

RESEARCH/PRACTICE ARTICLE

Lookout for learning: Exploring the links between drama and environmental education pedagogies

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(Received 02 May 2019; revised 14 July 2020; accepted 31 July 2020; first published online 18 September 2020)

Abstract

Environmental educators remain challenged by how to encourage people to make connections between environmental quality and human development in a way that is socially just and equitable for all living things. This article explores links between performance-based learning and environmental education pedagogy as one way to address this challenge. Sixteen children (8–10 years) from an Auckland primary school worked with a performance artist to present *Lookout*, an intimate performance by a child for an adult. Its intent was to juxtapose people's different backgrounds, experiences and ages in a two-way communication of their view of Auckland City through an environmental lens encompassing past, present and future, while surveying the city from a vantage point. Analysis of data from focus groups with the children and interviews with their parents (also participants) showed that the *Lookout* process led to children developing a deeper understanding of Auckland City's issues, a stronger sense of connection to their city, an understanding of the future, and feelings of empowerment. However, their parents' learning was more tenuous. Three key elements to the success of *Lookout* for learning are identified, and it is proposed that these could be used when developing performance-based environmental education programs.

Keywords: Environmental education; children; place; arts-based

It is challenging to devise ways to engage people in learning that will foster connections to 'place' and develop a relational way of being with all living things, leading to sustainable decision making being the default position (Wals & Benavot, 2017). An emerging approach in environmental education is that of performance-based learning, which involves watching or participating in performances that are viewed by an audience (McNaughton, 2004). *Lookout*, a performance-based educational production created by United Kingdom-based artist Andy Field (<http://andytfield.co.uk/>), encourages young people to consider issues such as the design of their cities past, present and future, and to share their views one-on-one with an adult participant while looking out at the city from a high vantage point.

The focus of this article is to explore participants' perceptions of their experiences of *Lookout* in terms of its value as an environmental education pedagogy. Data were collected via focus group interviews with children and interviews with some of their parents (who attended performances) following performances of *Lookout*. These performances were part of the Auckland Fringe Arts Festival in 2017.

The Challenge Faced by Environmental Educators

A continual thread that runs through the environmental education field is the key role that education can play. This role involves helping people to both understand and respond to the multiple sustainability issues that we face on local, regional, national and global scales (United Nations Educational, Scientific and Cultural Organisation [UNESCO], 2005; Wals & Benavot, 2017). There is undeniable evidence that environmental education has been successful. For example, according to the Organisation for Economic Co-operation and Development (OECD), many 15-year-olds are now more familiar with environmental issues, such as air pollution and diminishing biodiversity (OECD, 2009), and there has been an increase in proenvironmental behaviours that are politically driven; for example, voting for green parties and supporting green policies (Wals & Benavot, 2017).

However, researchers also acknowledge that there is a significant tension in the field (Sterling, 2010; Wals & Benavot, 2017). At the heart of this tension is that the purpose and intent of education itself has never embraced the issue of human development and its inherent connection to environmental quality. Furthermore, it has largely ignored issues of social justice and equity that lie at the heart of sustainability and environmental education (Jickling & Wals, 2008; Stevenson, 2007a). This tension is reflected in the way that the purpose of schools has remained one of social reproduction and the production of a workforce for the global economy (Birdsall, 2010). To achieve these ends, there is a strong focus on tightly prescribed literacy and numeracy goals, along with their assessment, and little time devoted to other subjects, which encourages individualism and competition (Stevenson, 2007a, 2007b). In sharp contrast, environmental education aims to develop learners' abilities to act politically and empower them to make decisions that will improve the quality of life for all living organisms (Jickling & Wals, 2008; Stevenson, 2007a, 2007b); learning that is open-ended and requiring a holistic, issues-based approach (Tilbury, 1995).

This tension is further reflected in the types of pedagogy utilised in schools. Currently, learning is largely closed because the content and learning outcomes are determined in advance and the requisite knowledge is transmitted to learners by the teacher. Such learning is atomistic and requires little thinking (Jickling & Wals, 2008; Stevenson, 2007a). Again, there is a disparity with environmental education pedagogy, due to its transformative potential (Sterling, 2010; Stevenson, 2007a). This can be described as learners critically examining sustainability issues from various perspectives, envisaging futures, suggesting and discussing possible ways of mitigating and/or solving such issues, and then taking action accordingly (Tilbury, 1995). Not only is this pedagogy open-ended, but learners are also encouraged to work cooperatively to co-construct knowledge and enact change.

