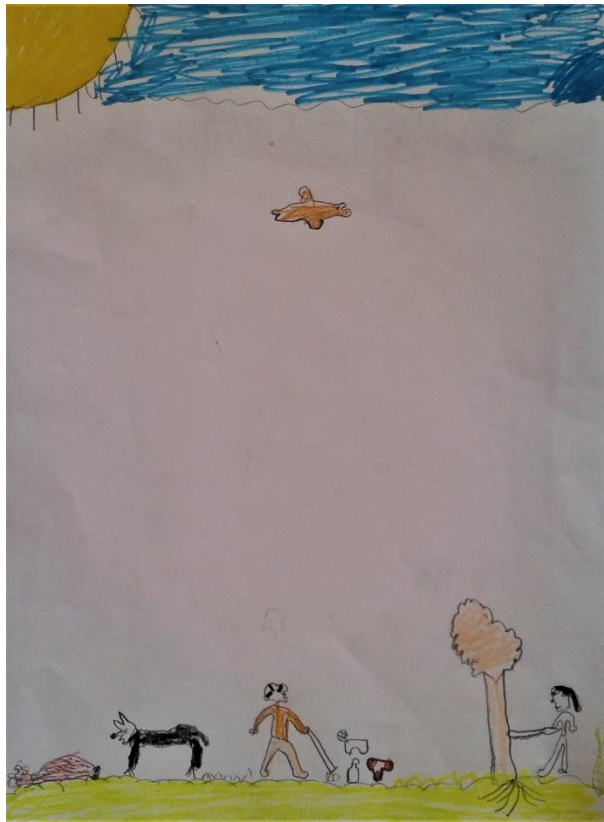


Figure 5.5 Image showing waste, the dog, waste pickers and the man cutting a tree



Figure 5.6 Image showing the man with saw, the dog, and waste



Figure 5.7 Image showing the fence around the dump, the mountain behind, and waste

5.3.2.3 Clearing of grounds around the municipal offices, library and the school

On a number of occasions, the children were taken on clean-up walks around the municipal offices and the library, which were sites identified as being affected by children's behaviour. After two of these walks, one at the school during a Potters' Place workshop and the other at The Bioscope during a Litter Lions workshop, the children were tasked to respond with drawings.

It is important to note though, that these areas are not only visited and used by the research participants, but also by other children. There are approximately 1000 children in the primary school alone, so the littering cannot be blamed only on the research participants. Therefore it was not possible at this stage to definitively state that there was any change in the behaviour of the children I was working with. This was significant in that it revealed that I needed a means of specifically recognizing changed behaviour in the research participants.

During a Potters' Place intervention, I specifically asked them to collect lollipop sticks. The intention was to show just how many lollipop sticks are being thrown on the school grounds, which are obviously the action of the school children. The activity resulted in one plastic shopping bag full of these sticks, but the children seemed unclear as to the real purpose of the exercise. They seemed to think that I

was collecting lollipop sticks for some specific reason and did not seem to grasp that I was trying to show them the results of their actions (i.e. littering). We repeated the activity the following week and the same amount of lollipop sticks was collected. Again, the children that attend The Potters' Place are a small percentage of the total school group, so once again, it was not possible to definitively state that there was any change in the behaviour of this group.

In discussion after the clean-up of these areas the children all, consistently, came with the same responses. They all agreed that it was the children that were throwing down litter, and yet they all denied that it was them specifically. They all emphatically denied dropping litter themselves. In the drawings that they were subsequently requested to make we find the same claims. The table below indicates that most of the children referred to litter, and these were the older children for the most part, but none of them took responsibility for littering. Some of the images appear below the table.

Table 2 Theme: response to clean-ups at the library and the school; Litter Lions and Potters' Place

number of drawings	43
unusable drawings	11
copies	0

reference to litter		age group
no reference	4	diverse ages
some reference	9	6-9 years
reference	23	of these 17 = 6-10 years; 6 = 10-13 years
acknowledgement of responsibility	0	
addition of text	6	

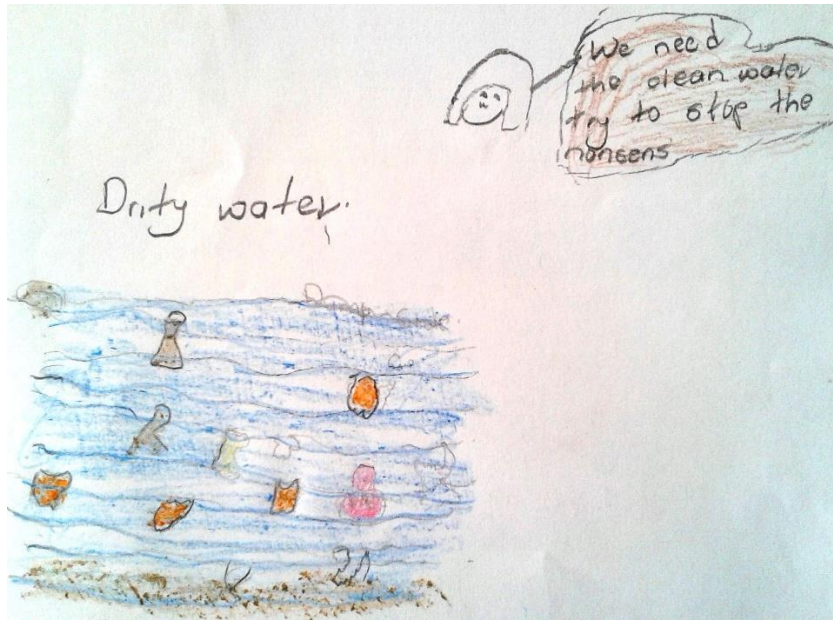


Figure 5.8 Image showing waste in water

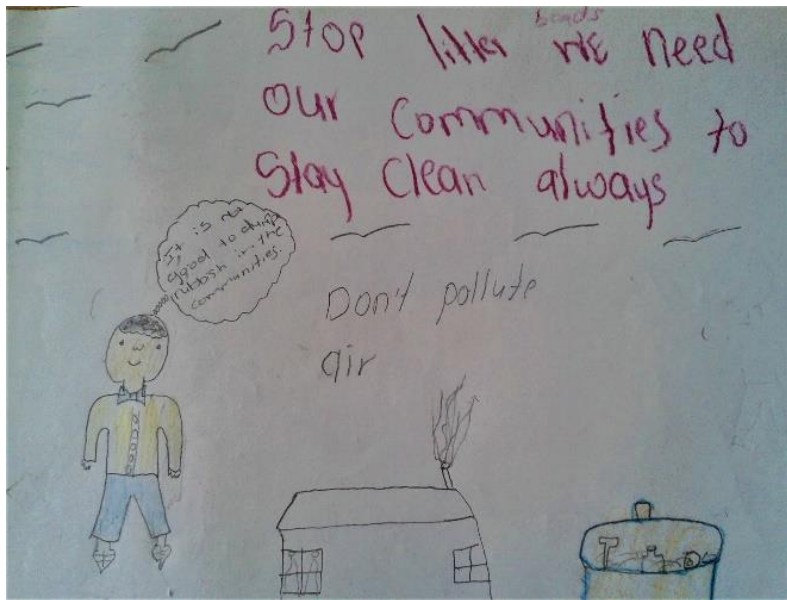


Figure 5.9 Image showing hazards of littering



Figure 5.10 Image showing an animal eating waste from a bin

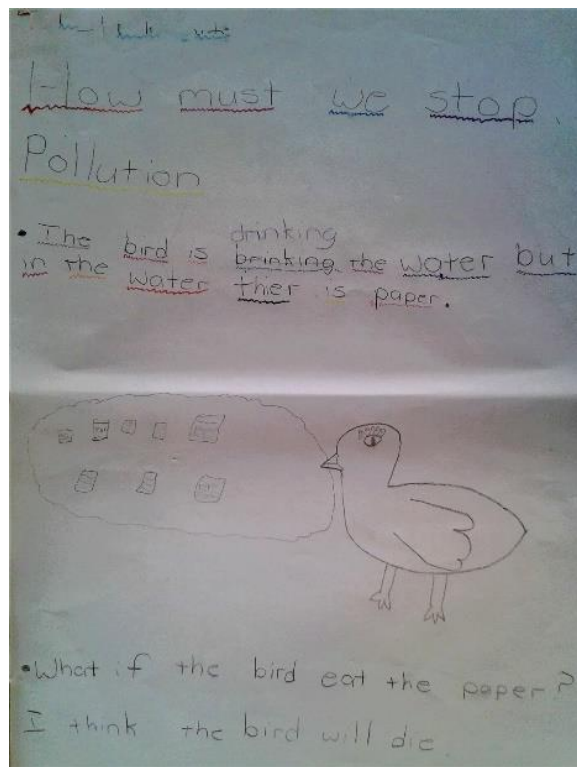


Figure 5.11 Image showing the connection between waste and wildlife



Figure 5.12 Image showing waste at the school grounds and an animal eating from a bin

5.3.3 Art and craft workshops

These workshops took various forms and the objective was different each time. What follows is a description of the workshops, their objectives and their outcomes.

5.3.3.1 Body mapping

An important factor that had come to light during reflection was that I needed to establish what life experiences the children had encountered. This was because I wondered if personal experience, such as living in a grandmother headed household, or the loss of a parent, may have had an effect on behaviour with regards to the environment. I thus decided to hold a body-mapping workshop. This is a process where the participants make a life-size drawing of themselves, indicating significant occurrences that had happened to them during their lives, by inserting images or text onto the drawing in relation to the specific position on the body. As Jager et al (2016) has stated "... it may be useful to what using body-mapping (which encourages visual processing and/or embodied awareness) offers in terms of access to information which would otherwise be overlooked or rendered invisible" (p.4). Also that "[b]ody-mapping possesses certain attributes, rendering it uniquely suited to particular research projects" (p.3), and gives as an example, where there is a language or cultural barrier between researcher and participants. Body-mapping is generally understood to be the internal perception of one's own body, but in this

sense, it can be used as a creative endeavour, both as a means of healing and a means of accessing the life-experiences and self-perceptions of others.

The exercise with the children was largely unsuccessful in terms of the objectives, although they enjoyed themselves tremendously. They particularly enjoyed lying down onto the large pieces of paper provided, and drawing the outlines of their bodies. The drawings that they made showed the kinds of clothes and accessories they like to wear and sometimes mentioned family members. Many of the children simply copied each other. The process would probably have been more useful if it had been taken over a period of two weeks, slowly working through small components each week, towards a final drawing. It could also have been that the children were too young for this type of activity.

There were fourteen drawings that were completed in the workshop, and the table below indicates what issues were mentioned. The drawings that had no indication of any embodied experience or addition of anything other than accessories were not included in the analysis.

Table 3 Theme: body mapping

Mar-18

image number	position of text on the body	Text
1	outside the body	I have good parents
2	heart	I am happy Mom is still alive
	shoulder	thank God for keeping my family safe
	chest	I feel sad and lonely that I don't have a girlfriend
	stomach	I broke someone's heart
3	heart	I love my Mom and Dad and Granny
4	heart	my Mom does not love me
5	arm	our dogs hurt me but I still love them. I will always love them
	heart	I love my parents and my sister and my brother
	stomach	my friend lied about me
	shoulder	my teacher hurts me when I do something wrong
6	heart	I love my sister and my brother
7	heart	I love my sister. I love my brother
8	outside the body	reference to a good family
9	outside the body	reference to a boyfriend
10	stomach	my dogs are thinking about me
	head	I like watching TV

Below are two drawings with details, showing the inclusion of some aspects of what I intended to evoke for this intervention.

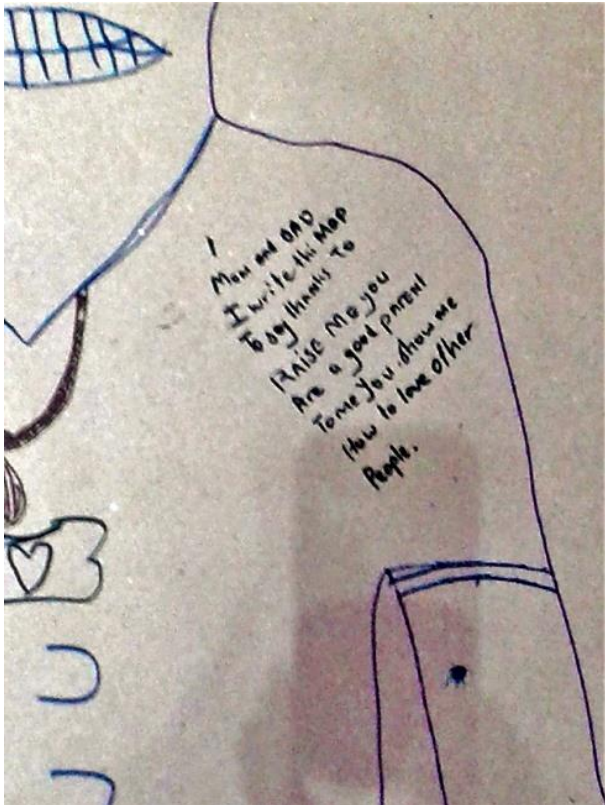


Figure 5.13 Image showing writing on the body Figure 5.14 Detail of Figure 5.13



Figure 5.15 Image of writing on the body

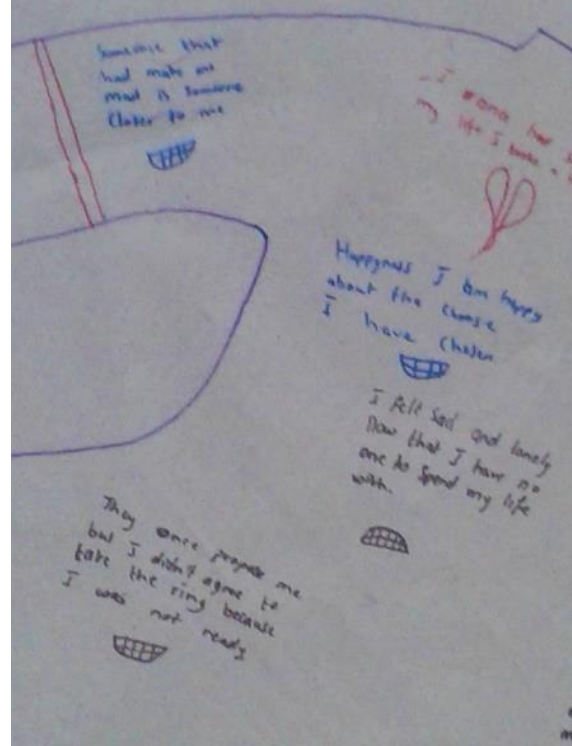


Figure 5.16 Detail of Figure 5.15

5.3.3.2 T-shirt painting

The Wakkerstroom Art Ramble provides an opportunity every year for creative work that goes beyond the work done with the children for this PhD and for the WNHA. Taking advantage of this opportunity allowed me to expose the children to other forms of creativity and to build awareness in the community of the work I was doing with the children. For this intervention the children were provided with t-shirts and fabric paint, so that they could enter for the children's section of the annual art competition, which had as its theme 'In flight'. This afforded the opportunity to explore the various creatures that fly in the natural environment around us, and what these need in order to remain healthy and able to continue to fly. I did this through a focus group discussion.

The images that the children chose ranged from birds of prey to little sparrows and insects, but also helicopters and airplanes, which showed a good understanding of the theme of the competition. One of the Litter Lions won the children's section of the art competition with her image of an eagle. Below is a photograph of some children painting their t-shirts, but I was unable to photograph the t-shirts before the children took them home, as my cell phone became faulty.



Figure 5.17 The Litter Lions painting their t-shirts

5.3.3.3 Banners

The children made banners for a parade that I had arranged as part of the Art Ramble, and these were made out of old canvas that was donated, and poles scavenged from the dump. The children had never participated in a parade before, and their understanding of a parade extended only to political rallies and marches, so they were therefore guided in the functions of banners. In discussion, the children chose the wording and all contributed towards painting them. Three banners were made, all sporting anti-litter slogans.

The objective of this exercise was to prepare the children for an intervention that they could specifically take part in, which was the parade, that was aimed at the community at large. Since they had never experienced anything of the sort before, it was also a good opportunity to educate them about the nature of advocacy with regards to the environment.

5.3.3.4 Paper packet puppets

This intervention, where the children made puppets out of paper packets, was specifically designed without an environmental theme. This was with the awareness that work with the children had the potential to create eco-anxiety. Pihkala states in

this regard that “[s]ome population groups are shown to be more vulnerable: - children, teenagers i.e. those who are generally unable to cope mentally, - people who depend on nature for livelihood...” (2019, p.10). This certainly then, applied to the research participants, both since they are children and that there is a dependency on nature, for example in cattle-grazing. If an environmental theme came into this workshop from the children themselves then I did not prevent it, but I was conscious to provide space where creativity could be explored without the need to focus on litter.

The children chose their own characters to make and puppets varied from autobiographical representations of themselves, to animals such as cows or dogs and cats. The last half an hour of the workshop was spent devising and performing short puppet shows, with the children grouping themselves as they chose.

As stated by Schmidt and Schmidt (1998), in Chapter Three, the children’s ability to remove themselves, and speak through the voice of the puppet, was poignant. Suddenly reserved children became articulate and funny. Stories told through the puppet shows included discussion on what had happened at school, plans for the weekend, and a moment where a parent chastised a child. The workshop was important because it allowed the children to express themselves without task-orientated instruction, and this gave them freedom that they perhaps lack both in school and in the Litter Lion workshops. It also provided me with the understanding that this form of creative art had the potential for performance to a larger audience at a later stage. Below are some images of the children with their puppets.



Figure 5.18 Children with their paper packet puppets

5.3.4 Parade

The parade was held on the second day of the Art Ramble, starting in eSizameleni and ending at the Town Hall. The children wore the t-shirts they had painted and carried the banners that had been made the week before. All the songs that had been rehearsed over the previous months were sung during the parade and then performed on stage at the Town Hall. Many villagers attended the parade, with adult volunteers in cars ensuring safety. A number of children who were not members of the Litter Lions also attended, and many children who were curious about what was happening decided to join the parade just for the fun of it. Many of the parents and/or caregivers were in attendance as well as community members that had responded to the general invitation put out on social media.

The parade generated much interest in the community and was, in this respect, a success. I suspect the reason why so many people came out of their homes to see what was happening was that something like this had never been done in eSizameleni. Messages sent via social media, and the fact that the parade was in conjunction with a village event, meant that there was also interest from visitors as well as residents of Wakkerstroom. The children enjoyed themselves and a sense of solidarity was apparent, although it was not possible to establish whether anyone, children or adults, had received an environmental message.



Figure 5.19 one of the banners for the parade

5.3.5 Process drama by Susan Hall

Ms. Hall was a member of the DfL staff when I initially approached the academic unit for assistance in workshops for the project. She agreed to come to Wakkerstroom and conduct a series of workshops that included process drama, embodiment work, and drawing. These workshops ran over a period of three weeks.

Ms. Hall first established what the children knew about littering, followed by a process drama workshop and a post workshop reflection. Next, she guided the children through group work where what was learned in the previous interventions was explored through the body. Finally, she extracted aspects of all the workshops and put together a performance for family and friends.

5.3.5.1 Planning of the process drama

Ms. Hall was given a basic brief as to what the project entailed and was sent the research proposal two weeks prior to her arrival. From this she decided that it was appropriate to use process drama for her workshops. Planning for the first weekend of workshops was rudimentary, apart from the reading of the proposal, and the workshops were fluid and took their own shape. Ms. Hall took a conscious decision to do this as she wanted to ascertain the level of the group, their prior knowledge and how they could respond to any input that she would offer. Importantly she needed to assess their ‘drama readiness’ to ascertain where she should pitch the exercise games and the process drama. She described this by saying: “we know what we have got – now what can we build on?”

The time during the first two workshops was spent in structured play activities, which comprised standard dramatic warm-up exercises, games where names could be learnt, and miming and character-building techniques similar to the ones that Mr. Morris had taught the children previously. Ms. Hall took the children through one exercise specifically to establish what they had learnt from me during the course of the fieldwork up until that time. The children were given paper and asked to write lists which I then tabulated. In the table below the numbers corresponding to the responses indicate how many children responded to that particular issue. For example, seven children said that I taught them to stop littering:

Table 4 Theme: response to "what has Carol taught you?"

Responses	
stop littering	7
game playing	2

clean the environment	1
acting	3
story telling	1
help the community	1
care for animals	1
drawing	1

It was encouraging for me to see that they knew that the focus of the interventions was on the issue of littering, but also that they acknowledged that there were other aspects to the processes as well.

The children were then broken into six groups of four and asked to write single words on pieces of paper to show what they understood about recycling. From this we were able to obtain a more accurate understanding of the children's thinking, as opposed to making assumptions based on observed behaviour and what they tended to include in drawings, as well as how they answered questions in this regard. While it cannot be said that the words written on small pieces of paper definitely indicated the children's understanding of the concept of recycling, both Ms. Hall and I were of the opinion that this was 'as close as we were going to get' at that stage. Below are examples of the written work that the children did with Ms. Hall, and an image of her discussing the activity previously mentioned.

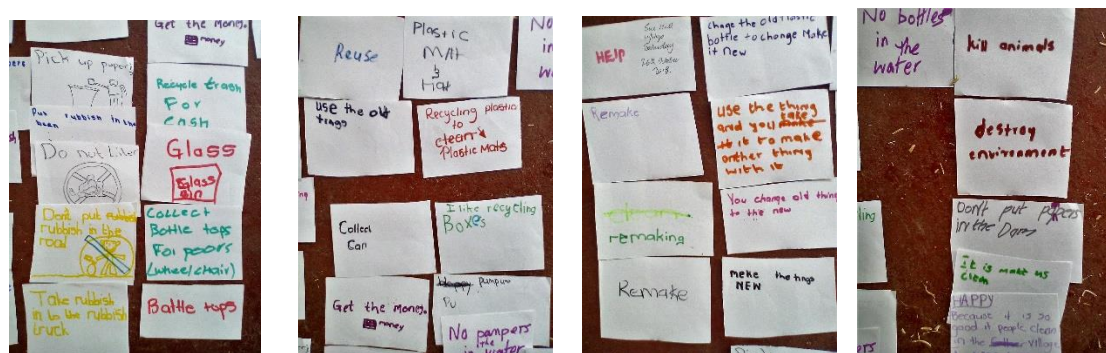


Figure5.20 Words on recycling by the Litter lions



Figure 5.21 Ms. Hall in process drama workshop

5.3.5.2 *Process drama*

The objective of process drama in respect to this project, was to create a scenario that the children could relate to in a very personal and intimate way, then create concrete issues with which they would have to engage within the safety of the space created for them. This was to establish if the children could make decisions within this context where we, as facilitators, could identify what they could manage and what they could come up with. It was also hoped, and most importantly here, that some underlying information regarding why children continue to litter, regardless of knowledge about environmental degradation, would emerge.

Of Dorothy Heathcote, who initially developed this method of teaching, Wagner says, "...Heathcote begins by building belief; once that is firmly established, she moves towards depth of insight about the experience. Whenever possible, she tries to move the class to a moment of awe..." (1979, p.76), and this is exactly what Ms. Hall did with the participants. The following journal entry describes process drama as defined by Ms. Hall:

...within the process they [the children] work things out for themselves. It gives them the chance to think and show on the ground. So we build the belief by enrolling characters, using props. The building of the belief is very important, as it is the starting point. It might be the link between awareness and action! So we build a world and just play in character. We need to recreate their real world so that there

is not so much distance, we then allow them to practice in a safe space.
(journal, 21st October 2018)

Ms. Hall and I then drew up a comprehensive plan to follow for the workshops the following weekend, as per the following journal entry:

We've put together a plan whereby I will set up the hall to have specific places familiar to the children i.e. school, police station, tavern, soccer club, church. In the centre is a pond with a stream feeding into it. Also in the centre is a pile of collected stuff from which the children can choose, that will feed their specific roles. The roles will be assigned outside in the garden, by Sue, while I am setting up the space.
(journal, 27th October 2018)

Below (figures 5.22 to 5.25) are the planning drawings made in preparation for the workshop.

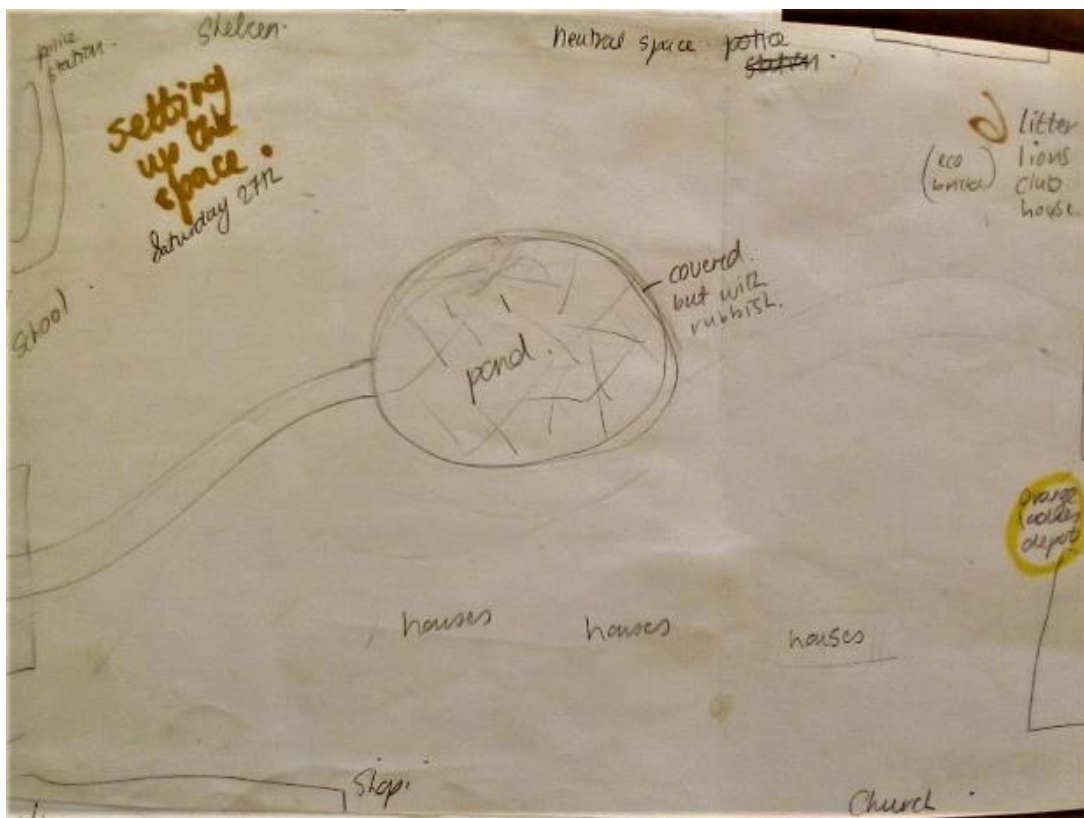


Figure 5.22 Ground plan in preparation for the process drama interventions

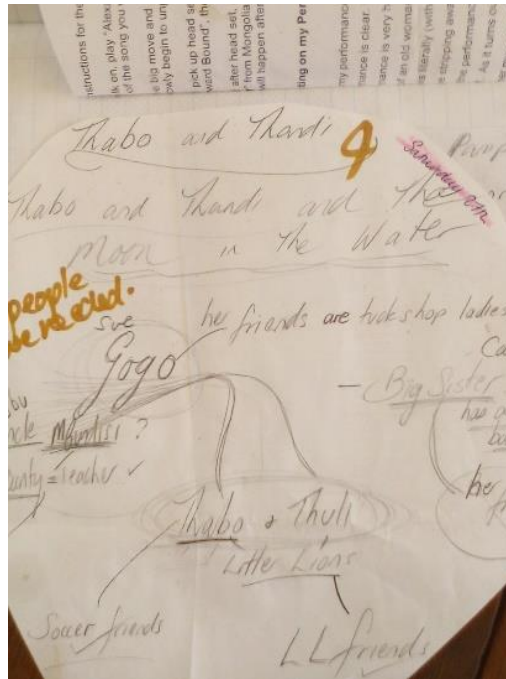


Figure 5.23 Mind map of the characters in the preparation for the process drama intervention

Mothers	.....	Pumper	Searchy 201	3	3
BoGogo	.....	decorating	?		4
Police	.....	cattle grazing			
CWP		time issue	pick up / plant		
Shop		dump boxes			2
Shoban		dump bottles / tins			2
Teachers	.....	teach re littering			2
Principal					1
Truck Shop	.....	sell amamba	Snacks		4
Ladies		Suckers			
Mfundisi					1
Parents	.....	a party	?		4-6
Litter Lions	→	Recycling Depot			8-10
Twins					
Scrap Metal Merchant					
Soccer team					

Figure 5.24 List of characters to be allocated to the participants

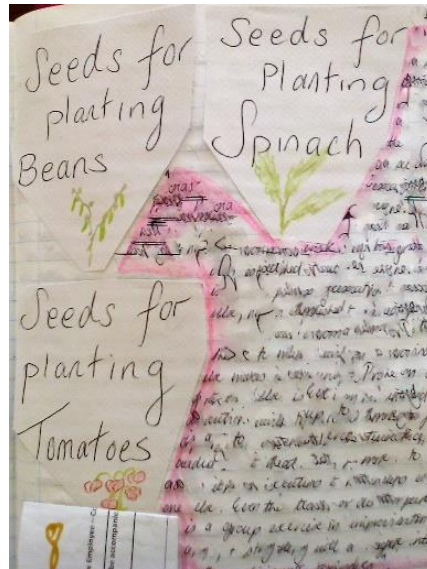


Figure 5.25 Seed packet props

After a short time of free play, the children were told a story in the garden by Ms. Hall. (See Appendix G). While this was happening, I set up the hall. Signage was put up in corners to indicate the specific spaces, and found objects were placed in the centre of the hall. Each child was enrolled by Ms. Hall as a member of the community, such as policemen, CWP workers, spaza shop owners, school children and teachers, tavern owners and Litter Lions, all having roles in the story told to them.

The children were then instructed to enter the hall, find their relevant spaces as per their characters, and then choose appropriate material from the pile of objects available to them. I found myself enrolled as an older sister of the twins, the protagonists of the narrative, who was also a single mother with a small child. I was handed a *doek* by one of the 'twins', to wear on my head. Ms. Hall had enrolled herself as a *gogo* (grandmother) who was ill.

When the children entered the hall they rushed to their 'homes' and then settled in quickly, using the props that they had chosen for themselves from the pile. Ms. Hall then quietly prompted changes which the children embraced wholeheartedly. For example, Ms. Hall would suggest that the sun was going down and that night was coming, and all the children then settled in for the night. The crowing of a rooster 'woke' them all up and they continued with the activities of the day. Children went to school, teachers taught, spaza shop owners sold and CWP workers picked up rubbish. Tavern owners sold beer to visitors, one of whom was Mfundisi, the local

priest, who was played by Mr. Tshabalala. At times Ms. Hall would step out of character as the *gogo* to prompt activities.

When the village had settled into a good routine of a few days, Ms. Hall then prompted the policemen to call a community meeting. The focus of the meeting was that there was too much littering as a result of the drinking and dumping, especially around the tavern, the mothers were throwing diapers into the waterways, and there was rubbish around the *spaza* shops and the school. The police wanted to close the tavern as one way of controlling the litter, and community discussion around all of these issues was on the agenda. My post-workshop reflection below indicates how the events of the morning unfolded:

The children came forward and spoke in character, in isiZulu. They embraced the process and went with the changes that Sue gave, such as going to sleep and waking up. This helped with setting up the space as 'this is our life, our world and our cycle in life'. She took strain in that she needed to constantly change character in order to prompt individuals so that the play could play out as it were. As much as it was the policemen and the school principal and vice-principal that were meant to host the meeting, Sue knew that we needed an adult to run it, therefore she needed to change character again.

Important in the process drama were the Litter Lions who not only did not pick up litter but were arrogantly throwing litter down. In Sue's mind the Litter Lions were further down the road towards environmental protection – perhaps it was false hope that this was so. It would've worked if the houses had had boxes to put their recycling in. Also, the Litter Lions needed to have been enrolled with specific tasks, such as making residents sign for recycling. It is a good question as to why the specific children elected to be Litter Lions, because they were not that strong. It might have been the specific children that enrolled who were not too strong, or that we had not empowered the Litter Lions. Children know about the characters such as police, shop owners, tavern owners – but there is no frame of reference for Litter Lions. It is ironic that we missed this entirely!

The CWP ladies in role were excited and were active in role. It made the 'meeting' very interesting. When Mfundisi said: "The CWP ladies are paid to clean," the ladies said: "No! We clean anyway."

If process drama is to work there needs to be buy-in – once there is buy-in there is commitment and excitement. There were huge strides in confidence in the children

and this is an aspect of process drama, since the children bought into their roles completely. Also, they are safe with Sibusiso and relate to Sue. (journal, 27th October 2018)

What was interesting too, was that the children were entirely willing to believe that the adults in the space (i.e. Mr. Tshabalala, Ms. Hall and myself), were as much a part of the narrative as they were. The polluted environment was making Gogo (Ms. Hall) ill; Mfundisi (Mr. Tshabalala) was drinking and contributing to littering, which was even worse since he was a priest; the single mother (me) was responsible for throwing diapers into the waterway. This was clearly disapproved of by the children, and they had no qualms in laying blame where it was due. The results of the ‘meeting’ were that the police were tasked with monitoring littering and the priest was made to repent, stop drinking and littering.

The following day began with a discussion about what the children had remembered about the process drama the previous day. One child took the lead and provided most of the narrative on this. Other children were encouraged to speak, but the enthusiasm of the boy, who was about nine years old, overshadowed them. However, his comments and insight were enlightening. The following journal excerpt was made in point form, but gives an indication of the conversation nevertheless:

- *Reminding each other of the process yesterday; who was represented and what was represented; then the story of the twins who were sad that because of the litter in the pond, and they couldn't see their reflection in the pond when they went there at night time.*
- *At the meeting the parents didn't agree to work together to clean up the village; the CWP were upset with the parents.*
- *Questioned as to what they liked the most: the tavern, the cleaning, CWP because they were cleaning nicely, the police because they said the tavern must close.*
- *Other things that were seen or done: the granny got better, and that there were things to eat, and flowers, the pastor because he was drinking, the twins telling us about the river, to clean the river, the parents and the pastor stopped drinking.*
- *Sue told the children that her favourite part was the noise of the water at night when the moon rose and it was clean.* (journal, 28th October 2018)

It was during this discussion that the boy who took most of the initiative to relate the events of the previous day made a pivotal comment. He said: “Nothing will ever change unless the parents stop littering”. Wagner has stated that process drama

searches "... for the precise dramatic pressure that will lead to a breakthrough, to a point where the students have to come to a problem in a new way, to Figureht for language adequate to the tension they feel" (1997, p.13), and this is what occurred in the final moments of this intervention. This was to have a dramatic effect on the course of the fieldwork from then onwards.

5.3.5.3 Process drama performance

By drawing on material from the workshops prior to the process drama workshop, and the process drama workshop itself, Ms. Hall put together a series of vignettes that were rehearsed and performed on the last day of the series of workshops, to which families and friends were invited. Attendance was poorer than the previous performance earlier on in the year, with few family members and some villagers arriving. Other attendees were a group of small boys who had been walking past as we were about to start, who were invited in. Ms. Hall began by explaining some of the isiZulu terms used in the performance, so that the non-isiZulu speakers would understand the narrative. The performance then took on the form of a variety show of sorts, beginning with a dance by one of the older girls who had choreographed the piece herself. The songs that had been written or learned over the past year were interspersed with short plays and movement pieces that had been extricated from the work as has been mentioned above.

Ms. Hall's command of isiZulu, rudimentary as it is, was hugely beneficial for many reasons. It allowed her to engage with the children in a more personal manner and also enabled the performance to be presented in the children's home language instead of just English. This visibly impressed the parents and the little boys who attended at the last moment. Despite there being a disappointing turnout, both the audience and the children enjoyed the performance. Comments of congratulations from the adult audience-members attested to this, and the children were upbeat and excited afterwards.

5.3.5.4 Reflections on process drama

Ms. Hall and I agreed that if only one piece of information was gleaned from an activity such as the process drama that we took the children through, then the endeavour had been worthwhile. From the papers that the children wrote their words on with regard to recycling, it was clear that they knew not to throw diapers into waterways, that they knew that they can make cash from waste, that they should not throw litter on the ground, and that they should reuse and recycle. Yet from the behaviour of the Litter Lions, as part of the scenario built during the process drama,

it was very clear that the children had no real frame of reference as to what a Litter Lion is or what a Litter Lion does, besides being part of a club. The other ‘stations’ had a clear frame of reference and the children know what happens there, but the Litter Lion station provided no real, concrete frame of reference. Wagner states that, “[t]he child who perceives an entire scene to be strange and outside all previous experience will not be able to get inside it and make sense of it” (1979, p.70, and this was conceivably what had occurred with the Litter Lions’ station in the context of the scenario. This meant that more intense work needed to be done if the concept of Litter Lions as champions for our local environment amongst the youth, was to work in the long term.

The comment made by the boy regarding the parents and littering behaviour was also extremely important, since it prompted a different course that the study subsequently took.

5.3.6 Concurrent work with the children of The Potters’ Place

Since work with The Potters’ Place continued concurrently during Cycle One with work with the Litter Lions, and since the work dealt with the same issues, it is important that this work is recorded as well. Also, many of the Litter Lions attended The Potters’ Place, so this provided the space to build on experience. These workshops, too, generated as much data as the Litter Lions workshops did, and made it possible to monitor the school grounds to check if there were any changes in littering practices. This was important since the school grounds were one of the areas identified as being affected by the behaviour of children. During the three weeks that Ms. Hall was in Wakkerstroom she agreed to attend The Potters’ Place with me. Together we were able to plan and run a range of activities for the children.

At times there were two groups of children, which meant that the interventions were held over two weeks, and at other times I worked with both groups together. Each intervention is described and tabulated separately below. The tables differ somewhat from each other, since there were different objectives and expected outcomes, however, the numbers seen on the right-hand side of each table refer to the numbers of mentions that were found in the responses from the children, in alignment with specific themes that emerged.

5.3.6.1 Response to “What should we do with pampas?”

This intervention was aimed specifically at the disposal of diapers, which are referred to as ‘pampas’ by the residents of eSizameleni, where the children were

asked the question and then required to respond by producing a drawing. The objective of this intervention was to encourage the children to think about the toxicity of diapers and how this could affect natural waterways when dumped there. Prior to the drawing exercise, I discussed the length of time that a diaper takes to decompose in the natural environment, which is up to five hundred years in a landfill, and the problems of faeces in water.

For analysis the drawings were divided into three categories: those that had images with no text, those that had some text with images, and those that were mostly textual. Those whose submissions were largely textual were from the older children, while the submissions that contained only images were from the youngest of the group. There was no copying in this intervention, as there were two workshops over the space of two weeks, so each child was able to have his/her own table to work at.

There were thirty-seven submissions that I analysed as per the table below. Twenty-four of the participants mentioned diapers in their work with others either referring to waste and littering and one not referring to waste at all. There were some interesting suggestions as to what one could possibly do with diapers, such as burying them in the garden to nourish the soil, or telling the mayor to call a community meeting. Whether this intervention could have an effect on behaviour with regards to dumping of diapers in waterways is impossible to establish, but there is the possibility that at least the intervention caused the children to reflect on the problem. The table below reflects some of the submissions showing the various responses.

