Abstract

Learning in place: Pedagogical pathways for place making

This paper examines the position and role of ‘place’ in primary school curriculum. Drawing on the research literature and preliminary data the paper analyses a re-imagined environmental education program at a primary school. Innovative and collaborative processes depicting children as integral designers of a new garden place are discussed. Focus is given to the school ground as an important site for teaching and learning. The role of an ecological centre designed to teach children about sustainable building principles is highlighted. Attention is drawn to the importance of children as place makers via endeavours that encourage and support children’s fascination and affinity with outdoor places in the school ground. Tending a food garden is proposed as a significant pedagogical pathway for nurturing children’s sense of wonder and enabling familiarity and a love of the natural world.

Keywords: place, place makers, children, school ground, natural world, gardening

Introduction

There is a growing interest in the use of school grounds for pedagogical purposes (Bell, 2001b; Coffey, 2001). This paper emerges from a broader study that focuses on the pedagogies that support children’s interaction with the natural world in primary school curriculum. In the study I have asked and been guided by the research question: What pedagogies enable children to develop a sense of place in garden-based education? The question provides a useful framework from which to consider the role teachers and schools might play in initiating and guiding children’s experiences with natural environments specifically through food gardens. It also brings to light the important contributions of the concepts space and place towards pedagogy and primary curriculum. Gruenewald (2008, pg.43) contends that:

Place is essential to education because it provides researchers and practitioners with a concrete focus for cultural story, and because it expands a cultural landscape to include related systems, bioregions, and all the space-specific interaction between the human and the more-than-human world…. Places, and our relationships to them, are worthy of our attention because places are powerfully pedagogical.

By focusing on place and place-based thinking and practice, educators have an opportunity to consider how they might take an active role in engaging students with coming to know the places in which they live. Invariably this will involve a geographical departure from the classroom in order to immerse students in direct experiences with people and places so they become familiar with the relationships that occur within those places (Knapp, 2007).
Classrooms today are still perceived as the predominant ‘place’ in which teaching and learning occurs. In their research of teachers’ perceptions and self-reported practices Skamp and Bergmann (2001) revealed significant teacher uncertainty about leaving the security of their classroom. Some teachers perceived outdoor teaching as not ‘real’ teaching (Skamp & Bergmann, 2001, p.349); that planning for outdoor learning experiences was complex and required too much time. Others expressed a lack of time to venture outside due to the demands of a busy and imposed curriculum. These responses highlight the need for greater research into the ways in which primary teachers might engage with alternative learning spaces and places that lie beyond but remain complimentary to classroom pedagogy, and which include and integrate curriculum (Comber, Nixon, & Reid, 2007; Skelly & Zajicek, 1998).

The current interest in the children’s garden movement in Victorian primary schools is flourishing. Hardly a new phenomena, the movement is part of a shift towards learner-centred pedagogy that encompasses engagement with gardening environments, and which is ‘supported and fuelled by a dynamic interface that relies upon interdisciplinary theoretical effort in the social, behavioural, developmental, ecological and agricultural sciences (Miller, 2007, pg.15). Over the past 12 months the Victorian Department of Education in conjunction with state and federal governments has assisted over 100 schools to develop kitchen gardens. Many other primary schools are making their own independent initiatives to establish food gardens within their school grounds. The rationale behind this explosion is not well identified within the research literature but could well involve the current exploitation of the earth’s resources and the pollution of its living systems (Orr, 1992), our increasing disconnection from where our food comes from (Berry, 1990; Pollan, 2006), the ways in which food is becoming redefined in schools (Centre for Ecoliteracy, 1999) as well as the decline of children’s experiences in and with natural environments (Chawla, 2002; Louv, 2005). Current educational attention has also been given to the obesity epidemic and other nutrition-related health issues (Canaris, 1995; Maller & Townsend, 2005). Consequently, some important links between food gardens and nutrition have been identified (CEL, no date; King, Kavanagh, Jolley, Turrell, & Crawford, 2005).

The focus of this paper is an environmental education program that concentrates on the significance of an outdoor children’s garden, acknowledges children in landscape decisions (Roe, 2007) and which is committed to learner-centred, place-making pedagogy. The real name of the school within this study has been replaced with the pseudonym Pumpkin primary school.