A barrier to alleviating this tension is the noncompulsory nature of environmental education within the school curricula in many countries. Therefore, the decision to incorporate it is up to individual educators and schools. In this way, environmental education largely occupies a marginal position, often as the 'little added frill' (Hart, 2010, p. 155). Consequently, it can be seen that the call for education to be reoriented towards sustainability made in 1995 in *Agenda 21* (Tilbury, 1995) has yet to be fully realised.

Performance-Based Learning and Environmental Education

It is argued that a performance-based learning approach, which falls under the umbrella of 'drama in education', could help to resolve earlier described tensions between current forms of education and environmental education. Using drama in education strategies could enable people to look to the future, develop their reflective thinking and foster connection to place, which are characteristic of current conceptualisations of environmental education. As a result, people could then consider the relationship between human development and environmental quality.

According to McNaughton (2004), 'drama in education' encompasses everything from watching or participating in audience-based performances to participating in nonaudience-based works such as improvisation. Curtis et al. (2014) evaluated two methods of drama in education, namely

demonstration and process theatre. They found that demonstration theatre, where performers develop and present theatre to an audience, was less effective in building content knowledge than process theatre. The *Lookout* performances can be regarded as process theatre, where trained performers work with untrained participants to develop performance pieces. However, the *Lookout* performances were unique because of their intimate nature. This intimacy arose because there was one child performer per adult audience member as they simultaneously looked out at the city and held a partly choreographed and partly unrehearsed conversation — a ‘shared dialogue’.

Similar to environmental education, drama in education is a holistic pedagogical approach as it involves learners cognitively, emotionally and physically (Caldwell, 2011; Lee, Patall, Cawthon, & Steingut, 2015; Tilbury, 1995). Therefore, as a pedagogy, drama strategies can complement the aspirations of environmental education. In terms of engaging learners cognitively, the use of drama strategies can help learners to develop knowledge about an issue, which can help learners make informed decisions. For example, Lee et al. (2015) found that the use of drama strategies led to improved achievement in subjects such as science and language arts, an important benefit shared also by the holism and multidisciplinary of environmental education (Tilbury, 1995). Drama strategies also help learners to explore and evaluate ideas, helping them to view issues from multiple angles (Caldwell, 2011; Levey, 2005; McNaughton, 2010), which is also crucial in environmental education for building an appreciation of the many viewpoints involved in an environmental issue (Tilbury, 1995). Having such an appreciation is a necessary consideration for resolving issues (Wals & Benavot, 2017).

Emotional engagement can be fostered through drama strategies. For example, values exploration, a central aim of environmental education according to Tilbury (1995), can be carried out using drama strategies. According to McNaughton (2004), drama can help learners explore values, using their imagination in ways that go past mental visualisation because drama enables them to ‘physicalize and vocalize the problem or event’ (p. 153). Not only can learners then develop their understandings about the issue being studied, they can also express their emotional responses.

The strategy of in-role drama helps foster empathy through role-play, since learners can don the ‘mask’ of the character being played, creating a sense of anonymity. This comforting ‘distance’ can allow the exploration of complex issues in a nonthreatening way (Adcock & Ballantyne, 2007), enabling learners to express feelings and also interpret the feelings of others (Caldwell, 2011; McNaughton, 2004) as they develop confidence and develop empathy for others. Empathy is key in environmental education as an acknowledged precursor to pro-environmental behaviour (Chawla, 2008).

Drama strategies involve embodied learning, where knowledge is explored and expressed in activities in a physical and social context (Miller & Saxton, 2011). McNaughton (2004) credits this ‘active, participative learning’ (p. 139) inherent in drama as having a central connection with environmental education, where Wals and Benavot (2017) argue that learners are able to find solutions to problems themselves and then take action. Such actions also involve embodied learning. They can be direct — for example, environmental restoration work or conscious consumerism; or else be indirect, such as writing submissions to local or national governments about proposed policies or legislation, participating in protests, or designing and distributing persuasive leaflets.