Table 5 Theme: "What do I do with pampas?"

Feb/March 2020

number of drawings	37
unclear response	0
copies	0

drawings and no text		comments
no reference to waste at all	1	
reference to littering, but no pampas	5	
reference to pampas	2	pampas in water with dog eating it pampas in water; people removing it

drawing and some text		
responses to littering and waste	11	no mention of pampas

mostly textual		
put pampas in the bin	7	
burn pampas	2	
bury the pampas	6	one thought that covering them in soil is good for the soil
put pampas out for the truck	2	
politicized response	1	mayor to call a community meeting; put up posters
put pampas in plastic sacks	3	one said to put the sack in the garden
tell parents to stop dumping pampas	1	



Figure 5.26 Image showing children cleaning water



Figure 5.27 Image showing a dog eating pampas, pampas in water, person throwing pampas in water

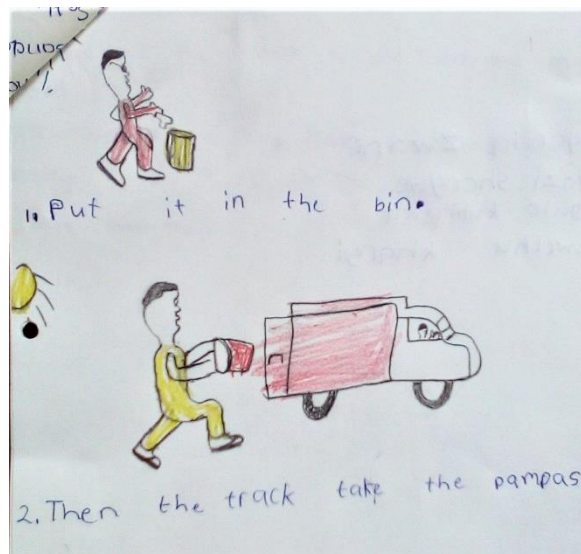


Figure 5.28 Some graphic suggestions as to what to do with pampas

you put out the pampers of your baby
 please put it in the dustbins.

1. Put the pampers on the plastic
2. Put the pampers on the fire and burn it.
3. Dig the hole and put the pampers on it.
4. Put the pampers in the dumping area.
5. Put the pampers on the dumping truck.

1. Take care of your country.
2. Love your country.
3. Respect your country.
4. Clean your country.
5. Let us all protect our country.

Figure 5.29 Written suggestions as to what to do with pampas



Figure 5.30 Younger child's response to the question

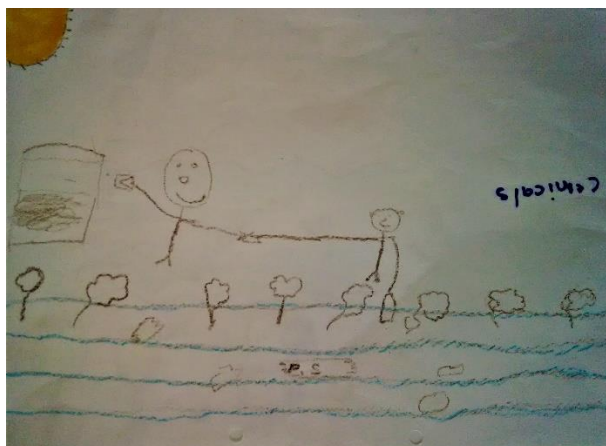


Figure 5.31 Younger child's response showing reference to chemicals

5.3.6.2 Response to "Why do you litter?"

This was an intervention where the children were tasked with providing a graphic response to the question: "Why do you litter?" The focus here was on the word 'you' where the intention was specifically to have the children reflect on their own behaviour, rather than laying the blame on others.

Three children responded in the first person, accepting that they are responsible for littering, and seventeen said that people litter because there is no dustbin available. Since I have specifically noted the positions and number of bins at the school, I know this to be untrue. Furthermore, I installed the swing bin outside the school grounds, next to the Spaza shop where the children purchase their snacks. Five children confessed to laziness as being a reason although only one of these conceded that it was him/herself that was lazy.

Below is the tabulated analysis of the intervention, followed by two drawings, both by the same participant, which refers to himself as responsible for littering. This particular child comes from a broken and violent home, is teased by the other children, and always tries to be the clown. He is particularly bright, which goes unnoticed by his peers since he plays this down. I have included his drawings because he specifically referred to himself as responsible, saying "good S" in the image of himself putting waste in a bin, and "who put the rubbish on the ground: S".

Table 6 Theme: response to "why do you litter?"

number of drawings	36
unclear response	5

copies	0
--------	---

focus of images	
no dustbin available	17
no pocket	2
laziness	5
wanted to play	1
are not educated	1
I put it in my pocket	2
I put it in a bin/ground	1
I want to be a Litter Lion	1

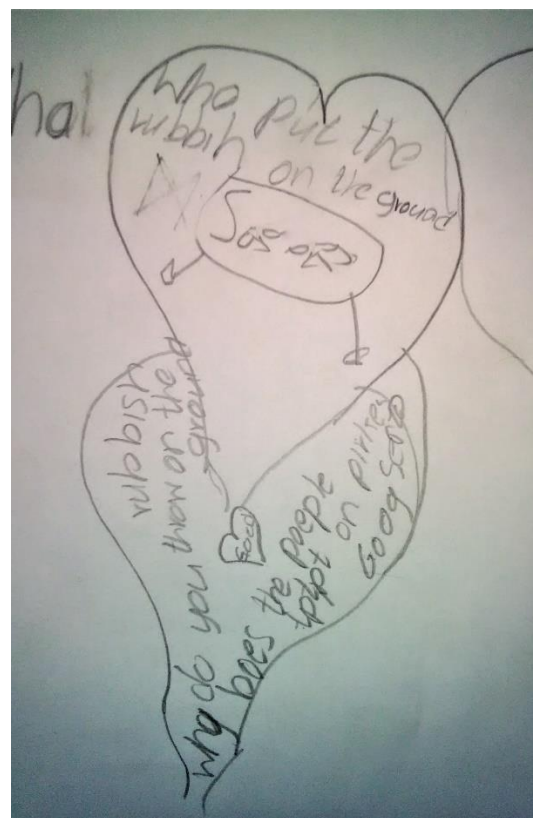


Figure 5.32 Two images showing personal littering behaviour, drawn by the same child

5.3.6.3 Response to "If I know not to litter, why do I still do it?"

This intervention built on the previous one, with wording again intended to assume that the children were responsible for the littering. That there were seven unclear responses may have been due to a problem with translation, or because these children were reticent to respond to the question. This time there were eight children who confessed to being lazy and six children who said that there were no bins nearby.

Other most interesting responses emerged from this intervention. For example, two children assumed that the problem would be solved by others; one stating that ‘I want others to sort the problem’, while one stating that ‘I think workers at school will take it for me...’. In my opinion the child who stated that s/he litters ‘because other people throw paper on the ground’ is a most poignant one, in that it refers back to a statement I received from an interviewee during the reconnaissance phase of the research. Here the interviewee mentioned that if an area was free of litter she would not consider dropping more, but if an area was already littered then adding to it was not a problem.

Below is the tabulated analysis of the intervention, with examples of the images that the children produced below that.

Table 7 Theme: response to "If I know not to litter, why do I still do it?"

Jun-18

number of drawings	31
unclear response	7
copies	2

Responses	
laziness	8
no bin nearby	6
don't listen to the teacher who says don't litter	4
children don't listen	1
I throw down before class	1
Ignorance	2
forgetfulness	1
I want others to sort the problem	1
I think workers at school will take it for me because sometimes I see them taking it from the bin	1
even me, I throw paper on the ground	1
because other people throw the paper on the ground	1
we want the world to be clean; we are Litter Lions	1

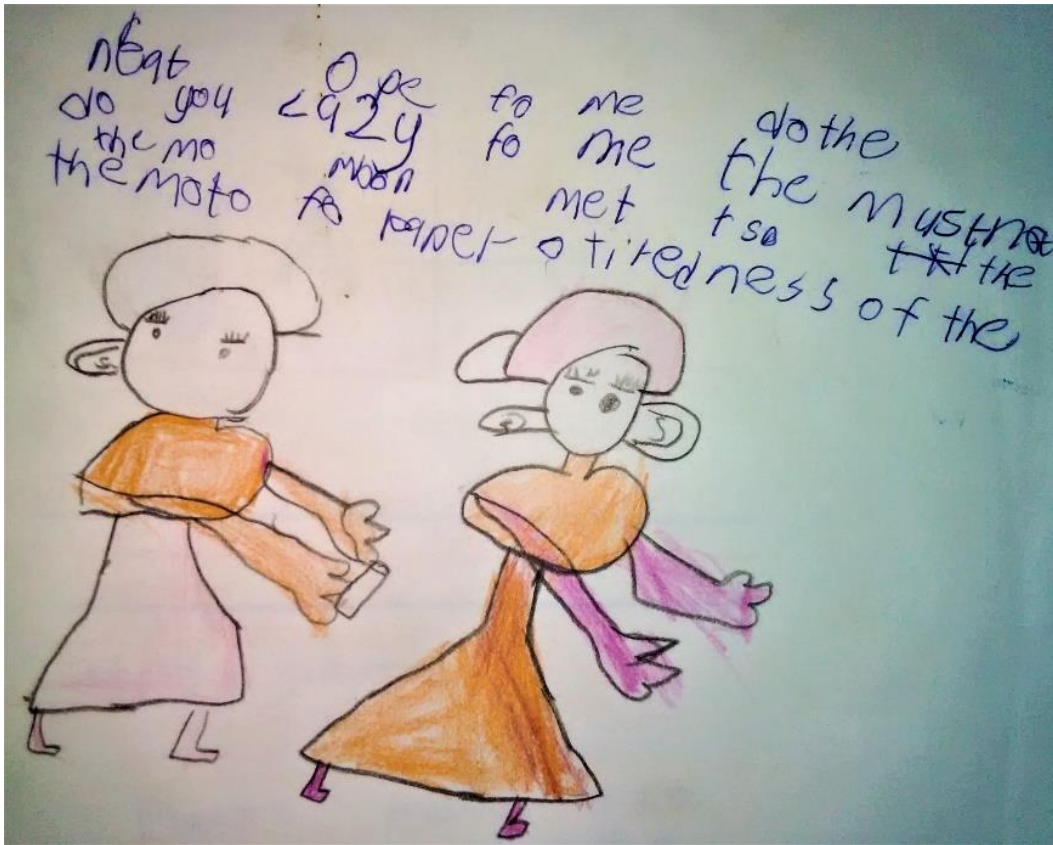


Figure 5.33 Image stating laziness and tiredness as being reasons for littering



Figure 5.34 Image stating that the respondent drops litter before class



Figure 5.35 Image stating that the respondent litters because s/he does not see a bin

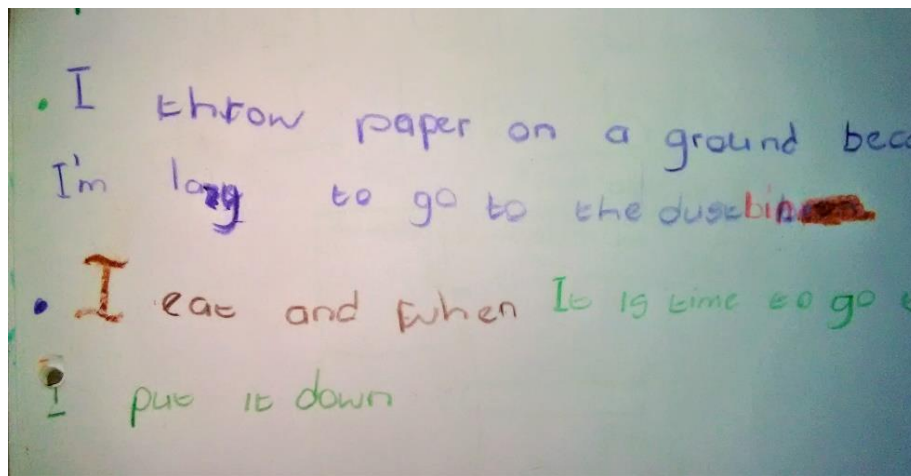


Figure 5.36 Textual response stating laziness as a reason for littering

5.3.6.4 *Tourism workshop and drawings*

Since tourism is vital to the continued existence of Wakkerstroom, I decided to have a workshop on tourism and the importance of keeping the natural environment healthy. This theme was the focus of two workshops held over two weeks, with separate groups of children. The first workshop was somewhat challenging for me as I did not have a translator as I usually did. The journal entry post workshop shows a surprising comparison between the first workshop and the next:

I asked them where they'd like to go touring to and why. Many said Durban, some Cape Town and a few Johannesburg. They wanted to see the sea and to meet new people, so it seemed that they understood the concept of going to a different place to experience something new. I then told them that many people want to come here, but they did not know why anyone would want to. Then when I said: "To see the birds, the vlei and the mountain", it seemed that a light went on. They were astonished at how much money people were prepared to pay just to see the innocuous little Rudds' lark. Then when I asked how it benefits us to have tourists here, I was faced with blank expressions. I then outlined the money that tourists bring in. Then, when I rubbed my fingers together to show the gesture for money, some of them said: "Ker-ching, ker-ching." This was what I'd said and did when I spoke about making money from waste previously. At least this shows that they'd remembered something.

Without a translator it was questionable as to whether they understood the task, even though I called the BirdLife SA assistant in from next door to assist, since he speaks isiZulu. The results were ok in terms of sweet children's drawings, but whether they grasped the concept is anyone's guess. Some did, however, show images of people throwing litter into waterways, which had not been discussed at this workshop. This shows that they, or some of them, are able to make the connection between littering and clean waterways. It still does not indicate anything about their behaviour.

Chatting to the BirdLife SA assistant in the car afterwards, as he flipped through the images, it became clear that what he had translated to the children was not what I had said in English. I was furious with myself that again, I had presumed that what I said was being accurately translated.

(journal, 13th September 2018)

Below are some examples of the images from the first workshop.



Figure 5.37 Image showing visitors enjoying the natural environment



Figure 5.38 Image showing visitors enjoying nature, including animals, and a mention that Wakkerstroom is an international birding hotspot

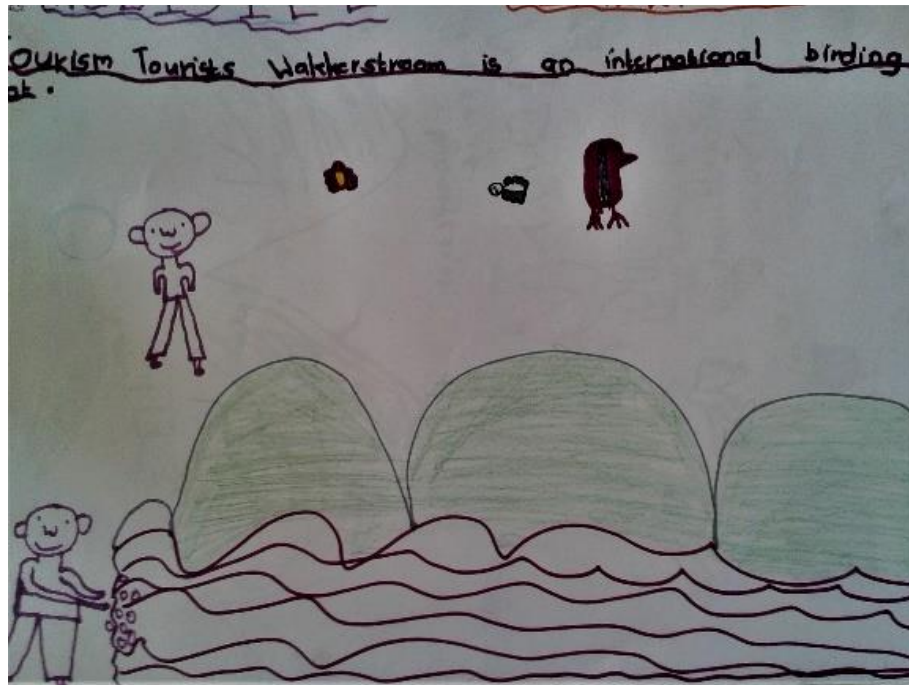


Figure 5.39 Image showing tourists, the vlei, and the mountains, including mention of the birding hotspot



Figure 5.40 Image showing a tourist bird watching

The second workshop on tourism was far more successful than the previous one, in terms of understanding the concept of tourism and the subsequent drawing task. On reflection:

This group were more engaging and responsive than the previous group. What made it this way? Possibly the presence of a teacher which I didn't have the last time – no, this was not the reason. The teacher was disengaged and I had to constantly draw him into the conversation. Furthermore, I am not sure if he translates what I ask him to – does he understand the content himself?

When asked where they would like to travel to as tourists, this group of children said America, Rwanda, Zimbabwe, Europe, as opposed to the Durban and Cape Town answers of last week. Again, why the broader thought process?

For the most part the drawings were the same, but this group also indicated an understanding of the cycle of water, i.e. water – clouds – rain (with one showing lightning and hail) – rivers and wetland. This group also added images of the bird hides
(journal, 20th September 2018)

The table below includes the drawings from both the groups, since it was the same intervention despite marked disparity in the responses between the two days.

Table 8 Theme: response to tourism workshop; Potters' Place

number of drawings	23
unclear response	5
copies	2

focus of images	
bird hides	3
bird watching	3
landscape	3
international birding hotspot	4
pond with ducks	1
mountain, river, tourist, bus	2
see birds + snakes of Africa	1

The responses showed that the children had remembered what was taught to them by Ms. Garland during her birding workshops, as was seen in the images of people watching birds with binoculars, and images of bird hides. Up until then it was unclear if the children had made the connection between bird watching and tourism. Most importantly too, was that four children mentioned that Wakkerstroom is an international birding hotspot, which is an important piece of information as far as tourism is concerned and also with regards to the work that Ms. Garland had done with them.

Below are images from the second workshop showing the inclusion of bird hides, the mountain and one submission that was presented as a poem rather than a drawing.



Figure 5.41 Image of tourists bird watching with binoculars



Figure 5.42 Image of American tourists watching and photographing birds



Figure 5.43 Image of the Ossewa Kop



Figure 5.44 Image of a bird hide



Figure 5.45 Image mentioning the hotspot and littering, but no mention of tourism

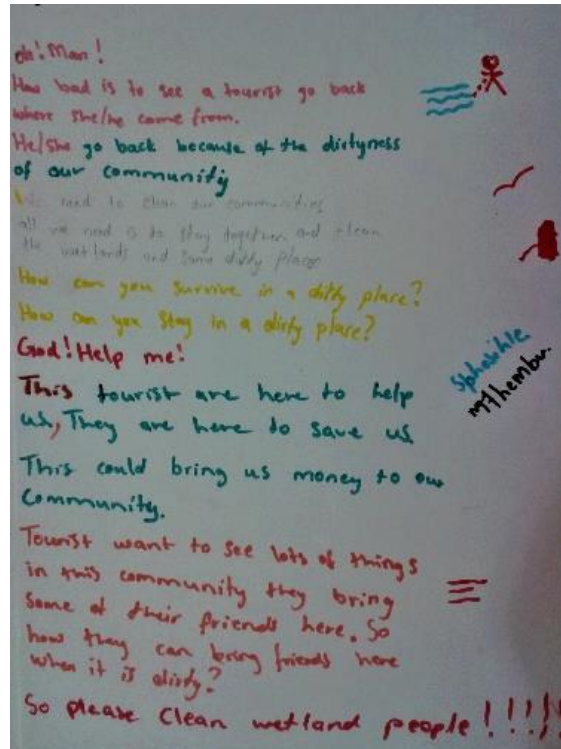


Figure 5.46 Poem response asking to keep the wetland free of litter

5.3.6.5 Soundscapes and story

In order to reaffirm the possibility of generating an income from the reuse of rubbish Ms. Hall told the children a story about a young man from eSizameleni who went to Johannesburg. Here he made a living from creating aesthetic sculptures from plastic waste. One of these sculptures was ‘discovered’ by an international art collector and the young man then became an internationally known artist, who continued to work within his chosen medium. (See Appendix H).

The children were taken through a world of sound, where they were guided to imagine the young man moving from his home village, via the various transport vehicles that he used, finally ending up in the city. The sounds of livestock, pets, children playing and calling to each other, then followed by taxis and buses, were all made by the children using their bodies, the floor, the desks and any waste material that was lying around in the classroom. This was followed by sounds of the trolleys used by informal recyclers, and the sounds of a gentle rain that developed into a thunder storm, and back to gentle rain. Next the children were broken into groups and allocated a specific sound, which they were tasked to insert in the appropriate place in the story. Finally, Ms. Hall repeated the story, and the children inserted the appropriate sounds as the narrative evolved.

The children loved the story and embraced the process of making the sounds. They were attentive when the story was repeated and excited when it was their turn to add to the soundscape. When the complete soundscape was recorded and played back to them, their excitement grew.

A discussion was held afterwards, about how Blessing, the central character in the story, was able to generate a living out of waste, and become an internationally-known artist. For the most part the children indicated that they understood this (some were too young), and showed excitement at the prospect of an income using waste. Whether there will be follow through with any making of objects, either aesthetic or useful, remained still to be seen.

The following week, once Ms. Hall had returned to Johannesburg, I set the children the task of drawing what they remembered from the soundscape workshop the previous week. They were given the option of working in pairs, as I wanted to establish if, firstly, this was possible for a drawing exercise, and secondly if the children were able to discuss the story and translate it coherently in drawing form without there being conflict about what was remembered. In a post-reflection journal entry I wrote the following:

Some of the children did some lovely drawings, and there was one I especially liked which had a most interesting viewpoint of a train [See the image below]. For the most part they were able to work in pairs and they were able to negotiate what they were going to draw and who was going to draw what – which was the task.” (journal, 8th November 2018)



Figure 5.47 Image of the train with interesting perspective

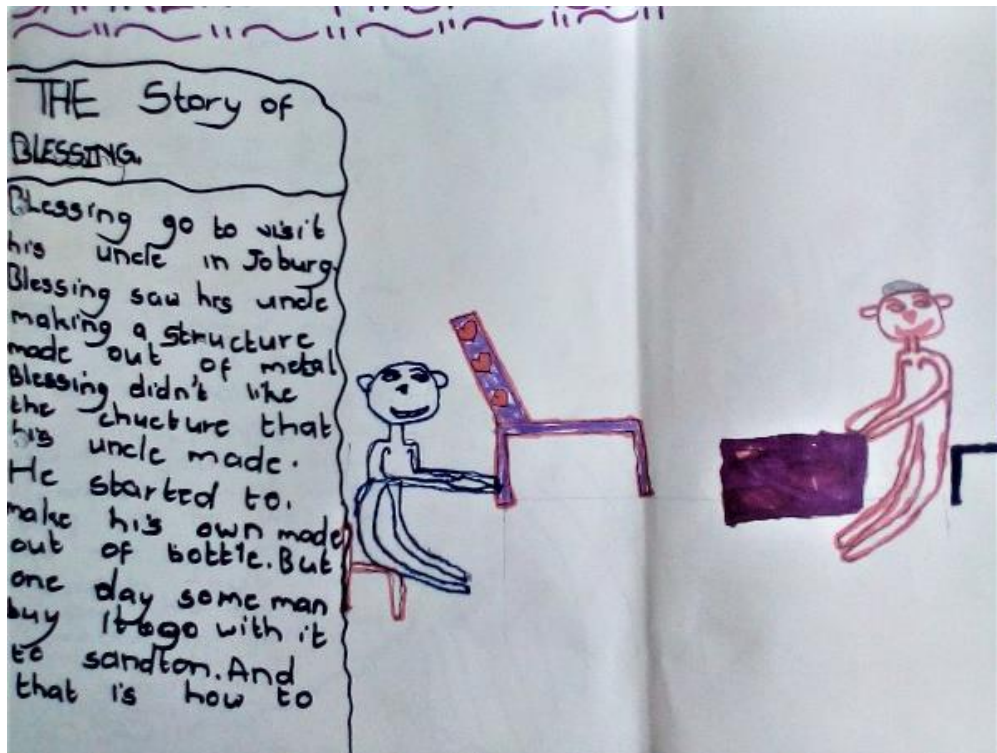


Figure 5.48 Blessing visiting his uncle

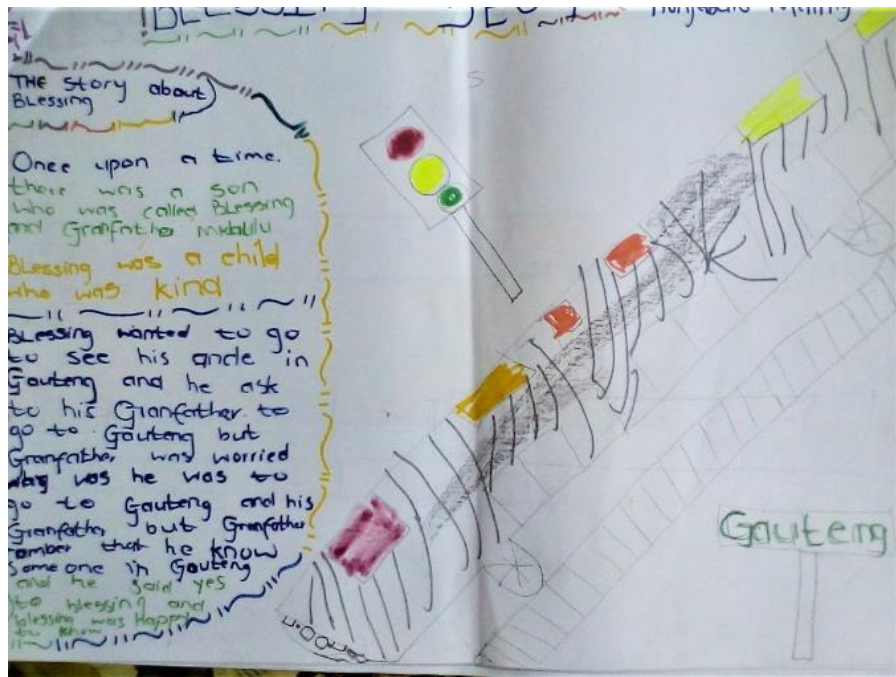


Figure 5.49 Cityscape of Gauteng where Blessings went to

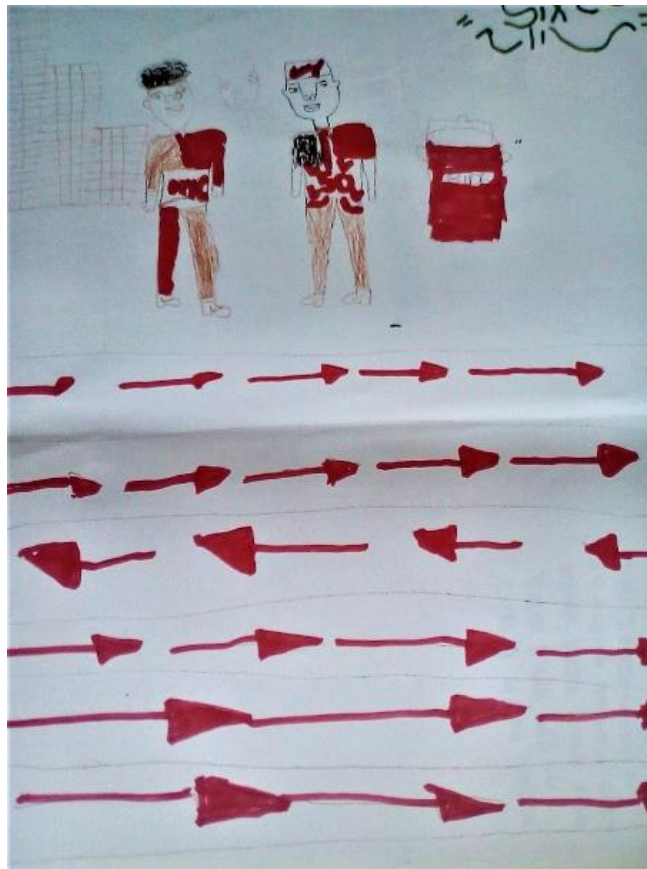


Figure 5.50 Blessing in the city

Table 9 Theme: response to Blessing's story Potters' Place

number of drawings	16 (32 children divided into pairs)
unusable drawings	0
copies	0

focus of images	
train	11
museum	2
Blessing's art	2
visit to the uncle	2
in the city	1
waste collector	1

Above is the tabulated analysis of responses to the intervention. Since most of the children drew images of the train, eleven in total, it would seem that the train had the most impact on the children. It was disappointing that there were only two pairs of children that focused on the art made out of plastic waste, and only one that focused on the waste collector.

5.3.6.6 Plastic bottle drumming

As a follow up on Ms. Halls' soundscape workshop, I decided to work on a second soundscape using empty cold drink bottles. The primary objective was to demonstrate first-hand how it is possible to create something musical, or at least rhythmical, out of waste. The secondary objective was to guide the children in the creation of a rhythmical soundscape that they would create themselves. This was a relaxed workshop that, although its intention was to expose the children to the benefits of reusing waste, was one of those times where I did not want to 'hammer' the point, instead having the children lead the process with more freedom. It was also close to the end of the year, so the children were tired. The workshop was a great success as the following journal entry testifies:

Today I took a huge pile of plastic bottles to The Potters' Place. After chatting about Sue's soundscape we had made previously, I demonstrated banging two bottles together, and against various surfaces. Then they dived into the bottles and each took two.

What fun they had! We broke into four groups and each group worked on their own rhythm, which we then put together. There was much hilarity, laughter and dancing. The second soundscape was made by banging bottles against walls and bodies, with the same method of different rhythms making up one piece.

When we got back to the classroom, I played the videos that I had made, back to them. They were super excited and it was so good to see them so involved and enthusiastic. Finally we discussed what we'd done, besides making a soundscape/video, which was a clear example of the rethinking of empty plastic bottles into making something new and useful. Did they get this last point? How on earth should I know? But really, really worth working on some more for Litter Lions in the future. (journal, 15th November 2018)

5.3.6.7 Reading articles from National Geographic

The following week, which was scheduled to have the second group doing bottle rhythms, took a different turn, since at the last moment I had to take the two groups together. Because I did not have enough plastic bottles to accommodate all of them, I instead took a copy of the current *National Geographic* which featured an article on plastic waste. The first image I showed them was poignant in that it was an image of a white stork wrapped in plastic. The poignancy lay in that a book had been written recently on a white stork, that had been shown to the children as part of the work done by Ms. Garland. Here the children were able to see the effects of waste on birds, and it had all the more impact in that it was a bird that they recognized instantly.

Other images that they were given to look at were of a tiny seahorse wrapped around an earbud, a turtle caught in a fishing net and a lady sorting plastic by colour on an Indian beach. These images had an impact on the children, and they showed a marked level of distress when looking at them. An image of children on a landfill had the most effect on them, since it was particularly disturbing. Once again, whether these images of environmental destruction could elicit a change in poor environmental behaviour was impossible to establish, and it was impossible to establish if the children could make the connection between the environmental destruction in the photographs and what occurs in their own environment.

However, what this experience highlighted was that planning for interventions, whether for the Litter Lion research participants or for The Potters' Place children, often had to take on a different direction. This could be for any number of reasons,

and this is a prime example of the messiness that sometimes occurs in research endeavours of this kind.

5.4 Learning from Action Research Cycle One

There was a wealth of learning experiences for me during Cycle One, that was to form the basis of planning for Cycle Two. Much of the learning was external to the study, but had a direct influence on the direction of the work in the planning for the following cycle. This has been organized into themes which are discussed separately below.

5.4.1 Participant attendance

I had been expecting there to be a similar dropout rate among the research participants in this project as had been displayed in other programmes of this nature in the area. This was not the case and led me to question what the differences were that made for successful attendance in this instance and failure in previous instances. It was still intriguing to me that the children that attended Happy's Friday afternoon activities continued to attend despite an authoritarian atmosphere. The question foremost in my mind was this: if the children of Happy's continue to attend, and the children of the pleasurable wildlife club mentioned in Chapter Four stopped attending, what exactly is it that the children are gaining from these programmes that makes them either attend or not attend? It became important for me to understand this because such understanding could be instrumental in keeping attendance levels up for the rest of the fieldwork. To this end, I questioned a number of people.

My houseguest who attended a workshop observed that the children simply want to be loved, and want to feel worthwhile. They may not be getting such attention at home, so this could be a reason that they continued to attend. Of course, it was by then impossible to know how the children had been treated in the previous programmes, but I am of the opinion that it was the kindness and individual care that I showed towards the children that had this positive impact, and this may have been an indication that I was on the correct path with regard to the theory of eco-feminism outlines. As Brisson states, “[i]t seems necessary that we construct an ecofeminist space which is not dominated by wealthy, able-bodied, straight white women” (2017, p.31), and that “[c]ertain identities are oppressed in distinct ways, and it is exactly this reality that ecofeminists seek to address, which necessitates the construction of a movement that prioritizes the marginalized voices” (p.30). These marginalized voices include those of children, and especially rural children. As one of my journal entries observes, this also may have been a contributory factor:

...I gave a big bear hug to a boy who arrived late, because he looked as if he was expecting a beating, and I told him that I had missed him. After the workshop he wanted a hug again and three other children asked for hugs too. This reminded me of what K had said – that the children crave contact; they are probably not getting it at home and certainly not at school. It's just discipline, beatings (maybe) and who knows...
(journal, 13th September 2018)

Another observer stated that the children attend regularly simply because they are having fun. This then led to other questions: were the children not having fun during the wildlife club programme in eSizameleni? And, is punishment as meted out at Happy's better than no physical contact at all? However, it could be simply that the children enjoy the creative arts. The success of the various projects using dance, poetry and prose writing, as discussed in Chapter Four is indicative of this. However, since I was unable to ascertain relevant details of previous projects involving children and the environment, although, apart from the crowned crane project, I doubt that they included the arts, I could not draw a definite conclusion.

5.4.2 NIMBY

The notion of 'not in my backyard' (NIMBY), has become apparent as a reason for continued informal dumping practices. The Oxford Dictionary gives the following definition of this concept as "a person who objects to the siting of something perceived as unpleasant or hazardous in the area where they live, especially while raising no such objections to similar developments elsewhere". In this context, for example, NIMBY refers to the reticence that people may have when faced with the threat of the construction of a wind turbine or a landfill near their homes. They have no objection to the construction of these things, just as long as it is not near them. In the context of this study, it is residents not wanting waste in or near their gardens and homes that causes the practice of dumping it elsewhere. As long as waste is not dumped in a location near the individual there is no objection to it in an informal dump. This is a practice that occurs across all socio-economic strata of the community in the village. The concept of NIMBY was a focus in reading in preparations for cycle two.

5.4.3 Political factors affecting the study

Narrowing this research project to encompass just the activities with children, while only engaging political factors as peripheral to the investigation, became impossible. The legacy of apartheid, which created a myriad of social ills that clearly affect the

manner in which the research participants exist in the village – their personal circumstances, the quality of the education that they are receiving, the service delivery, including the gate keepers that I have had to contend with, means that this study had to include politics to a greater extent than I originally intended. In South Africa, and certainly in this research site, the connection with litter is made on racial lines instead of socio-economical ones. There seems to be no acknowledgement that it is socio-economic policies of the apartheid era that has indirectly caused poor environmental behaviour. Obtaining assistance and buy-in from members of the upper socio-economic strata of the community, both black and white has been and will continue to be, difficult, and this includes members of the various political entities.

On the 12th September my journal entry attests, not only to despondency regarding the possibility of a successful endeavour with regards to this project, but also to the magnitude of challenges that are faced in this regard:

These are the reasons that I think that my project will fail; all of them are the result of socio-economic problems that this study cannot address, and probably will never be able to, since political factors are so difficult to overcome:

Behaviour is learned in the home, and it is very difficult to change this despite what is learned at school – there is no connection between what is taught at school and what is observed and accepted as normal at home;

Homes in rural areas are steeped in poverty; many of them are grandmother-headed households, where elderly women take care of any number of toddlers with very few resources; many children have absent parents who go to big cities to earn incomes, some homes are children-headed households with parents having died or absconded;

Aids and HIV are rife but the stigma attached is archaic, so there remains a silence around this, making prevention and cure impossible; unprotected sex continues; teenage pregnancy is common rather than the exception

Teenage girls often fall pregnant on purpose because of the attraction of the child grant that the government provides (R440.00 per child), without understanding that this is still too little to support a child, and certainly won't pay for nice clothes and hair that they think it will;

Corruption is rife in local, provincial and national government; this means that none of the social ills outlined above will be addressed in the near future.

This journal entry indicates that it is not possible to ignore the issues and factors that create and perpetuate the socio-economic problems affecting the children involved in the physical area of the study. Schratz and Walker put this succinctly when they write: “Our experience of everyday life is marked by domination and power. If we are to understand it, the structures lying beneath our experience must be made visible” (1995, p.60).

5.4.4 Knowledge-building

An examination of the drawings and performances that the children produced does not indicate if there had been an impact on the environmental awareness of the children. However, there was real indication of the building of knowledge over the period of Cycle One which shows how, when the children are requested to make a drawing on a specific topic, they often include knowledge dealt with in previous workshops, integrating the material well. This shows the ability to make connections between various topics, and how the environment and human behaviour are integrated and affected, without specific issues being separate from each other, and therefore may be an indication that it is possible eventually to bridge the gap between awareness and action.

5.4.5 Engaging with adults

As much as this research project intended to focus only on children it became apparent that this was impossible. The study had to take adults into consideration more than during the rudimentary preliminary investigation of the reconnaissance phase. It is in the homes and schools that adults inculcate particular values, attitudes and behaviours in the children. As much as this was known prior to the study, it was hoped that adults would not have to be included in interventions.

It had become apparent that this study has had an impact on other sectors of the community too, without there being any specific intention to do so. For example, a young couple who run a restaurant called me, and the following journal entry attests to this impact:

They said that because of me and what they see me doing with the children, and the knowledge of recycling that I am spreading, they are now 100% driven to ensure that their restaurant is completely green as soon as possible, and that they are committed to help and support me in any way. Their ethic can only rub off on their

staff and on the other restaurants in the village. Just shows – I am making an impact.
(journal, 5th September 2018)

Also, despite there being many people who drop waste into my garden, there are many more who now regularly take their recyclables to the depot, which they did not do in the past. This has been due to a number of talks that I have been asked to give, to various clubs and organizations here, that have raised awareness in the community.

5.4.6 The challenge of attempting to be value neutral

Maintaining personal neutrality during the fieldwork was a constant challenge to me, and care had to be taken in this regard. As Scratch and Walker state:

Allowing researchers personal concerns licenses them to practice in new ways but also requires them to be increasingly accountable. Once we admit that, as researchers, we hold values that affect the research that we do, we have to find ways to scrutinize our actions and our motives more closely (1995, p.5).