**Pumpkin Primary School**

Pumpkin primary school is located in the Yarra Ranges northeast of Melbourne in Victoria. The locale is renowned for its towering mountain ash forests and fruit and berry producing landscapes. Pumpkin Primary school is situated on a broad spur
flanked by two forested gullies on a generous but contained acreage. It has an enrolled student population of approximately 337 in 2008. For the past decade, diverse aspects of environmental education have been taught both formally and informally by the environmental education teacher at the school. In 2005 the teacher initiated an environmental project that involved the school’s re-conceptualisation of a mostly unused and out of bounds grassed area at the lower end of the school ground. Since that time, children’s engagement in the project has occurred through a consultative and collaborative process including mapping, measurement and modelling activities that have enabled them to (re) imagine how they may experience the new space. At the completion of this process (almost 2 years later), the teacher collated the emerging designs in order to determine the final design. The strikingly colourful and handsome outline is now finalised and takes pride of place in the school’s newly constructed ecological classroom, affectionately known as the ‘eco-centre’.

The environmental education program, referred to by the children as ‘enviro’ is integrated across all grades and permeates all subject areas. Classroom teachers in the middle and upper grades attend the weekly environmental sessions and work collaboratively with the environmental education teacher. For these grades, lessons focus on the interpretation of the final design and involve establishing new garden beds, planting vegetables and fruit trees, mulching, trellis and path building, composting, art work installations and food harvesting. Grade 6 students are presently designing an interpretive nature trail that will eventually be installed throughout the school grounds; each group of 2-3 students are responsible for their particular station. The lower grades are currently designing personal fairy gardens in the forest beyond the garden. Both projects involve similar principles to those incorporated in the initial design: children spend significant time planning, talking, mapping and collaborating before any finalised plans are put into place.

At the time of writing this paper, the school’s new eco-centre, which is integral to the overall program and prominently located within the garden setting, is nearing completion. Based on sustainable building principles the room faces north and radiates with natural light. Brightly painted chairs and tables, sofas, and rugs have become the favourite places on which children peruse the enviable collection of gardening books, magazines and picture storybooks. Giant paper mache flowers hang from the walls alongside children’s artwork and gardening posters. The room is welcoming and homely. Classes usually commence their weekly environmental session with an initial theoretical orientation and discussion. Invariably the students then move outside to the garden area for practical application and interpretation.

LITERATURE REVIEW

School grounds as learning environments

In the 21st century the classroom is still perceived as the predominant context in which education occurs. Current research however, points towards school initiatives that increasingly consider school grounds as a valuable resource and a site for teaching and learning, both formally and informally (Adam, 1990; Raffan, 2000). Janet Dyment (2005a, 2005b) and Anne Bell (2000a, 2001b) have conducted extensive
research on the use of naturalized school ground spaces and maintain that children’s experiences from their interactions in these sites help to stimulate educational and play opportunities and cultivate important child-environment relationships. Similarly, Karen Malone and Paul Tranter (2003; 2003) studied children’s perceptions of the role of the school ground as a site for learning and contend that the most stimulating school grounds were those that provided access for children to the natural environment. They found that children spending time in outdoor classrooms is currently recognised as informal curriculum and still undervalued, and is identified as ‘filling in time’ or as a ‘break’ from formal learning (2003, pp.289). Malone (2004) stresses the importance of establishing spaces for children that nurture their connection with and appreciation of nature and draws on the influential research of Wendy Titman (1994) involving children and school ground design. In highlighting what children have shared about how they would like to interact with the natural world, Titman claims that children want:

- Natural landscape with trees, flowers and other things that grow
- Animals, ponds and other living things
- Natural colour, diversity and change
- Surfaces they can use but don’t hurt and
- Places and features to sit in, on, under, lean against, where there is shelter and shade (Titman, cited in Malone, 2004, pg. 63)

The increase of ‘greener’ school grounds, particularly through the establishment of a food garden reflects the number of educators advocating the need for intimacy and interaction with natural communities (Alexander, Wales North, & Hendren, 1995; Bundschu-Mooney, 2003). Food gardens, also known as outdoor classrooms (Lucas, 1995), living classrooms (Nuttall, 1996) and edible schoolyards (Centre for Ecoliteracy, 1999) are becoming a well accepted and highly sought addition to the school landscape and curriculum. The benefits of gardening are well recognised within the research literature and include improved social interactions (Rivkin, 2000), increased environmental attitudes (Skelly & Zajicek, 1998), developed emotional and aesthetic attachments to the natural world (Capra, 1999), increased earth caring values (Pivnick, 2001) and the enhancement of academic performance (Alexander et al., 1995).