But drama in education involves more than cognitive, emotional and physical learning; it also involves using imagination and reflection that could potentially lead to shifts in worldviews. Imagination plays a crucial role in drama strategies. As learners engage in drama, their learning is an act of the imagination as they present the world as if it were happening (Miller & Saxton, 2011). During this time, reality is suspended for both the actors and audience, protecting them from any consequences — an ‘out-sideness’ (p. 120). Through this out-sideness, there is potential for reflection about the actions being performed and how they relate to both the actors and the audience. Such reflection is also found within environmental education, where following reflection about the contributing factors and underlying structures that have led to an issue, imagination can be used

to envisage scenarios in the future where the issue has been resolved (Tilbury, 1995); according to Miller and Saxton (2011), where learners can ‘see the world as if it were otherwise’ (p. 119).

As mentioned above, drama strategies offer opportunities for reflection because of the way that reality can be suspended, offering a sense of safety. It is while engaged in drama strategies that learners can also create and recreate ideas until they are satisfied with them, taking them outside of their everyday lives (Miller & Saxton, 2011). This reflexivity can help to build a learners’ capacity to think critically and reflexively, which Sterling (2010) emphasises in his definition of intrinsic sustainable education (referred to here as environmental education).

Wals and Benavot (2017) also regard the role of reflection as crucial. They argue that the fourth and most current wave of education in relation to people and planet involves people developing a relational worldview where they see themselves as interconnected to the planet of part of a whole, rather than separate. It is proposed that drama in education could help to develop such a worldview because drama strategies can influence or shift a person’s sense of themselves (Miller & Saxton, 2011). This shift could occur as learners engage cognitively, emotionally and physically through drama strategies, use their imaginations and reflect on their experiences.

It is also argued that learning needs to be set within learners’ localised places, where they live, learn and play. These localised places are where they experience the world, learn how the world works and about their place in the world (Gruenewald, 2003). It is through these physical, cognitive, and on occasion, spiritual interactions with place, that a relationship between a person and a place develops and grows, becoming endowed with meaning (Judson, 2006). This relationship can become reciprocal and evolving as a place shapes and is shaped by the people who interact with it (van Eijck, 2010). In this way, it is possible that a more relational worldview could develop.

Given these links between drama in education and environmental education, this research explored the potential of children’s engagement in *Lookout* performances, to develop their understanding about Auckland, its issues and possible futures, and their relationship with their city. The adults’ perceptions were also explored. Therefore, the research questions that guided this research were:

What is the potential of drama strategies for deepening participants’ understandings about issues facing Auckland?

How did these strategies help participants to develop a relationship with their city?

Research Design

This project used an interpretive-qualitative design with a case-study approach (Stake, 1994). This choice allowed an exploration of one bounded case that included the preparation workshop process and the following performances of *Lookout*. This choice of design allowed a detailed picture of the lived experiences of the children and adults who took part to be revealed, enabling a fine-grained analysis. Once ethics approval from a tertiary institution had been obtained, the children and parent participants were invited to take part in this study. All 16 child participants (aged between 8–10 years) agreed to take part (12 girls and 4 boys), along with 4 adults. These 4 adults were parents of children who performed in *Lookout*. While they took part in a performance, it was not with their own child.

Two focus group discussions were held with the children, with 8 in each group at their school following their performances in *Lookout*. Just prior to the focus group discussions, they were asked to write answers or draw in response to a set of warm-up questions about their perceptions of *Lookout*, such as what they gained from it and what parts they enjoyed or learned the most from and why. During the focus groups, similar questions were explored in more depth; for example, what did they learn through their participation in the project, what issues did they identify to showcase during the performances and how did they think these issues could be solved. Questions asked were intended to reveal if they had a greater awareness of the issues facing Auckland and their connection to their city.