In a self-assigned task, in order to scrutinize my actions as the reference suggests, I asked myself the question: “What is it that I bring into the creative process? I cannot be value-neutral.” From a body map the answer to myself was thus:

I really am feeling the weight of the colour of my skin. Now in rural South Africa I find myself in circumstances that many people were in when I was growing up: a corrupt, dysfunctional government, who cared less or nothing for the poor and disadvantaged, and an ignorant and blinkered uncaring middle class. Nothing has changed. Except perhaps I have, at least I hope I have.
(journal entry, *ibid.*)

Shulanuit Reinharz talks about bringing various “selves” into the field. By careful analysis of her own journal entries, she was able to categorize these “selves”. She explains

...how the self actually does serve as ‘the key fieldwork tool’. I propose that we both *bring* the self to the field and create the self *in the field*. The self we create in the field is a product of the norms of the social setting and the ways in which the ‘research subjects’ interact with the selves the searcher brings *to the field* (Hertz ed., 1997, p.3, italics original).

Continually trying to consider the self I was bringing into the research site, in order to prevent my values ‘infecting’ the study, as it were, has been a most difficult challenge. As mentioned in the journal:

The important thing is to continually second guess, and second guess the second guesses. The challenge is to know when to stop. (journal, 13th September 2018)

This also pertained to the difficulty in sourcing an appropriate research assistant in that I had to ensure that I was not making inappropriate assumptions. Incorrect translation may be due to many factors; the translator may not have understood what has been said in the first place, there may be no means of correct translation in that one language may not have terminology that appropriately translates from another language; the translator may simply not be committed enough to care if the job is done properly. Ryszard Kapuscinski writes about the

Sapir-Whart hypothesis” [that] “...being aware of the fact that in conversing with the Other I am communing with someone who at the same time sees the world differently from me and understands it another way (2008, p.43, capital original).

Careful consideration of the above reference, including the journal entry prior to this, became a conscious effort on my part during the rest of the study. This was extremely important in that issues such as these, which eco-feminists seek to counter in their writing, are central to this study.

5.4.7 Ethics and the researcher

Working with lower-income groups puts the researcher in a vulnerable position in that there is always the distinct economic difference between the researcher and the researched. Handouts are often requested, and in this research project it is not so much hand-outs that were being requested, but time and space. Often, children arrived uninvited at my home, wanting to play, or just ‘hang out’. It was difficult to establish parameters in this respect.

Another hazard that emerged was eco-anxiety. This is a real and damaging affliction, which has been recognized in psychology for some time now. Kelly (2017), has this to say in this regard: “While the term eco-anxiety was introduced relatively recently, the idea that it is based upon – concern about the environment – is nothing new... The term eco-anxiety allows us to express the way in which environmental concern is having unprecedented impacts on personal wellbeing” (p.2). I had tried to protect the research participants against this, but failed to consider myself. Kelly found that it is the marginalized of society (the elderly, children, rural and urban poor, racial and ethnic minorities), that are more likely to suffer from eco-anxiety and have less opportunity of avoiding disaster (2010, p.47). This provided a clear reason as to why I needed to protect my research participants. But with ‘global warming, loss of diversity, environmental degradation’ being the phrases on many people’s lips these

days, it is most difficult not to become overwhelmed with distress over the magnitude of the problem. This is even more so if one is working in environmental healing, such as I was.

Pinkala (2017), currently considered the expert in this field, claims that “[t]here is a grave need to help people to understand the scale and hiddenness of this anxiety ...” (p.113), and that “[t]here are various methods that people use to survive the anxiety. The best ways to adaption are linked to positive action...” (p.114). In my case this positive action in the form of this study was having an exponential impact on me in itself. Focusing on the positive aspects of the work I was doing, such as the restaurant owners’ change in attitude to dealing with waste, and the enjoyment that the children were having, despite not indicating any change in behaviour, became extremely important to me.

5.5 Findings influencing planning for Cycle Two

One of the most significant observations recorded in Cycle One was the comment that the boy made, regarding not being able to change children’s behaviour if their parents were still teaching them bad environmental practice. This made sense in that it had already been established that the children do have a rudimentary awareness of environmental issues which are taught in schools. Bess et al’s comments are relevant here:

For children, the first source of knowledge is most often their parents or care-givers. This method of authority is not only used by children but very commonly by each of us when we rely on the knowledge and ‘wisdom’ of prominent and significant people who are recognized as having a better grasp of their environment than ordinary people. Thus the statements of these ‘qualified’ people are rarely questioned or challenged. On the contrary, the knowledge imparted by them is usually accepted absolute (2018, p.1).

This need to consider the adults in the lives of the children was reinforced by the socio-economic circumstances that the children were living in as outlined in 5.4.3 above. Therefore, Cycle Two needed to incorporate a significant study into the awareness and behaviour of adults, and interventions aimed at adults.

A concerted effort was needed to identify an appropriate research assistant. It became more and more apparent that this person could not simply be an isiZulu speaker, but had to be a person who had a specific ability to work with children. It was also decided that payment of some sort needed to be offered as an added incentive in the search for an appropriate research assistant. Mr. Tshabalala was a perfect fit for this position, and worked with me for the rest of the study.

Logistical issues needed to be examined for the next cycle. Sunday workshops were too long to be able to sustain the concentration of the children. The workshops needed to begin later as well, since it became apparent that many children struggled to arrive on time because of commitments to household chores or church. The agreement to fetch the children from a central point and return them home again after the workshop needed to be re-negotiated.

Soliciting the commitment from professional theatre practitioners had become almost impossible. There were many reasons for this, but specifically it became apparent that these companies had to be booked well in advance for there to be concrete commitment. Funding was also a problem, most specifically because many of the companies require some sort of financial contribution towards performances from the children, which could not always be possible. This meant that more long-term planning in this regard was needed, and smaller companies or individuals needed to be considered for visits, rather than larger, more expensive companies, as had been the initial objective.

5.6 Conclusion

The reflections on my learning from Cycle One included logistical and practical concerns as well as ethical concerns, all of which affected the research participants and the facilitators. Included too, was the realization that this study could not focus on the children alone, and had to take into consideration adult role-players in their social environment. This meant that the scope of the study had to be significantly broadened.

A disappointing outcome of Cycle One was that the children were still unable to make the connection between what they know and what they do. The fact that there was still litter dropped on the ground outside and in the gardens of The Bioscope and in vehicles during and after the workshops attested to this.

The following chapter, Chapter Six covers the planning and further interventions for Cycle Two, which is based on the learning gained from this cycle, with all the above factors taken into account.



Chapter 6: Action Research Cycle Two

6.1 Mapping the chapter

This chapter focusses on the second cycle of action research, which took place over the course of 2019. The chapter begins with findings from the data collected and analysed during the first cycle, which were used to inform the planning of the second cycle. This is followed by a description of the interventions conducted during the second cycle and includes the analysis of the data generated by these. Finally the learning gained from this cycle is outlined, and this is what informed the final cycle of the action research for this study.

6.2 Cycle One findings that informed Cycle Two

Four key findings from Cycle One informed aspects of the planning for Cycle Two. Each of these is outlined briefly in this section.

6.2.1 Work with adults could strengthen the interventions

An important finding to emerge from Cycle One was that including adults in the interventions aimed at promoting environmental good practice, both as role models and as enablers of community activities, could contribute positively to the outcomes

of the informal education programme. As noted by one of the child participants in the Cycle One activities, parents need to set an example to their children by not littering. Given the key role of parents and guardians in children's socialization, it was decided that Cycle Two would include some environmental information sessions for adults in the community, with a view to promoting care of the local environment by both adults and children.

While some 'environmental champions' were identified in the reconnaissance phase of the project (See Chapter Four), reflections on the limited successes achieved during Cycle One suggested the potential value of including individuals and organisations who could play enabling roles, such as liaising with local government.

6.2.2 Opportunities for children to be decision-makers

Many of the children who participated in Cycle One activities indicated interest in creating their own performances on an environmental theme. Stein and Newfield state that "... students are *designers* of meaning. Meaning-making is about choosing and assembling resources in relation to individual desire as well as perceptions of audience and context" (2006, p.8; italics original). It was decided to incorporate designing, rehearsing and presenting a performance into Cycle Two's programme of activities so that children could demonstrate some of the meanings they made of the content of the informal education programme. I did, however, have to ensure that I was not falling into a pitfall as warned by Hart (1999): "Many facilitators working with children in participatory projects shy away from establishing any explicit rules for decision-making processes. Fearful of imposing their own structure, they provide no structure" (p.47).

6.2.3 Changes to the structure of the workshops

During 2018 it was found that the length of the interventions with the children were too long. The children could not sustain concentration for more than two hours, and workshops at times became rather disruptive and difficult to manage. It was therefore decided to begin the workshops later in the morning and run them for two hours only. This still provided time to conduct a meaningful workshop but also enabled time for the free play that the children enjoyed so much. In a study of play conducted over sixteen countries by Singer, Singer, D'Agnostino and DeLong, it was found that "... a lack of free-play and experiential-learning opportunities was eroding childhood. The study indicates that children's major free-time activity is watching television" (2009, p.i). The focus on watching television in free time had already been identified in the children in my research site. Burdette and Whitaker

state that “[p]lay is the spontaneous activity in which children engage to amuse and to occupy themselves. It is also a way children optimize their own brain development. Viewed from this perspective, the nostalgic observation that children “no longer play” should be taken seriously.....” (2005, abstract, parenthesis original).

6.2.4 The political dimension of community-based informal education programmes

The distinction which Janks (2010) makes between big *P* and little *p* politics is quoted at length because of the relevance of her examples to this research project:

Politics with a capital *P* is the big stuff ... It is about government and world trade agreements and the United Nations peace-keeping forces; it is about ethnic or religious genocide and world tribunals; it is about apartheid and global capitalism, money laundering and linguistic imperialism. It is about the inequities between the political North and the political South. It is about oil, the ozone layer, genetic engineering and cloning. It is about the danger of global warming. It is about globalization, the new work order and sweatshops in Asia.

Little *p* politics, on the other hand, is about the micro-politics of everyday life. It is about the minute-by-minute choices and decisions that make us who we are. It is about desire and fear; how we construct them and how they construct us. It is about the politics of identity and place; it is about small triumphs and small defeats; it is about winners and losers, haves and have-nots, school bullies and their victims; it is about how we treat other people day by day; it is about whether we learn someone else’s language or recycle our own garbage ... (Janks, 2010, p.188).

My initial intention had been for the research project to be apolitical but from the outset it was saturated with little *p* politics, and during Cycle Two became infused with local and regional elements of big *P* politics as well. Taylor (2003), claims that as much as “...applied theatre operates from a central transformative principle: to raise awareness on a particular issue” (p.1), he also states that “... sometimes this mission will have a political orientation to it” (p.3). He goes on to write “it is useful to consider the work of applied theatre as a partnership” (p.54), here referring to participants, teacher actors, other stakeholders and the community as a whole. As much as this research project initially hoped to disregard political factors and focus solely on children, findings from the reconnaissance and then from Cycle One suggest that this was a naïve aspiration.

It was for the reasons mentioned above that Cycle Two actively included adults with political agendas within local governance and those working through local government.

6.3 Interventions

Having acknowledged that the project would probably be less successful if adults, were not included, the interventions in Cycle Two were divided into two. These are the arts interventions aimed at the children as per the original plan for the project, and interventions aimed at adults.

6.3.1 Interventions with children

All workshops with the children began with warm-up exercises and had a component of free play. The following sections on the interventions are not presented chronologically as they occurred over the course of Cycle Two. This is because many of the activities were revisited over a number of months, or ran concurrently.

6.3.1.1 What is at stake? process drama

Following the process drama workshops conducted by Ms. Hall during Cycle One, it was decided to plan another one where issues such as ‘staking a claim’ and ‘what is at stake?’ could be explored. This is an important topic in the context of this study, since there are many instances where conflicting entities have a stake in the natural environment. The objective for the workshop was to show, through discussion and play, how various entities have claim to a piece of land, which was presented as also having a body of water on it, and to question which of these entities have more right to the land than others, if in fact anyone had more right over the land than others. Prior to the workshop I set out a demarcated area in the garden of The Bioscope, which was to be used for the process drama activities.

There were sixteen participants in the workshop that day and when they arrived they were taken outside into the garden, where they were led through a series of drama exercises, making shapes with their bodies to form a mayor, a sangoma, a farmer and a tourist, building upon the physical exercise that Ms. Hall had taken them through previously, when they made shapes of the CWP, church, school, tavern and police station. The children were then instructed to run randomly and to freeze in a specific shape when a whistle was blown. The objective of this game was to provide an opportunity for the children to think about how these specific people would look and behave, as preparation for the process drama. The demarcated area was then

shown to them and the notion of ‘staking a claim’ was discussed. It was interesting that none of the children nor the research assistant had heard of this term before.

The children were engaged and excited when they were split into groups according to the four categories of ‘claimants’. They were then told that they would find their ‘homes’ in the hall, and that each group was to come up with valid arguments as to why a particular category of claimant should have access to the water. Following this there was to be a community meeting where their arguments would be presented.

The children found their respective corners in the hall but also had the opportunity to look at the chart that I had put up. (See figure 6.1.) Please note that the chart initially presented only contained the drawing and the title – the words in boxes were added during the course of the workshop. A pile of bits and pieces of costumes had been placed in the centre of the space, and the children were encouraged to pick out items that would be appropriate for their respective roles. They were then given time to discuss within their groups how they would present their arguments and what specific reasons they would give as proof that they were more entitled to the land than others.

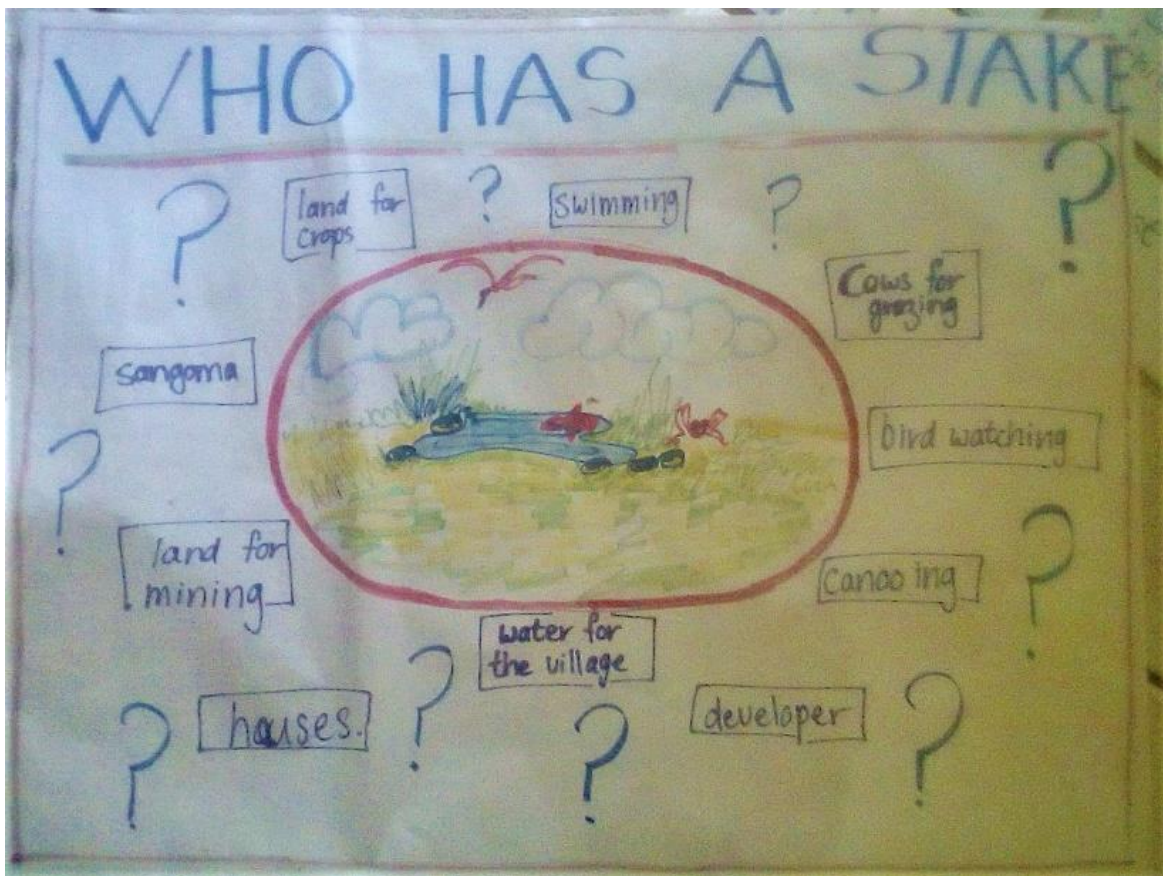


Figure 6.1 The chart that was added to by the children with their suggestions

A call to a community meeting via a loud hailer brought the separate discussions to an end, and the children gathered in the central space. My research assistant acted as the chairperson of the meeting and the topic was again outlined. As the children presented their arguments, words were written on cards and allocated to each group. (See figure 6.2). These specific words were added to the chart as per instructions from the children, according to their opinions regarding the most important aspects discussed.

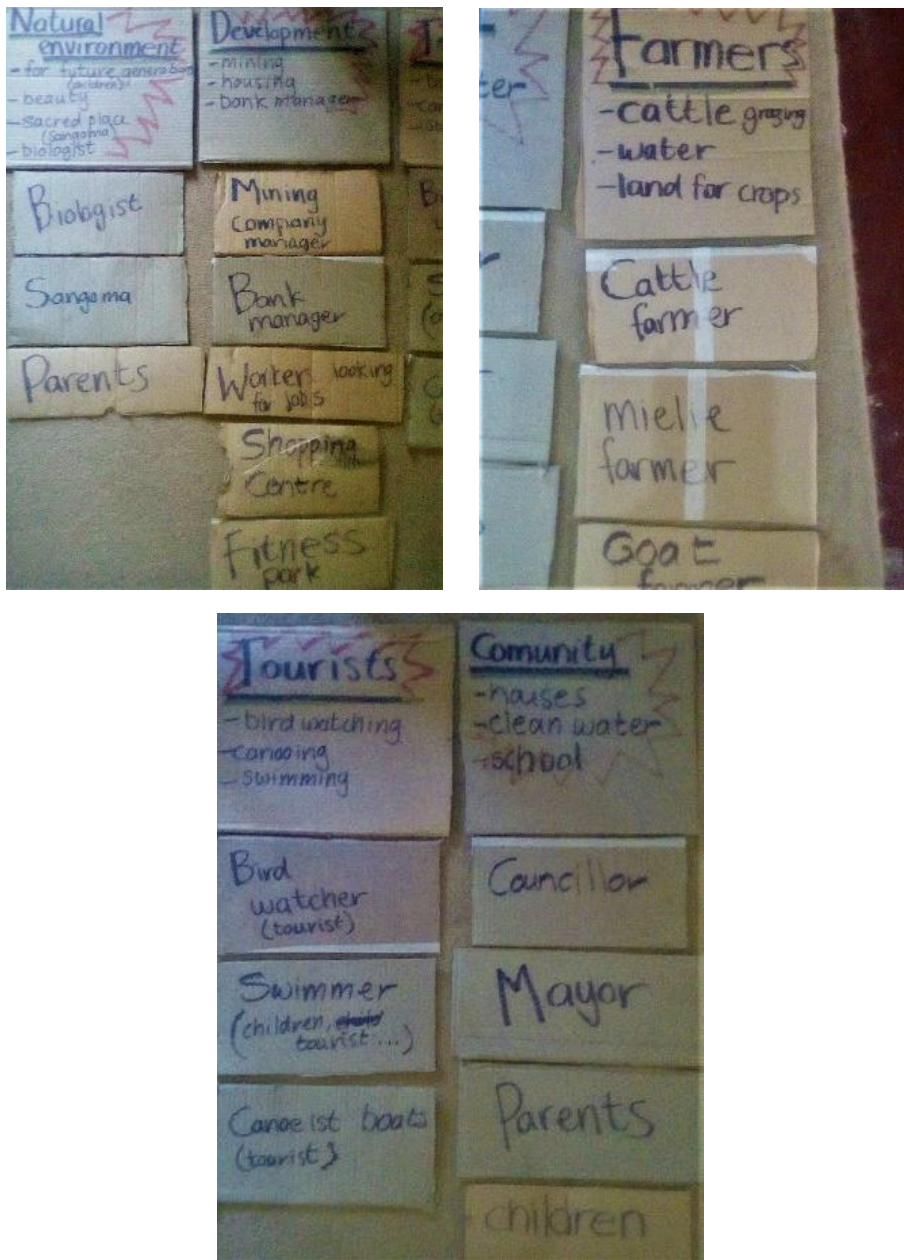


Figure 6.2 Cards with the children's arguments

After each group had been given the opportunity to present their arguments, the floor was opened for debate, with the research assistant acting as mediator. The debate became somewhat heated at times and was difficult to contain, which in itself was exciting as it meant that the children had become absorbed in the topic and had fully embraced the process drama.

The outcome of the process drama was far more successful than anticipated, in that the children were able to come up with many terms relating to the environment as it affected each of the claimants. For example, a sangoma would require the land and the body or water for traditional rituals, or a tourist would want the land to be left pristine for bird watching or swimming. This showed an understanding of how different groups of people make use of natural resources. The heated discussion also showed that the children had a good grasp of the notion of staking a claim and that, once a piece of land has been appropriated, built upon and changed, such changes are unlikely to be reversed. Much of the discussion was around access to the water on the land and concern about its preservation for future generations. This suggests that the work in Cycle One on the value of water had been retained.

6.3.1.2 Desert scenario

Continuing on the theme of water at The Potters' Place the following week, a workshop on a desert scenario was held. What follows is the journal entry made after the workshop:

I took the children to the assembly point where I had set out cups against one wall. Some of the cups had a small amount of water in them and some had none. The children were told to sit against the opposite wall, close their eyes and I then listen to the scenario I gave them.

“We are all in a desert. It’s very, very hot. It’s lunchtime. The sun is burning our heads. Our mouths are dry. We are dying for just a little bit of water. We are all very, very thirsty. We open our eyes. In the distance we see cups of water.”

Here they were encouraged to crawl across the space towards the cups. When they arrived at the cups some received water and some did not. There was no more water. We went back to the classroom and I drew a diagram of Martins Dam, Zaaihoek Dam, the vlei, the village, pumps and the proposed pipeline [this is elaborated on in section 6.3.1.3]. The children were extraordinarily attentive and were horrified at what was going to happen to our water. I encouraged them to talk to their friends and families about this.”

One of the teachers on duty with me that day, then suggested that we hold a march to the municipal offices. I was astonished and encouraged. This is exactly what could bring the communities together – a common, and very dire problem that will affect us all.
(journal, 18th January)

The following week at The Potters' Place I repeated the workshop with the second group of children, and this time I was able to concretise the information because there had been no water in the village from the night before. When the children reached for the cups, I prevented them from drinking what was there because the water was undrinkable since when water is interrupted in Wakkerstroom it is muddy for a day or so after it is turned back on again. Again, I drew the same diagrams of the various dams and pumps as I had done the previous week, but this time the discussion took on a different theme:

The discussion surrounded corruption as the cause of the water cut – no maintenance or upgrade of the equipment by the council because the council is bankrupt. The council is bankrupt because of corruption.
(journal, 25 January)

In both of these workshops I found that the children were much more engaged in the material presented than they had been in previous workshops at which more abstract concepts were discussed. In other words, here there was specific information that pertained to physical aspects of their local environment, that they could see and understand as affecting them directly. This was important as regards this study and useful for building upon. As Cohen, referring to the cognitive development of children as per Piaget's theory, states: "Around the age of seven, children start to be able to handle concrete operations. They can master some basics of logic as long as they are dealing with the here and now and the practical" (2006, p.45). Further to this, Formanek et al state that "[t]he growing child, interacting with his environment, constructs for himself a picture of the environment; that is, he builds up mental representations of his world" (1976, p.9).

6.3.1.3 Pipeline proposal

To build on the knowledge that the children were exposed to in the previous workshops, and taking into account that political factors could not be ignored, it was decided to run a specific workshop on a pipeline that was planned between Volksrust and Wakkerstroom. This pipeline intended to take water from Martins Dam, which provides water for Wakkerstroom, to supply Vukuzakhe, the township attached to

Volksrust. Many meetings with the council had been called by the WNHA, to which nobody had responded at the time of the intervention. The Briefing Meeting Document A on 17 April 2018 drawn up by the WNHA and interested parties, states that:

On 29 July 2018 the Dr Pixley ka Isaka Seme Local Municipality placed an advertisement in City Press for tenders to build a 29 km long, 26 cm diameter pipeline from Martin's Dam - the small dam which supplies municipal water to Wakkerstroom and eSizameleni - to Vukuzakhe, on the outskirts of Volksrust. No further details are yet publicly available and there has been no public consultation regarding the project.

The document also states that there had been no environmental impact assessment done prior to the permission to proceed with the construction of the pipeline, which then began in mid-2019 despite protests from Wakkerstroom residents. The community of eSizameleni was informed by their current councillor that any protest by the white community was counter-productive and simply racist, and therefore there was resistance within eSizameleni to any formal efforts to halt the construction of the pipeline. The relevance of this information for this study is that it had a direct influence on the planning of the workshop outlined below as it was considered important for the children to be made aware of political factors that were affecting, or could have a severe effect, on the local environment. This decision was influenced by Hart's (1997) argument that "[w]e need children to become highly reflective, even critical, participants in environmental issues in their own communities. We need them to think as well as act locally while also being aware of global issues" (p.5). For Roseland (2000) it is important that communities become aware of what he terms 'natural capital' and its role in 'natural income:

Natural capital refers to any stock of natural assets that yields a flow of valuable goods and services into the future. For example, a forest, a fish stock or an aquifer [such as the Wakkerstroom vlei], can provide a harvest or flow that is potentially sustainable year after year. The forest or fish stock is "natural capital" and the sustainable harvest is "natural income" (p.78; inverted commas original).

Since Wakkerstroom exists and remains functional due to the water in the area, which is then the natural capital, with natural income sustaining the entire village, it is important for children be aware of the tenuous position of their community. It seemed paramount that the children should clearly understand how the political agenda of the local council could potentially have a negative and long-term effect on the very natural resource that ensures the livelihood of the people in their community. Hart (1999), has also stated that "[w]hen children begin to observe their environment and to also question about why things are the way they are, they may

be quickly elevated to a higher level of social and indeed political consciousness” (p.25). And Randle (1999) urges teachers and other adults to “...enable and encourage pupils to find out about the political dimensions of environmental problems” (p.86).

The workshop began with the children being divided into groups of three. Again they made shapes using their bodies; here though, they made shapes of water in a pipe, water stealers and water pumps. The shapes were then put together to make one system. They were then given paper and crayons and encouraged to write or draw a response to the issue. What emerged was thoughts on various things that could be done to protect our local water supply and the wetland, which was encouraging to me, since they had not been instructed to do this. On reflection in the journal I wrote:

The interesting thing that emerged in their work was their interpretation of pictorial representations of environmental concepts that I'd given them over the past year. Some gave a combination of the water flow diagram that I had done, showing precipitation, run-off, ground water, streams, rivers, dams, vlei and the pipeline. One drawing showed Wakkerstroom, Martins Dam, eSizameleni, the pipeline to Vukuzakhe and Volksrust, plus Zaaihoek Dam. Many children spoke about keeping our water clean, and others spoke about 'what can we do as community members to prevent the pipeline?' (journal, 28th January)

Once they were finished with their work we placed all the drawings along the edge of the hall and I drew up a summary of what they had put on their paper, in the form of a colour chart. This was in order to give them a concise view of all of their opinions. See figures. 6.3 through 6.7 for some of the children's work, a tabulated analysis of these, and the final summary.

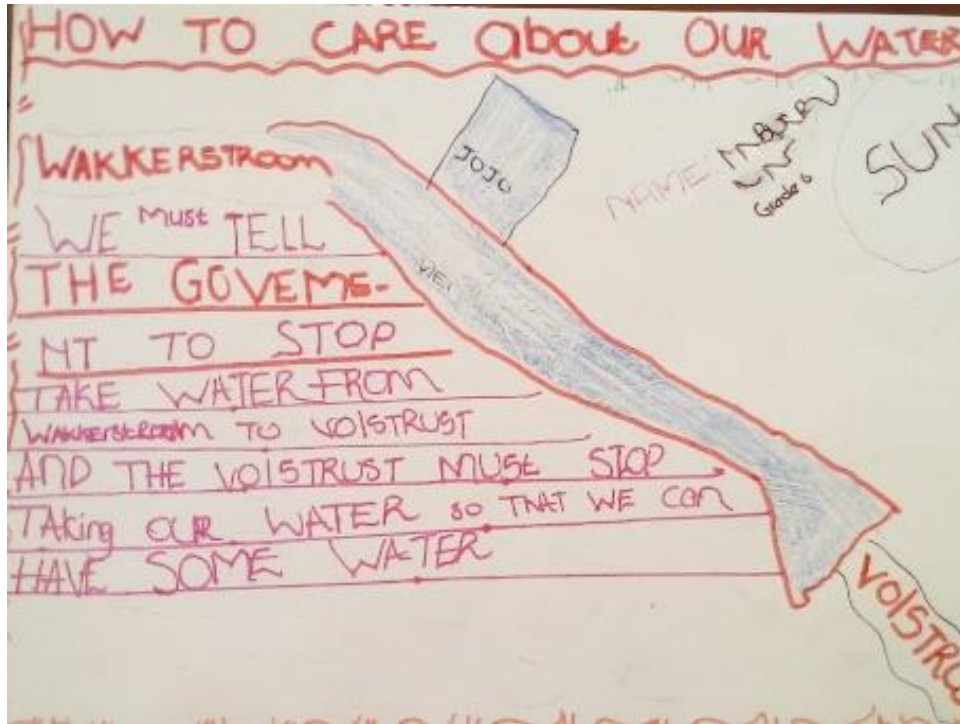


Figure 6.3 Image showing the pipeline and textual suggestions

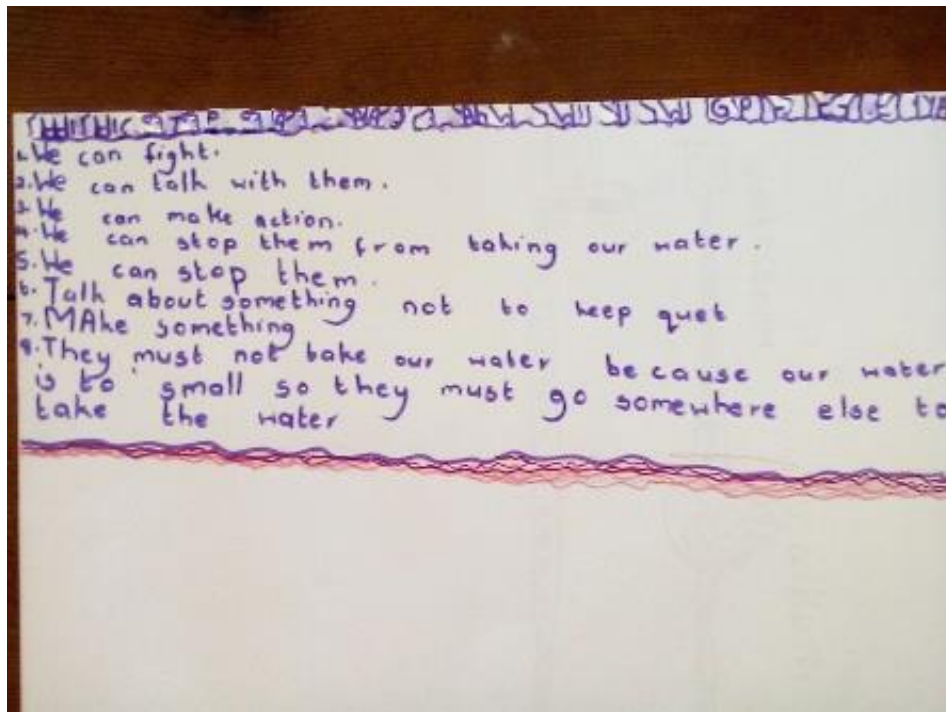


Figure 6.4 Textual response presenting suggestions

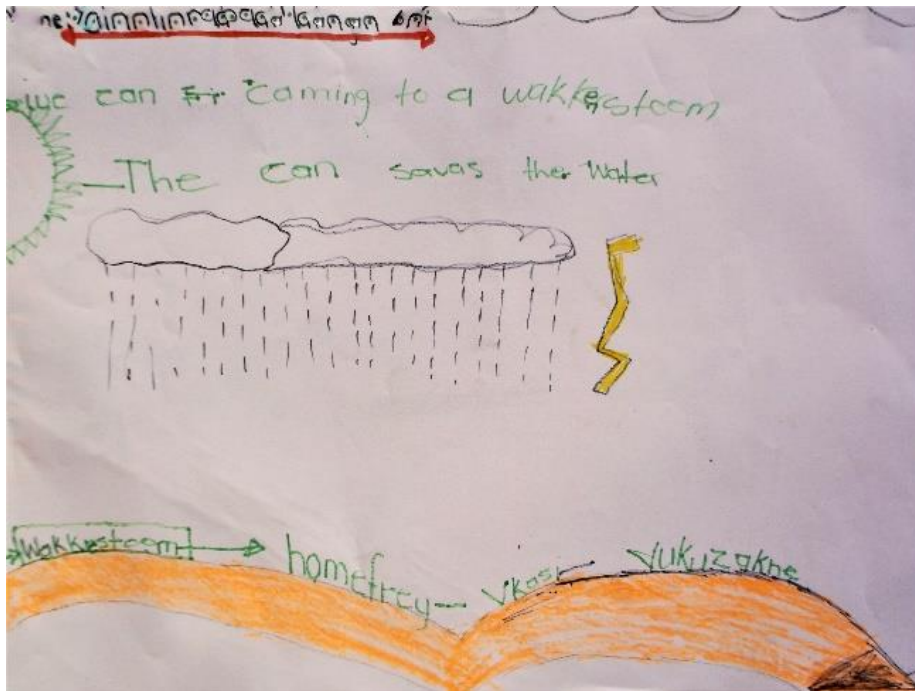


Figure 6.5 Image showing the pipeline and the water cycle

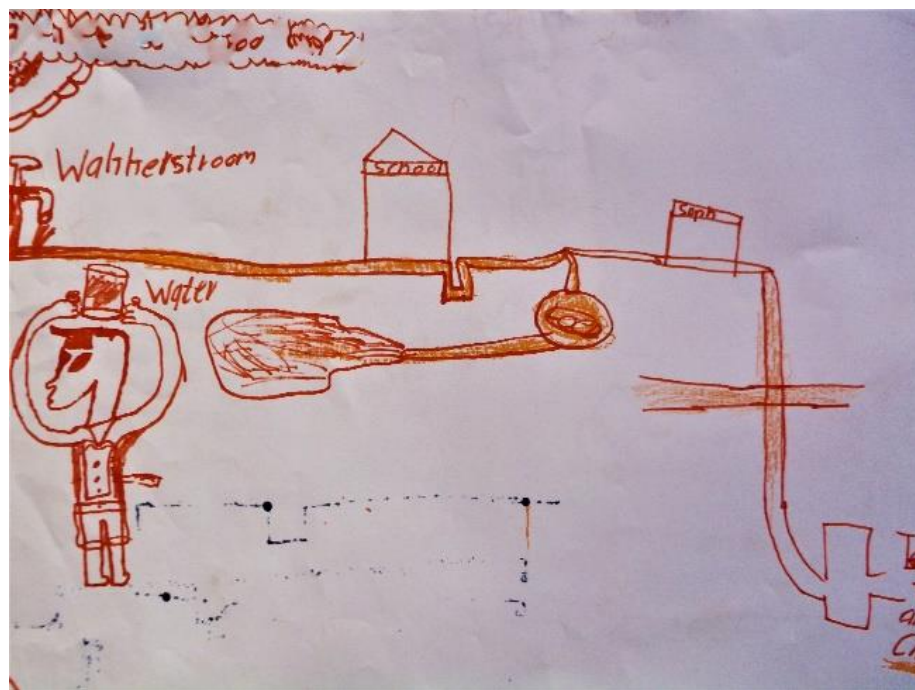


Figure 6.6 Image showing Martins Dam, the pipeline, and water pumped into homes



Figure 6.7 The action plan consolidating all the children's suggestions

Table 10 Theme: response to water pipeline issue

Mar-19

num. of drawings:	13
unclear response:	3
copying:	0

drawing number	focus of image
1 image + text	shows connection between eSizameleni + Vukuzakhe "let's talk, we can share" (very young child)
2 image + text	houses and the pipeline "We must take action! They must leave our water. We won't have it!"
3 image + text	pipeline, cow + person with crosses through them "Cattle will die, people will die, no pipe. We cannot live without water" We need to march to Mavuso (councillor) + say no!"
4 text only	1. build electric fence 2. hire security 3. place cameras 4. put dangerous dogs 5. tell police to help monitor

5 text only	we need water - gives a list of water uses
6 image + text	pipe between Volksrust + Wakkerstroom; jojo tank
	"We must tell the government to stop take water from Wakkerstroom; Volksrust must stop taking our water"
7 text only	"no water stealing" etc
8 image + text	one person facing two people
	"We can talk with Vukuzakhe people we can tell them to stop this we can dig up the pipe"
9 text only	"Fight, talk, take action, stop them from taking our water, tell them to take water from somewhere else"
10 image only	two towns connected by a pipe, includes vlei + tap

In analysing the drawings, it can be seen that the children were able to understand the information given to them. The pipeline, the connection between the two villages and the dams that supply water, were all present. Some drawings focused on the pipe, while others focused on ways of challenging the powers that wanted to construct this pipeline. This concurs with my suspicions that it was not possible to keep politics out of the study, and also that it is not necessarily unhealthy to politicise children.

(The communities of Wakkerstroom did hold a march to the municipal offices. Both the mayor and the councillor were invited to receive a letter of demands regarding the closure of the pipeline project, among other issues. Neither the mayor nor the councillor attended, but sent the local chief of police to receive the letter. Subsequently the pipeline issue went to court and was won, due to the efforts of members of the WNHA committee and two lawyers who worked tirelessly in this regard.)

6.3.1.4 Payment for work

I had experienced some disappointing responses to requests for volunteers to help with various village clean-ups and other activities. An example was a call to a young man to assist with the repair of his mother's home which had been damaged in a hurricane. His response was to enquire how much he was going to be paid for the work. On investigation I discovered that there is no term or concept for 'volunteer' in isiZulu. However, it is important to take into consideration what Hart (1999) has to say regarding time/effort expense for low-income earners: "[t]he need for

communities to learn how to manage their own closed-loop, non-polluting systems of fuel production is most obvious in poor communities, where families spend 60 to ninety percent of their incomes and/or working effort obtaining food and fuel” (p.119). If this figure is correct then it may provide a reasonable explanation for the reticence to work for no remuneration. I decided to run a workshop dealing with the notion of volunteering, but specifically focusing on a clean environment.

After warm up games the children faced the board where I drew a diagram of the following:

WORK → PAYMENT → CASH/SOMETHING ELSE

This was followed by an explanation of the concept of work for no cash, but instead something else that is beneficial, for example, cleaning up the vleis or the village. The ‘something else’ could be clean waterways or a clean village. We give of our time and our efforts, not for remuneration but for something else that we feel passionate about. I mentioned the work that is being done by scientists and lawyers who had been working hard to prevent the pipeline from going ahead. They were not being paid in cash but they hoped that their reward would be water for the village. I then wrote the following on the board:

KNOWLEDGE → AWARENESS → ACTION

Here the intention was to extend the concept of ‘volunteering’ to think about what can be done when we know something, and are aware of something, for example a polluted environment, and what can be done physically to bring about improvement. If we take action there can be a positive outcome, even though the reward is not a financial one.

