

Young Children's Engagement with Environmental Sustainability

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Conducted as an Honours year project, the purpose of this research was to illustrate the potential of young children to engage with the environment and sustainability issues, and to better understand the contextual factors that influence this engagement. As the voices of the children were highly valued, a case study approach allowed the practitioner researcher to employ data collection strategies such as participant observations, group discussions and visual arts media. To further understand the contextual influences, individual interviews were also conducted with a small sample of parents and educators. It is hoped the findings will support advocacy for, and inform partnerships between, educators, children and families, in the quest for effective education for sustainability (EfS) in the early years.

Introduction

As Elliott and Davis (2009) state, “there is possibly no greater global concern impacting on the lives of young children (...) than the state of the environment and the equitable and sustainable use of its resources” (p. 66). While many are concerned about the future of our planet, it is a very difficult process to change established attitudes and behaviour patterns later in life, and there is evidence to suggest that genuine engagement in pro-environmental behaviours can only be motivated by knowledge of, and positive attitudes towards the natural environment (Elliott, 2010). Considering the well documented evidence that suggests early childhood is a critical period for developing lifelong understandings, attitudes and behaviour patterns (Arthur, Beecher, Death, Dockett & Farmer, 2009), I agree with Elliott that EfS in the early years is “essential, not optional” (p. 36). As current and future stakeholders in the state of the environment, young children clearly “are affected by environmental decision making and have a right to be involved in it” (Barratt Hacking, Barratt & Scott, 2007, p. 532).

The Research Questions

This research project aimed to explore the capacity of young children to engage with and comprehend the environment and concepts of sustainability. Furthermore, I endeavoured to ascertain attitudes towards these, and any subsequent participation in environmentally responsible behaviours. The research asked “What do children understand about the environment and sustainability issues? What are their attitudes towards these? Are they motivated to participate in environmentally responsible

behaviours? And what factors influence the children's understandings, attitudes and behaviours?" The factors investigated for their influential power were: nature-based experiences, family values and practices, and the early childhood educational context.

Methodology

When considering the myriad of methodological approaches that could be taken, I found it useful to consider my own ontological and epistemological viewpoints (Gallagher, 2009). Selecting a research topic and suitable methodological design necessitated reflection on personal experiences and values, as well as an understanding of the professional context and relevance of potential topics. As someone who grew up with strong ethical values relating to the environment, it has been a natural progression for me to develop and uphold these in my chosen profession of early childhood education (ECE). When embarking on this journey of research, there was likewise a natural progression of interest towards issues of environmental concern within the early childhood context.

The belief that "children are social agents, beings in their own right and experts on their own lives" (Gallagher, 2009, p. 70), necessitated an approach that would empower children to collaborate throughout the process of research, and express themselves through multiple avenues. Valuing the children's "interpretation of events" (Roberts-Homes, 2005, p. 40) equally with those of the researcher, the parents, and the professionals, aligns me with an interpretivist paradigm, often associated with inductive research methodologies, utilising qualitative approaches to data collection (Mac Naughton & Rolfe, 2010). As my intention was to examine the topic in detail, from a range of perspectives, a case study design was selected, with myself as practitioner researcher.

- The context and participants

Case studies are particularly suited to practitioner research, as a pre-existing relationship, familiarity and understanding of the setting and participants lessens the impact of the research on the subjects (Edwards, 2010). Thus a nested case study model (Thomas, 2011) allowed me to investigate the topic within my current workplace, working with the children in my group, their families, and relevant staff.

The setting is an ECE centre in Melbourne's inner-northern suburbs, which has a strong philosophy regarding the natural environment and sustainable practices. The study involved three participant groups. As the major aim was to understand young children's engagement with environmental sustainability, it was viewed as essential to include the voices of the children themselves. Part of the motivation to utilise this group of 30 four-five year old children was my own practitioner observations which indicated to me that young children do engage with issues of environmental sustainability, although to varied levels and with varied responses.

To gain more insight into the role of the children's familial and educational contexts, it was also necessary to obtain the perspectives of relevant parents and educators. The clientele that access the setting represent a range of demographics, however, the nine parents that responded to this study were all university educated professionals, with ages ranging from 35-50, existing in two-parent working families. Likewise, the educators employed at the setting come from varied backgrounds with

various levels of experience and qualification. The two who participated in this study were the kindergarten teacher and a diploma qualified assistant.

- Data collection

Influenced by contemporary theories that celebrate children as competent, capable, and active in their own learning, there has been a recent shift from researching children as objects, to collaborating with them on all aspects of the research process ((Roberts-Holmes, 2005). The case study provides diverse avenues for collecting and analysing data, which in turn provide multiple opportunities for all children to participate, express their knowledge and experiences, and develop a shared understanding with the researcher (Gallagher, 2009). Active participant observations, group discussions and visual arts media are well suited to the ECE context, as they are non-intrusive and commonplace for the children involved (Edwards, 2010).