Individual interviews were held with the adults, during which their experiences of the *Lookout* process were examined. These interviews were also held at their children's school following the performance. A Skype interview was held with Andy Field and questions were asked about his underpinning vision for *Lookout* and how he developed and supported the children through the *Lookout* process. All focus groups and interviews were recorded and transcribed. The warm-up question sheets completed by the children and the transcribed data were then thematically analysed according to Braun and Clarke (2006), to identify key themes that related to Auckland's issues, possible solutions and connection to 'place'.

The *Lookout* Process

After the children's school had agreed to participate in *Lookout*, Andy and his producer Beckie Darlington organised and ran a series of preparatory workshops. The first half-day workshop was to select suitable performers from a larger group of children who met Andy's age criterion of senior primary school children. During this initial workshop, 40 children worked in groups, taking on the roles of everyday objects that people encountered on their journeys to work; for example, a toaster or a wardrobe. They had to describe and discuss the role of their object in today's world, then project it back 30 years to describe and discuss its role then. Next, they had to project the role of that object 30 years into the future and how it might look and feel like then. Based on their participation in this workshop, Andy and teachers at the school chose 16 children (based on their speech clarity and confidence) to participate in further workshops, followed by the three days of *Lookout* performances.

These 16 children were immersed daily in workshops lasting two hours with Andy and Beckie over the remainder of this week. They began by discussing what the 'perfect' city might look like and the concept of utopia. Next Andy gave them a sheet of paper with a list of values on it, such as generosity, equality, fun, money, family, and productivity, and the children were asked to pick the five that were most important to them. These five values then went into the creation of their ideal city.

Following identification of values, the children were provided with large-scale photos of Auckland City and they worked on changing these photos in accordance with their ideas for improving Auckland. The children were also given photos depicting examples of ways in which other cities had 'greened' their built environments; for example, the High Line Railway Park in New York City (see <https://www.thehighline.org/>) and the Cheonggyecheon Stream Restoration Project in Seoul, South Korea (see <https://en.wikipedia.org/wiki/Cheonggyecheon>). This work went into the creation of audio-recordings of their ideas that would be played during their performances, and they also prepared verbal dialogue for their 'live' stories within the performance (for examples of recordings see <http://aplacetolookout.co.uk/>). The focus of the prepared recordings and 'live' dialogue was to create an interactive performance piece around these children's projections of their lives in Auckland at 30, 60 and 90 years forward into the future. At the 60-year point, an environmental catastrophe had occurred and its imagined effects on their lives were recounted. Questions to ask adult participants were also crafted and embedded within the performance, creating a 'shared dialogue'.

During the following week, two days of rehearsals were followed by three days of performances, with each child performing three times in each day so that 144 adults participated in these performances.

Vision of the Production

Andy Field, an English artist, was interviewed by Skype to explore his vision of *Lookout*. The performance of the shows, over two years, across several UK and other world cities including Auckland, was in response to his interest in exploring unique and unusual couplings of people

and place, all linked through the medium of performance and the context of increasing turbulence of our world. In each place where *Lookout* has been performed, while the format is the same, the issues, while similar, produce a different perspective. As he described, ‘the experience of making and remaking *Lookout* has remained for me something to hold on to amidst the storm — a way of both reaching back into the long history of cities and projecting ourselves forwards into a future well beyond our brief lifespans’ (Field, 2018, p. 85), which illustrates his focus on exploring people’s relationships with their world.

Andy explained that a big part of the workshop process was using performance art to develop the tools that would enable the children to have an equal conversation with adults — participating in the ‘political and social discourse’ from which children are usually excluded (Skype interview). The skilful managing of the process by Andy and Beckie (combining performance art with their position of regarding children as expert participants in their own right) aimed to equip the children to navigate the experience with confidence, enjoyment, and openness to share and learn, which can be regarded as synonymous with empowerment.

In reciprocation, via *Lookout*, adults were encouraged to see beyond their lifetimes through a child’s eyes. Andy regarded this as a ‘key environmental aspect [of *Lookout*]’ (Skype interview) because he believes that adults ‘struggle for a way of relating’ (Skype interview) to environmental crises as something needing resolution now. He is concerned that adults are anchored in their own lifetimes and the immediacy of the present, ‘living everyday . . . perpetually putting off tomorrow in favour of the present’ (Skype interview) and so are unable to envisage a future involving their children.