Three studies specific to children and gardening and which are of great significance to this study have been identified within the research literature. The first of these is Michael Murphy’s (2003a, 2003b) investigation into students’ ecological knowledge and their sense of place after being involved in a garden-based program for two years. He observed that schools who adopt a food systems-based approach will see significant increases in student ecological knowledge and concern, as well as improved academic achievement, behaviour and nutritional health. Laurie Thorp and Christine Townsend (2001) identified the impact of garden-based curriculum via an investigation into children’s relationship to land and food and what it might offer teachers struggling to engage students in the learning process. Two significant insights emerge from their research. The first acknowledges that the gardening activities changed the status of food as a commodity for consumption to a portal for communal goodness which the children took great pride in growing and sharing both at school and home. Secondly, children gained first hand experiences about how to
grow food. They came to understand the seasonality of different foods and plants as well as the benefits of creating and maintaining healthy soil, and engaged in all aspects of gardening that included the preparation of beds, the planting of seeds and seedlings, making compost, weeding and tilling.

An ethnographical investigation into the connections with nature via gardening found that gardeners form critical connections with their environment from which they can draw a deeper appreciation of nature (Salsedo, 2007). Salsedo developed five themes that fostered the connections to nature through gardening. These include: childhood experiences; management, interacting with plants and control; understanding the greater complexity of nature, gaining humility and wisdom; grounding, achieving inner peace and well-being and; legacy.

Historically and anecdotally, the children-garden partnership is relatively well established. Less evident however, is research that examines pedagogies that support children’s understanding of the natural world via growing food and their attachment to the place of garden. Given the scarcity of existing research these three studies are significant contributions to a burgeoning field and draw attention to the importance of the place of garden as a portal for enabling children to become familiar with the living systems within and beyond the soil (Capra, 2005). Acknowledging the significance of place, particularly a garden place has a critical role to play within curriculum and is discussed in the next section.

**Place, place-making and place-based education**

Aldo Leopold (1968) in his classic essay on the conservation ethic drew attention to the educational system and its inability to develop and nurture a consciousness of land, emphasising the limited understanding of our attachment to place. Leopold’s pioneering insights have been responsible for generating an increased interest in the phenomena of how it is we come to cultivate and maintain relationships with the natural world. David Orr (1992, 2005) calls for greater recognition of the role of place in education. He maintains that place has become nebulous and overlooked in primary education and laments how schools continue to maintain students and their relationship with their place as marginal, uninteresting and unimportant. Nel Noddings (2006) likewise, points to the centrality of building, dwelling and cultivating to human life arguing how ‘the spaces in which we live shape us and are, in turn shaped by us’ (p.68). She too contends that schools have given little attention to the homes and places in which we live.

Smith and Williams (1999) draw attention to the past decade when many educators have argued for the development of curriculum to be concerned with grounding learning in a sense of place through the study of local knowledge and the investigation of surrounding natural and human communities. Likewise, Sanger (1997) maintains that the use of place in educational contexts provides students with knowledge and understanding of a particular place, emphasising that the land and students’ personal knowledge and experiences outside the classroom all have value.
Capra (1999) contends that place, be it a school yard, a vegetable garden, a wetland or frog pond, holds the promise of becoming the educational instrument that orchestrates the fostering of experience and understanding of the natural world in primary education. Gruenewald and Smith (2008) suggest that in coming to know a place students are invited to inhabit their local environment and engage with and observe the nuances of that specific locale. Gruenewald (2003) describes this process as ‘place-making’, whereby children are enabled to shape what places will become. The idea of place making is taken up in a pedagogical approach known as place-based education, which is concerned with and oriented towards the concept of ‘place’.