The children were then divided into groups of five. Each group was to come up with a scenario where they would indicate understanding of the notion of working for something other than for payment. They were given time to come up with their scenarios and rehearse. Each group then presented their scenario to the rest of the children.

All five scenarios dealt with subject matter that had been covered in previous workshops. This was disappointing because I had hoped that the children would be able to apply the concepts to new issues, yet it did show that there was an understanding of the environmental issues that had been presented to them

previously. The important thing is that the children understood the notion of work for reward other than cash. Two examples of the scenarios are provided below:

Scenario 1: two people discover that the waterway is blocked with litter. They ask their friends for help to clean it up. The friends want to know how much they would be paid to help, and they are told that they must help without payment because ‘we need clean water’.

Scenario 2: a boy visits friends who are sitting at a tavern/home, where he tells them about the proposed water pipeline. He asks them to come with him to court, but he also tells them that they have to work for free. The friends leave, with disparaging remarks, but the boy goes to court anyway.

6.3.1.5 Crisp packets and letters to the president

For this intervention the children were taken through a series of exercises where they used their bodies to make rain, wind, thunder and lightning. From there they formed a vlei with water life in it, a dam, a river going to the sea, using all their bodies together. This was a fluid exercise, where children were encouraged to improvise. When instructed to become a dam, for example, they were to use their imaginations, and become any aspect of the dam that they wanted to. It was exciting to see them working together and where one became the water, another would become the bank, with yet another playing the part of a frog jumping from the bank into the water.

The children were then each given a packet of crisps with their cold drinks, and were told to keep their empty packets. There were two reasons for this – firstly the empty packets were to be used as part of the workshop, and secondly, I wanted to see if any of the children dropped the packets on the ground afterwards. After the cold drink break the exercise that we had done previously was repeated, but this time with specific groups becoming the vlei, the dam, the river and the sea. Others were a thunder storm with rain, lightning, wind and thunder. Three older children were then assigned to be the empty crisp packets. As the wind blew, the packets went into the air; as the rain fell, the packets went into the vlei, then were washed into the dam, then into the river, and finally into the sea. There the packets were eaten by turtles, who then died. The game was chaotic, with seemingly no structure and direction, yet in retrospect it was successful in that the children had a good time and were most attentive when, afterwards, I repeated three times to them: “If you drop a snack packet, I promise you, it will end up in a waterway and maybe even the sea, even if it is far away from you.” Despite the attention that the children gave the process, this did not change behaviour with regards to dropping crisp packets.

At the time of this particular workshop Mr. Ramaphosa, the President of South Africa, launched his anti-litter campaign. Using my cell phone, I showed the short video clip of the launch to the children. When I asked them what they thought we, as a small village in Mpumalanga, could do as part of the President's campaign, there were a number of suggestions. One child suggested writing letters to the President and issuing a challenge to the rest of Mpumalanga. This was that our village would be the cleanest in Mpumalanga in one year's time, and this was unanimously agreed upon. I handed out paper, crayons and pens and the children wrote their letters.

This workshop taught me much. The children were able to come up with their own ideas about how to contribute towards the President's campaign and were also able to come to an agreement in choosing one idea and run with it. It was also exciting to me to experience how a workshop can take a sudden and different direction to what had been planned.

The other important point that I took note of was that it is erroneous to base my attitude to any workshop on how I feel straight afterwards, and that subsequent reflection and conversation is vital. Although reflection had been a specific methodology from the outset there were moments when I needed to relook at what I had recorded directly after the intervention, and re-record, so to speak, what I remembered. The reflective process then became layered and thick. Many times a post-reflection reflection was needed, and more insight was gleaned as I was able to step back and view the events with less emotional involvement. As Taylor (2003) so succinctly puts it: "The most effective facilitators are able to reflect on the kind of teaching artists they are and the possible ones they can become" and goes on to say that "[r]eflection, though requires distance" (p.71). The later development of my role as the Inside I is what allowed me to begin the inclusion of such distance.

During the subsequent week I couriered the children's letters, with a covering letter of my own, to the President's office. I followed up with an email to his personal assistant. Disappointingly there was no response either from Mr. Ramaphosa or his personal assistant, neither was I able to establish if in fact the envelope with the letters arrived at the correct place. This became an ongoing embarrassment for me in that I had to constantly tell the children that there was no response. Eventually, we had a discussion around possible reasons for the lack of response. In the discussion the children brought up corruption and lack of interest from political powers, and subsequently, and understandably, lost the impetus to follow through in their challenge. Figure 6.8 show some of the children's letters and drawings.

Dear President Cyril Ramaphosa

Masingalahlini bhatshi amasilahlini edhas ni ngoba donathubralanie b'nathi uPresident Cyril Ramaphosa abifakele umudhasibipi soti

Umasifonele Sibhline indhawoyethu sakhe Sibhelele kubhuteke kukahle lenhawoww ibhenhlini ikhadnamabheba silahle ebhas

UPresident Cyril Ramaphosa abifakele emakhona sakhe sifakele sifathe so' Fanelesikhalani b'nathi nawubona ibhe ulifakhe bhasibhini nama enahhawa.

From: President Cyril Ramaphosa

Dear President Cyril Ramaphosa.

We as young people or children are thinking of making our village as clean as ever. Because we don't like living in a bad-end place that has litter. We are litter lions so we do what litter lions do for an example: picking up papers, papers. The word Litter + Lion means that someone who don't like litter and if he/she see a paper, becomes a lion, and he/she


What must we do to make our village the cleanest village?

We must be Litter Lions. Oh don't forget to pick up the paper or litters. People must be Litter Lions for their village.

Making our world a better place to live in. Let Fight of our cleanliness.

Mistie
Linda
Linda

Dear President Cyril Ramaphosa

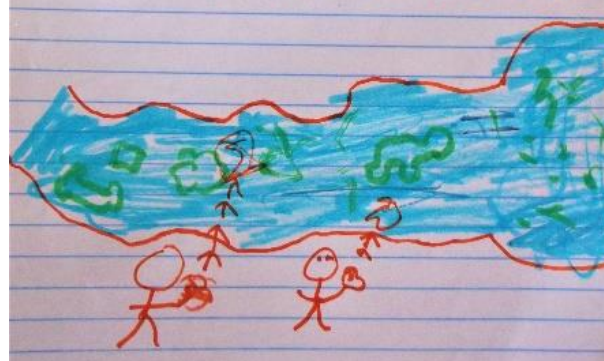


We are going to be the cleanest village in Mpumalanga

Dear: RAMAPHOSA

Sizo clean indawo yethu Mpumalanga

Sizela usizo ngoba sekugcolile bukanje imifula Udodi Abantu balahla udodi



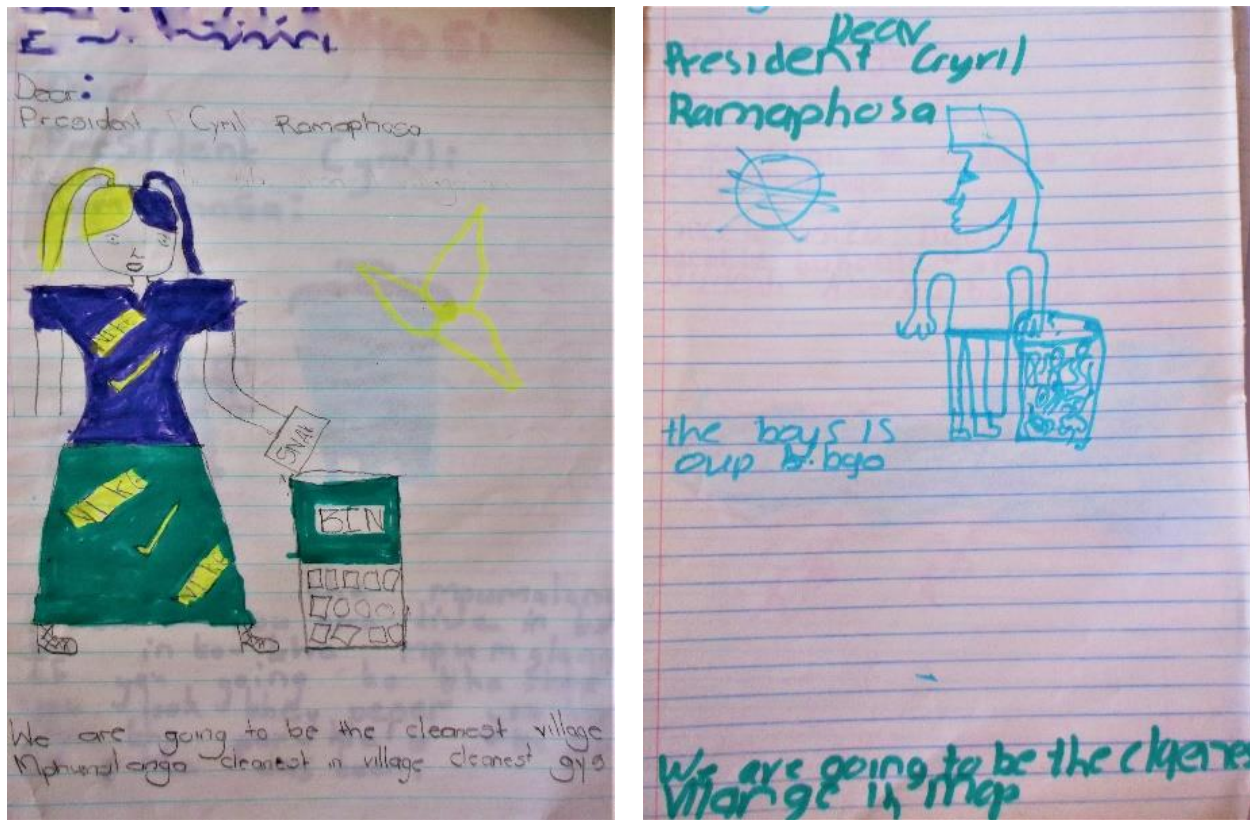


Figure 6.8 letters to the President by the Litter Lions

The letters and drawings revealed that the children had learned from the Litter Lion workshops so far, in that they spoke about the need for a clean environment. Of more interest was that they came up with corruption and lack of interest from political entities by themselves, which showed that they do have knowledge of the broader implications of these social ills faced by the country.

6.3.1.6 Response to “If I have a snack packet and there is no bin, what do I do?”

Following on with the theme of personal responsibility for littering, I asked the children to respond graphically to the question “if I have a snack packet and there is no bin, what do I do?” The objective here was to establish if they knew what alternatives were available for them if there was waste at hand but no dustbin nearby, also to establish if there were any new alternatives that the children could think of. Below is the tabulation of responses, with an analysis below that. The numbers on the right hand side indicate the number of children that responded with that particular suggestion.

Table 11 Theme: "If I have a snack packet and there is no bin, what do I do?"

Apr-19

number of drawings	35
no response	8
copies	1

Responses	
put it in my pocket	11
put it in my bag	19
burn it	6
put it in a bin	24
take it home + bin it there	4
ask for directions to a bin	1
tell the mayor	1
instructing someone to put it in his jersey	1
reuse it to make a mat	1
I will throw it on the ground	1

The non-responses were those that showed no response to the question and were therefore not included in the analysis. Many children gave a number of suggestions in their responses and these are all tabulated accordingly. Twenty-four either drew themselves binning the packet or stating that they would throw it in the bin, when the question was what they would do if there was no bin at hand, and clearly these did not understand the question. Thirty-four said that they would keep it in their pockets or bags, with most of these saying that they would bin or burn it when they got home. One child said that she would ask for directions to a bin, which was innovative, while one image showed the respondent instructing another person to put the snack packet in his jersey, presumably jersey pocket. One child suggested telling the mayor about it, and one child confessed that he would throw it on the ground. Below are some examples of the drawings.

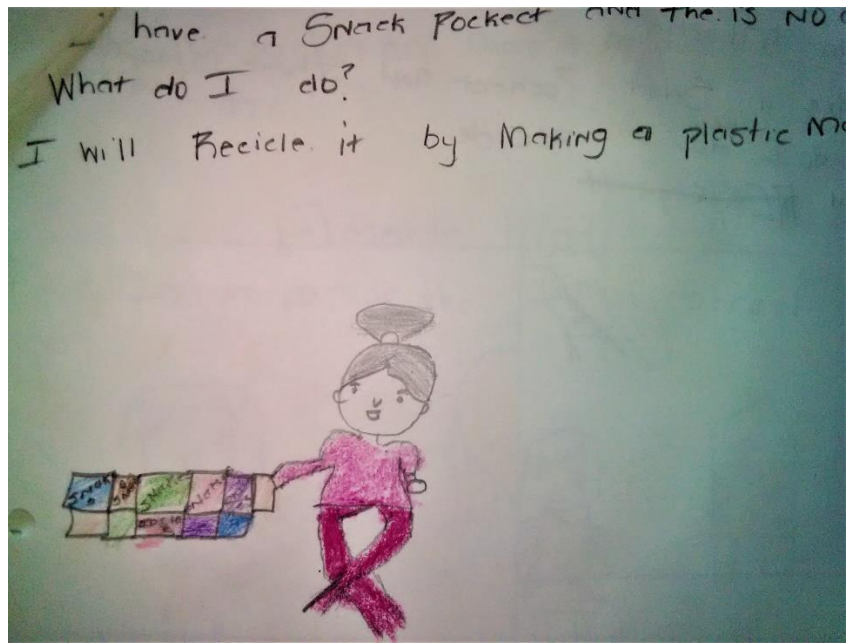


Figure 6.9 Image showing the reuse of plastic to make a mat

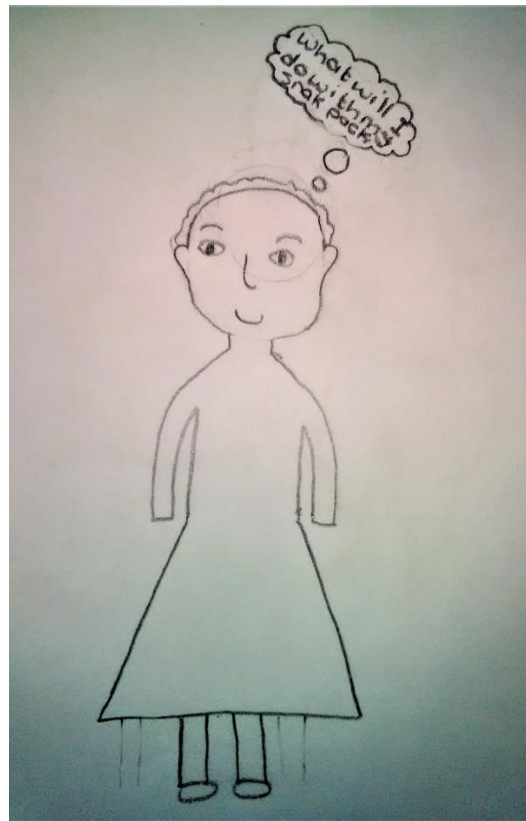
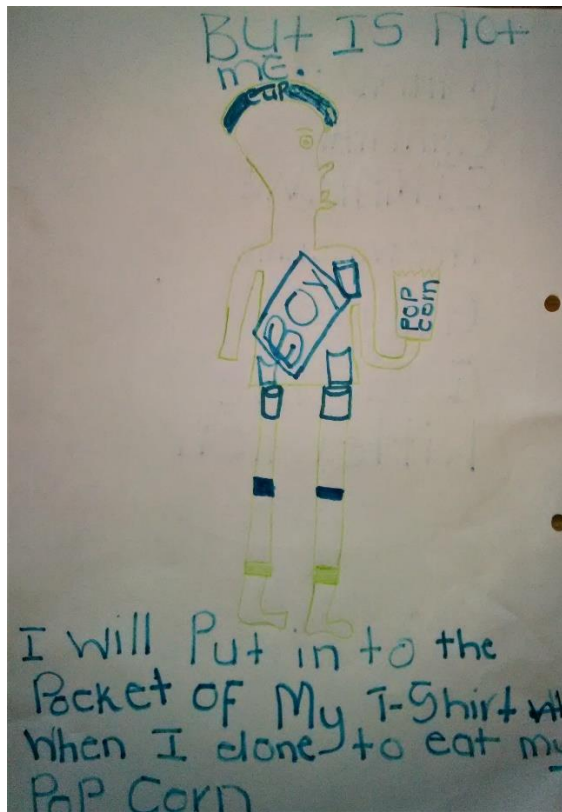


Figure 6.10 Image showing putting the packet in a pocket Figure 6. 11. Image showing a thought bubble

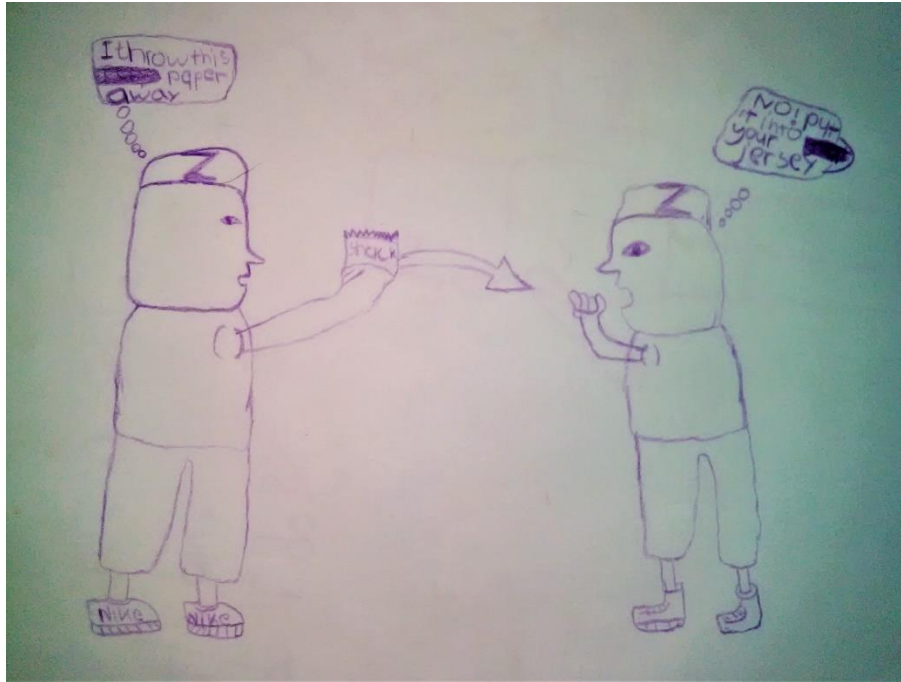


Figure 6.12 Image showing one person instructing another to put the packet into a pocket

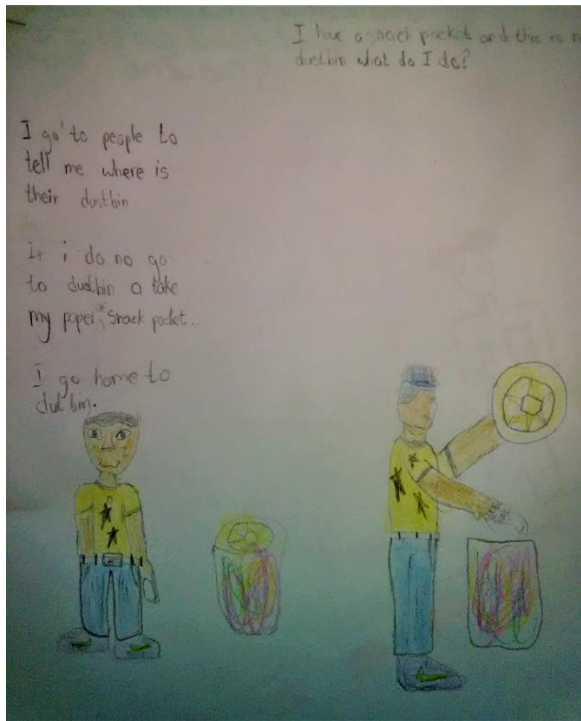


Figure 6.13 Image showing person asking for a bin



Figure 6.14 Image showing person looking for a bin



Figure 6.15 Image showing person putting the packet in a bag

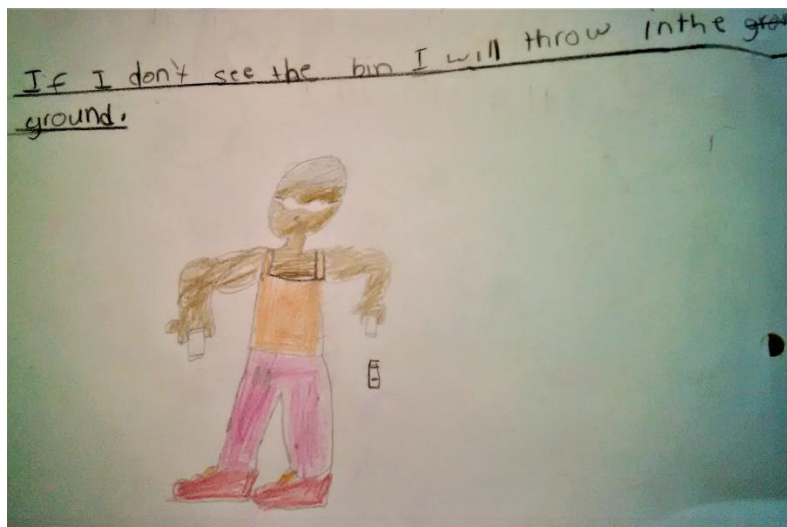


Figure 6. 16 Image showing the person throwing the packet on the ground

The most important data that emerged from this intervention was from the two children whose responses differed from the others. I was most encouraged by the child who stated that she would reuse the snack packet to make a mat, and I was impressed by the child who said that she would ask someone to tell her where she could find a bin. However, the most poignant response was from the child who confessed that he would throw his snack packet on the ground, and this is relevant because it was this specific child who eventually emerged as a champion of the environment as a result of this study. Not only this, but he was honest about his littering habits, where others were conceivably paying lip service.

6.3.1.7 Rod puppet story telling

Since I have experience in puppetry, and considering the fun that the children had making paper bag puppets in Cycle One, I decided to use a rod puppet to tell stories to the children. My objective was to establish if it was possible for children to absorb information through a simple story, using one puppet.

The information that I presented to the children concerned the “Tops and tags” wheelchair programme that runs in Wakkerstroom. Usually the bottle tops are sent to a location removed from the communities that collect them, and there is little connection between the collectors and the recipients of the wheelchairs. It was for this reason that I specifically sourced a similar programme to the national one, but one which enabled me to identify a disabled person in the local community to benefit, instead of someone far away. During the course of the year enough bottle tops had been collected in order for a wheelchair to be allocated. The process included sourcing a disabled person who needed a wheelchair, taking the person and the bottle tops to Newcastle where the handover was to take place, and participating in a photoshoot for the local newspaper. I decided that it was important for the children to see first-hand what voluntary efforts, such as collecting bottle tops, can result in, as opposed to an abstract notion that is never really experienced.

The rod puppet that I used to tell the story is a small puppet called Mr. Mouse, and the story was entitled *The lunch box boy*, which has as its theme the small things that one person can do, (such as collecting bottle tops) that can have a big impact (such as providing a wheelchair for a disabled person); an impact that can have long-lasting effects. (See Appendix I).

The children love the puppet, and I am tempted to say, love the story-telling. (I wonder if this is because they are so infrequently exposed to the arts such as puppetry, and do not have stories told to them – interesting question). Once I had finished, they broke into applause, which really moved me.
(journal; 28th August)

After the puppet show a photograph of the lady who had received the wheelchair was shown to the children. Unbeknown to me she turned out to be the grandmother of one of the children, and this made them excited. The children were then shown on the board a diagram of a bottle top, a pile of bottle tops and a wheelchair, in order to reinforce the message. They were encouraged to collect bottle tops towards the next wheelchair.



Figure 6.17 The recipient of the wheelchair and the bakkie-load of bottle tops

The next week the children were asked to present any tops that they had collected. Many of them, mostly girls, had collected tops during the week. The following journal entry outlines the course of the subsequent activity:

I began by holding up a single bottle top. I then asked them what they remembered about these tops. One of them replied saying that I had asked them to collect them for wheelchairs. Then I asked them what the connection between bottle tops and wheelchairs is. Some thought that wheelchairs are made out of recycled bottle tops. I redid the drawing of the wheelchair and the process involving the bottle tops and the recycling company that doesn't give cash in exchange but gives a wheelchair. (journal, 5th September)

To establish whether the children had remembered anything about what had been covered in the workshop, I decided to return to this subject matter at a later date. On that occasion, on arrival at the venue, I asked if any of the children had collected bottle tops towards the wheelchair project. A number of them came forward, again mostly older girls. What followed was enlightening as it gave a clear indication that there was little understanding of reuse with regard to the cold drink bottle tops, and

that the children saw this as a competition to see who could collect the most tops, as the following journal entry shows:

I asked them what they thought would make me the happiest. “If we found lots of tops” they said. “No!” I said, “Actually I would be happy if you found no tops, because this would mean that there was no more littering.”

This is a constant challenge – they think that when I ask them to collect a specific item of waste, that it is a competition. As much as I try to show that this is an amount of reusable/recyclable waste that doesn’t go into a landfill for hundreds of years, and is instead put to better use, they still think it is a competition. This is a mindset that is difficult to change.
(journal, 12th September)

Here I needed to remind myself of what Formanek et al write, when they state that:

The child’s thought should be viewed as part of a lengthy and complex organizing process which begins with an inability to comprehend one’s surroundings. This first infantile stage is followed by misconceptions and fragments of ideas, slowly leading to intuitive and partial comprehension, and finally to adequate approximations of reality (1976, p.8).

In the light of this it was clear that I needed to curb my frustration, since there were many other mitigating factors at play other than the children’s seeming inability to grasp a concept presented to them.

The children were then given paper and crayons and asked to render in any form, story, poem or drawing, what they had remembered of the story that Mr. Mouse had told them.

Table 12 Theme: response to rod puppet show

Sep-19

number of responses	71
no response to topic	6
copies	1

images or text responses	
those showing the connection between recycling and donation of tops in exchange for wheelchair	10
those showing the connection between tops and wheelchair but no recycling	21
those who thought that the wheelchair was made out of tops	14
no connection between the wheelchair and tops	17
reference to the puppet, but no reference to the topic	3

The results showed an understanding of the connection between the large quantity of plastic bottle tops that went to Newcastle which was swapped for a wheelchair for a specific person. What was not so clear in some of the work was the connection between the wheelchair and the bottle tops as being a recycling concern. Some still believed that the wheelchair was made from melted down plastic. Many of the children presented images that were reproductions of the photographs of the wheelchair recipient, and this showed that this had had an impact on them. The questions that I subsequently put to myself were the following:

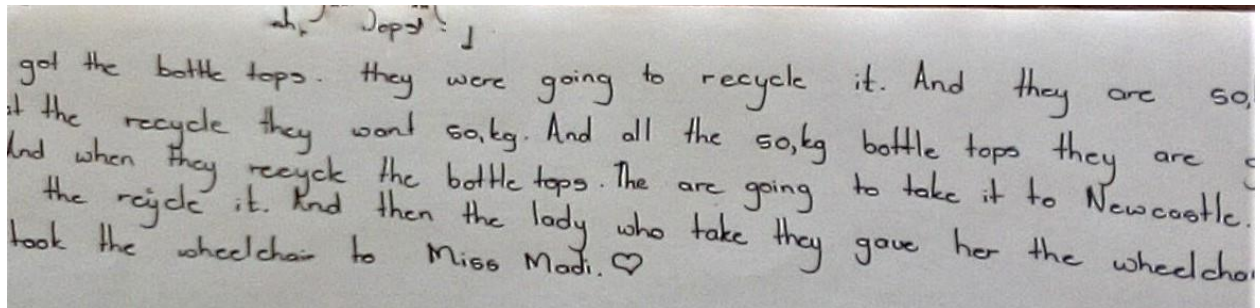
- Was it the impact of the puppet that enabled the children to absorb this information?
- Was it that there was a physical manifestation of their efforts in collecting bottle tops that enabled information retention, coupled with the impact of it being one of the children's grandmothers who received the wheelchair?
- Was it because the children had received constant reminders and reinforcement of the information that they were able to retain it?
- Was it a combination of all of the above?

The conclusion that I came to was that it was probably a combination of all of the above. However, the impact that the little rod puppet has had on all the various audiences cannot be underestimated. This cannot only be put down to the likelihood that the children of eSizameleni have had little, if any, exposure to the arts, and therefore are intrigued and excited when exposed to something new, such as a small rod puppet.

Puppetry has entertained and educated children and adults alike for hundreds of years. For example, Javanese culture is intricately linked to the shadow puppet, and the puppeteer, known as the 'dhalang', is afforded high esteem. Javanese culture is reflected in the shadow plays – who holds power, respect, social standing and reciprocity, including household relations, in the village and the broader spectrum of society (Keeler; 1987). Francis (1988, p.2) states that “[s]ince the most ancient times, puppet theatre has been an illuminating source of metaphor, some of which illustrates the relationship between the Creator and His creation”. Puppetry cannot, therefore, be restricted to the genre of entertainment for young children.

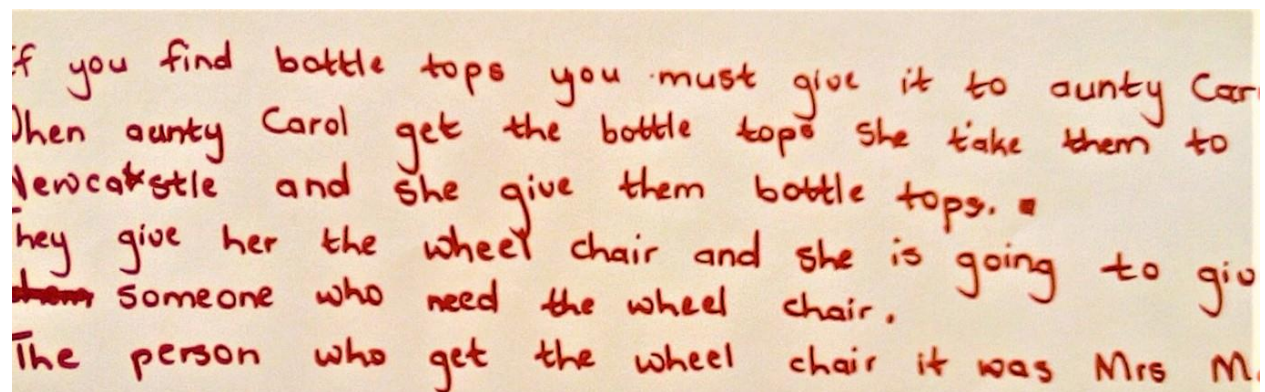
Physical manifestation of the result of efforts made cannot be underestimated. In this instance, for example, the children knew who the recipient of the wheelchair was and were subsequently able to see her going to the shops or sitting in her garden in

her wheelchair, and make the connection to the information given to them. This is entirely different to collecting plastic bottle tops and never seeing the results of time and effort put in. Disappointing though, was the inability of most children to grasp the importance of recycling, and the threat of litter to the environment. Below are some of the responses that the children presented for this workshop:



got the bottle tops. they were going to recycle it. And they are so, it the recycle they want 50,kg. And all the 50,kg bottle tops they are and when they recycle the bottle tops. The are going to take it to Newcastle. the recycle it. And then the lady who take they gave her the wheelchair took the wheelchair to Miss Madi. ♡

Figure 6.18 Textual response, showing the understanding of the recycling in exchange for the wheelchair



if you find bottle tops you must give it to aunty Carol then aunty Carol get the bottle tops she take them to Newcastle and she give them bottle tops. they give her the wheel chair and she is going to give ~~them~~ someone who need the wheel chair. The person who get the wheel chair it was Mrs M.

Figure 6.19 Textual response, showing no understanding of the recycling concept



Figure 6.20 Image by a young child showing the wheelchair recipient



Figure 6.21 Image showing the wheelchair recipient

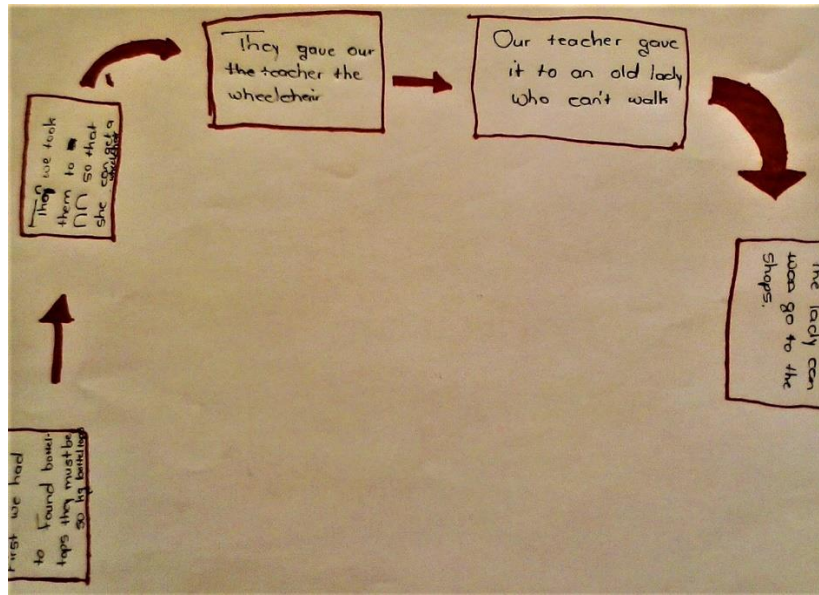


Figure 6.22 Mapped image showing the path of the bottle tops to receiving the wheelchair

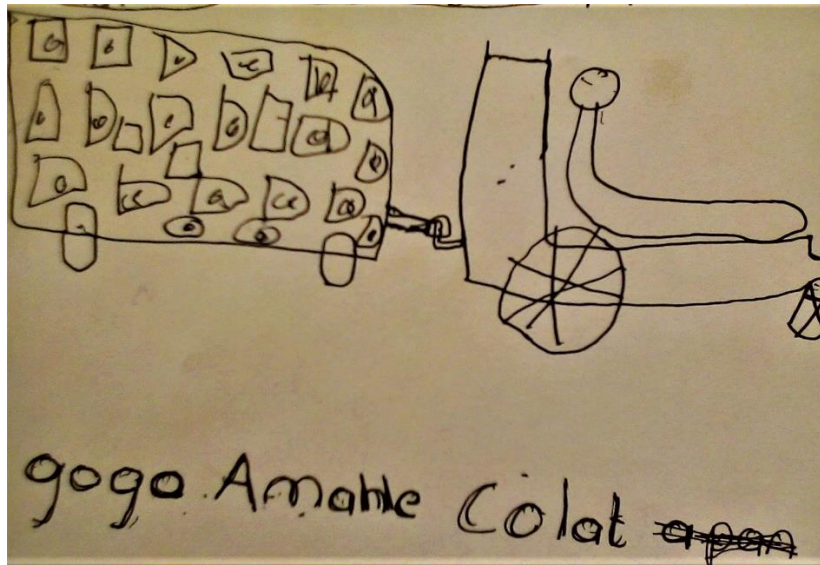


Figure 6.23 Image by a young child showing the wheelchair recipient and the bakkie load of bottle tops



Figure 6.24 Image showing the bags of bottle tops and the recipient of the wheelchair



Figure 6.25 Image by a young child showing the bags of bottle tops and the wheelchair recipient

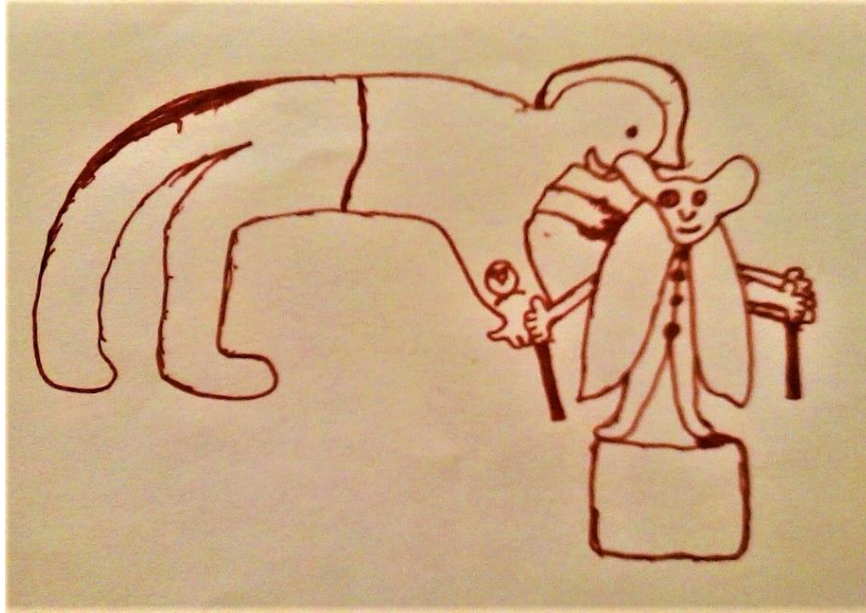


Figure 6.26 Image of the rod puppet and the puppeteer

In analysis of the drawings the specific items foregrounded indicate various aspects of the information provided that were focused on by the children. For instance, one drawing shows that the child was more interested in the rod puppet than the content of the story, while another showed the happy recipient of the wheelchair. Yet another was able to grasp the collection of waste to exchange for the wheelchair.

6.3.1.8 Personal space and embodied environment

The concept of understanding the body and being aware of personal space is an important aspect of drama and dance. In this workshop, which only eleven children attended, the focus was on personal space. The workshop was conducted by Ms. Hall, who had returned to the village in 2019. The objective was to build on movement processes that the children had learned previously, to enable the children to put together and perform themselves a piece of dance/drama at the end of the year. In other words, it was hoped that, through workshops such as this one, the children would be provided with the rudimentary tools with which to make their own performance with an environmental theme, thereby showing what awareness they had. Despite this, this workshop was intended as a break from an explicit environmental education focus, in alignment with my determination to prevent eco-anxiety in the research participants. Pinkala (2017) notes that “[m]any studies have revealed that youth experience much anxiety about the global situation” (p.120), and I wanted to avoid this at all costs.

The workshop examined the concept of levels within movement. This was explained in terms of high, medium and low levels, and the children were then encouraged to form shapes with their bodies that indicated these. Then in groups they made shapes that encompassed all three levels but which also made an interesting shape when combined. From there a movement piece was made where the groups moved from one shape to another and then froze in the final shape. Then all the groups were put together and instructed to move slowly as one group, using the notion of the different levels, to make one encompassing movement piece.

Afterwards Ms. Hall took the children through a process of reflection and discussed the manner in which personal space is important. The children were encouraged to talk about their own experience of the workshop.