Consequently, *Lookout* has a deliberate forward focus — the juxtapositioning of children (next generation) with adults and the empowerment of children within that coupling — plus the focus within the performance on looking into the future. Even the choice of the performance venue as an undisclosed (to participants) high spot (in Auckland this was a disused multistorey office block in the CBD) removes participants from the traditional theatre experience and creates anticipation and uncertainty for the adult participants as they are positioned in front of the view, awaiting the arrival of their performer. Meanwhile, the children, as performers, get to quietly take up position beside their audience of one while that person is listening to the opening recording on a digital device.

Andy proposes that participation in *Lookout* involves transformation for both the adult and child. Not only are their relationships with the city and how it functions transformed, they can develop a greater awareness of the future and its possibilities.

Outcomes of Participation in *Lookout*

Data from the focus group interviews with children and adults were analysed in terms of the understandings that they developed about the issues facing Auckland City and their relationship with their city.

The first aspect that was explored during this study was whether these children’s understandings about issues facing Auckland were deepened as a result of their experience in the *Lookout* process. An analysis of data showed that these children were able to identify a number of issues about living in Auckland and also suggest possible solutions, which is indicative of a deepened understanding. They were worried about pollution, rubbish and graffiti; as well as there being insufficient transport infrastructure; too many traffic accidents; and many ugly, grey buildings. Also, they expressed concerns that had an economic and consequential social basis — the cost of living in Auckland and how expensive housing was, leading to more homeless people.

To solve these concerns, the children had a wide range of solutions and visions for the future of Auckland City. There were architectural ideas (e.g., a city in the clouds with a slide back to Earth, buildings with trees on their roofs, more colourful buildings of different shapes); transport-related ideas to reduce private car use (e.g., building an underwater tunnel across the harbour, having a

sky tram, flying cars and bird-powered taxis); and rubbish-related ideas (e.g., flying rubbish bins fuelled by the actual rubbish). To address the concern about the rising number of homeless people, these children thought that more homeless shelters should be built. Their visions went wider than buildings, transport and rubbish, to Auckland needing to have more public amenities, such as swimming pools, libraries and playgrounds, and public events, such as concerts. They also envisioned more vegetarian options in restaurants and a complete ban on smoking cigarettes.

While the children's engagement in the *Lookout* process led to them to an understanding of Auckland's issues and possible solutions, the outcome of the adults' participation differed. Their focus was totally child-centred. Comments related to them appreciating the child's performance, the emotions this performance aroused in them and how it benefitted their child. All of the parents expressed perceptions that illustrated how they valued the child's performance. For example, parents said that they felt the children's voices 'authentically ... came through' (Parent B) and the performance was a 'space where they [children] were taken seriously ... paying attention to them' (Parent O) and that this 'validated a child's worldview' (Parent L). Two further comments showed that parents appreciated the child's ideas and opinions during the performance. For example, one parent commented that they were, 'looking at a world that these children had ... internally created ... while seeing a current world' (Parent O). They spoke about consequences of the present on the future by stating, 'Have it coming from a child ... someone who what I do is going to have a direct consequence on their lives' (Parent O). These comments suggest that a space for sharing did seem to be created during the performance.

Parents' engagement in the performance aroused their emotions, and again, it was in relation to the child's performance. For example, one parent commented that 'I found it quite emotional and moving ... something about the child's voice that really tugs at your heart ... the soundscape that went along with the voice helped [reference to the audio-recording made by the child performer] ... I found it was quite emotive' (Parent M). Another parent went further and talked about the influence of the child's comments to make change and said, 'Kids are so good for making you want to do things better' (Parent B).

This focus continued as they spoke about how their child had benefitted from being involved. They considered that it was a 'wonderful experience' for their child because it was 'really interesting and challenging' (Parent L). Also, many comments were made about their child's positive emotions about their involvement and how their child had 'enjoyed all the different elements' (Parent B); another said, 'the whole journey, she just loved it all' (Parent L). One parent's remark summarised these parents' feelings when they said, 'they were totally enthusiastic and quite absorbed in it' (Parent M). Furthermore, these parents felt that their children had developed more confidence in themselves through the adults' acknowledgement of their ideas.