An educational process grounded in place and which makes deliberate attempts to engage children with the local, cultural, environmental and broader context of place is known as place-based education (Orr, 2005; Sobel, 2004). Woodhouse and Knapp (2000) refer to place-based education as community-oriented schooling, ecological education and bioregional education, and propose that the proliferation of these phrases are a response to the increased alienation from nature and human nature. David Sobel (2004) emphasises that the basic premise of place-based education is that students come to learn about a particular place, about themselves and about the world in which they live. In Re-Viewing "Place" as Focus of Pedagogy (2001), Jan Woodhouse fleshes out the promises of place-based education highlighting its attempt to position the individual in relationship with the human and non-human elements of the life-world at a place that is welcoming of educational experience, and a knowledge base from which to construct a more ecologically sustainable culture.

In place-based education teachers and students function more as collaborative team members. The entire focus shifts from question-answer dialogue to a more collegial relationship when the teacher and the student are both able to stand together examining the world in wonder (Krapfel, 1999). Gruenewald and Smith (2008, p.13) maintain that in place based education there is an expectation that learners become ‘creators of knowledge as well as consumers of knowledge, and their questions and concerns play central roles in this process’.

Research Methods: Data collection

Data analysed in this paper is part of a broader qualitative study, a work in progress that is investigating the pedagogical practices that support children’s interaction with food gardens in primary school grounds. The study involves three primary schools: one in Tasmania, and two in Victoria. School selection was based on each school’s commitment towards the cultivation of teaching and learning experiences through growing food and necessitated the schools’ environmental and/or gardening program be suitably developed to warrant it significant, if not central, to the overall school curriculum.

Data collection at Pumpkin primary school commenced in 2007 and is continuing into the 2008 school year. Information sources have been derived from several visits to the school during the data-collecting phase of the study period. One key component of the data collection has involved recorded conversation-like, semi-structured individual interviews. These were approximately 60-70 minutes in duration and involved the
environmental education teacher, the school principal and the art teacher, all of whom have had a significant role in the planning and implementation of the environmental program. In addition, 25 children from grades 3-6 have been individually interviewed for approximately 10-15 minutes.

**Analysis of data from Pumpkin Primary School**

The body of data I am reporting on is a conversational style semi-structure interview recorded and transcribed verbatim with the environmental education teacher. I also draw on children’s writing samples and personal reflective field notes that were recorded after each of my visits to the school. In the interview with the teacher I was interested in exploring issues about pedagogy, program development and design process. The process of analysing the interview involved an inductive approach that facilitated what Margaret Somerville describes as the emergence of new knowledge (Somerville, 2003). In other words, this process recognized the emerging knowledge that was unknown to me prior to the interview. Reading the interview transcript I actively engaged with the data by briefly summarising (naming what the transcript was saying) each of the paragraphs as I went. At the completion of this process I developed a separate transcript summary that highlighted distinguishable topics. The summary looked like this:

1/1 progress of eco-centre  
1/2 parental contribution to environmental education program  
1/3 staff involvement in program  
1/4 school culture and environmental education

These topic summaries provided distinctive insights into the school’s environmental program and the school community’s approach to the new garden. From the summary a group of overarching categories or storylines (Somerville, 2003) began to emerge and I was able to develop main headings in which they could be located: SCHOOL CULTURE, SIGNIFICANCE OF PLACE, PEDAGOGY and GARDENING KNOWLEDGE. These categories provided a structure in which the corresponding topics mentioned above could be located and examined.

In the following section of the paper I analyse some of the ideas within these emerging themes.

**SCHOOL CULTURE**

**Environmental education**

Over the past decade Pumpkin primary school has actively acknowledged the value of environmental education. In more recent times, particularly with the implementation of the gardening project and the newly established ecological classroom the realm of environmental education has found itself a new direction. What was once a relatively informal approach to environmental education has now become more formalised, structured and embedded into the school culture and curriculum. So much so that the
significance of environmental education is explicitly identified by the school staff as central to the identity of the school. It currently underpins the school’s strategic plan:

There’s a general interest level though at the school that is a driving force behind this and it’s how we know we can keep going because it is part of the culture. It’s always been part of the culture in that there’s been a focus on environmental education, the kids have always been taught outside, it’s very much part of the school way. This is what we’re on about…these are our values. We want people to know this is our core business and how it relates to us as developing human beings (Environmental education teacher, 2008).