A second workshop extended the work on awareness of personal space. The children were encouraged to cross the hall while acting as various animals and, at the same time, to consider the three levels experienced before. They chose their own animals accordingly, so a snake would move at a low level while a giraffe would move at a high level, and so forth. Then, when Ms. Hall shouted “Freeze!” they would have to find their corresponding animals and form a group that was appropriate for that animal – so, for example, individual fish would then form a school of fish, and hold that specific shape. From there they were split into groups to devise a short play using the animals that they had chosen. The groups were specifically constructed to ensure that there was an older child and an equal gender balance in each one. Three plays were presented all of which displayed understanding of the notion of levels as previously worked on and demonstrated a solid grasp of the concepts the children had been taught. This showed that the performing arts were having an impact on them, and confirmed that what both Mr. Morris and Ms. Hall had taught the children had been retained and was being used in their movement pieces.

6.3.1.9 Texture workshop

This workshop had as its objective the development of understanding of the concept of texture, both in the visual and performing arts, and was an extension of the previous embodied work. It was also to indicate to the children that similar concepts are integral to both these forms of the arts. The children were divided into the same groups of three as in the previous workshop. This time the instruction was to move from a smooth experience to a rough experience and then to freeze, also remembering to make use of the three levels and to consider personal space. Time was given for the movement to be decided upon and to be practised, and then each

group presented to the others. Once all the groups had presented, everyone was encouraged to comment on the other groups – this provided space for critical reflection and it was the first time that the children had been exposed to comments by their peers. They were also asked to talk specifically about how they felt doing their own pieces, what they thought could have been done better and what they thought was successful. Many of the children were too shy to talk and there was much disruption by the younger ones, but the older ones engaged in both their own work and the work of their peers. They continually mentioned that they wanted to choreograph and write their own end of year performance and, at this stage, it looked as if this was a distinct possibility.

Ms. Hall had facilitated the first part of the workshop, since she is more of a dance practitioner than I am, and I took over for the second part since I am more of a visual artist than she is. Elaborating on the concept of texture I showed the children how to take graphic rubbings from the environment around us. They were then given paper and pencils and given free reign over what they could take rubbings from. The children loved this task and were most innovative in selecting what they took rubbings from. After half an hour they were called together and all the work was put on the floor and examined. The children were challenged to guess what the other children had used to make the specific patterns, and there was much excitement and animation in the discussion. Some of the interesting objects that they had selected included tree bark, a scratched bumper of a car outside, the sole of a shoe of a visitor, leaves and a gravel pathway.

Again, it was hoped that this would feed into a performance that the children wanted to make themselves. By this time two teenaged girls had said that they had a plan for a play already and just needed time to rehearse.

6.3.1.10 Performance at the end of semester one

In support of the decision to allow the research participants free reign with planning, writing and rehearsing their own performances for Cycle Two, Preston (2016) claims that “[w]hat makes Applied Theatre work so fascinating is the way it can incorporate the full scope of drama practices and ideas, adapting them to suit the needs and interests of a particular group. Intrinsic to Applied Theatre is the tenet of active participation and ownership in cultural production” (p.153; capitals original). She adds that “Applied Theatre’s responsiveness through form rightly implies that the interests of the participants are prioritized,” (p.168). For Hughes and Nicholson (2016)

...performance is an act of intervention, a method of resistance, a form of criticism, a way of revealing agency. Performance becomes public pedagogy when it uses the aesthetic, the performative to foreground the intersection of politics, institutional sites, and embodied experience. In this way performance is a form of agency, a way of bringing culture and the person into play (p.209).

The authors quoted suggest that there is value in giving performers agency to plan and present their own performances. However, when children are not used to taking an agential role, support from a facilitator is crucial, as the journal entry below indicates:

I tried to let the children run with their own programme, which of course came with its own challenges. M., who was the one who had indicated that she wanted to perform, was suddenly shy, and struggled to come up with dance moves. She wanted music to dance to and the pieces on the various phones were too slow and the volume too low. (She had not brought any music as I had suggested previously). It was after drinks break that really good stuff emerged, where they sang two songs which had some lovely dance moves. With a few suggestions we turned them into possible performance pieces.

I then suggested adding something about litter and immediately it was there – two verses which they made up on the spot.

Pedagogically, I affirmed that as a facilitator it is good to go from what the children know and have experienced. This then makes the point of departure their own. (journal, 7th April)

The next time I met the children was the 17th April and by then they had forgotten what they had done previously. Not only this but one of the older girls, who had indicated that she was keen on taking a more active role in the procedure, arrived late and then left early without any explanation. Somewhere during the workshop, the children seemed to become lost. There were any number of reasons for this – they may have become tired and distracted, they did not want any outside ideas imposed on them (for example the suggestion that the dance pieces that they had were too long), or that they simply wanted to play instead of working on a play/dance piece. It was difficult to explain to them that there was not enough time to create a piece of work by themselves without more structured rehearsals and guidance from facilitators. However, as is attested to in the following journal entry, there were some positive outcomes:

The exciting thing was though, that the children came with shakers, made out of bottles filled with stones, beer tops strung on string, and a drum made of a coffee tin. This shows a commitment to the process and an understanding of using waste to make percussion instruments. (journal, 17th April)

The final performance, for friends and family, had to be structured and rehearsed by Ms. Hall, Mr. Tshabalala and me since, as much as they had a desire to, the children were unable to put it together in the end. The post-performance reflection shows that there was a learning experience for me, and that the performance itself successfully entertained the audience, but in terms of the specific criteria for this study it failed. The entry reads thus:

The most important thing about this performance is that it was the children who provided the material for the show. This shows that they are enthusiastic about performance and contributing towards it, and also that it's best not to always impose material on them. The other thing that was valuable was that I can see how the work I've done with them has brought them out of their shells. I was bowled over when L. decided to play piano as part of the show. He played a nursery rhyme and a classical piece. He is a very shy boy but he had no qualms about performing in front of an audience. And S. performed a rap piece that she had written herself.

This is not the first time that I've noted other emergences from my work, which I've not focused on because my focus has been on my PhD. (journal, 11th June)

According to the criteria for the intervention, which was to present a dance or a play on littering, that specifically built on the performances from Cycle One, then the children's performances were a failure. Their performances, while entertaining and showing enthusiasm, had no message regarding environmental good behaviour for the audience. However, since the children had brought musical instruments that they had made themselves at home out of waste, without any prompting from the facilitators, this aspect of their creativity and agency was encouraging.

6.3.1.11 Year-end parade as part of an anti-litter campaign

The first time that I considered the possibility of an anti-litter campaign was in mid-April during Cycle Two. The questions I put to myself in the journal were as follows:

What would it take to conduct a massive anti-litter campaign here? What form would it take? What events could be planned? When would be the best time to have this? How long should it be? (journal, 17th April)

The parade by the children, as part of a bigger anti-litter campaign that involved the broader community, came about because it became impossible to create and rehearse an end of year play or dance piece as we had done previously. As a result of inconsistent attendance there was no way of rehearsing what had already been planned without having to reorganize parts to be performed. This was disappointing because some of the children had begun to understand how to create a play with an environmental message as described in the following journal:

The play that the children wanted to do included a pond with creatures in it; then two women walk past on their way to the dump with rubbish. They are then mugged by tsotsis who think they have money in their bags. When they discover it's only rubbish, they throw it all into the pond, and all the creatures are affected. (journal, 18th August)

When reflecting on what had been learned from Cycle Two I subsequently wrote the following:

As much as the children really want to take control of performance, and as much as I've tried to let them, I've realized that it's not possible. They are too young to really understand the complexities of putting a performance together, and certainly not experienced enough to improvise. (journal, 8th October)

This then became an important piece of information that was to guide me in planning for the final cycle of the study.

Because of the lack of consistent attendance, it was decided that there would be no formal performance, but a parade instead, which would be part of a broader anti-litter campaign with adults in the community. The parade would take the form of songs learned during Cycle One and Cycle Two, which would be sung while carrying placards and walking a pre-determined route from Wakkerstroom into eSizameleni. While the Cycle One parade had taken a route from eSizameleni into Wakkerstroom and had been part of the Wakkerstroom Art Ramble, this second parade was not attached to any official community event. In order to show the thought processes that led me to the final design of this implementation, please see the mind map (figure 6.31) included at the end of this chapter.

Thinking that it would be a fun exercise for the children to make their own placards, as they had done the previous year, two workshops were devoted to this. Firstly, a discussion was held as to the purpose of a parade. Secondly, workshops were held where placards were made with the intention of using them for the parade. For the

placards the children suggested content by writing suggestions on cards. Many of these suggestions were in isiZulu, and many of them showed a good understanding of information on littering and the importance of a clean environment addressed during Cycles One and Two, and this was encouraging as far as this study is concerned. During the discussion one of the children, a particularly difficult child, who plays the children off against each other when she does attend and is consistently disruptive, made a very interesting comment as the subsequent journal entry attests:

While we were discussing the parade, which we decided was somewhat like a protest or a toyi-toyi, B made an interesting comment. She said, almost aggressively, but most definitively, that "people will never stop dropping litter; children would never stop dropping litter; we will never stop dropping litter". I think that the most important thing here, is that she included herself in this, and this is not something that happens often. Mostly the children blame other people for dropping litter. (journal, 20th October)

Figure 6.27 shows some of the suggestions as written on cards.

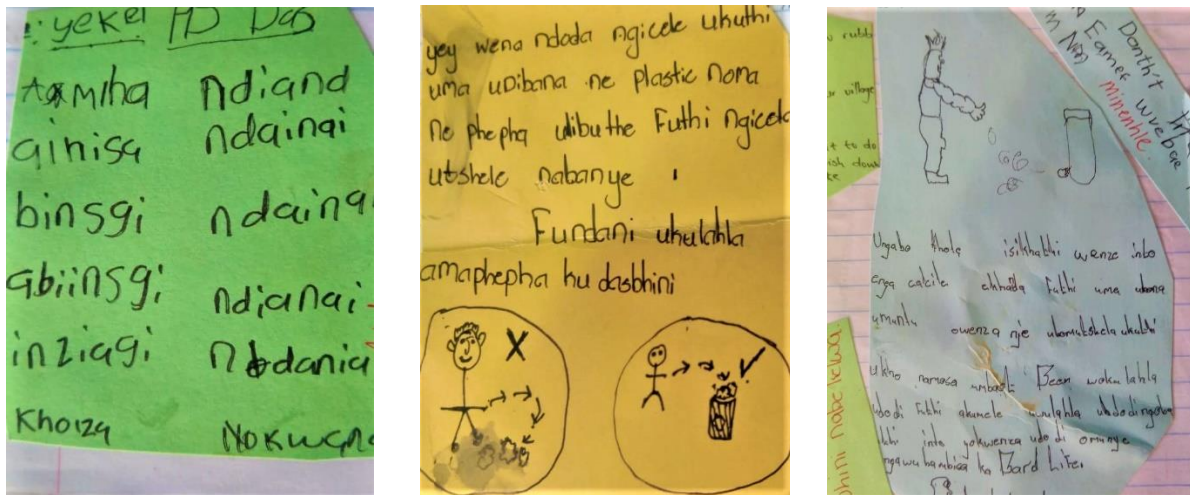


Figure. 6.27 Suggestions by the Litter Lions for placard messaging

The suggestions were then placed on the ground and through a democratic vote, the children chose a few that were most appropriate. The messages were then transferred to large pieces of cardboard and attached to branches collected from underneath trees in the area. The messages, which were mostly in isiZulu, showed that the children understood the concept of the parade, and also the need for clear messaging to the community.

The parade went off like a damp squib in terms of support from the community. There was much interest however, once the parade entered eSizameleni and many children joined us as we made our way, just in the way that they had the previous year. These children, and many of the adults that showed interest too, were most keen to read what was written on the placards. Some of the children that joined in along the way were children who had been research participants previously but who had dropped out, and it was interesting to note that they remembered the songs that they had learnt.



Figure 6.28 image of some of the children at the parade

6.3.1.12 Other interventions at the research sites

Some interventions during Cycle Two, while contributing to learning, did not take the form of workshops.

An intervention that I added was a reflective process with the children, and little notebooks were given to them in mid-September. These were kept in the venue and handed out at various workshops, and the children were told that I would only read them with their permission. Although many of the children are rather young for this type of activity, some interesting information emerged. It was useful, for example, to get a small insight into social dynamics between the children – who bullies whom,

who is friendly with whom, and so forth, but also to learn that some children feel compelled to attend the workshops because they feel that the younger children need them to be there. Some of the children wanted to attend church and wrote that they missed not being able to go to church because of the workshops. In the journal below I reflect on the children's journals:

The journaling was not specifically aimed at what they'd learned through the Litter Lions programme, so I wasn't expecting anything of that. But it's good to get a different perspective on the children – a tiny glimmer into their lives. Clearly they enjoy what we do; they enjoy the dancing, the performing and the games. Whether any instilment of environmental awareness is happening in the children is still unknown.
(journal, 4th November)

During the construction of the eco-brick bench, at least five children had seen me, along with the friends who assisted me, at work. Then during a Litter Lions workshop, they questioned me about what they had seen us doing. I took the opportunity to briefly explain this project, after which I wrote as follows in my journal:

They were really attentive when I explained how we had made the eco-bench, and I did a diagram representation on the board for them. A picture of the bench = 128 eco-bricks = 128 bags of non-recyclable waste not going into a dump/vlei/sea = not harming wildlife/humans. They got it! They had all the correct answers to my questions and were intrigued when I converted the concept of the bench into bulk waste.
(journal, 19th September)

Subsequent to these workshops I held a competition where the children were encouraged to make their own objects out of waste, using the information they'd learned, where the objects could be aesthetically pleasing or useful. Disappointingly only three children entered the competition but their entries showed considerable ingenuity and creativity:

A made two little objects out of mulched egg boxes. One is a little bowl and the other is a planter. T is collecting sweet wrappers and making rings and bracelets. C made a traffic light out of cardboard. The prize is a mirror made out of waste that I had bought years ago and never used. As much as I don't want to provide an incentive, other than having a clean environment, for them to think about waste, this time I've decided to provide a really nice incentive just for a change. The exciting thing is that A has absorbed what I'd shown them when we made the masks, and T is showing

initiative with her sweet wrapper jewellery.
(journal, 2nd October)

Subsequent to this reflection the child who had made the jewellery continued to make further pieces, and sold them at a village market, earning a substantial amount of money. This was a remarkable step towards experiencing first-hand the results of the work that this study had as its intention by choosing to work with the arts. Being able to generate an income from items made of waste was to have an impact on more of the children the following year.

While the children were busy with a drawing workshop, I left the venue and spent some time collecting sucker sticks which I took back to the venue and placed in a pile on the floor. When I asked them who was responsible for dropping these on the ground there was a resounding answer: “We are!” This response showed a meaningful shift in the children in that prior to this they would not have admitted to being responsible, blaming others instead. While they are not yet changing their behaviour, they appear more aware of their behaviour than at the start of the research interventions.

6.3.1.13 Interventions with children beyond the research sites

There were opportunities to work with other children, separate from the research participants, on themes similar to those used in the research study. These were relevant to the study as each provided insights into aspects of the research, and some useful connections and learning experiences were enabled. These connections and experiences were exciting and encouraging because they revealed that there are many other projects, both locally and internationally, that are similar to this one.

The first involved a visit to the Luneburg Primary School, where I was invited to be the guest speaker at a year-end function showcasing the work that the children had done during the year. Like eSizameleni Primary, this school is a government school, and the children that attend the school are largely children of German farmers and farm workers in the area.

The school has an eco-club where children choose the theme for the year – water and plastic for 2019. This meant that the focus of the work done was on innovative ways of reusing plastic, recycling plastic and taking care of water. All the work was on display in the school hall, and there were numerous items made out of plastic waste, such as a cooler box made from bubble wrap and insects made of plastic bottles. The children also make eco-bricks which they send to a central drop off place

in Johannesburg. As guest speaker I was asked to present the various projects that are underway in Wakkerstroom, either as part of the Litter Lions or the WNHA, and for this I gave a power point presentation. Here I described the tops and tags project, showing photographs of the recipient of the wheelchair, the eco-brick project showing photographs of the eco-brick taxi bench we had constructed. I also outlined this doctoral research where the arts are used to raise awareness with regard to littering. Finally, I did my puppet show, using the rod puppet, Mr. Mouse, and told the story of the *Lunch box boy*. This was done with some trepidation since the audience was made up of approximately eighty children and eighty adults, all either German, Afrikaans or isiZulu speakers. My impression from feedback over coffee was that the presentation, including the puppet show, was a great success. The children were excited to see the photographic evidence of the success of the tops and tags and eco-brick projects, and unanimously decided that all collections and construction of these items would be donated to Wakkerstroom in future instead of being sent out into the 'ether' where no concrete outcome could be observed.

The second opportunity to work with children came during a social visit which Ms. Hall and I made to Morija, a small village in Lesotho. On arrival it was clear that a clean-up was being held, involving the children in the village. Since the clean-up was to run over two days, we took part in the second day's activities which comprised various talks and games with an environmental focus, as well as a further clean-up. I was also given a slot where I did a puppet show improvised with the help of Ms. Hall. Afterwards the facilitators posed some questions to the children about what they had understood from the puppet show.

The experience taught me that there is a vast difference between the children of eSizameleni and the rural children of Morija. The participants in the research site have access to television, cell phones and computers, at least at the internet café and the library, if not at school. The Morija children were far more enthusiastic to engage with any learning experience given to them. The children and adults alike were deeply attentive to the performance and the contribution of the translator I had asked to assist did not detract from the flow. The children understood the content of the story and were able and willing to repeat the message back to the facilitators. Whether the weekend's events were to have an impact on the behaviour of the children was for the local facilitators to follow up on. Figure 6.28 shows the performance of the puppet show.



Figure 6.29 Impromptu puppet show in Morija (photograph courtesy of Mari Hyokyo)

I was also able to set up an interview with the facilitator of the programme, who had come from Maseru. She runs a programme there almost identical to the Litter Lions programme and there is much congruence between the two. This can be seen in the following excerpt from the interview:

F: We would help them with their homework, but then from there, we thought why not bring that environmental consciousness here. From there they started having that idea – let’s do a drama about this, let’s do a poem, let’s do dancing. We had monthly clean-ups. It just turned into that – it’s about the drama, the community clean-ups, the ways we can raise awareness in the community. In a simple way, ‘coz we’re dealing with kids of all age groups – they range from four to 16/17.

C: Why particularly poetry and dance?

F: To be honest it’s entertaining. It was something they were doing already, naturally. If they were bored you would see them doing pretend drama. If that’s what engages them, why not use it? For us it was just what they were already doing.

She agrees with me that the arts are the most appropriate way in which to raise environmental awareness and to change bad environmental behaviour. Ms. F faces the same challenges that I face, in that there is a dropout rate among the older children, especially the boys, although she also questions why other children continue to come. We agreed that it is because there are few opportunities for

children in both Maseru and Wakkerstroom to socialize after school hours, and both Ms. F's and my programme give children something different to do. She also mentioned that she had identified the need to take care of other needs in the children's lives, particularly the adolescents, and not only focus on environmental awareness. She agreed that reaching the broader adult community is important as well, and this concurs with the findings of this study at the end of Cycle One. Both of us still struggle with the question of whether we have made any meaningful impact on the children in terms of how they view, and behave towards, the environment.

This meeting was not only informative, it was encouraging in that I had made a valuable contact with a like-minded person, and collaboration opportunities will continue beyond this study.

6.3.2 Adult interventions

McNiff (2014) claims that “[v]alues, logic and practices are mutually influencing: what we believe in and value influences how we think; how we think influences what we believe in; and values and logics influence, and are influenced by our practices” (p.34). The beliefs, values and practices of parents and other adults in Wakkerstroom are likely to inform the beliefs, values and practices of the children of the area. The following section describes the interventions facilitated for adults during this cycle.

6.3.2.1 Power point presentations

Swanepoel and de Beer (2006) argue that, “[y]ou cannot make informed decisions if you do not receive the necessary relevant information” (p.63), and therefore it became important to me to provide what information I could to the adult members of the broader community. The assumption that educated adults have sound knowledge of good environmental practice is incorrect, as was seen first-hand in many instances during the reconnaissance phase of this study. Many people did not know what waste is recyclable and what is not; many people assumed that a plastic bag is biodegradable when they perceived it becoming brittle and breaking into tiny particles, rather than understanding that this is the worst of plastic waste that enters the natural environment.

I therefore decided to give a number of power point presentations to adult audiences during the course of Cycle Two and these took into account the advice of Swanepoel

and de Beer (ibid) who advise that "[i]nformation should not speak only to the minds of the people, but also to their hearts" (p.64). Some of these presentations were repeated to the same audiences with some changes, in order to reinforce the information. "Talking garbage" formed the basis of the topic, and was appropriately adjusted according to the audience at any given time, i.e. English, Afrikaans or isiZulu speakers, or various community groups or NGOs. A presentation on the benefits of earthworm farming was also given and this was to result in many families starting their own earthworm farms, mostly with children being the driving forces behind this activity.

The quantity of recyclables taken to the recycling depot increased dramatically after the presentations, until unfortunately the depot was closed.

6.3.2.2 Questionnaires

For Cycle Two I decided to use a questionnaire to establish whether the adults who had attended the local high school had been taught anything at all about littering, dumping and environmental awareness and also to find out what explanations they would give for why littering was so prevalent. (See Appendix A). Fifty questionnaires were sent out via Ms. Sibande and Mr. Tshabalala, and twenty-one were returned. Seven males and fourteen females responded, with most of them aged between thirty-one and forty. Eighteen of the respondents had attended high school in Wakkerstroom, with one person having been born here but not attending school. All the respondents who attended high school here, with the exception of one, said that they were taught about environmental degradation and the importance of keeping a litter-free environment. Responding to a question as to why people dump, eight of the respondents said that people are lazy, seven that there are no dustbins, and one that the waste removal truck does not come regularly. In response to a question as to why people dump waste instead of putting it out for the truck, seven answered that there are not enough bins, while four stated that there is no education as to what to do with waste. Two people said that there is no municipal waste collection. Most interesting was that one respondent said that if the streets were clean then people would not use the streets for dumping, and this is in alignment with a number of responses during informal conversations I had during the reconnaissance phase of this study.

The next question dealt with why people dump diapers in waterways. Once again four said that it was because there are not enough bins, one said that mothers are mostly teenagers who have better things to do, while one said that people do not do

this – it is pets and wind that are responsible for this. One said that it is because water takes the diapers away, and two said that people are uneducated. Six people said that people simply do not care, which is interesting in that this was the highest number of respondents.

When asked how they thought the village could be made cleaner the response was mostly around education, with four suggesting awareness campaigns, three suggesting that people be taught how to use bins, two suggesting teaching high school children and one suggesting education on reuse and recycling of waste. One respondent suggested providing a monetary incentive to clean up regularly, one that the municipality should provide strong bags and one calling for a functional municipality and better supervision for the CWP workers. Below is the tabulation of the responses.

<u>Table 13 Theme: adult questionnaire on knowledge of waste/recycling</u>			
Sep-19			
female respondents = 12		male respondents = 9	
<i>Question 1: how long have you lived in eSizameleni?</i>			
1-10 years = 1	10-20 years = 6	20-40 years = 6	40+ years = 8
<i>Question 2: how old are you?</i>			
20-30 = 2	30-39 = 9	40-49 = 5	50-59 = 4 60+ = 1
<i>Question 3: did you attend high school here?</i>			
yes = 17	one did not attend school 3 no responses		
<i>Question 4: were you taught anything about litter/waste in school?</i>			
yes = 16			
<i>Question 5: What do you think causes people to dump rubbish into water and onto the ground?</i>			
stubborn/laziness = 8	no bins = 7	no education = 8	no truck to fetch waste = 1
<i>Question 6: Why do you think people dump instead of putting waste out for collection?</i>			
People don't want to buy bags = 1			
People don't have bins = 7			
There is too much waste and people don't like full bins = 2			
There is nobody in the home willing to take the bin out = 1			
People don't care = 1			
If the streets were clean the people wouldn't use them to dump = 1			
No education as to what to do with waste = 4			
There is no truck collection = 2			
<i>Question 7: Why do people dump pampas in the rivers?</i>			
People don't care = 6			
There are no bins = 4			

The water will take it away = 1
 People don't like the smell and germs in their homes = 2
 There is no alternative = 1
 I don't know = 1
 It is the teenagers who do this = 1
 People don't do this; it is pets and wind that does this = 1
 People are uneducated = 2
Question 8: How can we make the village clean?
 Have places to send rubbish to =2
 Reward people for collecting rubbish = 1
 Provide bins = 5
 Teach people how to use bins = 3
 Hold awareness campaigns = 4
 Teach high school children = 2
 Provide wheelie bins = 1
 Municipality to provide black bags = 1
 Truck to collect once a week = 1
 Have a community group to clean the village = 1
 Better CWP supervisors; functional municipality = 1
 Eliminate single-use plastics = 1
 Educate people on recycling and reuse = 1

The information gained from the questionnaire was interesting. Lack of education came to the fore as a leading reason for poor environmental behaviour, despite most of the adults having been taught good environmental practice at school. This response suggests that I was correct in assuming that this study needed to include adults as well as children and it reinforces the need to bridge the gap between awareness and action. It also meant that the work of raising awareness and education needed to continue with adults and children alike, well beyond the timeframe of the research study.

That the respondents suggested that bins be provided was also interesting, since I had been told that all homes had been provided with bins in the past, and these were then used for other uses instead of for waste removal. Some respondents stating that the municipal truck needs to collect waste regularly, was strange to me, since I know for a fact that the truck does this once a week.

That some people believe that wind and pets are responsible for diapers entering the waterways, with no responsibility attached to humans, was alarming to me, as was the response where it was suggested that water takes the diapers away. However,

this corresponds with the notion of NIMBY as discussed previously. As long as the smell, germs and the problem of diapers is not in or near the homes, then it is no longer a problem. That they cause a problem in polluting water is not considered.

This little survey was the forerunner to a project to provide sealable bins, in the form of up-cycled paint drums, for new mothers, provided through the local clinic and supported by the WNHA.

6.3.2.3 Clean-up campaigns

A community vlei clean-up was held on 2nd March and there was a good turnout of volunteers, although not as many as had participated in the first clean-up. Eight bags of waste were pulled from the waterways and surrounds with the bulk of the waste being plastic and glass bottles. Items left behind after traditional rituals were also found, and a pile of bags of diapers that were so waterlogged it was impossible to remove them. Although there were fewer people working than previous clean-ups, there was also substantially less waste. This however, cannot be held as conclusive evidence of improved practices with regard to littering and dumping, since the first clean-up, which resulted in a substantial amount of waste, had pulled waste from the waterways that had been building up over many years. What is relevant to this study is that, despite the call to all sectors of the community, all the volunteers were members of the WNHA or the WWT (Wakkerstroom Walks and Trails) groups, with one gardener who was paid to assist.

Through the WNHA I decided to run an anti-litter campaign that involved the children in their parade, as described above (see 6.3.1.11), and the various groups that are supported as job creation initiatives, in a large-scale clean-up of an identified area in eSizameleni, the day after the parade. In the short term the objective was to clean up an area that was particularly affected by litter and to raise awareness in the groups that participated and, through the visibility of the work done to raise awareness in the community as a whole. This entailed meetings and requests for permission from the supervisors and heads of departments of these groups as well as approaching the municipal manager and his assistants. The groups that contributed were the WOF team, three CWP teams and the Delta Environmental Group, plus the municipal workers who are usually employed to keep the village clean. (The Delta Environmental Group will be referred to in section 6.3.2.6.) A call to the rest of the community was made for volunteers to assist in providing black bags, transport of waste, refreshments and also picking up litter.

There were approximately eighty people involved on the day and 346 bags of waste were pulled from the area. The value of the day, besides cleaning up the area, was that many ongoing conversations were initiated. The mind-map at the end of this chapter, in figure. 6.31, outlines the various components, organizations, equipment and groups of people worked with in planning the campaign and in follow up monitoring.

The children who had participated in the previous day's parade had been shown the area to be cleaned and asked to take special notice when they came home from school, at the difference the clean-up campaign had made and also to monitor how soon the area became polluted subsequently.

Despite the fact that it took just approximately one week for the area to become as polluted as it had been prior to the clean-up event, there was a significant outcome. The Delta Environmental Group decided to hold a clean-up of the same area again. This time they made all the arrangements themselves, ensuring that there were enough protective gear and black bags for the morning, the municipal truck to come and pick up the bags and a lunch provided for all who participated. None of the people who attended this clean-up were paid, except for the ladies who made sandwiches for lunch. It was impossible to establish how many bags had been collected because by the time lunch was served and people gathered, the truck had removed everything.

This truly was a significant event and, despite its having nothing to do with the raising of environmental awareness in children through using the arts, concurrent conversations indicated that my work in this village is making a positive difference. People spoke about the Environmental Impact Assessment that had supposedly been conducted and which permitted RDP homes to be built in the surrounds of the area we were cleaning, where clearly the water table was far too high to have structures safely built; they spoke about the problem of diapers in the waterways and the possible ways of preventing this by providing information to mothers and teenage girls; they spoke about the various art and performances that I had run during the course of the previous two years; they spoke about how disappointed they are in the ward councillor, who is always invited to these events but who never attends; they spoke about the pipeline proposal and how the councillor had lied to them. All of this showed how important visibility is, particularly in a small village, and very importantly, visibility in the form of me getting my hands dirty (literally) and being

prepared to engage in activities that are traditionally undertaken by simply paying someone else to do them.

The trainer engaged by the Delta Environmental Centre, to conduct the training that is mentioned below, told me that he has run the programme all over the country, but the one in Wakkerstroom has been the most successful by far. He said that one of the reasons was my contribution to alleviating environmental degradation that encompassed all sectors of the community. As much as this might not necessarily be true, it certainly was most encouraging. None of this is to say that littering and informal dumping will halt in the near future, but a seed has been sown, and bears nurturing. Changing habit can be extremely difficult, as Kollmus and Agyeman (2002) note: “[a]nyone who has ever tried to change a habit, even in a very minor way, will have discovered how difficult it is, even if the new behaviour has distinct advantages over the old one” (p.241). They use the example of a person trying to give up smoking.

6.3.2.5 Eco-bricks and tops and tags projects

It was just as important for the adults in the community to experience first-hand the outcome of efforts such as the eco-brick and tops and tags projects, as it had been for the community’s children. A number of social events were held where eco-bricks were made, and such events were both fun and productive. Outlining these projects in the power point presentations mentioned above (section 6.3.2.1) created awareness, and resulted in many villagers getting involved, including residents at the retirement village, domestic workers and their children, and visitors to the village.

The first eco-brick construction was decided upon by vote and this was a taxi/bus bench erected at the entrance to the village, situated next to a swing bin that had been erected the year before. The positioning of the bench has meant that it is visible as people enter the village and has provided a place for people to rest while waiting for their transport. There was much encouragement during the construction of the bench and its success has resulted in many more people contributing to the making of eco-bricks. Since the taxi bench took 128 eco-bricks to build, the other meaningful result is that far fewer non-recyclables went into a dump.

Similarly successful was the outcome of the tops and tags programme, where a specific person with a face, a name and a reputation in the community had benefited. Because efforts resulted in a physical manifestation locally (the provision of a wheel chair to a local resident) awareness has been raised far more than if these locally

produced eco-bricks and tops and tags had been donated to national programmes. Evidence of this is that many individuals and organizations now collect tops and tags for the wheelchair programme. This was one of the most important aspects of any success in this study so far, especially since the work that goes into the collection and construction is across all socio-economic strata and age groups.



Figure 6.30 Eco-bricks under construction



6.31 People waiting for a taxi at the eco-brick bench

6.3.2.6 *Champions of the environment*

One of the findings from Cycle One was that a champion, or champions, of environmental projects needed to be sourced. I made a concerted effort to search for these individuals in order to establish relationships with a view to creating synergy with the Litter Lions and other organizations. Although Block (2009), claims that “we have already learned that the transformation of large numbers of individuals does not result in the transformation of communities” (p.5), in my view such transformation is possible, especially if we consider the work of people like Jane Goodall, as quoted at the beginning of this thesis, who is amongst the many individuals who have transformed communities in very meaningful ways. It also seemed inconceivable that the barriers that existed between residents, the council and the various organizations could not be broken down. The effort made has yielded encouraging results which are described and discussed in this section.

A Facebook post by a young man living in eSizameleni, communicating that he was fed up with the littering and dumping in the village, resulted in a meeting where an immediate relationship was developed. He is one of the supervisors of one of the groups of CWP workers and he tasked himself with cleaning up waterways and dump sites. Through him I have been able to bring organizations and individuals

together, and have accessed areas that I would otherwise not have been able to, such as communication channels with the council. He has attended the power point presentations and works tirelessly in trying to educate and raise awareness among the people responsible for the dumping of waste. The community of Wakkerstroom supports his efforts on an on-going basis by donating black bags, rubber gloves, dust masks and, at times, refreshments. He has also been sponsored a bicycle which makes his work easier by enabling him to monitor work faster and come to events held as part of this research project. He is also willing to work as a volunteer after hours, for example in community clean-up events. As a champion of the environment his visibility and engagement with the research participants is invaluable. Here is conceivably evidence that the statement by Block (2009) quoted above regarding individual transformation having no capacity to transform communities is incorrect.

Another champion that emerged was the *dominee* (minister) of the local NG Kerk. Through him many people were encouraged to contribute to the various projects that are running, especially in the retirement home. Through his contacts in the Afrikaans farming community he has sourced resources in the way of building materials and expertise needed for construction of the eco-brick benches and swing bins. Unfortunately, he passed away in 2020, and this was a huge loss to the community and to this project.

Informal recyclers, who make their living from collecting recyclables from dump sites, were engaged in conversation, to establish where they store their material prior to collection and if they were willing to receive donations. These are some of the means that have been found to solve the challenge of the recycling depot closure. This resulted in new recycling depots, which are discussed further in Chapter Seven.

Finally, and fortuitously, in a restaurant I met a man who was in the village facilitating the work of a group of young people as part of a national job creation programme focusing on the environment. This is the Delta Environmental Group, mentioned previously with reference to the village clean-ups. As a result of conversation with him I was able to access the group during one of his classes, and here I performed my Mr. Mouse puppet show, adjusting the content to align with the age of the group. The following journal entry attests to my feeling of encouragement:

I talked to them about what I am doing with the WNHA and the children. None of them knew anything about the WNHA, which is a very important piece of information. I did my short puppet show for them, ostensibly to show them how I

work with the children but also because it doesn't matter how old a person is – we all like a puppet show. Then I spoke to them about the anti-litter campaign and the parade. I emphasized that how one doesn't always have to be motivated by financial payment, that a clean and healthy environment should be payment for work that we do in this instance. It was refreshing to be listened to, to be able to pitch to adults and to know for sure that they understood what I was talking about. If at least one person in the group of about 20, is moved to action and changed behaviour, and takes it home to his/her children, then I am doing my job properly. (journal, 15th October)

Many of the people in the group were already known to me through various projects or social interactions and this helped in forming relationships. From this fortuitous meeting I have been invited to various events, such as the clean-up described in section 6.2.3.2, run for and by this group who are in the process of applying for NGO status. Since the programme has been implemented through local government, I have also been able to access key role-players through this group, that I would otherwise have not met or had access to. One of the members of this group has indicated that she would like to sit on the WNHA committee and this will contribute to making the committee more inclusive of the whole community. Her son is also a member of the Litter Lions. This woman has become a key representative of the Delta Group and has indicated to me that, prior to the course she undertook, she had no idea that the practice of littering and dumping had such a negative effect on the environment, even though she had been taught this at school.

Providing some useful advice on the success and sustainability of projects such as this one, Rodda (1991) stresses that ..."[i]n particular, with regard to combating environmental degradation and establishing sustainable and wise use of natural resources, it is crucial to ensure that women, as key actors, can support the activities and will be motivated for implementation and long-term sustainability" (p.151). This woman has agreed to participate in, and contribute to, the work with the children on an on-going basis. This is relevant in that the contribution of women in alleviating environmental issues and the importance of women as knowledge holders of local natural resources need to be taken into consideration.

The importance of these individuals and groups is that they have emerged from the communities of Wakkerstroom. As early as 1988 Coetzee recognized the importance of engaging with 'non-experts' in projects such as these, when he says that "[t]he assumption that development is not merely the result of the master plans of the so-

called experts implies that development (as a process with deeply embedded moral overtones) must be approached from other points of departure as well” (p.88, brackets in the original).

Thus it became vital that, in further work in the field, the champions that had been identified during this study, such as the woman discussed above, be involved as the planners and implementors of any project, to withstand the unilateral imposition of projects by the ruling elite.

In addition to discussing natural capital, Roseland (2000) discusses “social capital”, explaining that ... “social capital gets created by the individuals who form social networks, to produce goods and services, non-monetized as well as monetized. Networks are usually informal groups who know each other personally, such as villagers who help each other...” (p.83). A valuable aspect in the development of the relationships with the champions described above, is Roseland’s term “non-monetized”, since these people are willing to participate in activities in the environment without payment. Additionally, they are enthusiastic about creating their own events aimed at alleviating environmental degradation, and inviting me to participate with them. The value of the social capital gained through these interventions cannot be overemphasised.

6.4. Personal challenges

Besides the inappropriate behaviour of some of the children with regards to my private space, there emerged other challenges that threatened to disrupt the study during Cycle Two, and further into Cycle Three.

With the work that I do, plus the constant reminders of the state of the village and the world in general, the eco-anxiety that afflicted me in Cycle One, became exponentially worse in Cycle Two. The closure of the local recycling depot exacerbated this and I soon learned that people are very comfortable with passing the problem (in this case the challenge of finding alternative means of recycling) onto other people. In my opinion this particular challenge should have been one that the community and the council faced together, but it was not so.

This was a learning experience in that I saw first-hand the notion of NIMBY playing out. Community members wanted to expend as little effort as possible on recycling or reusing waste, but to alleviate their consciences would make it my responsibility. On at least three occasions, I was aggressively confronted with the question ‘what are we now supposed to do if you don’t accept waste?’ People constantly told me

that they do not have time to make eco-bricks, to which I began to respond by asking if they thought that I did have time.

However, despite the irritation and sense of being overwhelmed, these experiences opened new avenues for raising awareness in the village. Instead of refusing to assist in responding to the challenge of the closure of the recycling depot, I chose to engage the community in thinking about how the problem could be solved. I also engaged the champions that had emerged in the adult community in conversation to this end and used the situation to further awareness and education.

As much as I knew from my learning in Cycle One that I had to place clear parameters on my own space, both emotional and physical, the challenge became more serious in Cycle Two, and had to be faced consciously in going into Cycle Three. Bess et al (2018) warn of this: “Throughout the research process the philosophical, political and religious beliefs of the researcher, as well as their racial attitudes and other convictions, all play an underlying role. As human beings, researchers can never be completely objective, particularly when dealing with social phenomena” (p.360). Being outside of the socio-cultural sector of the community within which I was working within forced me to examine myself, my values and my behaviour.

6.5 Findings

This cycle showed that there had been a small rise in environmental awareness in the children, but there was still no indication of any change in behaviour. The inclusion of adults in the study afforded some good results, especially with regards to identifying champions of the environment. The findings are discussed below, with these divided into sub-sections of children and adults.