In terms of developing a connection to Auckland as their 'place', it seemed that the *Lookout* process did lead to children feeling more connected. Their comments during the interviews showed an increased awareness of the environment in which they lived. One child discussed how they learned 'how Auckland is important' and 'the way we could make our city a better place', with another saying that they had learnt 'what other people learned of [thought about] the city'. While some specifically mentioned Auckland City, others made comments about their learning in terms of the environment in general. For example, some said that *Lookout* had 'started me thinking more about the environment', whereas others said they had learnt to be 'nicer to the environment'. Other children commented on thinking more broadly about issues — for example, that their participation 'extended your thoughts about how reality really is'.

These children also discussed their emotional responses during the process, which were also indicative of feelings of connection. This was evident when they talked about the way that they now felt 'more strongly' about environmental issues and that 'we have to be a lot nicer to the environment'. Some children were not impressed with Auckland residents and expressed concern that 'people don't really think' about the environment and that others 'need to take more care of our city because lots of people treat it badly'. Other children were hopeful that 'maybe we can do

stuff like that [referring to the High Line Park and restoration project in Seoul] in Auckland'. They felt that 'we kind of learned that it is possible to make it an even better place'.

These aspirations to make Auckland better are also suggestive of feeling connection to place. And they went further, with 11 identifying changes that they (or their families) had made to improve Auckland's environment following their *Lookout* participation. These behaviour changes related to transport and rubbish management. One child stated that they were now 'using the car less' and another said that they would now 'walk to more places ... to the library'. Others spoke about the way that they now 'not using like gladwrap [plastic clingfilm]' and that 'once we finished like our apple cores ... in the car we just threw it out the window but now we ... stop by a rubbish bin'. Another child's remarks related to their parent's behavioural change, and they said, 'It changed my mum's thought ... and now she goes around and she picks up other people's rubbish and she has been putting up posters like "Don't litter, it will cost you!"'

One child's ideas went further when they talked about changes in thinking about rubbish, which demonstrated deeper thinking at a structural level. This child said, 'I think about how people treat things like rubbish ... and how we can make it better, like stuff for recycling.' In this comment, they were looking beyond just taking responsibility for disposing of rubbish correctly and were now thinking of ways of improving the management of rubbish.

Parents' comments indicated that through the *Lookout* process their children did seem to feel more connected. They suggested that through their child's engagement, their children had been given space to 'creatively think about their world' (Parent O) and that this was 'quite an empowering thing' (Parent O). Consequently, these parents thought that their children not only had 'pride' in themselves and 'confidence' in their views now, their performance had also 'validated what their contribution was and what they could do in the future' (Parent L) and that this gave them a 'sense of influence over their city' (Parent L).

One parent's awareness of their 'place' — Auckland City — was raised, and they posed questions for themselves, asking 'How am I conscious about what I'm doing in the place that I live in ... how am I contributing to my city?' (Parent B). This parent also said that they now were 'doing the walking school bus [organised activity where parents walk with groups of children to escort them to their local school] ... not wanting to be stuck in the car so much' (Parent B).

However, the other three parents talked about a growing personal awareness of needing to change as a result of their participation. Such thinking could be a precursor to developing more attachment to Auckland. For example, one thought that their engagement had 'sown some seeds ... on an everyday level I think it just sort of made a little incremental change in us' (Parent O). However, no specific changes were mentioned. Another parent discussed how 'it actually made me feel guilty for not doing more ... I'm going to go and join something because I feel I am not contributing' (Parent L). They were also more reserved about having made any behavioural changes as a result of their engagement in the performance and instead discussed how they had shared their ideas about Auckland's issues with their families. For example, one commented on how they now found themselves 'talking about it with other people ... so it generated a wider kind of family discussion' (Parent M). This comment shows how children's ideas and learning can influence their family. These comments seemed to indicate a growth in their environmental awareness and again, a possible precursor to developing a greater attachment.