Philosophy

As part of its curriculum Pumpkin primary school of offers a philosophy subject. Although taught separately to all other subjects, it would appear that engagement in this subject has had a significant influence on how the children work within the environmental education program. Engaging in discussions that might emerge from a picture storybook or a broader incident or issue, children are invited to question some of the actions or behaviour the story brings to light. The emphasis is on a deliberate inquiry process that encourages children to engage in thinking and conversation about their own and others values and opinions. The process does not focus on finding solutions but provides children with an opportunity to talk and to be heard. An adult who assists in guiding the conversation but who keeps each child’s contributions to a minimum always facilitates these discussions. The environmental education teacher acknowledges the significance of the processes inherent within the philosophy subject:

One of the programs we have running here and have had running for a long time and it’s very successful, is our philosophy program. So the kids from prep are used to sitting in a circle and having questions posed and having turns of listening to everyone’s views and changing their views if they think that’s actually a good explanation. It develops a greater respect for differing opinions and views and the ways people think. When you’re outside doing things all in different ways, you’re less likely to hear someone say ‘not like that you idiot’ (Environmental education teacher, 2008).

My field notes indicated similar respectful processes that children were familiar with, highlighting the spirit of the shared conversations students were conducting as part of the design process for the interpretive nature trails they were developing. Working in the eco-centre before venturing outside to explore their sites I noted that:

Each group shared with the class their ideas and aspirations for the trail: each student within each group spoke. I was amazed at their ability to deliver their ideas and to the extent their peers asked questions and genuinely listened to what they had to say. When I mentioned this to environmental education teacher later she commented on the impact of the philosophy classes and how they prepared the children for listening to others, to speak and to be prepared
to change their ideas based on the discussions that were taking place (Author, 2008).

There is an implicit expectation within the classes that children will initiate and make public their perspectives, and that the audience will engage with the ideas that are being put forward. The children come to understand what it means to not only work collaboratively but to take on a well-developed respect for the ideas of their colleagues and to generate new knowledge along the way.

SIGNIFICANCE OF PLACE

Children as place-makers

The design process at Pumpkin primary school involved rigorous consultation that encouraged the students to envisage the potential of the new garden place: their aspirations for the new garden would underpin the final design. Some of the children’s responses included the need to hold a chicken, to grow food, to pick a tomato and to have a frog pond. As with the children in Wendy Titman’s research (Titman, 1994) these children are confident in identifying the spaces in which they want to learn as well as imagining possible experiences that appeal to their learning. Now that the garden is well established and the children have become regular visitors to the garden, they are often encouraged to reflect on their gardening experiences. Their reflections reveal newfound knowledge, personal feelings and environmental stewardship (Pivnick, 2001; Skelly & Zajicek, 1998) evoked by their experiences in the garden place:

I feel safe in the garden now
I help my dad weed the garden
It’s changed the way I plant
I know how to weave sticks
I learnt not to compact the ground

(Artectfacts: children’s work, 2008)

For many primary school children the end of the school day heralds a hasty departure from the school gate. During my regular visits to the school it was common to observe children hanging around after school, heading towards the garden, often with their parents in tow for an impromptu garden tour. The garden is emerging as a unique and special place within the playground: children continue to be intrigued by its transformation and have come to understand that they have had a significant role in contributing to its current state. Their physical work has played a substantial part in creating the garden produce, its colour, and its beauty and it is not surprising they want to share their passion for the garden with their respective families. They show a well developed connection to the garden place and identify themselves as important to its on-going development (Malone, 2004). These connections are confirmed by the teacher’s observations:

It’s extremely satisfying to see something that you’ve had a hand in. Now they haven’t all planted the corn, they haven’t all planted the tomatoes but they’ve all
been part of the whole process and it’s such a collaborative one. There’s overlapping of everything. No longer anyone knows that they were the ones that did this, because one a half hours is never enough to do anything really, so they may have started it and then the next grade comes in and continues, and I think it’s very important that collaboration (Environmental education teacher, 2008).

The garden place is well celebrated within the school community; a salutation of collective creativity and place making. Although the approaches to the garden project are collaborative in nature, select children are often recognised for their outstanding efforts during the gardening sessions. As a reward they are often invited to choose a freshly picked item from the garden in acknowledgment of their contributions in class. According to the teacher similar celebrations have been known to take place more publicly:

There was a boy in the school holidays that just excelled himself in his cricket team and he was voted captain, and he took his team to grand final… he took eight catches… he was just amazing and he’s a pretty low achiever generally, so we had a thing about him at the school assembly, and I said I’ve got a special award prize for you. And I had corncobbs and tomatoes, and the cheer went up, and everyone went yeah (Environmental education teacher, 2008).