6.5.1 Children

As had been found at the end of Cycle One of this study, the children continued to drop litter on the ground, which was very disappointing. There were a number of incidents that were indicative of this, as the following journal entries show:

S was eating snacks when I arrived to fetch the children, and as I was closing the doors of the car, there was her snack packet on the road! I asked her why she'd dropped it and she said: "I forgot". She then authoritatively told a boy to pick it up. It was only when I made it clear that I knew it was her that had dropped it that she confessed.
(journal, 15th September)

C dropped the wrapper from her frozen juice on the pavement when I went to fetch them. They were all sucking on these things when I arrived and I decided to watch them carefully. Of course, I called her on it, and she was appalled that she had done it, and it was absolutely clear that it was a completely subconscious action on her part. T accused her of being a fake Litter Lion. Later the research assistant dropped paper on the ground outside the venue, which the girls called him on. He denied it, but the interesting thing was that none of them picked it up, despite the argument as to who was responsible. (journal, 4th November)

Formanek et al, writing about the child's intellectual development, and in reference to the journal entry above, states that "[s]ince he [the child] believes he is the centre of his universe, he responds only to his own needs and his own perceptions. He does not understand the difference between cause and effect, between subjective and objective, between dreams and reality" (1976, p.15). In consideration of this it is not surprising that the children behaved in the manner in which they did.

Another aspect of my findings was confirmed by the experiences of F. Children in both eSizameleni and Maseru experience teasing if they are seen cleaning up their areas without adult supervision. The children have told me this on numerous occasions, when I have asked them why they do not want to clean up without my assistance. This was a contributing factor when the children showed reticence to clean up and to encourage their peers and parents not to litter or dump.

In assessment of the areas identified as indicators of children's littering practices as outlined in Chapter Five, at the end of Cycle Two it was clear that no change was evident. Each time the children were requested to do a quick clean-up of the school grounds during the cycle, the same amount of waste was collected, which indicated that nothing had changed at all. However, as with the other three areas focused on for this purpose, it cannot be conclusively claimed that the research participants' behaviour has not changed, since in both these areas other children also play there, and this is probably an insoluble problem within the scope of this research

When the children were tasked with collecting specific items of waste, the following questions were asked in the journal:

Are they collecting bottle tops to please me or are they really committed to contributing towards a wheelchair for someone in need? I'm so tired of this second

guessing, but without it there are no more questions to be asked, and no definitive data.
(journal, 18th October)

It became clear that there had been a small development in the children's environmental awareness, as was indicated in the drawings and the drama workshops. Here they showed retention of information and ability to build on information previously presented. The visible effects of work in reuse of waste, such as the eco-brick bench and the wheelchair, showed a remarkable increase in desire to contribute towards these projects, whether they are sustainable or not. However, it was also clear, generally, that the children were still littering. The habit of dropping litter on the ground is so entrenched that they are not even aware that they are doing it, even if they really do not want to do it. Breaking this habit was not something that could easily be achieved over a period of time, and certainly not over the course of the timeframe allocated to this study.

Since the children had indicated that they wanted to make their own plays during the course of Cycle One, I had built this into the interventions in Cycle Two. However during this second cycle it was discovered that in fact the children were unable to do this. There were any number of reasons for this, and the scope of the study could not examine all of these. It was because they were found to be unable to take responsibility for running with their own programmes, that Cycle Three reverted to facilitator-based interventions.

6.5.2 Adults

The decision to include adults in the study was productive. Working with various adult groups and individuals in the communities provided opportunities for developing relationships, opening conversations and providing platforms for raising awareness that may have an impact on the children over time. Realizing that the arts can be used for work with adults was crucial, too, in that it offered more opportunities for events in Cycle Three where exciting interventions could be planned. Learning that my assumption that adults would not be open to arts interventions such as puppet shows is incorrect, meant that this was one form that I could use more extensively. Just as it had with the children the visible and concrete effects of reusing waste, had a marked effect on awareness in the adults. This could be seen in the construction of the eco-bench, in which a number of adults took great interest. Further arts interventions plus power point presentations for adults in all sectors of the community were crucial to continued success in this aspect of the study.

6.5.3 Self-preservation

Given the eco-anxiety that I began to develop during Cycle One, and the challenges that I experienced during Cycle Two with regard to my personal space and my own behaviours, planning for Cycle Three needed to take self-preservation into account. With reference to eco-anxiety Pinkala (2017) observes that "... most of those who wish to advance environmental matters have stressed that anxiety and guilt should not be generated" (p.112). I thus needed to put structures in place that could protect me from the affliction, while also not forgetting the other adult community members plus the children.

6.5.4 The need for a critical friend

It had become most apparent that I needed space to step back from the interventions, and take a view that differed from the perspective from which I had been forming my reflection. I had become too close to both the events and the children, so therefore began to search for a new means of gathering data that did not involve my being in the middle of the work while it unfolded. In action research the tool of the critical friend, where an external person is included in order to provide insight that may be invisible to the researcher, is often applied. In the case of this study, however, since I enjoyed the assistance of both Ms. Hall in the form of professional facilitator and Mr. Tshabalala in the form of research assistant, I was able to step out of the space and become my own critical friend during Cycle Three.

6.6 Conclusion

The successes in Cycle Two with regard to working with adults suggested that these could be continued, and built upon, in Cycle Three. As much as there was little, if any, indication that the arts had facilitated any behaviour change in the children with regard to littering, which was as disappointing as it had been at the end of Cycle One, the relationships and conversations that opened up in Cycle Two were invaluable. Pivotal in the learning was that the children want to be environmental custodians but have habits that are difficult to break. These enabled a clear direction for the planning of Cycle Three, with further work with adults as well as children.

Taking into account political role-players in the field, and developing relationships and communication channels with them, as had been identified as a need at the end of Cycle One, served the study in a positive manner. This enabled work to be undertaken that had previously been impossible to do. Maintaining open channels

with these authorities, especially the junior members of municipal staff who work ‘on the ground’ as it were, was important in the planning for Cycle Three.

The interview with F in Lesotho was enlightening in that it indicated that the challenges faced within this study are not unique, especially with regard to the question of changing behaviour, but also regarding personal space and eco-anxiety. The fact that the programme that F runs is so similar to this one was most informative and encouraging, specifically because of the issues mentioned above, but also because it opened up possibilities for further collaboration.

Chapter Seven describes and discusses the interventions undertaken for Cycle Three, and ends with a critical analysis of all findings from Cycles One, Two and Three.

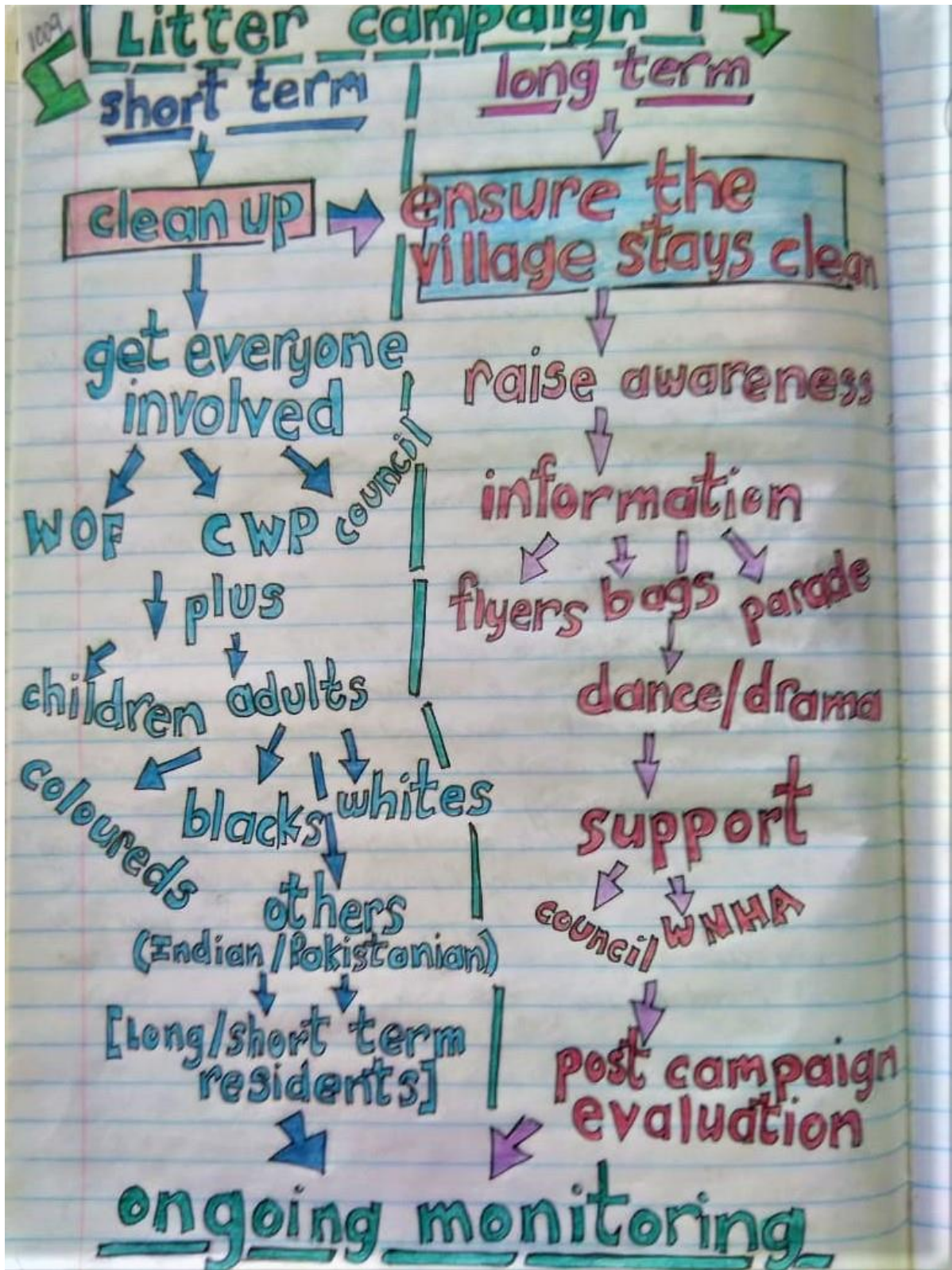


Figure 6.32 Mind map showing the thinking in the planning of an anti-litter campaign



Chapter Seven: Cycle Three

7.1 Mapping the chapter

The focus of this chapter is the final cycle of action research, which completed the field work for the project. The cycle was meant to take place over the course of the first half of 2020, but was disrupted by the lockdown imposed by COVID-19.

Findings from Cycle Two that informed Cycle Three are discussed in section 7.2 of this chapter. These are followed by a description of the interventions undertaken. Section 7.4 discusses the impact of COVID-19 and in section 7.6 the chapter concludes with a critical discussion of findings from all three cycles.

7.2 Cycle Two learning that informed Cycle Three

Key findings from working with adults and children during Cycle Two were the following:

- Children do indeed learn bad environmental behaviour in the home. This was established through observation and informal conversations with residents.
- The inclusion of adults in interventions broadens the reach of the information made available through a range of activities. For example, the opening of informal conversations with adults during clean-up events afforded opportunities to disseminate knowledge and to gain insight into political, environmental, and indigenous knowledge.
- Adults have more of a voice in the political sphere and therefore are better positioned to make the changes aimed at in this study. Important in this regard

are access to adult community-members and council and, most particularly, the inclusion of women in these areas.

- The researcher who engages in a humble manner with the circumstances of people who live in poverty helps to create working relationships, open communication, and creates opportunities to engage with them in bringing about change.
- Adults enjoy arts-based interventions for example, puppet shows and story-telling. Adults engaging me in conversations after these interventions, showed that both the art forms and the knowledge gained from content presented had made an impact on them.
- There was a distinct need for an outside eye in interventions, since I was becoming too immersed in the creative work.
- These findings were valuable in the context of the theories of deep ecology and eco-feminism, supporting a return to indigenous knowledge, an equality between researcher and participants, and the inclusion of women in projects such as this, as called for by these theories.

It had become clear during the course of the previous two cycles that arts-based interventions with children do engage their interest. Whether such interest leads to behavioural change, and whether environmental awareness has been raised to the extent that was hoped, is less certain. As expressed by the applied drama practitioner from Lesotho who was interviewed during the second cycle of the research, “I always ask myself – are we really reaching them, or are they enjoying a drama for a while? How do you know when you’re having any meaningful impact? But they still enjoy the work” (F interview; September 2019).

However, an important finding from Cycle Two was that permitting the children to create their own plays, without significant scaffolding to guide their efforts was not productive. Although the children had indicated that they were keen to create and work on their own plays, it was found that they were too young and/or did not have enough experience or discipline to sustain the creation and performance of a play. The Cycle Three play-making intervention described below was thus director-driven, with only some initial input from the children.

Despite there being much reflexivity during the course of the fieldwork for this study, there seemed to be a gap between what was occurring in interventions and what was perceived to have occurred. This was because I was facilitating many of

the interventions, and then reflecting on them afterwards. Despite in many cases gleaning additional insight from further reviews based in my journal entries, I still felt that I was not providing myself with enough time within the framework of the interventions to observe comprehensively what was happening in real time. Therefore I took on the function of the ‘critical friend’ as employed in action research, albeit as a critical researcher rather than friend.

7.3 Interventions

The first interventions for Cycle Three cycle focused on water, primarily because the WNHA held the first of what was planned to become an annual event - the Wakkerstroom Water Weekend (WWW). This aimed to raise awareness of the importance of clean water and to test water samples from diverse locations in the village. An additional goal here was to provide ongoing comparative data to inform scientists, who could then make recommendations to government departments.

As before, the interventions described below are divided into those with children and those with adults.

7.3.1 Interventions with children

These were implemented between January and March during the first school term of the year, until lockdown was imposed.

7.3.1.1 MiniSASS

I began the term’s activities with Ms. Garland, the manager of BirdLife SA, by introducing the children to MiniSASS (Mini South African Scoring System). This is a tool developed to monitor water quality over time. In his report to the Water Research Commission, Dr. PM Graham, representing GroundTruth, describes the programme thus:

Reliable indicators of water quality and river health are often difficult and expensive to derive. The development of the miniSASS tool during the late 1990s was a low technology, scientifically reliable and robust technique to monitor water quality in rivers and streams.

Ms. Garland and I both sit on the WNHA committee, and were also involved in the planning for the WWW, so we decided that a miniSASS could be an appropriate activity for the children. While this was not an arts intervention, it led to arts-based activities later on.

The miniSASS was held over the course of two weeks with the children divided into groups of six. Using nets, magnifying glasses, and charts provided, the children were

tasked with identifying the creatures they could find in their buckets of water which we had fetched from the vlei. The intention was to indicate to the children the variety of life that can be found even in a small sample. Through this the children learned that protecting water is important not only for people and large animals but also for microscopic creatures. They identified a number of these, including tiny water snails, slugs, water nymphs, and whirligig beetles. The children were fascinated by the creatures that they found, which the following journal entry indicates:

The children were most excited by the red worms that were found in the water, and they were proud of themselves when they accurately identified them on the charts provided. One of the children particularly liked the 'jik-jik', as we all decided to call it, which was a creature that moved forward in stops and starts. (journal, February 2020)

Whether they were able to make the connection between the wetland and the water in the buckets remains unclear, and this possible lack of connection is a concern that is discussed later in this chapter. Both workshops resulted in the same level of enthusiasm on the part of participants.



Figure 7.1 the children busy with the MiniSASS

7.3.1.2 Water creature puppets

From the miniSASS, photocopied printouts were made of the creatures identified. During the course of the following two weeks at The Potters' Place, the children coloured in the images. These were then used as props for the water production performed by the Litter Lions.



Figure 7.2 shows examples of the water creature images

7.3.1.3 *Galela*

Galela, meaning ‘pour’ in isiXhosa, is a professional play, devised and produced by Wellworn Theatre, and directed by Thembela Madliki in 2018. It deals with issues of the importance of clean water, but also has a political component to it. Because of the WWW it was decided to bring *Galela* to the village for a performance as part of the events planned for the weekend. The following excerpt from Wellworn Theatre’s website describes the production:

Three best friends bravely embark on a project to make their town’s drinking water safe again. They soon discover, however, that they have waded into hot water and that the problems affecting the town dam are deeper and murkier than at first glance. Still determined to make a difference and to secure the future of their friends and family, the trio dive in to fix the mess, proving in spectacular fashion that children with the biggest imaginations will save the world (www.wellworn.org.za accessed 17th Oct 2020).

The cast of three cleverly played all the characters, from the children to the corrupt mayor, driver, parents and school teacher. The story unfolded with the use of song and dance, simple theatrical devices and found objects as props. The children made a stand, exposed the corruption, and saved the water.

The production was of particular importance to me as I wanted to ensure that the message of clean water went beyond villagers in the higher socio-economic categories, to reach as broad a spectrum of people as possible. I wanted to try to create an inclusive moment in the weekend, where all could attend and at the same time be entertained.

The play was performed three times – first at The Potters’ Place, where 100 children watched; second in the eSizameleni Community Hall. Here approximately 850 people attended, mostly children. Both these performances had free entrance. The

final performance was for the children of Village Primary, and here the children were asked to pay a nominal fee.

In terms of our objectives this intervention was overwhelmingly successful. Ultimately, we reached over 1200 people, most of whom were children. Further to the performances, a number of follow-up workshops were held, both at The Potters' Place and at Litter Lion interventions, in order to establish how much of the message of the play was understood and retained. The results were astonishing. Children remembered the songs three weeks after the performance. They were able to describe the events of the play by re-enacting the story as it unfolded. They were able to equate events in the play with local issues: for example, they compared the situation of the corrupt government official in the play coercing the driver to dump waste into the river with our local issue regarding the pipeline planned to take Wakkerstroom water to Volksrust.

However, despite the children being able to remember the storyline and the songs, and also being able to make a connection between the play and local politics, one needs to ask whether any of this is likely to result in any long-term change of attitude and behaviour. What can be definitely stated is that exposure to *Galela* motivated a greater number of children to really learn to act and dance, than had previously been the case. A journal entry that recorded a conversation I had with S and T, two research participants, indicates this:

“This is what we have been doing – like this water play; it’s like ours,” said S after the performance. When I told him that, yes, this is exactly the same as our water play, he said: “But ours is not like this. Theirs is much better than ours. And they are funny and clever. I wish I could be in a play like that”. T agreed, and said that one day she wishes she will be able to act in a play like Galela. (journal, February 2020).

This means that there are already children who are enthusiastic about attending arts and dance lessons in future.

7.3.1.4 Litter Lion water performance

In order to reinforce the message of the importance of clean water, it was decided that the Litter Lions would perform a play workshopped and directed with the participants by Ms. Hall. It was showcased over the weekend of the WWW along with *Galela*. The following journal entry sums up its intention:

Our objective is to produce a dance/drama in celebration of water as part of the WNHA Water Weekend. For the Litter Lion study it gives me an opportunity to celebrate water rather than the usual hammering away on the hazards of pollution.
(journal, 25th January 2020)

Ms. Hall began with brainstorming workshops, where the children were encouraged to give ideas and to enact various aspects of the water cycle, the possible creatures that live on or in water and their movements. Since the children had become used to working in this way with Ms. Hall, they were immediately able to respond to what was required of them. From these workshops Ms. Hall was able to extract aspects of movement and dialogue that formed the framework of the piece, which she then honed as director.

It was during this intervention that I decided to place myself in the position of ‘critical researcher’, a variation on the critical friend of the action researcher described in the literature:

The idea of a ‘critical friend’ or ‘critical colleague’ was first recommended by Stenhouse (1975) as a ‘partner’ who can give advice and is working with the teacher-researcher in the action research. Instead of perceiving the role as an advisor or consultant, the ‘critical friends’ see themselves as the ‘friend’ of the teacher-researcher (Kember et al, 2006, p. 464).

Because I did not need to participate in rehearsals beyond simply being present, I was able to observe more than I had been able to in the past two cycles, and was able to remove myself from the activity altogether and simply watch and take notes. This proved to be a useful means of obtaining greater insight into the effects of the workshops than had previously been possible, since in the earlier workshops I was ‘in them’ so to speak, whereas now I was apart from them.

Ms. Hall provided some narration, using a microphone, and music through a battery-operated sound system. Props were sourced from waste material: old tin cups, bowls, a hat stand and empty cold drink bottles, and the completed water creature puppets. The children wore blue t-shirts, donated by a local second-hand clothing shop, and their own jeans.

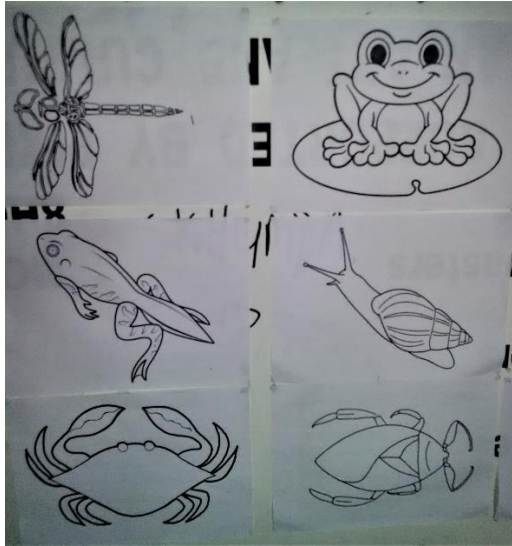


Figure 7.3 Copies of images for puppets



Figure 7.4 Completed water creature rod puppets

The play began with two children worrying about a lack of rain and therefore no drinking water, followed by the group deciding to make rain. Using empty cold drink bottles they created the sounds of water falling, lightning and thunder. Meanwhile behind them Mr. Tshabalala, my research assistant, placed a basin of water, which was ‘discovered’ by the children when the ‘storm’ was over. Then, through movement and dance, the audience was taken through the water cycle, from rain running into rivers, ponds and dams, and then into the sea. This was followed by further illustration of condensation, evaporation and rain. In an extension of the miniSASS previously discussed water creatures found in bodies of water were acted out, and reinforced by the images on sticks. The play ended with water being offered to audience members by the cast.

There were two performances, one at The Potters’ Place, and one at the WNHA Water Weekend event where results of the water testing were given to residents. Because the play was performed just before the *Galela* performance at The Potters’ Place, it provided an opportunity for the professional theatre practitioners to watch, and this had an encouraging effect on the children. The cast of *Galela* were impressed with the work that the children produced and made this very clear to them.

One of the cast members of Galela was so encouraging to the children, and said that he would love to come and see further plays and dances by them in the future. The children were super happy to receive this compliment from the professional actor, whom they had seen performing in his own play. A said: “one day I am going to be just like you! You’ll see, come and see.” (journal, 28th February 2020)

The children were inspired by experiencing the results of their own work and then impressed by the possibilities of play-making by watching *Galela*.

It was good for the children to perform for an audience, especially I felt, considering that the audience was made up of their peers. (ibid.)

There were nine days between the two performances which gave Ms. Hall and the children an opportunity to make additions to the play. I was unable to attend the final rehearsal at which these additions were practiced and was astonished at how well these had been made in such a short space of time. In Ms. Hall's view the children had been inspired by their experience of watching *Galela*:

Sue took the children for a final rehearsal to prepare for the WWW performance. In that short time she was able to add two more sections to the piece! She said that she had been able to do this because the children were more focused than ever before, even during warm-up games. She put this down to their experience on Thursday when they watched Galela. (journal, 1st March 2020)

The performance at the WNHA event went well. The children were enthusiastic and energetic and the audience, made up of adults, seemed most impressed. There were many congratulations extended afterwards, especially from the members of WNHA committee. A comment that was made by a community member who is particularly supportive of this project was: "These children have come such a long way since they first performed. Well done! The message was clear, and the children clearly had a great time."





Figure 7.5 images from the WWW performance of the Litter Lion water play

There are a number of reasons why these applied drama performances were important with regard to this study. These are:

- A clear and concise message of the importance of clean water reached hundreds of people, both through *Galela* and the Litter Lions;
- Those of the higher socio-economic strata of Wakkerstroom were able to experience first-hand the efficacy of applied theatre, both in terms of *Galela* and the Litter Lions play;
- Information was retained by the children, who could remember events in the play and the songs in *Galela*, long afterwards;
- The children were exposed to the possibilities of applied drama in that, up until then, they had been making their own productions, but when they saw *Galela* they understood a broader application of the art form and the possibilities for them for their own future play-making.

7.3.1.5 Drawing

Drawing was used twice in interventions in Cycle Three. The first drawing intervention was conducted after the miniSASS, and was held at The Potters' Place.

The intervention began with the children naming the various uses of water, which they showed individually using mime, with their friends having to guess what each use was. The same process was used for the water cycle, followed by birds, animals and insects that live on or near water. From this rather energetic process, the children were invited to choose one or two of these components and make a drawing. Below are some of the drawings that were the result of the intervention.



Figure 7.6 Some of the work that the children produced on the uses of water and the water cycle

The final intervention that I was able to conduct with the research participants, before the lockdown imposed by COVID-19, was somewhat unsuccessful since the final art work did not achieve the outcome that I had intended. The intention was twofold: firstly I wanted to establish again, through graphic representation, what the children had retained from the previous interventions that dealt with the water cycle; secondly, I wanted to demonstrate a different means of drawing. This entailed drawing with wax crayons and then washing over the drawing with watered down

paint. The wax repels the paint which then exposes what has been drawn in more detail.

I laid out a long stretch of paper on the floor and taped it down. The instruction was that we would all make one long drawing about water. It could be anything that they remembered from the past few weeks' workshops. Some of the children copied the water insects and others drew rainbows and suns, with the result that there were water creatures floating in the sky with rainbows and suns everywhere. (journal, 16th March 2020)



Figure 7.7 Details of the long drawing of the water cycle

Unfortunately, the children were unable to understand the concept of one communal drawing, which may simply have been due to bad instruction on my part. Then, when we washed the paper with blue paint, we discovered that the paper was too thin to allow the colour to come through, and care had to be taken that the paper did not tear while drying. The paint was too watered down to expose the image as well. It was only in retrospect that I realised that I should have done a 'dry run' prior to the

intervention, but by then it was too late. Again, on reflection in my journal, I put some questions to myself.

Were my instructions unclear? And even if they were clear enough, did Sbu have enough visual literacy to translate the instructions for me? (journal, 10th May 2020)

According to Piaget and others, who concern themselves with development theory in children, were some of the children unable to grasp ‘the bigger’ picture both visually and psychologically? Although Bland (2011) refers to Walker, stating that “[s]tudies have shown that by ages 7-9, ‘children have developed a graphic language ... including specific symbols and rules of spatial organization’” (Walker in Bland, p. 97) and at around age 9-11 they strive for greater accuracy. One wonders if these studies have taken into consideration children such as the research participants engaged in this study, who have sub-standard education and little parental involvement. As Cohen has mentioned on the subject when he says that “Vygotsky was less concerned with parents [than Piaget] but for most children their parents offer an almost constant source of help and encouragement” (2006, p. 69).

However, everyone enjoyed themselves, evidenced by the excitement when we all stepped back and looked at the final drawing. This shows once again that children, and certainly the children participating in this study, are keen to draw. This included in this instance, Mr. Tshabalala who contributed enthusiastically to the work. His comment was recorded in the following entry:

“But it’s not so bad, Carol. It looks great. I like it. The children like it. It looks good on the wall. We can see the animals, the water, the river – all that.” (journal, 16th March 2020)

These two interventions both showed that the participants had an understanding of water and how it is deeply integrated into our lives. Including the two performances of *Galela* and the *Litter Lions WWW water play*, I felt that the children who I worked with, those of The Potters’ Place and the Litter Lions, had been able to experience diverse information presented on water in its many forms. It was meaningful to me that this awareness and understanding was communicated in their drawings.

7.3.1.6 Other interventions

As had been the case with the previous two cycles of action research, there were other interventions that had an impact on the work, mostly in the form of being able

to reach a broader population than just the research participants. Again, these were limited by the imposed lockdown, but they are described below.

7.3.1.6.1 Site visit to the vlei

During one of the rehearsals for the water play there was a discussion around the children's experience of the wetland. I was horrified to learn that many of them had never visited the area. My distress was not so much that they had not been there, but that it was such a vital piece of information that I had missed from the very outset of the project. A serious error on my part was to ignore the possibility that the very natural environment that I was trying to save and use to contribute to raising environmental awareness in the children was unfamiliar to them. My distress at this error was reflected in my journal.

What's the point of trying to instil a love of nature, value for the vlei, understanding of the value of tourism, when they have never had a real experience of it? (journal, 27th January 2020)

Had I established this during the reconnaissance phase of the study I might have planned some of the interventions differently. The questions I then put to myself were, how do the children perceive nature, how do they feel about nature, what do they think about nature, if they think about it at all? Brisson (2017), referring to Geng et al. (2017), states that

[t]he way we feel about nature has a direct impact in the way we live our everyday lives. Our conception of nature is of great significance, because it has a direct effect on how we treat our environment, and to what extent we engage in environmentally conscious behaviours (p.23).

Having no green spaces to play in, the children's main entertainment is through television and social media. One parent had this to say in an informal conversation: "I would rather my child stayed at home and watched TV than be running around in the township where I don't know where he is or who he is with". She had recently had electricity installed in her RDP home, and had compromised a lot in order to purchase a television for her family. When I noted that there are no parks allocated for children's recreation, she shrugged and said that there are continual promises made by councillors but they always come to nothing (informal conversation 17th November 2020). With children continually exposed to the offerings on television is it any wonder that they are more intent upon amassing wealth at all costs, than fostering a clean environment? To refer once again to Hart (1999), the following statement is certainly true of the children in eSizameleni:

Fostering a sense of place and an affection for the local environment and community in childhood seems an overwhelming task when one thinks of the enormous and expanding power of technology and the mass media to seduce young children into desiring all that they do not currently have (p. 193).

Von Boeckel agrees with this, when referring to French sociologist Jacques Ellul (1998), who

... points to the problem of “denaturalization. Living in today’s world, we are out of direct contact with the realities of earth and water. Instead we deal with the reality of technical objects and instruments that more and more constitute our environment (1998, p.41).

I had assumed that all children who live in a rural area have at least some level of connection to nature that city children do not have, and that these rural children have less connection to social media and technology than their city counterparts. This was an erroneous assumption. For these reasons, a plan was made to take the children to one of the bird hides. Even though there was no intention to go into the water, I was concerned about the possibility of children falling in, so great care was taken in the plan for the trip. Three adults, wearing safety vests for safety, accompanied the group of about fifteen children. The children were expressly forbidden to go into, or close to, the water.

Hart advises that “[o]ne should aim to focus the attention on each of the senses – listening for noises, smelling of pleasant and unpleasant parts of the environment” (p. 179). Therefore, in the bird hide, the children were instructed to whisper, and then to see what birds they could identify using the binoculars borrowed from BirdLife SA. After a few minutes of bird watching the children were asked to close their eyes and simply sit still and listen to the sounds around them. They were all very attentive and sat very still during this short meditation. After approximately five minutes I told them to open their eyes but to continue sitting still. I wanted them to hold onto a sense of peace and wonder that nature can afford to those who are willing to be still. After some time the children were taken back to the vehicles, with small flowers and insects being pointed out to them along the way.

Of ‘trails’ or ‘sacred walks’ Von Boeckel (1998, p.84) quotes the advice given to educators by Jean-Jacques Rousseau in the eighteenth century: “[i]t is nature that shows the way. Do not give your pupil any kind of verbal lesson, he ought to receive them only from experience” (p. 92). I thus specifically did not ask the children what sounds they heard in the bird hide, or even what their experience of the fieldtrip had been. I wanted them to own the experience themselves, and embody it, which meant that it is impossible for me to know definitively what their thoughts were on the

experience, or if they made any connection between any of the interventions and what they observed during the visit. What was clear however, was that the children enjoyed themselves thoroughly, and that was enough for me.

Regular trips into nature will be prioritized in future. This, I hope, will ensure that as the children go through the Piaget's stages of cognitive development, a love of nature will grow in the various experiences of it as they move into adulthood. After all, a love of nature, which then instils a sense of custodianship of the natural environment, is what deep ecologists and eco-feminists aim for.

7.3.1.6.2 Reading group

A child psychologist, who lives in Wakkerstroom, began a small reading and vocabulary development programme with children in her area. She aims with this programme to stimulate vocabulary development in the children, since she has identified this as a problem which affects learning across the curriculum. Her modus operandi is to select one word a week, have the children look it up in a dictionary, and then write sentences with the word, accompanied by drawings elaborating on concepts and terms.

At her request I attended her group one Friday afternoon. The intention was for me to focus on the word 'litter', and then hold a discussion on it. We then took the children out into the road and conducted a clean-up, which included spaces around some of the children's homes and a local tavern. I learned from watching the children trying to read, and by the manner in which the reading group leader explained words to the children, that I had been unaware of the depths of the problem created by sub-standard education. What follows is a journal entry after this experience.

Most of the children can't grasp the metaphorical aspect of language, the representational notion that letters, placed carefully next to each other, not only transfer to a sound that has specific meaning, but that also refers to a concrete thing, a concept or time/place in the world. Simply put there is a leap of understanding that say, the word 'dog' represents an animal that is usually in the home, barks and can bite. Many of these children cannot make the connection. (journal, 10th May 2020)

Many of the children selected to be research participants in my study came from more affluent homes than most of the reading group children. This meant that they possibly had more stimulation in the home and more support for their linguistic and general cognitive development, but time spent with the reading group led me to consider whether or not I had been using language and introducing concepts that the

research participants could understand. If not, being half way through the final cycle of action research made it too late to take this possible limitation into consideration. However, it did mean that interventions after the study would take this into account.

7.3.2 Interventions with adults

Plans for a big education roll-out, which included members of the local municipal authority, and which was aimed at the adult members of the communities, were in their early stages in March 2020. These had to be put on hold. However, because of relationships built up over the course of the fieldwork some work with adults was able to be done during this difficult time. Through careful negotiation with all role players in the field the projects were completed between September and December of 2020.

7.3.2.1 Questionnaires

As part of the work with adults in December, I decided to send out another questionnaire further to the one I had done in Cycle Two. The objective of the survey was to establish what awareness adults had on the new recycling depots that had been set up shortly before. Included in this was the intention to establish how many people actually recycle in the first place, and also if I had disseminated the information on these depots successfully.

Thirty questionnaires were distributed by hand and all of them were returned. Twenty-two people had lived in Wakkerstroom for ten years or less, three had been residents for twenty years or less, while four had been resident for twenty or more years. Only ten of the respondents were male, and the age group was predominantly older, with eleven respondents being between the ages of fifty and sixty. Nine were over sixty with the remaining between twenty and forty. Since the survey was anonymous, and I was not responsible for handing out the questionnaires, I was unable to ascertain the racial demographics of the respondents. In my opinion, however, this was immaterial.

Sixteen respondents knew where the new glass recycling drop off point was, with one person who did not respond, while thirteen knew where the recycling depot was. Again, one respondent did not answer this question. Interestingly, only eleven respondents said that they made use of the drop off points, which meant that knowing about a recycling depot does not necessarily mean that one would make use of it. Of the respondents who stated that they did not use the depot, two said that they would if they knew where it was. Most of the respondents had heard about the depots by

word of mouth, with nine having been reached via WhatsApp. Only one person had received the information via email. Ten stated that they had not heard about the depots from any source. The final question asked what respondents do with building rubble. Fourteen said that they take it to the dump, and seven said that they ensure that the builder removes it. Five said that they reuse it in further building, and one said that he puts it on the pavement. One said that she does not generate rubble.

Within the constraints of lockdown a bigger outreach was not really possible, which was unfortunate. There were some interesting points that did emerge, though. It was surprising to me that so few respondents had not heard about the depots via email, since I had sent out many emails to this effect on the extensive databases that exist in the village. That more people had been reached via WhatsApp showed that this is a more effective manner in which to disseminate information through the communities, and one that I will be making use of in the future.

The respondents were given the opportunity to add further comments on the rear of the questionnaire. Disappointingly only three people added comments, which follow:

Respondent 1: The extent to which the village could coordinate recycling could be improved. We merely rely on C and S and the good will/decency of people to take things to them. Municipality and/or volunteers/CWP could help with collecting more and distributing to the aforementioned collectors. Alternatively, as envisioned by IM some systems could be set up at the dump, but this may cause tension between the collectors, because they would both want to benefit from the municipal drop off.

So essentially the private collecting works in a way, but it is making the overall recycling possibilities smaller than they could be.

Other programmes could be started. For example, more eco-brick making and something with polystyrene, but sadly this too requires education and coordination and probably financing for a place/space.

Respondent 2: I would never put rubble on the pavement! What happens to it then? It is bad for the environment, I think. If I can't reuse it for other building then I take it to the dump, even though I don't like doing this. It would be better if we didn't make rubble in the first place.

Also, how can I be sure if the builder takes the rubble to a proper place. Maybe he dumps it where he should not, because he doesn't care. There is so much rubble at

the old quarry. I know they [builders] just dump it there. It's wrong. Just because you can't see it, doesn't mean that it is right.

Respondent 3: Really, we all know S, and he is a mess. His dump site brings rats and snakes. I live there and I don't like it.

These three respondents showed three rather differing opinions on the issues raised by the questions that were put to them. The first of these clearly knew who and where the recycling depots are, and had some interesting points raised. The suggestion of further work by the municipality, organizations and individuals, and the understanding that there are issues that may impede this, highlights the challenges that are faced in the village.

I was glad to have learned from respondent two that there are people who are aware of the hazards of building rubble in the natural environment. Since the scope of this study did not extend to the effects of rubble, I had not focused on this besides recording where it was dumped. This awareness was encouraging to me, especially since the respondent was also aware that builders are often responsible for dumping rubble in inappropriate places, and reiterates my opinion that people with vehicles are happy to dump waste where it cannot be seen, rather than make the extra effort to dispose of it properly.

Respondent three seemed most against the depot in eSizameleni. Prior to the collaboration with S however, I had spoken to residents around his home and his depot, with the specific intention of establishing whether they had any objection to villagers adding to his recyclables. Nobody expressed any objections.



Figure 7.8 The recycling depot opposite S's home

7.3.2.2 *Champions of the environment*

As was discovered during the reconnaissance phase of this study, many projects in the past had failed due to the loss of a community or project leader. Dr Gerber, the dominie attached to the NG Church, who passed away suddenly in 2020 and whose wife has agreed for me to name him in this thesis, had emerged as a quiet supporter of this project through assistance gained via the church. His death left a big gap in the community and in the support for this study. The important learning here is that when a project champion is no longer available it is vital that a replacement is identified to fill this gap, in order for the work to continue. In the past the result of a loss such as this meant that the project stopped and therefore failed. While finding a replacement to fill the gap that Dr Gerber left may not be possible, I intend to seek champions of environmental conservation activities on a regular basis, because it became apparent during the fieldwork that champions of the environment are to be found, if one searches for them. Engaging in collaboration with these champions ensures that projects are inclusive and local knowledge can be drawn on to good effect. This confirms the need to engage in indigenous knowledge as the chosen environmental theory suggests.

7.4 Impact of COVID-19

Poignantly it would seem that the pandemic occurred through human interaction with the natural environment. The following statement by Enric Sala in his National Geographic article intitled *The Cost of Harming Nature* highlights that:

COVID-19 is yet another reminder that conservation is not just a luxury for rich countries or a romantic ideal. Our very survival depends on our being better members of the biosphere, our larger community (September 2020, p.16).

The pandemic had an impact on both the final phases of the action research project and on my own physical and mental health. These are discussed separately below.