Because this research explored what strategies helped children to develop their sense of place, they were asked about their learning and experiences during the *Lookout* process. All the children stated that the actual performances were the part that they enjoyed the most rather than discussing actual experiences. They thought it was 'fun hanging out with Andy and Beckie', and the reasons given related to being able to share their ideas and hear those of the adults — the shared dialogue aspect of the performance. One child said that they 'liked talking to different people because they all had different ideas', another enjoyed 'finding out what other people think', and for another child, it was being able to 'meet strangers and hear their stories'. These children also wanted to persuade the adults to adopt their ideas. For example, one commented they were 'trying to

get people to walk away with their ideas' and another said that they wanted 'to kind of get them to side with me'. However, some did mention using their imagination more frequently than usual, with one child stating that they 'use[d] your imagination more than you usually use it at school' and another saying that your ideas had to be 'like candy floss converted your ideas'.

Discussion

This research explored the potential of drama strategies to deepen children's and adults' understandings about issues facing Auckland. It also sought to investigate how these strategies helped children and adults to develop a relationship with their city, a crucial element for environmental education according to Wals and Benavot (2017).

During the *Lookout* process, these children were able to identify a range of issues facing Auckland, such as environmental degradation and homelessness. This process also enabled them to develop an understanding of these issues and suggest possible solutions. These children's abilities to be able to suggest such solutions implies that they developed a deeper understanding of an issue through being able to consider possible solutions and then deciding on the most suitable. Their multilayered solutions for Auckland City's social and environmental issues were also evidence of a deeper level of understanding; for example, colourful nonrectangular apartment buildings with trees on their roofs. This type of thinking is synonymous with problem solving, a skill that both Wals and Benavot (2017) and Sterling (2010) regard as key in environmental education. However, parents did not seem to develop this deeper understanding of issues.

Feelings of connection to Auckland City were also built during the *Lookout* process for both the children and their parents. Not only did these children become aware of and explore issues facing Auckland City and then identify possible solutions, they also expressed an emotional attachment through their concern about the way Auckland residents treated their city and their hope for a better Auckland in the future. Some of the children went further and reported a change in their behaviours that would have a positive effect on Auckland's environment, indicative of feelings of responsibility for the health of their city. This is a hallmark of them building a relationship with their 'place' — Auckland City (Greuenwald, 2003; van Eijck, 2010). This affiliation was more tenuous, in general, for the adults, although it seemed that their awareness of being part of Auckland City was raised and they had begun to question how they could contribute meaningfully to the improvement of their city; or, as one parent opined, 'having a bit of ownership in your environment and city rather than just existing in it' (Parent M).

Wals and Benavot's (2017) notion of developing a relational worldview involves people seeing themselves as connected to their world, particularly their 'place', and a realisation that their actions impact on all living organisms. Building relationships between both people as well as other living organisms is viewed as crucial to break down the binary between people and nature (Stevenson, 2007b). During the *Lookout* performances, relationships were built between people as the children interacted with their adult audience in a reciprocal, respectful way. These relationships were also apparent as both adults and children taking part in *Lookout* gained greater empathy for the other's perspective through engaging with each other about a future world that they might or might not share. It is possible that these relationships, as well as these participants' developing relationship with their place — Auckland City — could be the beginning of them shifting to holding a more relational worldview.

Other facets of the *Lookout* process also contributed to the children's deeper understanding and emerging relationship with Auckland City, such as the focus on envisaging the future, use of imagination and development of feelings of empowerment.

Tilbury (1995) argues that envisaging a future is key to environmental education, while Sterling (2010) discusses that environmental education needs to develop learners' abilities to consider the future so that sound decisions can be made in the present despite the future's uncertainty and

complexity. Andy Field's vision for *Lookout* also has this future focus. In fact, *Lookout* was a deliberate attempt to extend participants' lifespan and understanding of past, present and future issues via a shared dialogue as part of a performance. Consequently, consideration of the future strongly featured in these children's experiences. Projecting themselves into the future 30, 60 and then 90 years ahead during the workshops seemed to help them to think about and identify possible solutions for Auckland's issues, develop concern about the way in which some Auckland residents did not care for their environment, make changes in their behaviour and express hope that the future for Auckland City could be made better. Again, for their parents, this future focus was not as evident, and they were sometimes inclined to be more nostalgic about the past, for a city changed in their lifetime; for example, one parent saying 'most of those buildings weren't here when I was a little girl' (Parent M). However, as Andy Field had envisioned, these adults did seem to have gained a sense of relationship to Auckland that went beyond their lifetime when they expressed the realisation that what they did in the present would have a direct consequence on their child's life in the future.