These comments reflect the teacher’s observations about children who may not find success in the general classroom environment, but who, in the garden context are able to find themselves in a position where they stand out and become leaders. The teacher is mindful of what the garden site represents for those students who may be experiencing difficulties in the classroom:

And they say self-esteem grows on the end of a shovel and I really see that because those kids with low self-estees are often the kids who aren’t achieving in the classroom and so when they come down here they’re the ones that are putting their hands up first to be the initiators and the team leaders. They’ve got that head start on their peers because they are actually knowledgeable with outdoor work, they know what tools are, they know how to use them and it just turns it around for part of a day for them to be the one that people are looking to (Environmental education teacher, 2008).

**Gardening knowledge**

An important aspect of gardening is the acquisition of intimate knowledge and familiarity of the local landscape in which the garden exists (Salsedo, 2007). This includes noting and working with the seasonal changes, the influences of the weather and the surrounding terrain, the condition of the soil as well as developing an appreciation of the unpredictability that comes with gardening (Capra, 1997). Children at Pumpkin primary school develop specific gardening knowledge through an enquiry-based approach where they are encouraged to question particular events or dilemmas that emerge within the garden, as opposed to having a scenario determined and described for them by an adult.
There’s evidence of ducks, we see them out here, and there’s evidence of rabbits. So we decided we’d be scientific and we planted up two beds full of parsley, two kinds of parsley and we left it there like bait. For three weeks the ducks didn’t touch it. So we went, well obviously there’s enough for the ducks elsewhere, they’re not a problem, they’re not going to bother our garden. So we decided OK we’ve got to be very careful about our young plants, so we put some chicken wire around our seedlings, our leafy greens as we planted them (Environmental education teacher, 2008).

Children come to learn that gardening involves developing respect for the other living creatures that live in the garden space and what it might take to co-exist with them (Pivnick, 2001). Additionally, gardening lessons expose children to the pragmatics of how to garden and work with systems that support the vigour of plants and soil (Bundschu-Mooney, 2003). The environmental education teacher explains:

*This time I want to teach them the leaves, the fruits, the roots, the fallow kind of pattern so then we can be ready for each bed, say well we’ve had a leafy vegetable in there this time so what do we have next, we need something that has a fruiting body, then we’ll have something like a root vegetable and then we’ll leave it for a season. So getting into that crop rotation and incorporating companion planting in there too. It’s staggered in terms of that’s where it’s a sequential program because they’re learning one practice and then overlaying it with more knowledge* (Environmental education teacher, 2008).

The teacher understands the importance of exposing the children to the science of gardening and the need for implementing gardening practices that encourage healthy crops and yields. These are profound messages that contribute to the acquisition of deep gardening knowledge about what it takes to produce food (Nuttall, 1996).

**Children’s language**

The students at the school spend significant lesson time observing life in the garden and the accompanying wetlands. In these places children examine the comings and goings of the natural world (Sanger, 1997), particularly the flora and fauna that exists within the school ground. Regular visits enable them to become familiar with other non-human living residents and visitors. Students are encouraged to use the scientific language that best describes the biological processes they observe. Language therefore becomes an important expression of the knowledge children develop. Sometimes young children make up their own words that best explain what it is they see and other times they are encouraged to learn and use appropriate scientific terminology. According to the teacher:

*Kids like to use words that are deemed adult. They’re quite capable of using them. When I started teaching environmental education I remember having a student teacher come in one lesson and we were acting out some of the aquatic invertebrates … this is a back swimmer and metamorphosis is what happens when the mud eye turns into the dragon fly… using those words and saying let’s break it up – met-a-morph-o-sis and turning it into a song. And she said at the end I*
couldn’t believe they were using all those words (Environmental education teacher, 2008).

Here we see the teacher encouraging students to be confident in adopting language that best describes and supports their learning. Children come to understand that within specific sites such as a wetland or a garden, explicit cycles of nature are occurring (Capra, 1997).