7.4.1 Impact on the research

Further interventions planned for this cycle were a series of focus group discussions where the research participants would have been engaged in conversations around what they had experienced during the past few years. These were to have been followed up with their own journaling and drawing. It was unfortunate that these interventions were prevented by the pandemic, but the possibility of further valuable work at a later stage still existed.

7.4.2 Personal impact

The physical effect of contracting the virus myself and the emotional strain of lockdown impacted on the eco-anxiety that I was already suffering. Although this was to have a very serious effect on my psychological well-being, but it also provided learning that could be taken into account when research in this field is considered by others, or by myself if I were to extend this work.

7.4.2.1 Illness

During the first wave of the virus only six confirmed cases of the virus were identified in the village, and one of these was myself. One man who became ill had contracted the virus while in hospital for something else, while the rest of us had no way of identifying where we contracted it. Of the six of us, one lives in eSizameleni. None of us became dangerously ill and all recovered well. It was the exhaustion that the virus caused that was to have the worst impact on me, since this exacerbated the eco-anxiety that I was already suffering.

7.4.2.2 Eco-anxiety exacerbated by the pandemic

The eco-anxiety that affected me during the course of the fieldwork for this study, worsened dramatically during the lockdown imposed by COVID-19. It became an existential crisis that was mirrored in many of my friends who work in environmentalism.

Pihkala refers to 'ecological grief', equating it to other forms of grief that are not fully recognized – loss of an unborn child, death of a same-sex partner, loss of a pet. He refers to these examples as 'disenfranchised grief'. He also recognises it as an existential problem, and I think herein lies my personal problem. Environmental damage and the overwhelming sense of a problem that is too big to solve and which by all accounts will lead to certain death, brings to the fore existential questions – what is it all about? What is the meaning of my life? Where is the good in all of this? Pihkala advocates a return to spirituality and theology for comfort, but how do I find comfort in the place which I believe, as deep ecologists are critical of, is responsible for environmental degradation in the first place?

A new normal goes back to littering and dumping, pollution in the air, and back to the same old disgusting behaviour the world over, and a return to the Litter Lions. What is the point? It all seems so pointless and meaningless. I am bone weary of trying to make a small difference. (journal, 20th May 2020)

Prior to lockdown it was impossible for me to attend any village function, or even to go shopping, without being accosted by someone who wanted me to clean up an area, complain about a tavern owner and mess generated, or simply to open up a conversation about why people litter. These conversations were always deeply negative, highly politicized, and mostly racist in nature.

I had not realized how exhausted I had become by these complaints and queries prior to lockdown, but the realization of this, and then the easing of restrictions, made me feel worse, since I then faced a return to this bombardment of negative energy and demands for action. Finally I sought the help of the chairman of the WNHA and his wife, both friends, both attached to the church that I attend, and both invested in the work that I do. They advised me to step away from the work until 2021, and to keep reminding myself that there will always be litter, there will always be dumping, and there will always be people in a community who make demands and behave badly, no matter where I live. I was reminded that my study had never had the intention of changing the behaviour of the entire village over the course of three years, but simply to change the behaviour of a small group of children.

This experience of such dire eco-anxiety and despair brought on by the research, and then impacted on by COVID, highlights the importance of protecting the researcher in the field. As much as I am sure that there are other sectors that may result in psychological effects on the researcher in the field, such as perhaps research with victims of human trafficking may cause trauma, I do suspect that the overwhelming sense of helplessness that environmental work can cause may be all the more dangerous at this time, since it can bring about existential questions and suicidal thoughts. This is suggested by Anna Kelly when she states that “[i]ntense feelings of being overwhelmed or burned out are incredibly common for those who consider themselves to be environmentalists, environmental activists, or for those who are currently studying or have careers in the environmental field ...” (p. 8). In the same publication Kelly states that:

Although the value of eco-anxiety has been recognized and explained by various independent sources (see Edwards, 2008), the term has not yet found its way into academia. Both the academic and psychological communities have much to gain from a deeper understanding of the root causes, manifestations, and implications of eco-anxiety (Kelly 2017, p. 3).

7.4.3 Community upliftment enabled through the study during the pandemic

As Robert Zipplies has so accurately stated: “The unemployed and the poor are the most vulnerable to the impacts of climate change, lacking the resources and skills

required to adapt” (2008, p. 65). If we are to consider that the pandemic conceivably emerged due to the impact of humans on the natural world Zipplies’ comment is true of the poor and unemployed who suffered the most during COVID-19. Living in a rural area, and therefore living closer to people who are compromised by poverty than one would be in a city, the suffering that occurred in Wakkerstroom was highly visible.

Since many people in Wakkerstroom lost their jobs because of the pandemic, and many of those people were already living close to the breadline, the WNHA decided to set aside funds for job creation once restrictions were eased. Relationships nurtured during the cycles of fieldwork enabled me to identify relevant people for specific jobs. These projects served to assist a few people through the devastating poverty created by COVID, and also to further my work against littering. These are discussed separately below.

7.4.3.1 Construction of the glass recycling drop off point

C had been collecting glass for some time and had identified a space adjacent to the town dump for people to drop off glass recyclables. She had had a sign made for this and had contacted various residents of Wakkerstroom with a request to alert the village to the new drop-off point. Unfortunately this site was not fenced off, neither was it possible to monitor it, which resulted in its becoming a hazard, with broken glass everywhere and other waste being dumped there making it an eye-sore. C then approached me and asked me if I would be able to assist in fencing off an area for her.

The construction of the fence requested by C for the glass recycling depot, was facilitated through the WNHA job-creation programme. Having established that the site adjacent to the dump was unsuitable for the depot, we decided to move the depot to her garden for this. Together we marked out a space and discussed how this could function. While the work of collecting glass, crushing it and communicating with the recycling company that picks it up, is entirely run by C, and generates an income which supports her family, she nevertheless still had to ask permission from her husband to erect the fence. With her glass recycling initiative, she supports her two unemployed adult children, five of their children, two of whom are toddlers, and her husband. This family structure and the means of financial support is generally the norm in eSizameleni, and yet the women, generally the financial support of the family, remain subservient to the men. This is exactly what the proponents of eco-feminism are speaking out against.

However, C's husband gave his permission, and in a few days a fence was erected. For this project, cement, wire, droppers and a pedestrian gate were purchased through funds set aside by the WNHA committee. Four unemployed men were engaged to erect the fence. It was through the study that I knew of these men; I knew their circumstances and that they were seriously compromised by the loss of work, which was tenuous at the best of times. Notices went out to all members of the community, with directions as to where the new site is and instructions as to how the system works.

There are a number of other points that are important about this request by C for assistance. Firstly, it was evident that C felt comfortable about asking me to assist in this project as a result of her knowledge of the environmental activities I had been engaged with the community. Important too, was that she wanted to know whether it might be possible to use eco-bricks rather than wire to build the fence. I had not discussed the benefits of building with eco-bricks with her previously but it was clear that she had learned about them from someone else in the village. It transpired that she had been collecting non-recyclable waste for eco-bricks and cold drink tops for a while, for a friend of hers who works as a domestic worker for a woman who collects tops and builds eco-bricks. C had no idea why her friend was collecting these items of waste for her employer, but happily contributed anyway. It was only when she investigated this somewhat strange request for help from her friend that she learned about the tops and tags wheelchair and the eco-brick programmes. The fact that she was enthusiastic about building with eco-bricks showed that at least one person has been able to be reached with this cheap and available means of building, and it was disappointing that at the time we did not have enough eco-bricks to use for the demarcation.



Figure 7.9 The glass drop off point, and a section of the fence

7.4.3.2 Installation of swing bins

Owing to my portfolio of litter monitor on the WNHA committee I had received many complaints over the years, about areas that had substantially more litter than other areas. I decided therefore to install more swing bins as part of the job creation initiative. (I had already installed a few of these, but this had been with voluntary labour.) Again, materials were purchased with WNHA funds, other than the bins themselves which were donated. Four bins were erected and this provided a small income for six unemployed residents. On final construction I sent an email to the municipal manager so that he would be able to instruct the employee responsible for emptying the bins, and gave clear directions as to where the bins were.



Figure 7.10 Bins prior to installation and an installed bin

Unfortunately, in the course of installing the bins I was accosted by an unemployed resident of Wakkerstroom, on his way to the tavern at 9am, and an argument broke out. I suffered severe verbal and some physical abuse. It transpired that this particular man is known in the community, and is referred to as Mal M (Mad M), since he regularly smokes marijuana which makes him aggressive. Somewhat comforted in this, in that it was clear that I had not precipitated the attack, the trauma that I nevertheless subsequently suffered exacerbated the eco-anxiety that had already become a serious problem for me.

7.4.3.3 Eco-brick making

With financial contribution of a few residents of Wakkerstroom, who also were poignantly aware of the suffering of many people in the township, a number of people were employed to make eco-bricks. As much as I am against the payment for the construction of eco-bricks, since I am of the opinion that people should want to reuse non-recyclables because it is the right thing to do, I set aside my opinion in view of the financial suffering that occurred during lockdown. A fee of R10 was paid for each eco-brick completed.

Approximately 300 eco-bricks were made during this time, and this achieved more than just providing an income to the impoverished. Since the equivalent of one full black bag of waste is compacted into one eco-brick, this project reflected the removal of 300 black bags full of waste from informal dumps - a substantial amount of waste that was taken out of the natural environment. Further, it also produced enough eco-bricks to build all sorts of things, such as more taxi benches, or even playground

equipment in the future. Below is an image of some eco-bricks that were made during this time.



Figure 7. 11 Eco-bricks made during lockdown

Another interesting piece of information emerged during this process. One of the men employed to make eco-bricks was reticent to use non-recyclables from the waste lying around eSizameleni, preferring to collect waste from the town dump. When asked why this was so, he said that people mock him in the township. This was not the first time this had been told to me; the first time was during Cycle One when the children said that they would not clean up without me for fear of being teased. Could this have meant that any efforts to clean up the litter, unless part of a formal event, were considered laughable, even for an adult?

7.4.3.4 Recycling depot in eSizameleni

Although not specifically a project that was enabled by the pandemic, the new recycling depot was an offshoot of the glass recycling initiative mentioned in section 7.4.3.1. S is a waste picker living in eSizameleni who, I discovered, has a large recycling concern which he runs from the field opposite his home. I had been familiar with S, since he passes my home twice a day en route to and from the town dump. During prior conversations with him I had come to know that he is in recycling, but I had no idea just how expansive his enterprise was until I visited him.

This began a conversation that initiated collaboration with S to the benefit of the broader Wakkerstroom community. Since the closing of the recycling depot at BirdLife SA many people who had asked me if there was a possibility of an

alternative being offered, and this gave me the opportunity to provide it. Directions to S's recycling depot were sent out via social media and via email.

The benefits of this collaboration were many. The provision of another recycling depot enabled those who previously recycled, to resume recycling; additional people contributing recyclables to S's depot assisted him with his work; and, importantly in my opinion, it contributed to integration between the different socio-economic and racial groups, that are so separate in this village. As there were many white people who had never ventured into eSizameleni prior to taking recyclables to the new depot, this undertaking contributed to my intentions to adhere to the concepts of inclusivity and equality that deep ecology and eco-feminism suggest in order to alleviate environmental destruction.

It was subsequent to this that I circulated the questionnaire on the awareness of these recycling initiatives (see 7.3.2.1 above), as a final intervention for this study

7.5 Emergence of results of the interventions

Over the course of the fieldwork for this action research project it was very difficult to establish whether there had been any change in the environmental awareness of the children who were my research participants. While some indication of attitude change emerged during discussions and through performances and artefact making, this was countered by the children's continuing to litter. A number of events occurred in September 2020, however, which are suggestive of changes in attitudes and behaviours. These are discussed below.

7.5.1 Clean up drives initiated by research participants and champions of the environment

Because the CWP workers were unable to work during lockdown, pollution in eSizameleni had become exponentially worse. For reasons unknown, the CWP workers did not return to work when restrictions were eased, and the situation became dire. The CWP supervisor, mentioned previously as being identified as an important champion of the environment, approached me to ask if we could arrange clean-up drives. Over the course of the following two months various clean-up events were arranged, in which the village was divided into sections and cleaned by volunteers.

One of the clean-ups, arranged by the psychologist who assists children with reading, was, with the assistance of the CWP supervisor, held in her area. Children from the reading group, and other children and adults who were recruited, together cleaned

up the litter around the local tavern and the adjacent streets. Those that were unable to attend during the time arranged, cleaned up around their homes when they could. Over eighty bags of waste were collected altogether over the Entendeni clean-up.

On an occasion when I was driving through eSizameleni one of the Litter Lions stopped me. He asked me to take him to a place where he wanted to show me something, and he took me to an area where the dumping is always particularly bad, which had worsened during lockdown. “What can we do about this?” he asked, “When can we clean this?” This was meaningful in so many ways. This child had joined the Litter Lions when it was first formed, before the group became part of this study. He had lost interest, then returned, lost interest again, and finally had participated enthusiastically during the WWW performance. It never occurred to me that he would become engaged as an active citizen and, in fact, I had despaired over this child. He is bright and articulate but was insecure about his artwork and had been reticent to speak up during interventions, at times becoming aggressive and sulky. He was also the boy who had been the only participant to confess to dropping his snack packet in the ground if he was unable to find a bin. It was therefore a great surprise that he had suddenly come into his own, and is now a possible champion of the environment as he grows into adulthood. On reflection in the journal, I wrote the following;

There are three important things that this meant: 1. He recognizes the mess and the need to clean it up, and this means that, with this boy at least, my work has made an impact; 2. He didn't say 'how can we clean up', rather he said 'when can we clean up. And this means that, whether he was going to succeed or not, his intention was to clean up; 3. He has agreed on a date and a time, which we set then and there and suggested that he will rally his friends. This means that that through him awareness is raised in others, which was a primary objective of this study. Now this is of huge importance to me, because it has shown at least a small measure of success in my PhD.

(journal, 4th September 2020)

We held a clean-up the following Saturday. At first it was B, Ms. Hall, Mr. Tshabalala and myself who worked, but soon a number of children were drawn into the activity and soon we had a team of approximately twenty children assisting. The ages of the children ranged from four to fourteen, and it was extraordinary to see them working so hard and committing their Saturday morning to this activity.

During the course of the morning two events occurred that were meaningful. The first one was when a man teased the children, saying that it was impossible to clean up the mess. B responded by telling him that “at least we are trying; what are you doing?” B was visibly distressed and mumbled something to his friend in isiZulu. When I asked S to translate, it transpired that he had said: “I love my planet and I don’t want to see it like this.” The second noteworthy event that occurred was that, during the course of the clean-up, a man came with his wheelbarrow and seemingly without noticing the activity going on around him, was about to dump the contents of the wheelbarrow where we had just cleaned. An eruption of indignation from everyone stopped him in time.

We were able to fill twenty-six black bags that morning, plus three bags of recyclables. Unfortunately, the difference in the mess was negligible but the children were keen to return and continue the following Saturday, which we did.

This event also resulted in a serious ethical dilemma for me, as is described in a journal entry.

Now here’s a dilemma – we were under the impression that there was no water there, and our intention was to clean it up before the rains came and washed it all into the river. But, as we worked, water began to run; there had been water under all that mess all along. The dilemma lies in the fact that I was expressly forbidden to take children into water, both by the WNHA and the Wits ethics committee. What do I do? My entire doctoral study is based upon trying to instil a sense of care for the environment, and when one of my research participants decides to organize a clean-up, and it results in freeing up a clogged waterway, what do I do? Do I instruct all the children to move away from the water, and end the clean-up, or do I stand with the children in wonder at the success of good work, enjoying the sound of running water? The children found a little crab and a strange little fish – a sort of barbel-shaped creature, no longer than a finger. Their excitement and curiosity was palpable, and despite what I expected them to do, which was to kill the creatures, they carefully put them back into the water. (journal, 13th September 2020)



Figure 7.12 Children cleaning up



Figure 7.13 Images showing the waterway once it was clean

The fact that these two, one a champion of the environment and one a young research participant, contacted me in order to assist in cleaning up the village, suggests a small measure of success, in that at least one adult and one child showed a marked change in environmental awareness and behaviour.

However, S was not the only child that indicated that the interventions had achieved some success. A further clean-up that was initiated by the Litter Lions came as a huge surprise, and it was related to me by Ms. Nsibande, the director of The Potters' Place. Excitedly I wrote the following in my journal:

Charity told me that the grounds man at the primary school came to her one afternoon. He said that when he had come to school early that morning there were children cleaning up the school grounds, sorting through waste and taking the full dustbins out onto the pavement for collection. When he asked them what they were doing they told him that they are Litter Lions and they belong to The Potters' Place, and that they've learned that it's important to keep the environment clean. This is the most important journal entry in all the time that I have been doing research for this project. It suggests that I have been able to make a difference in the behaviour towards environmental good practice in these children. And importantly, this came from work done with the children directly through the arts, and not with the inclusion of adults as was identified as a need for the success of this project at the end of cycle two.
(journal, 31st January 2020)

This suggests that the arts can make a difference. It also suggests that it is possible to identify and nurture champions of the environment, both adults and children, if one is prepared to search for and nurture them.

There is, of course, the understanding that a few clean-up initiatives will not solve the litter problem. Continual clean-up events will have to be initiated on an ongoing basis until people learn not to litter. However, it was meaningful to me that these clean-up events would not have been possible without the champions of the environment that I had identified and nurtured through the course of the fieldwork.

7.5.2 Selling items made from waste

The member of the Litter Lions who had made bracelets and necklaces out of sweet wrappers during Cycle Two, continued to do so during Cycle Three. She made a substantial amount of money from this, and was able to save up and purchase a new pair of shoes. Unfortunately, this endeavour was simply to generate cash, and although this is commendable and shows that there has been learning through the interventions in this study, it also shows that environmental behaviour has not changed in this child, which is seen in the following journal entry.

T went to town to deliver bracelets made from sweet wrappers to W, and while she was there, W saw her drop chip packets on the pavement. As much as she has made

R800 from re-use of waste, only waste that has value is considered. Dropping of litter by children is really a sub-conscious thing – I am convinced of that. I don't think they realise that they are doing it. (journal, 16th March 2020)

This specific child, however, is particularly good at visual art, and has indicated that she wants to continue attending art classes with me. I hope that eventually, through continued engagement, a change in her littering habits can be made. Importantly too, she is the older sister of S mentioned above who arranged the clean-up, and she had been one of the most committed of the Litter Lions over the course of the study.

7.6 Critical analysis of findings from Cycles One, Two and Three

From the description and discussion above it is clear that there has been some impact on the environmental awareness of the children, even if only for a few of them. Up until this point in the study I had been convinced that the study had been a failure.

Since children are more than willing to embrace all art forms, and enjoy dancing, singing, poetry reciting, and play-making, using the arts to raise environmental awareness in children appears to be an appropriate way of engaging their interest, as has been identified over the course of the fieldwork. Also, since children grow up so fast, interventions conducted over the course of a few years, such as this one, means that the impact of interventions will hold different meaning to the children as they get older. Referring once again to Hart:

... there is a strong theoretical basis for believing that children's spontaneous learning through play and exploration in a consistent environment over time, with good role models nearby, could well be the basis for establishing the kind of deep, affectionate caring that is needed for a lifetime caring approach to the environment (p.64).

The multimodal approach taken in this study, within applied and participatory research, ensured maintenance of participant interest and also provided a triangulation of data gathered. Drawing activities in particular yielded important data, confirming the following assertion: "... drawing is an activity that allows children to symbolize what they know and feel and it is a very essential outlet for children whose vocabulary, written or verbal, may be limited" (Edwards, 2016, p.8).

The inclusion of adults in interventions, from the beginning of Cycle Two and into Cycle Three, which enabled sourcing adults who are engaged in work within this sector, no matter in what capacity, became useful in many ways. An example of this is the power of word of mouth was shown by C and her willingness to collect tops and non-recyclables for her friend, and thereby learn about the wheelchair and eco-

brick projects. Collaborations with all sectors of society through the nurturing of relationships showed the power of community engagement if one is willing to take the time to do this. Included in this is the importance of engaging with people who hold political influence in municipal positions, particularly women. Kember et al's observation that "building rapport with the teams is not easy at all, but involves motivation and effort of both parties" (p. 469), is certainly applicable to this study with reference to the development of relationships. Bess et al. (2018) succinctly state that "[a] good relationship between everyone involved is essential for the success of the action and research involved in the final stages" (p.95). Again, this was true of my study in that it was the culmination of efforts to bring members of the communities together that resulted in successful interventions, even when it was difficult to ascertain the extent to which environmental awareness was raised.

I am of the opinion that adhering to the tenets of the chosen theory that underpinned this study has stood me in good stead and will continue to do so. Prioritising respect for, and acknowledgement of the value of, all people, which a fundamental axiom of deep ecology, and specifically women and children as an intrinsic principle of eco-feminism, enabled the study to achieve more than what it set out to. This has built rapport with many people, and as Kember et al. state: "As Goldhammer et al. (1980) suggests, a good rapport should be one which can improve the professional self-image of the related parties" (p. 469), and these 'related parties', being the marginalized of the research site, can be said to have been uplifted through the work. Although there was not necessarily a facilitator/learner relationship in the interventions with adults, I feel that the following reference is relevant: "When the facilitator is a real person, being what he (*sic*) is, entering into a relationship with the learner without presenting a front or façade, he is much more likely to be effective" (Rogers, p.106).

An indication of how women can be pivotal in decision-making and development within a community environment was seen in the instance of the glass recycling depot. As Alice Bouman-Dentener states: "Traditional, top-down management places women and other civil society groups on the side of the affected, those that need to be provided for rather than participating in their own development" (2015, p.19). Here was a direct example of how the notions of eco-feminism could be played out, as opposed to the patriarchal practices mentioned in the reference. Bottom-up, inclusive and participatory project implementation, as per the literature on development theory examined in Chapter Two, was far more successful in this study than the projects implemented in the research site previously. This bottom-up

approach afforded the identification of champions of the environment, through whom interventions further to the initial plans for the study were enabled.

In terms of being the ‘inside I’, (or critical researcher) I suspect that an external observer might not have had the same contextual understandings that I was able to bring to observations during interventions. In this study, I was inverting the critical friend role, since, as Kember et al. have stated: “In the literature, the role of the ‘critical friend’ or ‘facilitator’ in action research is perceived as an agent for teacher development, rather than to facilitate the progress of the research” (p. 464, inverted commas in the original). Here I was performing the role of the agent in my own personal development, and at the same time, facilitating the progress of my own research. This was somewhat like non-participant observation, as outlined by Bess et al (2018, p.188). This provided exponential additional insight to my reflection, which was pivotal in this study. Further, the ‘inside I’ may be a means of deeper exploration into possibilities within research hereafter.

Finally, protection of the researcher in endeavours such as this one from the dangers of eco-anxiety, cannot be overemphasized. Sarah Car (ed, 2020), refers to “disenfranchised grief”, stating that this is often underplayed and therefore not acknowledged as being worthy of discussion within the sphere of climate change and environmental degradation (p.9).

7.7 Conclusion

The interventions for Cycle Three concluded the fieldwork for the study. As much as the intention of raising awareness, changing attitudes and changing behaviours of the research participants with regard to littering and dumping of waste, was arguably not achieved to the extent that I would have wished, there were outcomes that were surprising and positive.

The following chapter, Chapter Eight, gives a broad overview of the findings from this study, and makes some recommendations for further projects of this nature in other rural villages in South Africa.



Chapter Eight: Conclusions and recommendations

8.1 Introduction

The Constitution of South Africa guarantees its citizens the right to a pollution-free environment, which is supported by legislation. Furthermore, formal education ensures that the hazards of environmental degradation are taught at school. However, the extent of littering and dumping countrywide shows a deep chasm between what citizens know and what they do in this regard. In *Mind the gap* (2002), we learn that the reasons for the lack of follow through with environmental good practice, despite knowledge and awareness, are convoluted. In South Africa we could claim that these are exacerbated by the legacy of apartheid. This then begs the question: what programme or action may be initiated that will have an impact?

This study investigated the possibility of bridging the gap between environmental awareness and action within a small group of children in the village of Wakkerstroom. With a theoretical background of eco-feminism, stemming from deep ecology, this was a multimodal study, using applied drama over three cycles of action research as methodology.

The mind maps at the end of this chapter (figures 8.1-8.3) provide a visual representation of key findings and knowledge built over this study.

8.2 Findings

The principles of deep ecology and eco-feminist theory, which underpinned this investigation, including community development theory, provided a solid grounding on which to plan and implement the three cycles of action research that formed the fieldwork. Following the reconnaissance phase of the study, where many projects of this nature had failed, it was found that these principles enabled me to prevent falling into similar pitfalls. The fundamental tenets of the chosen theory: putting community needs first, approaching individuals from an equal stance, ensuring inclusivity, and importantly, showing by my own behaviour that I was prepared to get my hands dirty (literally and figuratively), all served me well. This meant that I was not engaging with the community, the participants or individuals with a superior air, and thus was able to negotiate rather than instruct. Importantly too, the long-term work within the site differed from the hit-and-run projects that left the community vulnerable, and the assurance of continuing work in this field has ensured that relationships are solid and sustainable.

Being an artist and a puppeteer myself, and having a hunch that the arts would appeal to children, was what led me towards the multimodal approach within applied drama that I used. The results were surprising. Focussing on environmental awareness and changing behavioural patterns of littering, I almost missed other positive outcomes of the arts-based interventions. Over the course of three years the group of children I have been working with have become articulate, confident in stating their wishes, able to perform in front of an audience, are approachable and willing to engage in conversation. I am convinced that this is not only a result of children growing into adulthood, but that the work with the children, keeping the above-mentioned principles in mind, has resulted in this positive outcome. That there is no substantial indication of changed behaviour in littering practices seems almost immaterial now. This will come by default, since the study has begun to shape confident and reflective young people. In my opinion, applied arts has the potential to effect change that goes beyond one specific objective, as this study has shown, especially with children.

This does not negate the successes that were achieved with the objectives and aims in mind. That it took three years for small changes in attitudes and behaviours to be seen within a few children, shows that hit-and-run projects cannot be successful, and that only long-term work will have an impact. This study was successful in very small ways, but work will have to continue indefinitely for meaningful results to emerge. It was the manner in which the research participants in my study, who were young children whose first language was isiZulu, shaped their meaning through drawing and performance that provided me with a rich source of data.

As much as I wanted to avoid it at the outset of the fieldwork the inclusion of adults in interventions became imperative. Children need support, guidance and the example of adults. Including adults in interventions provided this but also produced outcomes that were surprising. Approaching adults without the usual superior attitude that so many projects still display led to the discovery of ‘champions of the environment’. These individuals are passionate about the environment and I have been able to draw from them in many ways. I have concluded that there will always be such people in all communities, if only time is taken to search for them and effort is expended in nurturing relationships with them.

The success of using the arts to raise awareness in interventions with adults also came as a surprise to me. At first using puppetry to tell stories was used tentatively, but when I saw how much the adults enjoyed this, I used it more often. Considering what I already knew about the use of the arts as a communication tool, I should not have been surprised.

Engaging with members of the local council could also not be avoided. Community development projects cannot ignore political elements, but can also make use of these. It does not make sense to work in silos when there is so much that can be achieved when working together. South African legislation and implementation strategies with regard to the environment, where we see various entities working separately from each other is a point in context. Noteworthy in this study was the way in which exposing local council members to various aspects of my activities in local voluntary organisations, and of my research, led to the development of useful and ongoing relationships across many relevant spheres.

This study aimed to bridge the gap between environmental awareness and action in a small group of children, but ended up bridging all sorts of other gaps too. In the current South African socio-political environment, where the disparity between the wealthy and the poor is still compounded by racial tension, bridging communication gaps is difficult. The relationships that were forged during this study and the integration of activities accomplished by the introduction of various people mean that further work can now be inclusive and supportive rather than in silos which is counter-productive.

8.3 Limitations

In retrospect the reconnaissance phase should have included more surveys and questionnaires investigating a deeper look into environmental awareness and practice in adults; this is difficult to discover after the fact and possibly would have

engendered a different strategy from the outset. Of course, this is not something one can know at the time, but is useful to keep in mind for further work in this field.

Protecting myself from the effects of eco-anxiety was not included in plans for the study, with the focus only on protecting the children. This became crippling, with despair brought on by constant reminders of environmental destruction through the work, and exacerbated by COVID-19.

The final stages of fieldwork were disrupted by the COVID-19 pandemic, but the relationships nurtured over the course of the study enabled me to assist in a number of job-creation initiatives that would not have been possible without the successes of the study in this regard.

8.4 The building of knowledge that the study affords

The inspiration for this study was the perception of dire littering in the research site, which led to an investigation into what exists in legislation and school curricula. This gap between knowledge and action, that is exacerbated by a lack of enforcement strategies, was not being filled by any other entities. Here I refer, for example, to arts-based theatre companies that have environmental themes aimed at education, and NGO's in the sector that also have some education programmes. If any or some of these programmes succeeded in bridging this gap there would be a visible difference in the state of littering and dumping in this country.

Again, all of these sectors, be they government or non-government, pay little to no attention to micro-circumstances that exist in South Africa, neither do they consider implementing what is taught, and finally there is no follow-up. This study suggests the provision of a programme that takes all of this into consideration and provides a platform to bridge this gap effectively.

Reflective practices are important in action research methodology. Constant self-analysis is also a fundamental principle of eco-feminism. In these contexts, turning the critical friend into the 'inside I' is a new form of reflexivity that has the potential to enhance the work during research processes. Here there is the potential for the researcher not so much to second-guess, as to second-know.

8.5 Recommendations for further work

This form of intervention within this field is appropriate and has huge potential to make a difference in the state of littering and dumping in this country. The challenge is that each and every rural village will have its own set of circumstances and

opportunities. No one village will ever be the same as another in South Africa, due to the variances in socio-cultural demographics, natural environment, and local governance. It is therefore imperative that a thorough reconnaissance phase be implemented prior to any planning. This cannot be undertaken in a short space of time, and I would recommend sourcing a research assistant who lives in the village as soon as possible if the researcher/facilitator does not live there.

Ensuring that the marginalised of the site are at the forefront of the programme, especially women and children, and that their voices are heard, is highly recommended. By extension also, empathy and understanding of the challenges that the impoverished face in South Africa are vital. Deep reflection is always needed. The equality between humans and nature and between women, and other marginalised voices, and men that eco-feminism works towards, should be a big focus of the intervention.

Any researcher in this field needs to ensure protection against eco-anxiety. There are any number of ways of doing this, as the literature suggests. Some suggestions are: be aware of this from the outset and do not underestimate the severity of the condition; ensure that time is set aside regularly to simply go into nature and enjoy it; do something that is not eco-friendly once in a while, such as throwing a small recyclable into the bin, which prevents constant obsession with being environmentally friendly. In alignment with this, ensuring that children are also protected from this affliction, some arts-based interventions that do not have an environmental theme are also useful. Taking children into nature and encouraging them to enjoy the natural environment for its own sake, ensures that any intervention further to this builds upon experience but also prevents eco-anxiety.

8.5 Conclusion

This thesis began by quoting Dr. Jane Goodall when she asked *what are the consequences of little choices made?* During the course of the study it was easy to forget that it was only a small change that was aimed at, and that even this small change was unlikely to be achieved in such a short space of time. I was wrong in this assumption, in that there were small successes that emerged right at the end of the fieldwork. Other successes that were not defined aspects of the objectives of the investigation also presented themselves, and these ensure that on-going work in the site is possible. With the support of all those who have become a part of this work, including the children, their parents, council workers and caring, committed individuals, big successes are achievable. Repeating the earlier reference to Margaret

Mead who “[s]aid, “Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it’s the only thing that ever has” (Lehtonen et al, 2019, p.366), I can only be encouraged.

(87029 words)

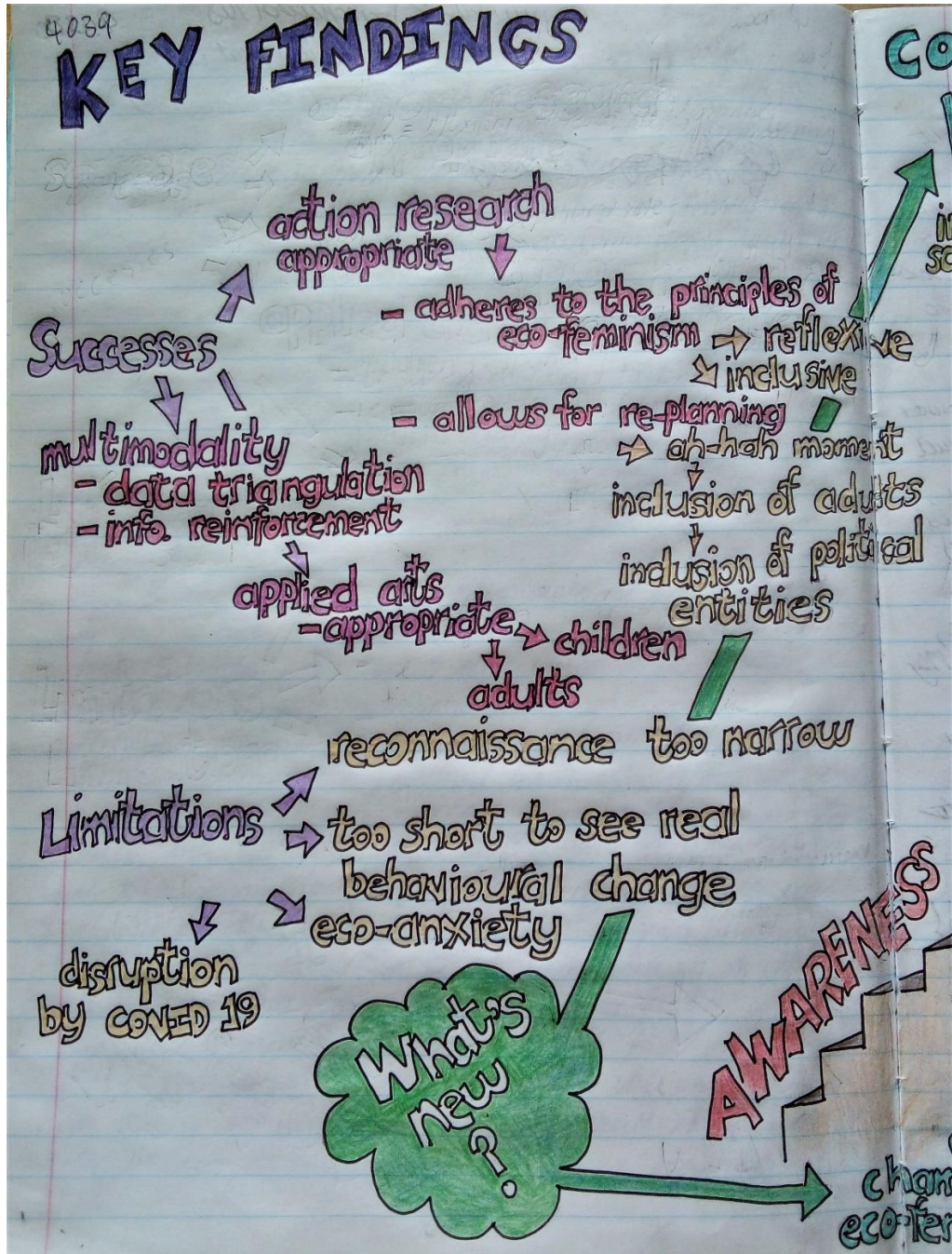


Figure 8.1 mind map: key findings

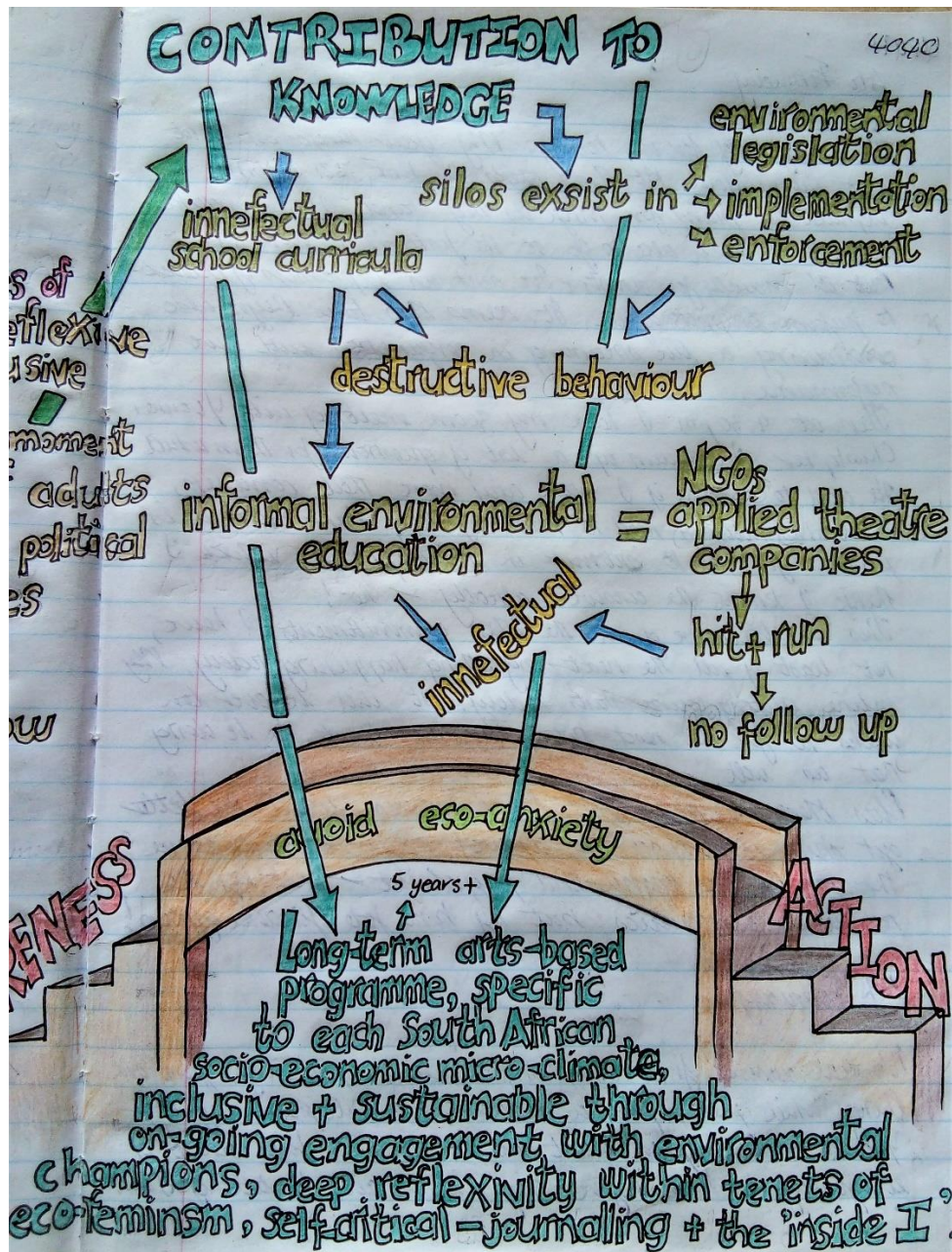


Figure 8.2 mind map: contribution to knowledge

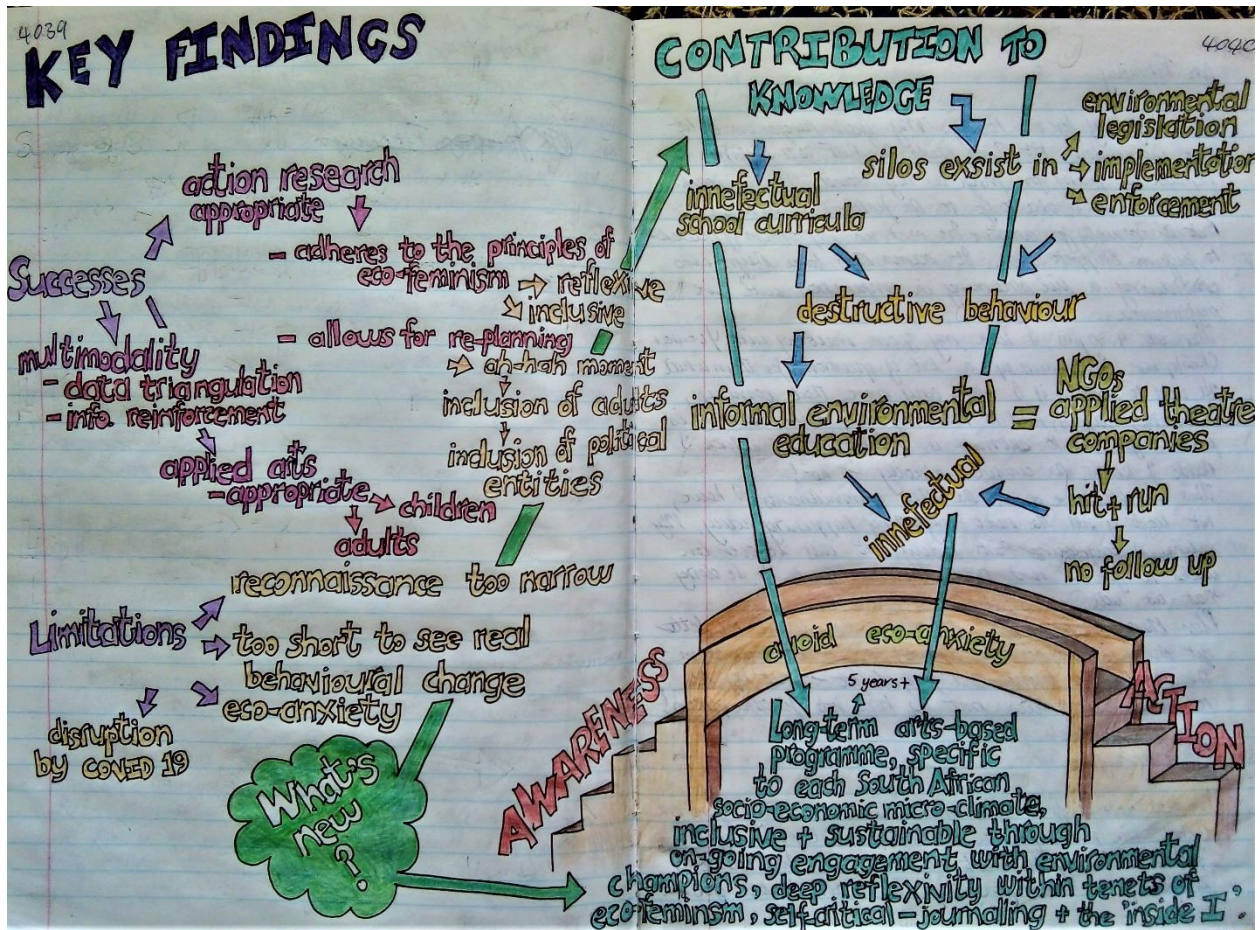


Figure 8.3 mind map: key findings and contribution to knowledge

Appendices

Appendix A: Questionnaire one

Interview questions for residents of eSizameleni

1. How long have you lived in eSizameleni?.....
2. How old are you?
3. Did or do you attend the high school here?
4. Were or are you taught anything about litter and waste at school, and if so what were you taught?
-
-
-
5. What do you think causes people to dump rubbish into the water and onto the ground?
-
-
-
-
6. Why do you think that people dump waste instead of putting it out for collection once a week?
-
-
-
-
7. Why do people dump pampas into the rivers?
-
-
-
-
8. How can we make the village clean?
-
-
-

We will be putting all the information together and will report to everyone we have interviewed. Thank you.