Observations were used throughout all stages of this project, as I took daily written notes of the children's play, interactions, and responses to environments and occurrences, as well as any educator involvement. As the project progressed, new resources and visual arts media were provided to facilitate expression of feelings, ideas and understandings. It is my belief that due to my pre-existing relationship with the participants, the behaviours and interactions recorded in these observations were representative of their actual feelings and thoughts and usual behaviour. The children and staff are very familiar with the process of observation and being observed, and show active interest in the practice of teacher documentation.

Group discussions with the children were used as a more formal means of collecting data, and were formulated around conversations, questions, interests and dilemmas that had occurred throughout the day. These were usually introduced with a picture story book or reference book, and the children were encouraged to respond verbally or through drawing, describing their own knowledge of the content, their feelings about this, and what they already did or intended to do in response. While the children in this group are experienced in this kind of discussion, it became evident that my role as researcher was not without influence in these situations. Due to the same pre-existing relationship that made the observations so natural and authentic, these children were well aware of my own opinions about the natural world and environmental issues. Throughout the research discussions, several children were clearly influenced by their perception of 'what I wanted to hear'. It therefore became my ongoing goal to improve my techniques in acquiring responses, and encouraging the children to really think about the topics, and respond from their own feelings and understandings.

Semi-structured interviews were used to obtain data from the parent and educator participants. Interviews have the advantage of being more personal and flexible than questionnaires, and were chosen for their ability to elicit detailed and meaningful information regarding the participants' own experiences, perspectives and behaviours (Thomas, 2011).

- Data analysis

When planning the stages of data collection and analysis, it was essential to remember that case studies should be a reflective and reflexive process (Roberts-

Holmes, 2005). This involves addressing personal bias and assumptions, as well as acknowledging the impact of the researcher's presence on the subjects. In consultation with Thomas' (2011) description of constant comparative analysis, the raw data from the children were continually analysed to determine their areas of interest and knowledge, their feelings and attitudes and any relevant behaviours, as well as any changes that occurred over the period of the study. Once the data had been coded into initial categories, any emergent themes were used to create sub-categories for the next stage of coding. The typed adult interviews were similarly read and re-read constantly. As themes began to emerge in each transcript, these were coded and compared across all interviews within one participant category, and then across all forms of data from all participants.

Ethical Considerations

While ethics are an essential element of any research project, the ethics of researching with children can be particularly complicated, as attitudes towards the rights and needs of children are undergoing change. The United Nations *Convention on the Rights of the Child* (as cited in Roberts-Holmes, 2005, p. 54) asserts that children have a right to participate in matters that concern them, whilst also recognising that children are vulnerable and have a need for protection. This necessitates a shift in the balance of power, moving from research about children, to research with children. It is therefore essential for researchers to address their own attitudes towards children and their role in the research process (Roberts-Holmes). My own philosophy holds children as competent, strong and active in their own learning, thus my research project was designed with respect for their opinions and right to participate. The motivation of the topic itself stemmed from a desire to empower children and equip them with lifelong skills that will enhance their existence and that of others.

Discussion of Findings

When analysing and synthesising the data from all participant sources, four major relational themes emerged. Firstly, while the children engaged deeply with the natural environment and sustainability issues, there appeared to be inconsistent relationships between children's understandings, their attitudes, and their motivation to participate in environmentally responsible behaviours. Secondly, the link between children's engagement with environmental sustainability and their contextual influences is intricate and complex. Thirdly, these relationships are reciprocal, as children themselves are a major contributor of influence: on each other, on their educators, on their families, and potentially on the wider community. And, lastly, that collaboration between educators, families and children is necessary for EfS to be effective.

Bronfenbrenner's ecological systems theory illustrates the inter-connections between each person and their context(s), and the possibility for reciprocal influence between individuals and those they come into contact with, potentially filtering through to wider exosystems (Arthur et al., 2009). Examining the findings through the lens(es) of an ecological model highlights the many factors that interplay within the child, as well as the complex relationships between external factors. There are many

points of reciprocity, and this provides a map of the intersections between knowledge, attitudes and behaviours, as well as the interconnected contextual influences of family, the natural world and educational setting, placed within the wider setting of society. These relationships are not static, nor are there clear links between cause and effect. Rather, each child's engagement with environmental sustainability is complex and influenced by unique circumstances, and there is the potential for constantly shifting input and output on all levels.

Conclusion

This paper has explored some of the planning and implementation of my research regarding young children and environmental sustainability, with a particular focus on the methodological choices and processes. Ecological systems theory provided a basis for examining the pivotal role of the child within their many contexts and the importance of collaboration between all parties. Viewing the connections in this way is useful in comprehending the vital role that ECE plays in the current and future lives of young children, and also the future of our planet (Elliott, 2010). By establishing a strong relationship with families through the common link of their children, educators can support all stakeholders to become informed and empowered.

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