GARDEN AS A SITE FOR TEACHING AND LEARNING

The purpose built eco-centre at the school has a central role to play in the overall delivery of the environmental program and is recognised by the school community as a place in which children might take up learning experiences differently. In examining the dwelling places of children, Noddings (1996) asks: ‘what does a house, apartment, or room say about the person who lives there? What are the person’s interests? How are they represented? Is the space an authentic extension of a real person or that of a human impersonator – a mere copy of something considered fashionable’ (p.69)? Similar questions could be asked of the Pumpkin primary school community such as: What does the eco-centre say about the environmental education teacher and the children? By all accounts the design and furnishings in the eco-centre reflect a broader, creative interpretation of how a classroom environment might look and feel. The atmosphere is authentic, warm and representative of a highly stimulating learning environment. The room has, as one parent described to me, ‘the same ambience as the teacher’s own home’ (Green, 2007-08).

The building itself is going to be absolutely vital for the program because it provides a facility where kids can actually have some formal instruction on sustainable living which is essentially what we’re teaching in here. But it’s also as a model to demonstrate building principles that can be incorporated into design, using renewable energies, looking at the materials that you use to clad or build with, so they create conversations about those sorts of things.

The composition of this classroom produces its own authentic knowledge and experiences. The teacher uses the design of the room to educate the children about sustainable building practices and how this particular building encompasses those principles. The room is acknowledged as integral to the garden and not viewed as a separate classroom removed from the other learning that may occur in and around the garden.

PEDAGOGY

At Pumpkin primary school children come to understand that their environmental learning will take place in the school ground, the eco-centre as well as their everyday classroom, and that these experiences will invariably overlap via an integrated curriculum (Lewicki, 1998). They recognize the garden place and the eco-centre as places in which their experiences are highly valued. They are engaged in the processes that occur in these places and that encourage them to generate thinking,
ideas, discussions and questions about their learning. These processes do not happen by accident but are orchestrated and guided by the environmental education teacher’s pedagogy that is creative, inclusive, and respectful. Children are consistently encouraged to think, talk and reflect about the ideas that emerge from their experiences in the garden place. The construction of the new eco-centre signifies something special for the school community but especially so for the children. The teacher’s view of the potential of the eco-centre is evident:

“This building…I wanted it to be a bit like a house. Because at home we are very comfortable and school seems such an alien kind of place to be in sometimes for a whole day. And yet I’ve always felt that why can’t your classroom look like your lounge room? Why does it have to look so regimented? .... And this inside I want to be relaxed and interesting and I want them to feel creative and inspired and connected and there will be times when we will have the whole lesson in here if it’s bad weather, and I want them to sit on the couch and read and I want them to sit at a microscope and explore things (Environmental education teacher, 2008).

The teacher’s pedagogical aspirations are unmistakable. She identifies that in order for children to engage in learning that is meaningful and stimulating, the classroom or outdoor environment needs to physically inspire the children’s learning. The children come to see this room and its garden surrounds as a place to experience learning that is fun and interesting, and certainly very different but complimentary to their everyday classrooms where most of their learning occurs.

Discussion

The environmental education project at Pumpkin primary school brings to light some of the emerging possibilities around teaching children in a school ground setting. The cultivation of important child-environment relationships that Malone and Tranter (2003) refer to are evident within this program and have a significant bearing on how the children develop an affinity with the garden place. The project signals an innovative approach to teaching and learning that Gruenewald (2003) describes as a pedagogy of place: a pedagogy that draws on a particular place to educate children in coming to know this place and become attached to it. Pedagogically the notion of ‘place’ underpins the school’s environmental education program. The environmental education teachers’ practices are aligned with those place-based education approaches described by Sobel (2004) and Woodhouse (2001), both of whom highlight the grounding of teaching and learning in place as a way of assisting children to build environmental knowledge about specific locales. The school takes up the phenomena of place and builds within the curriculum an appreciation of the natural locale and its associated ecosystems that Capra (1999) describes as important for school curriculum.

The environmental education teacher has engaged in some vital thinking about what the (new) place might do, what it might provide and what it might represent for children. She recognises the potential of the new garden site and seeks collaboration with the school community to consider how this place could become integral to the broader school curriculum. In asking children to engage in rethinking how this new
space might work, she responds to Orr’s (2005) challenge to grapple with how we might inhabit and know place differently. Her pedagogical practice encompasses a ‘localising’ of the curriculum which Smith and Williams (1999) refer to as necessary for allowing children to come to know about where they live. The approach enables children to respond to their learning in ways that welcome individuality and collaboration, and is far removed from the ‘one size fits all’ curriculum that pervades many primary classrooms.