Appendix B: CAROL PRESTON PhD LITTER AND RECYCLING SURVEY

Dear respondent

I am conducting a short survey on litter and recycling awareness for the purposes of my PhD study, which deals with littering and informal dumping practices in Wakkerstroom and eSizameleni. I would be most grateful if you would take the time to fill in the short questionnaire. This is anonymous and if you would like to have a copy in Afrikaans, I will be happy to provide one. Please note that questionnaires in isiZulu have been circulated as well. If you have friends and/or staff who would like to respond, please let me know and I will supply one.

Please tick the appropriate box, and when done drop it in the envelope attached to my gate at 230 Uys Street. This is to ensure anonymity, but if you are happy for me to pick it up from your home, I will be willing to do so. In this case, please send me a message or call me. For those who live in Kana there will be an envelope at the gate for drop off.

1. How long have you lived in Wakkerstroom?

1-10 years 10-15 years 10-20 years 20 years plus

2. What is your gender? male female

3. What is your age group?

20-30 30-40 40-50 50-60 60 plus

4. Do you know where the glass recycling drop off point is? yes / no

5. Do you know where you can drop off recyclables? yes / no

6. Do you make use of these drop off points? yes no

7. How have you heard about where you can drop off recyclables?

Email WhatsApp word of mouth other/NA

8. What do you do with building rubble? take it to the dump put it on the pavement
ensure the builder removes it

If you have any other comments or suggestions, please use the back of this form. Thank you for your time.

Carol Preston 0837014670 230 Uys Street

Appendix C: letters of information, consent, assent and ethics clearance certificate

PARTICIPANT INFORMATION SHEET

Title of the research project: The affordances of an applied arts intervention for sustained environmental good practice in the township of eSizameleni.

Research project by Carol Preston, 0836014670, 230 Uys Street, Wakkerstroom

Supervisor: Yvonne Reed, 0116468150

Ethics Committee details: Shaun Schoeman shaun.schoeman@wits.ac.za, 0117171408

Good day

This letter is an invitation to be part of my research project which I am doing through Wits University. My project is working with children from eSizameleni and Wakkerstroom, and I hope to be able to help with cleaning up the environment and the water ways by using plays, drawings and performances for community members. I hope that at the end of my project children like you will be able to understand the importance of keeping our environment clean and not throwing rubbish on the ground, and that the children will know what to do with rubbish instead. My aim is to raise awareness in children who will then be able to understand what happens to rubbish that is left on the roads and in the water. How I want to do this is by using art, plays and discussions about the environment. Through this project I hope to understand why people throw litter on the ground and dump rubbish in the communities, and then to plan ways to stop this from happening. Hopefully I will be able to help other people living in small villages like ours to understand the need for taking care of the environment.

You have been asked to be part of my project through The Clay after care programme, where you will have seen me once a week coming to talk about how we should be taking care of our environment. I would like to invite you to be part of this project, and I will ask your parents or guardians for permission for you to work with me as well. This project will be over the next four years starting in 2018. Each school term there will be a new programme. I do not need any payment from you or your parents or guardians for you to be involved in this project, and you can leave the project at any time you like. You do not have to answer questions or take part in activities that make you feel uncomfortable. Your participation in my project is voluntary, which means that you choose to be in the project and you are not forced to be involved. Please know that because there will be group projects, discussions and workshops I cannot be sure that you will be anonymous. This means that others in the group will know you, just as you will know them. It also means that I cannot be sure of confidentiality. This means that the others in your group will know what you say or do in workshops and discussions.

Sometimes I will take videos of plays that we make together, and sometimes I will take photographs of the art works that we make. These will be used for presentations for the communities – your family and friends, who will be invited to come and see what you and the rest of the participants have been doing. The videos will never be shown on television. If you feel uncomfortable at any time about photographs and videos you are welcome to tell me not to do this, and I will stop. All your art work will be filed and kept in my office in a locked cupboard, so nobody will be able to see them, and they will be given back to you if you want

them back. Videos of plays recorded on cell phone will be transferred to my computer and wiped from the phone. This means that nobody will be able to see them unless we allow them to.

At the end of the four years I have to write a thesis. This is part of what I have to do for this study for the university. I will never use your name in anything that I write in my thesis. My thesis will be put onto the internet for other researchers to learn from, and a copy will be put in the University Main Library, but they will never know who you are. If you would like me to make a short version of my thesis I will be happy to do this.

I have a supervisor who looks after me while I am busy with my research project. Her name is Yvonne Reed and you can call her anytime if you need to if you have any questions. Her contact number is at the top of this letter. You can also call me or come and see me at anytime as well, and I will happily help with questions. My address and contact number is also at the top of the letter. I hope that we will have a lot of fun together and I am looking forward to working with you.

Carol

PARENT/GUARDIAN INFORMATION LETTER

Title of the research project: The affordances of an applied arts intervention for sustained environmental good practice in the township of eSizameleni.

Research project by Carol Preston, 0836014670, 230 Uys Street, Wakkerstroom

Supervisor: Yvonne Reed, 0116468150

Ethics Committee: Shaun Schoeman shaun.schoeman@wits.ac.za 0117171408

Dear Sir/Madam

This letter is an invitation for your child to be part of my research project which I am doing through Wits University. My project is working with children from eSizameleni and Wakkerstroom, and I hope to be able to help with cleaning up the environment and the water ways by using plays, drawings and performances for community members. I hope that at the end of my project children will be able to understand the importance of keeping our environment clean, and have an understanding of alternatives to dumping. My aim is to raise awareness in children who will then be able to understand what happens to rubbish that is left on the roads and in the water. How I want to do this is by using art, plays and discussions about the environment. Hopefully I will be able to help other people living in small villages like ours to understand the need for taking care of the environment. Your child has been identified to be part of my project through The Clay after care programme, where I work as a volunteer educator. This project will be over the next four years starting in 2018, and each school term there will be a new programme. I do not need payment from you for your child to be involved in this project, and your child can leave the project at any time he or she likes. Your child does not have to answer questions or take part in activities that make him or her feel uncomfortable, and his or her participation in my project is voluntary. It is also important to note, please, that since there will be group discussions and group workshops that I am unable to guarantee anonymity or confidentiality.

At times I will take videos of plays that we make together, and at times I will take photographs of the art works that we make. These will be used for presentations for the communities – families and friends, who will be invited to come and see what the children have been doing. If your child feels uncomfortable at any time about photographs and videos being taken it has been explained that he or she welcome to tell me not to do this, and I will stop. Videos and artwork will be stored in a locked cupboard in my office and no unauthorized people will have access to this. If your child would like his or her artwork returned to him or her I will gladly do this.

At the end of the four years I have to write a thesis, and this is part of what I have to do for this study for the university. I will never use your child's name in anything that I write in my thesis. My thesis will be put onto the internet for other researchers to learn from, but they will never know who your child is. If you would like me to make a short version of my thesis for you I will be happy to do this.

I have a supervisor, Yvonne Reed, who guides me while I am busy with my research project; please feel free to call either her or me at anytime if you have any questions. Our contact numbers, and my address, are at the top of this letter.

Kind regards,

IFOMU LOMZALI/UMONDLI (Parent/guardian consent form)

Isihloko socwango: Ukusetshenziswa kobuciko ekusekeleni imikhuba emihle yokugcina imvelo ihlanzekile esigodini saseSizameleni.

Umcwani womsebenzi: Carol Preston, 083 601 4670, 230 Uys Street, Wakkerstroom

Mina

.....
.....

(igama lomzali) ngiyavuma ukuthi ngichazelwe ngocwango futhi ngiyazwisisa ukuthi u_____uzobamba liphi iqhaza.

Yebo cha

Ngiyavuma ukuthi izithombe zomsebenzi wobuciko owenziwe yingane yami kanye nemidlalo eqoshwe eyingxenye yayo ingagcinwa futhi kusetshenziswe kwisethulo emphakathini.

Yebo cha

Ngiyavuma ukuthi ulwazi olutholakele ngocwango lungasetshenziswa nangabanye abacwani.

Yebo cha

Igama lomzali/umondli

.....

Igama lengane ezohlanganyela

.....

Usuku

.....

IFOMU LESIVUMELWANO NOMHLANGANYELI (participant assent form)

Isihloko socwano: Ukusetshenziswa kobuciko ekusekeleni imikhuba emihle yokugcina imvelo ihlanzekile esigodini saseSizameleni.

Umcwani womsebenzi: Carol Preston, 083 601 4670, 230 Uys Street, Wakkerstroom

Mina

.....
.....
(igama lomhlanganyeli) ngiyavuma ukuthi ngichazelwe ngocwano futhi ngiyazwisisa ukuthi ngizobamba liphi iqhaza.

Yebo cha

Ngiyavuma ukuthi izithombe zomsebenzi wobuciko ezenziwe yimina kanye nokuqoshwe ngami kungagcinwa futhi kusetshenziswe kwisethulo emphakathini.

Yebo cha

Ngiyavuma ukuthi ulwazi olutholakele ngocwano lungasetshenziswa nangabanye abacwani. Isibonelo uma umcwani engafuna ukusebenzisa inxenye yomphumela walocwano engami kucwano lwakhe, olunesihloko esisondelene nalesi .

Yebo cha

Igama lomhlanganyeli

.....
Isiginesha KaMhlanganyeli

.....
Usuku

INCWADI YABAGXILA NGOLWAZI (focus group, informal conversation information letter)

Isihloko socwango: Ukusetshenziswa kobuciko ekusekeleni imikhuba emihle yokugcina imvelo ihlanzekile esigodini saseSizameleni.

Umcwani womsebenzi: Carol Preston

Umhloli : Yvonne Reed

Imininingwane yeKomidi lenkambo enhle: shaun schoeman

Mhlanganyeli

Ngiyabonga ukuvuma ukuba yingxeny yamalunga azogxila ngolwazi locwango engilwenzayo. Lencwadi ikwazisa mayelane nocwango engilwenzayo ngokusebenzisa iNyuvesi iWits . Lomsebenzi ngizowenza ngokusebenzisana nezingane zaseSizameleni naseWakkerstroom, ngiyethemba ngizoba lusizo ekugcineni indawo ihlanzekile kanye namanzi ngokusebenzisa imidlalo, imidwebo kanye nokwenzela amalunga omphakathi imidlalo.

Ngiyathemba ekupheleni kwalomsebenzi izingane zizobe seziqonda kabanzi ngokubaluleka kokugcina imvelo ihlanzekile futhi ziqonda nezindlela ekuyizonazona zokulahla imfucuza.

Inhloso yami ukukhuphula izinga lokuqonda ezinganeni mayelana nemfucuza esala emgwaqweni kanye nasemanzini. Ngizokwenza konke lokhu ngokusebenzisa ubuciko, imidlalo, kanye nezingxoxo mayelana nemvelo. Ngiyethemba ngizokwazi ukusiza nabanye abantu abahlala ezigodini ezincane njengaso lesi esethu, ukuba bakwazi ukuqonda isidingo sokunakekela imvelo.

Mayelana nezinhlokhono zababambiqhaza ngizodinga ukuholwa ngendlela yohlaka locwango.

Izingxoxo zeqembu lokugxila ngolwazi yizona engethemba ukuthola ngazo ulwazi lokuthi yiziphi izizathu ezenza abantu bengcolise, kanye nokuthola izindlela ezingalekelela wena namalunga omphakathi ukuthi kugweywe imfucuza endaweni.

Emva kweminyaka emine komele ngibhale ngomphumela wocwaningo, lokhu kuyingxenye yomsebenzi engowenzela iNyuvesi iWits.

Angeke ngisebenzise igama lakho kulocwaningo uzohleze ungaziwa,uma kuyisifiso sakho. Uma ufuna ngikwenzele isiqeshana somphumela walocwaningo uma sengiqedile ucwaningo ngiyothokoza ukukwenza lokho.

Izingxoxo zeqembu lokugxila ngeke zaba ngaphezu kwamahora amabili futhi zizobanjelwa e-The Bioscope. Lezingxoxo zizoqoshwa ngomqophi mazwi zibese zigcinwa kukhomputha ngephasiwedi ethile. Izingxoxo eziqoshiwe ziyosulwa mhla kwaphethwa. Izingxoxo eziqoshiwe ziyogcinwa ngendlela ehhovisi lami ekhabetheni.

Uzonikwa ifomu leqembu eligxila ezingxoxweni ukuba usayine. Ngiyacela ukuthi unake ukuthi isiqiniseko sokuvikeleka kwegamalakho asikho kodwa uma sekubhalwa umphumela wocwaningo amagama abantu ababebambiqhaza awazukuvezwa umbhali uyozisebenzisela awakhe.

Umdloli wami nguYvonne Reed, ungamfonela noma mina uma unemibuzo. Amafoni akhe angaphezulu kulencwandi nami ungangithinta noma ungibone noma yinini ngingajabula ukulekelela ngemibuzo. Ikheli lami kanye nenombolo yocingo nakho kungaphezulu.

Ozithobayo
uCarol Preston

IFOMU LABAGXILA NGOLWAZI (focus group, informal conversation form)

Isihloko socwaningo: Ukusetshenziswa kobuciko ekusekeleni imikhuba emihle yokucina imvelo ihlanzekile esigodini saseSizameleni.

Umcwaningi womsebenzi: Carol Preston

Ngiyakwamukela ukuba ngomunye weqembu lokuhlaziya ulwazi ngokukhuthazwa ngu Carol Preston ngenhloso yezifundo zeziqo zakhe .

Ngokuvulelekile ngiyamnika imvumo uCarol Preston neNyuvesi iWits igunya lokucina konke okuqoshwe kukhomputha ezovikela konke, ezohlala ekhabetheni elikhanyayo. Ngiyamnika uCarol Preston neNyuvesi iWits imvumo yokusebenzisa lomsebenzi ezigungwini zokufunda, ekufundiseni ngawo, ekuwuphindaphindeneni, ekubolekisaneni, ekukhangiseni nasekuwudayiseni lomsebenzi kanye nokuwundlulisela ezindaweni zokuwukhangisa ngokugqamile. Nokuwufaka ohlelweni lweNyuvesi oluku-internet. uCarol Preston neNyuvesi bazokwenza ngalohlelo:

[] Ngaphandle kokujawabisa

[] Ngokujawabisa yilokhu okulandelayo

[] Ingingxoxo izomamelwa futhi isetshenzise ngemvumo yami kuphela.

[] Izingxoxo ngeke zandluliselwa kwabanye abantu bomphakathi ngaphambi _____

[] Shono okunye;

Isiginesha kamhlanganyeli kuleqembu

Usuku _____

Igama elingcwele _____

Amafoni _____

Ngicela uCarol Preton neNyuseni iWits ingabinagunya lokungihlonza ngegama umakwenziwa izingxoxiswanano kumathephu nakwezinye izinhlelo zomthombo wabezindaba.

Isiginesha kamhlolikhono _____

Usuku _____

Isiginesha yomkhuthazi _____

Usuku _____

Appendix D: Litter Lion play

(two characters are played by one performer indicating the different characters by changing caps and accent, and by turning to face the other character)

Actor enters the stage, looks for somewhere to sit. Sits on a crate that is pre-set. Actor opens backpack and takes out a take-away container, and a cold drink, and begins to eat. After enjoying the meal the actor throws the containers on the ground. Actor changes character and stands, looking at first character.

Second person: Hey! What do you think you are doing?

First person: What do you mean?

Second person: Throwing your rubbish down on the ground here.

First person: Well there is so much rubbish here anyway. What difference will it make?

Second person: There is no reason to make it worse.

First person: Well I am creating jobs, for those people who clean up.

Second person: If you are creating jobs for people to clean up, then why is this place so dirty?

First person: There is no bin here. So where am I supposed to put this?

Second person: You keep it in your bag until you find a bin. And your plastic bottle can be recycled, you know.

First person: Yes I know about recycling. But it is so hard to do.

Second person: It is not so hard. There is a recycling depot down the road. It is the right thing to do. Don't be lazy.

First person: Yes I will try not to be lazy from now onwards.

Second person turns to the children. Asks what are recyclables, what can be done with waste, talks about the importance of not littering. Then teaches them the Litter Lion song

Appendix E: Litter Lion song

(sung to the tune of “What shall we do with the drunken sailor”)

What shall we do with the mess around us X 3

Throw it in the dustbin

Reuse, rethink, recycle X3

Stop the mess around us

I want to be a Litter Lion X3

Stop the mess around us

Appendix F: the “Whitchita” song

Whitchita do-e-ah, do-e-ah, do-e-ah

Whitchita do-e-ah, do-e-ah, ho X2

Wakka tenaya, haya, haya

Wakka tenaay, haya, ho X2

(repeat)

Appendix G: Ms. Hall's story for the process drama workshop

There were twins who loved to go down to the pond at midnight during full moon. They loved to see the reflection of the moon in the pond and listen to the sounds of the frogs in the water. But as time went by they began to realise that there was a problem with the pond. It became more and more difficult to see the reflection of the moon in the water, and eventually the moon disappeared altogether.

They saw that it was litter and dumping that was blocking the water and it was so bad that Gogo had become sick. They also knew that their older sister, who had a new baby, was dumping the baby's diapers in the river, and that they were ending up in the pond. This made the children very sad, and they decided to do something about it.

Appendix H: Blessing's story

Blessing went to visit his uncle in Johannesburg. He went from the township (sounds of children calling to each other; animals; whips cracking). A storm blew up (sounds of wind; thunder; hail; rain). He took a train to Johannesburg (sound of the train hooting, chugging). In the city he took a taxi to Uncle's house (sounds of taxi hooting; people talking; brakes squealing). At his uncle's house he saw that his uncle was making art work out of waste plastic, and making money out of it. Blessing liked this idea but he thought he could do better. He wanted to use metal to make art work. He started to collect metal waste, and made friends with the waste pickers in the city (sounds of trolleys; people calling to each other). Blessing made lovely art out of waste metal and exhibited it in an art gallery in Johannesburg. Here an international art dealer saw his work and bought all the art and took it to New York. Blessing made a lot of money out of his art and he was very happy.

Appendix I: The Lunch Box Boy

Mr. Mouse: Not so long ago there lived a girl called Tammy. Every day before she went to school her mother, whose name was Mrs Sibanda, would make Tammy a lunch box. There would be an apple or a banana or a pear, and a sandwich with peanut butter or jam or cheese spread. When Tammy came home from school she would put her lunch box in the sink and wash it out ready for the next day. One day she came home from school and said to her mother: “Mom there is a boy in my class who falls asleep every day. He puts his head down on his desk and falls asleep. I think he is hungry.” The next day when Tammy came to pick up her lunch box, Mrs Sibanda had made two lunch boxes. “Take this to the boy in your class”, she said, “Give it to him so that he will not be hungry.” From that day onward Mrs Sibanda made two lunch boxes for Tammy to take to school. And every afternoon Tammy would wash out two lunch boxes.

Many years went by. Tammy grew up, and had children of her own. Mrs Sibanda’s children had all left home by then. One day she was sitting in her kitchen, resting all on her own after the hard work of cleaning up, when there was a knock on the door. “Come in,” she said. In came a young handsome man. “Hello Mrs Sibanda, how are you this lovely day?” he said. “I am really well,” she replied, “and how are you?” “I am very well,” said the young man. “Do I know you?” she asked, “You seem to know me, but I have not met you before.” “Yes,” he said, “You do know me. My name is Sello.” “Hmmm, Sello,” said Mrs Sibanda, “No, I don’t remember meeting you. I am sorry.” “Well”, said Sello, “I am the lunch box boy!” “The lunch box boy,” said Mrs Sibanda, “No I really am sorry I do not know who you are. Can you remind me please?” “I am the lunch box boy, the boy who you made a lunch box for and gave to Tammy to bring to school for me every day. Because of the lunch box I was able to stay awake for classes and I left school with good grades. I went to university and now I have a good job, a lovely wife and two children. I have a little house and I can support my mother. All thanks to you, Mrs Sibanda. So now I am here to volunteer in my spare time to help you with any work that you need me to do.” From that day onwards Sello and Mrs Sibanda were great friends, and Sello would come and help her with anything she needed. When Mrs Sibanda and Sello’s mom got really old, Sello and Tammy would love to see them sitting on the stoep talking about the old days and watching their grandchildren play.

References

- Janks, H. 2010. *Literacy and Power*. New York & London: Routledge.
- Stein, P. & Newfield, D. 2006. Multiliteracies and Multimodalities in English in Education in Africa: Mapping the Terrain. *English Studies in Africa*. 49(1) pp. 1-21.
- Sanoff, H. 2000. *Community Participation Methods in Design and Planning*. Canada: John Wiley & Sones, Inc.
- Marais, M & Armitage N. *The measurement and reduction of urban litter entering storm-water drainage systems: Paper 2 – Strategies for reducing litter in the stormwater and drainage systems* (2004)
- De Beer, F & Swanepoel, H. *Community development. Breaking the cycle of poverty*. Fourth edition. Juta & co Ltd. (2006)
- Collins K & Hall P. *Participatory research. A Primer*. South Africa (Pty) Ltd (1999)
PUBLISHER
- Coetzee, J.K. (editor) *Development is for People*, Johannesburg, Southern Book Publishers (Pty) Ltd (1988)
- Capra, F *The Web of Life “A new synthesis of mind and matter”* Flaming (1997)
- Taylor, P Applied Theatre. *Creating transformative encounters in the community* New York University, New York (2003)
- Block P. *The structure of belonging* Berret-Koehler Publishers Inc. (2009)
- NcNiff, J. *Writing and Doing Action Research* SAGE Publication Ltd London (2014)
- Van Vlaenderen H. & Neves D. *Participatory Action Research and local knowledge in community context* in *Self, Community and Psychology* Duncan N, Ratele K et al (eds) UCT Press Landsdowne (2004)
- Shaughnessy N. *Applying Performance. Live Art, Socially engaged Theatre and Effective Practice* PALGRAVE MACMILLAN (2015)
- Preston S. *Applied Theatre, Facilitation. Pedagogies. Practices. Resilience* Bloomsbury Publishing Plc (2016)

Programme for the implementation of the national waste management strategy. Starter Document for Waste Recycling; Background Document of Post Consumer Recycling in South Africa and Internationally May 2000

Hart, R.A. *Children's Participation. The theory and practice of involving young citizens in Community Development and Environmental Care* UNICEF New York Earthscan (1999)

Roseland M. *Sustainable community development: integrating environmental economic, and social objectives* Journal: Progress in Planning 54(2000) 73-132 Pergamon

Sen A. *Development as Freedom* Anchor Books England (2000)

Schatz M. & Walker R. *New opportunities for qualitative research* Routledge London & New York 1995

Hughes J. & Nicholson H.(eds) *Critical Perspectives in Applied Theatre* Cambridge University Press United Kingdom (2016)

The fires beneath

March K. (ed) *First Steps in Research* Van Schalk Publishers Pretoria (2007)

Boal A. *Games for actors and non-actors* 2nd edition translated by Jackson A Routledge London and New York (2002)

Frazier C. *Thirteen Moons* Random House USA (2006)

Pinkala P. *Environmental education after sustainability: hope in the midst of tragedy*. Global Discourse, 7:1, 109-127, DOI, 1080/232 69995.2017.130042

Van Boekel The use of drama and art-based EE

Rodda A. *Women and the Environment* Zed Books Ltd UK and USA (1991)

Stevens L., Tait P., Varney D. (eds) *Feminist Ecologies Changing Environments in the Anthropocene* 2018, Palgrave Macmillan Melbourne Australia

Jamieson D., *Ethics and the Environment An Introduction*, 2009, Cambridge University Press, New York

Braidotti R., Charkiewick E., Hausler S., and Wieringa S., *Women, the Environment and Sustainable Development. Towards a Theoretical Synthesis*, 1995, Zed Books Ltd., United Kingdom

Hertz R. (ed), *Reflexivity and voice*, 1997, Sage Publications, United Kingdom

Padgett D.K. (ed), *The Qualitative Research Experience*, 2004, Wadsworth, New York

Day B., and Monroe M., (eds), *Environmental Education for a Sustainable World Handbook for International Practitioners*, 2000, GreenCOM, USAID

Mitra R., *Doing Ethnography, Being and Ethnographer*, 2010 MASTERS FILE

The Wounded Researcher: Levels of Transference in the Research Process MASTERS FILE

Methodology of the Heart: A Performative Writing Response MASTERS FILE

Rogers C., *Freedom to Learn*, MASTERS FILE

Interpreting Performance and Cultures MASTERS FILE

Taylor P., *Rebellion, Reflective Turning and Arts Education Research* MA FILE

Grady S., *Toward the Practice of Theory in Practice*, MA FILE

Kollmus A., and Agyeman J., *Mind the Gap: Why do people act environmentally and what are the barriers to pro-environmental behaviour?* In *Environmental Research* Vol.8, No.3, 2002 DOWNLOADS

Austin G., *Feminist Theories: Paying attention to women*, 1990, MASTERS FILE PaR

Barrett E., and Bolt B. (eds), *Practice as Research: Approaches to Creative Arts Enquiry*, MASTERS

Randle D., 1999, *Teaching Green, A parent's guide to education for life on Earth*, Green Point

Bess, Higson-Smith and Sithole, 2018, *Fundamentals of Social Research Methods; An African Perspective*, Fifth edition, Zambia PUBLISHER

Kapuscinski R., 2008, *The Other*, Instytut Ksiazki, Poland SEE PG 247 RS

Tausig M., 2011, *I Swear I Saw This; drawings in fieldwork notebooks, namely my own*, University of Chicago Press, Ltd, London

Holmes R., 1998, *Fieldwork with Children*, Sage Publications, Inc., California

Douglas M. and Fardon R.(ed.), 2013, *Personal Method. Anthropological Writings Drawn from Life*, Sage, London

Sheldon R., 2016, *The Child to Come; Life after the Human Catastrophe*, University of Minnesota Press, USA [didn't use this but]

Exploring Environmental Consciousness in South Africa, Report 10-709 June 2010, Barbara Anderson, Marie Wenzel, John Romani, Heston Phillips, Population Studies Centre, University of Michigan, Institute for Social Research [pg 274]

Lehtonen A., Salonen A., and Cantell H., “Climate Change Education: A New Approach for a World if Wicked Problems”, in *Sustainability, Human Well-Being, and the Future of Education*, 2019 [printed downloads p283]

Kelly A., 2017, *Eco-Anxiety at University: Student Experiences and Academic Perspectives on Cultivating Healthy Emotional Responses to the Climate Crisis*, University of Colorado, Boulder [p289]

Embodied ways of storying the self: A systematic review of body-mapping [printed downloads p291]

Janet L., *In the Room with Climate Anxiety* [printed down loads p291]

Kress G and Van Leeuwen T, 2006, *Reading Images. The Grammar of Visual Design*; second edition, Routledge, USA

Leitch R and Day C., *Action research and reflective practice: towards a holistic view* [downloads p293]

Hsu, Ya-Huei, 2014, *Analysing Children's Drawings*, Department of Education, National Chiayi University, Chiayi City, Taiwan [p296]

Ellis C, Adams TE and Bochner AP, *Ethnography: An Overview*, [printout file citation in back of article p297]

Lekgeu MS. & Davis N., 2017, “Perceptions of Climate Change Among Grade 11 Learners in the Tshwane Metropolitan Municipality”, South Africa, *Southern African Journal of Education* [downloads file]

Wagner BJ., 1979, *Dorothy Heathcote. Drama as a learning medium*, Hutchinson & Co. Ltd., Great Britain

Zipplies R. (ed.), 2008, *Bending the curve. Your guide to tackling climate change in South Africa*, Africa Geographic (Pty) Ltd., Cape Town

Garrard G. (ed.), 2014, *The Oxford Handbook of Ecocriticism*, Oxford University Press, New York, USA

Archer A. & Newfield D. (eds.), 2014, *Multimodal Approaches to Research and Pedagogy. Recognition, Research and Access*, Routledge, New York

Formanek R., Gurian A., & Thomas, CT., 1976, *Charting Intellectual Development. A practical guide to Piagetian tasks*, USA **PUBL**

Cohen D., 2006, *How the child's mind works*, Routledge, New York

Harvester CJ., 2009, *Ecofeminist Pedagogy: Framework for Ecojustice in Education*, Simon Fraser University Library, Canada [check initials articles]

Wall S., 2006, *An Autoethnography on Learning About Autoethnography*, International Institute of Qualitative Methodology, Canada [check this articles]

Douglad K. & Caless D., 2013, *Handbook of Autoethnography a History of Autoethnographic Inquiry*, [articles]

A Focus Theory of Normative Conduct: A theoretical refinement and reevaluation of the role of norms in human behaviour, [behavioural theory articles]

Theories and Concepts for Human Behaviour in Environmental Education pg 327 [have I used this? in downloads]

Community Development Theories and Principles of Community Participation, [have I used? Articles] p.329

What is Reflexive Practice [articles ? have I used this] p.330

Bland D., 2011, *Analysing Children's Drawings – Applied imagination*, Queensland University of Technology, **PLACE** [articles]

Featherston M & Wernick A (eds.), 1995, *Images of Aging; cultural representations of later life*, Routledge, London

Edwards D., 2016, *Analysis and Interpretation of Children's Drawings*, (thesis/dissertation – no reference) [articles]

Carr S. (ed.), 2020, *The Skimmer on Marine Ecosystems and Management*, [articles]

Pihkala P., 2019, *Climate Anxiety*, MIELI Mental Health, Finland [articles]

- Pihkala P., 2018, *Eco-anxiety, tragedy, and hope: the psychological and spiritual dimensions of climate change*, *Zygon*, vol. 53.no2. [articles]
- Brisson 2017, *Women's Connectedness to Nature: An Ecofeminist Exploration*, [citation in downloads] p339
- Robinson-Pant A., 2016, "Beyond the Classroom: From Education for Rural Transformation to Learning Within Rural Transformation?", *Journal of Education and Research*, March 2016, Joint Issue 5.2 & 6.1 pp.9-30 [p342]
- Etherton M. & Prenti T., 2006, "Drama for Change? Prove it? Impact assessment in applied theatre", *Research in Drama Education*, 11:2, 139-155 [p344]
- Heron J. & Reason P., "A Participatory Inquiry Paradigm", *Qualitative Inquiry*, Volume 3 Number 3, 1997, 274-294, Sage Publications, Inc. [short course printed]
- Bargal D., "Personal and intellectual influences leading to Lewin's paradigm of action research", *Action Research*; Volume 4(4): 367-388; SAGE Publications; London; 2006 [short course printed]
- McNiff S., 2019, *Philosophical and Practical Foundations of Artistic Inquiry* [short course printed]
- Bergdoff H., 2006, *The debate on research in the arts*, Amsterdam School of the Arts, Amsterdam [short course printed]
- Van Boeskel J., 2013, *At the Heart of Art and Earth: An Exploration of Practices in Arts-based Environmental Education*, Doctor of Arts Thesis, Aalto University, Helsinki [environ articles]
- Jewitt C., Bezemer J. & O'Halloran K., 2016, *Introducing Multimodality*, Routledge, New York
- Kress G., 2002 "Design and Transformation; new theories of meaning", in *Multiliteracies: Literacy Learning and the Design of Social Futures*, Cope B., & Kalantzis M. (eds.), Routledge, New York [p370]
- Lindstrand, F. (2008). Interview with Gunter Kress. *Designs for Learning*, 1(2), 60-71
- Kember (2006) The diverse role of the critical friend in supporting educational action research projects [articles]

“External Conversations: An unexpected discovery about the critical friend in action research inquiries.” Teresa S. Foulner. Volume: 8 issue 2, page(s): 135-152 June 1, 2020 [p371]

Bouman-Deneter A., (2015). “Women as Agents of Change in Water: Reflections on Experience from the field”, in *Women for Water Partnership 2015, in collaboration with UN-Women and UNW-DPAC* [p371]

What makes a critical friend? See citation under articles]

Costa, A., & Kallick, B. (1993). “Through the lens of a critical friend”, *Educational Leadership*, 51(2), 49-51 [p374]

Buzan T. & B., (2003). *The Mind Map Book*, BBC Worldwide Limited, London

“Children’s Pastimes and Play in Sixteen Nations: Is Free-Play Declining?” Singer, Dorothy G.; Singer, Jerome L.; D’Agnostino, Heidi; DeLong, Raeka, *American Journal of Play*, v1 n3 p283-312 Win 2009

“Resurrecting Free Play in Young Children. Looking Beyond Fitness and Fatness to Attention, Affiliation, and Affect”; Hillary L. Burdette. MD. MS; Robert C. Whitaker. MD. MPH *Arch Pediatr Med*. 2005; 159(1): 46-50 [p377]

Meade, RR., Shaw, M., & Banks S., (eds.) (2016), *Politics, Power and Community Development*, Policy Press University of Bristol, Great Britain

“The Deep Ecology Movement: Origins, Development, and Future Prospects (Towards a Transpersonal Ecosophy)”; Alan Drengson, Bill Devall, Mark A. Schroll; *International Journal of Transpersonal Studies*, 30(1-2), 2011, pp.101-117 [p378]

Pg 358 did I use these three?

“Influence of support service linkage strategies on sustainability of donor funded livelihood projects in Kilifi County, Kenya”; Cornel Likale Ndombi, Dorothy Ndunge Kyalo & Angeline Sabina Mulwa, *International Journal of Research in Business and Social Sciences* (9)(4)(2020) 404-418

Stein, P., (2008), *Multimodal Pedagogies in Diverse Classrooms; Representation, rights and resources*; Routledge, London

“Multimodality and the Multiliteracies Pedagogy: Design and Recruitment in South African Children’s Musical Games”, Susan Harrop-Allin, 2017; *Journal of Research in Music Education*, VOL 65, Issue 1, 2017

Susan Harrop-Allin, (2011), *The implications of South African children’s games for music education*; University of Western Ontario, London Ontario

Morton, T., (2013), *Hyperobjects Philosophy and Ecology after the End of the World*; University of Minnesota Press, Minneapolis

Baarfield, T. (ed.) (2001), *The Dictionary of Anthropology*, Blackwell Publishers, Oxford, UK

McNiff, J., (2014), *Writing and Doing Action Research*, SAGE Publications, London

Schmidt, HJ. & Schmidt, KJ., (1989), *Learning with Puppets guide to making and using puppets in the classroom*, Meriwether Publisher, Colorado Springs, United States of America

(Waste Management By-law, 2013) **Published in Province of Gauteng: Provincial Gazette no. 216 on 30 July 2013 Commenced on 30 July 2013 [Up to date as at 5 August 2020]**.

(One More Generation » Youth Empowerment accessed May 2016

, About the Campaign — Eco Schools, accessed 14/03/2019).

<https://brainly.in/question/11149381> (accessed on 12/11/2020)

(<https://www.gov.za/documents/constitution-republic-south-africa>; accessed 12/11/2020).

(<https://www.bizcommunity.com/Article/196/361/95566.html>; accessed 12/11/2020).

Weigo organizing brief no. 3 “Options for organizing waste pickers in South Africa” (under environmental articles)

([NIMBY | Definition of NIMBY by Oxford Dictionary on Lexico.com also meaning of NIMBY](#)).

The Bible

www.vonwong.com, accessed 02.01.2020).