Imagination is a crucial part of drama in education (Miller & Saxton, 2011), and the children acknowledged that they did use their imaginations more often than usual during the *Lookout* process. Using one's imagination seemed to be integral to the temporal focus of *Lookout* — being able to imagine solutions to Auckland's issues, as well as being able to envisage their lives in 30, 60 and then 90 years into the future. These imaginings might have also helped to build connections to place as children imagined themselves interacting with their place over the time scale, and also imagining themselves as part of the solutions to issues that they suggested.

Both Sterling (2010) and Wals and Benavot (2017) advocate that environmental education include developing feelings of empowerment. Andy's vision for *Lookout* also involved empowerment in that the child would be able to interact in an adult space. There is no doubt that this space was created during a performance and that these children did feel empowered. They reported feeling confident talking to strangers and sharing their ideas, believing that they could persuade adults that their ideas were valuable, and that the adult would leave the performance holding their viewpoint. Their parents readily agreed with these perceptions that their children's ideas were taken seriously by their adult audience, although their surprise at the capability demonstrated by the children resonates with Malone and Hartung's (2010) views. These authors propose that 'In the West . . . children are often constrained by adults in their ability to be active in shaping their lives and communities, as adults seek to act in what they perceive as the best interest of the child' (p. 26). The belief in the capability of children to make decisions about matters affecting them is framed as a right via the *United Nations Convention on the Rights of the Child* (Office of the United Nations High Commissioner for Human Rights, 1989), but despite 30 years passing, its intent is often overshadowed by adults' assessment and decision making.

In summary, it does seem that drama strategies have much to offer environmental education pedagogy. Given that the children developed a deeper understanding of Auckland's issues and more of a connection to place than the adults, it is evident that it was engaging in the process of *Lookout* that had the most impact, rather than just engaging in the performance. However, this study is a small-scale one and involved a particular type of performance-based learning in a particular context. Also, the adults interviewed were parents of the children who performed. While they did not engage with their child during their performance, this could have affected their responses. It would be interesting to explore other adult participants' perceptions of their experience with *Lookout*. Further research is also needed to explore whether similar outcomes can be had with other types of drama in education strategies and in other contexts. Additionally, these data are self-reported perceptions, not substantiated by independent observations, and the study did not explore the long-term effects on environmental awareness or behaviours by engaging in *Lookout*. Nevertheless, performance-based learning does seem to have much potential for environmental education.

It is also important to consider the elements in this process that made a difference in order for other practitioners to utilise these findings in their own practice. Three such elements seemed to have the greatest impact:

1. *Workshops* that prepared the children, which included identification of what they liked/did not like about Auckland, consideration of utopia and values associated with a city, examples of what others had done, along with opportunities to employ their imagination and creativity in envisaging solutions.
2. *Careful consideration of the future* as the children projected themselves 30 years into the future, which exemplified the present city and their relationship to it; then 60 years into the future where they considered global ecological issues and their relationship to these issues, for example climate change; and finally, 90 years into the future, which was about them and their own personal hopes, dreams, ideas and values.
3. *Creation of a space where adults listened respectfully to children*; where such conversations had an integrity to them and adults were not patronising, which led to the children feeling empowered.

Conclusion

This research focused on a confluence where different ages, perspectives, views, memories, expectations and knowledge came together while considering Auckland City, its issues and its future. As an approach to environmental education for children aged 8–10 years, *Lookout* was successful in developing their understanding of Auckland City's physical and social issues while simultaneously encouraging them to share their ideas and views in an environment where they felt valued. Increasing children's agency and developing their capability to contribute in this way was part of Andy Field's vision for this production and helped to set up a unique reciprocity between people and space. As a result, relationships seemed to change between adults, children and their city, and a new dynamic developed due to sharing and connecting their collective views of their Auckland — where adults have a longer past and children a longer future in their city.

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