The children at the school engage in experiential type learning where they are encouraged to reflect on their garden experiences in order to make sense of what they are learning. These experiences which are deliberately put in place by the teacher, embraced as the portal through which children come to know their school ground place are aligned with the ideas within the place-based research literature. In a sense, the children have become place-makers and through a consultative process that seeks their input, are enabled to shape what this particular garden place will become (Gruenewald, 2008). Their knowledge is expanded as they go about interpreting and developing their design ideas in order to place-make. In what can best be described as a state of reciprocity, their garden-based experiences become the curriculum and the curriculum is responsive to their embodied experiences.

Titman’s research (1994) with children and school ground design and the environmental education teacher’s storyline share some important commonalities. Each has pursued conversations with children to gauge their perceptions of what it means to spend time in natural outdoor spaces. Children express significant and similar aspirations about their experiences in the world of nature that involve interactions with animals and ponds and being in places where things grow. They articulate their inherent desires to connect with the things that exist outside in the natural world. Supporting and nurturing that sense of wonder requires adults to not only guide and share the excitement, but to pave the way by instigating opportunities that enable children to experience the mysteries that occur beyond the classroom at a place that is close to home, or in this instance, school (Sobel, 2004). Underpinning the environmental education teacher’s pedagogy is an important commitment to directing students towards connecting to, and developing a love of the natural world (Pivnick, 2001; Salsedo, 2007).

Although the environmental program utilises the entire school ground, the children’s engagement occurs predominantly through the food garden and its forested surrounds. The food garden has become the significant pathway from which children connect to the world of plants, animals and soil. This place is welcoming of educational experiences that Woodhouse (2001) has described and which highlight the local and the global interface. At a time when food shortages and food costs are increasing, and in light of the many contaminated foods that are produced with unknown chemicals and unknown health risks, growing organic food (food that is grown without chemicals) can be perceived as a personal, healthy and practical response that sustains humans as well as supporting the health of ecological systems (Berry, 1981, 1995). The educational messages in the program encourage children to establish a knowledge base about where food comes from and what it takes to grow it (Pollan, 2006). Gardening conveys to children that where they live (or go to school) is a special place
and that growing food is a viable way of understanding themselves as part of that place.

The gardening initiative at Pumpkin primary school emphasises the pedagogical possibilities that exist within primary schools. The pedagogical approaches within the environmental program, as well as the establishment of the garden and the sustainable ecological classroom all serve as exemplars for how other teachers and schools might go about creating experiences that enable children to come to know and care for the natural world that resides within their school ground.

**Conclusion**

This paper highlights an innovative environmental program at a primary school in the Yarra Ranges, which focuses on collaborative student-teacher processes that have assisted in the transformation of an unused area of the school ground into an extensive garden space. In engaging children in conversations about what a new garden area might look and feel like, children were able to reflect on and identity personal learning aspirations through imagining a new outdoor learning space. Invariably these experiences have involved growing food, looking after animals and caring for plants. The establishment of the new garden has prompted the school staff to re-think the ways in which many of its subjects, particularly environmental education might be taught and learnt.

The establishment of children’s food gardens in educational settings is an expanding field. This study confirms the contributions garden-based learning can make to curriculum and pedagogy, and highlights its potential to connect children to the natural world via positive learning experiences. The significance of place, place-making and place-based education has been identified as central to the development and implementation of teaching and learning in primary schools. Garden-based learning is an approach that incorporates some of these themes and provides a framework for how primary schools might re-think curriculum.

Garden-based learning should not be viewed as an adjunct to the primary curriculum but rather as an interdisciplinary portal through which places and subjects can be explored and woven together. The pedagogical approaches in garden and place-based education have a critical role to play in developing within children a love and familiarity for the places in which they live and go to school. Guiding children towards learning from local surroundings is fundamental in coming to know place and warrants considered planning and implementation on behalf of the teacher.

In this light, the paper has defined the emerging themes within the research literature that play a critical part in cultivating the pedagogical possibilities that are supportive of ‘place’ in primary schools. The processes within this case study extend pedagogical inspiration for other schools and primary teachers concerned with grounding learning in a sense of place.
References


