

Chapter 11

Young children, environmental education and the future

Julie Davis

Introduction

*The world is not left to us by our parents,
It is lent to us by our children.*

(African proverb)

The final years of the twentieth century are a period of increasing uncertainty, instability and rapid change. In Australia, the United States, Europe, Asia, indeed in western-style economies generally, nations are striving for higher living **standards** for their populations through economic growth, 'market efficiencies' **and** competitiveness in local, regional and global markets. At the same time, there is mounting concern with regard *to* the consequences of economic development that continues to ignore or marginalise natural systems and fragments social systems.

As economists, bankers, businesses and governments pursue economic policies and goals that presume there are *no limits to growth*, others believe that both regionally and globally the human species is living beyond its means. Tony McMichael (1993), an Australian epidemiologist of international repute, writes that global environmental change is eroding the very life-support systems of the Earth and that this is a threat of major consequence to the world's living species, including humankind. Lester Brown (1992) of the Worldwatch Institute, states that there are serious doubts as to the planet's 'capacity to sustain future improvements in the human condition'. David Suzuki, renowned biologist and environmentalist from Canada, commented in 1990, 'that the only way we can get off our destructive path is to develop a radically different perspective on our place in nature'.

There can be no doubt that for some, the future offers wonderful opportunities for excitement, choice and increasing comfort. However today's children, even the wealthy ones, are already in a world where environmental damage, social injustice and appalling ill-health are major features of the global landscape and where future options for healthy, just and sustainable lives are already being foreclosed through current actions and lifestyles. Ultimately, it is children, with the biggest stake in the future, who will bear the consequences of economic, social and environmental decisions and actions that are currently being made or avoided.

One of the greatest tasks for society then is to **equip** children with the attitudes, values, knowledge and skills necessary to rethink and change current patterns of action and to secure healthy, just and sustainable futures for all (Davis and Cooke, 1996). Environmental education is vitally important for this. Yet, for children in the early childhood years, with the biggest stake in the future, there has been a major absence from curriculum theory, policy and practice of approaches that stress environmental perspectives,

This paper raises some questions about the future for young children. It explores the links between early childhood education and environmental education and proposes some ways to strengthen these. There are challenges raised for early childhood teacher education and for the early childhood field generally. It is my primary contention that, while it is the young who will most suffer the consequences of ignoring social and environmental concerns, it is adults who must bear the responsibility for setting in train the changes needed to divert us from our present destructive paths. It is not good enough to 'educate the children, because the children are our future'. *We* are our children's futures. Children are already being colonised by exploitative ideas and practices towards each other and the environment. Children are already learning to be avid consumers, to value

the trivial, to be instantly gratified and entertained by their toys, computers and parents. *Now* is the time for the early childhood educators to catch up with community concerns about environmental issues and to take a leadership role in an area in which we have the potential 'to make a difference'.

A few big questions about the future

What *is* life going to be like for our children, and their children, in 50 years? Can our children expect to have healthy and vigorous lives when already we have natural systems that are unable to regenerate as we impinge on their boundaries, extract their riches and pour in pollutants?

What can our children expect, when we have reduced the capacity of the biosphere to cleanse itself, so that clean water in many parts of the world is either impossible to attain or must have massive inputs of energy and resources, to ensure its quality?

What can our children expect when, in many nations, the loss of forests and the impacts on human health of industrial development are major public health issues?

What can our children expect when violence is not only on the television screen, in the computer and video games, but also in the schools and on the streets of the towns and cities in which we live?

Will it be possible for our children to lead satisfying lives, when the world's supply of natural and human resources is being increasingly captured for the purposes of frivolous consumerism? Where children are regarded *as* 'economic units', 'bombarded with multi-million-dollar ad campaigns to make them desperate to eat this hamburger, wear those shoes, eat that ice-cream, drink that drink, buy that toy' (Adams, 1996:2). We live in a society where our wants have become our needs!

Can our children expect to have fulfilling and fruitful lives, free from hunger and violence, when even now, the world's population is growing by around 90 million people each year and there is increasing demand for wealth, and higher levels of consumption, in all our economies?

In summary, on a global scale, we already have rapid population growth with fewer resources and decreased capacity of the natural and social systems on which we depend to support this, combined with rising expectations for greater material comfort.

Our current crisis

Unless we change, we'll get where we're going.

(Anon, quoted in Birch, 1993:107)

The Rich Poor

In times of apparent wealth and opportunity at the tail end of the twentieth century, an increasing number of commentators in the so-called rich and affluent nations – like Australia, Britain and the **USA** – write about social breakdown, injustice and inequality. Phillip Adams, an Australian social critic wrote, in May **1996**, in a leading weekend newspaper, about the role of large corporations, the marketing industry and their influence on children:

Even the children of the affluent often live in intellectual and emotional poverty, leading ... fragmented lives'.

A week later (in the week of the killing of thirty-five people at Port Arthur in Tasmania), Adam Greycar (1996), a criminologist, wrote a newspaper article that focussed on social fragmentation and technologies. He commented:

Our sense of communal life has been overtaken by an inward focus and the desire for instant gratification. (This) combination of an inward focus within a competitive environment makes a lot of behaviour unpredictable.

Richard Eckersley (1996:13), an Australian who writes extensively about 'futures', in the same week put the focus on the media when he wrote:

Too often, the media distract us from the important with the trivial... They fuel our discontent by promoting a superficial, materialistic **and** self-indulgent lifestyle – one that is, what is more, beyond the reach of growing numbers of people.

These comments highlight just some of the social concerns that are becoming major issues in affluent nations. However, alarm bells are being rung by scientists, by those in the medical professions, by environmentalists and by many ordinary citizens disturbed about the multitude of environmental problems that prevail as

we head into the next millennium. In these countries where life *should* be good, our children, the ones in the preschools, childcare centres our homes *are* already inheriting the waste, degradation, ill-health, exploitation and alienation of affluence!

The Truly Poor

And what of the children, families and communities who are truly poor, the 800 million people who face persistent, everyday hunger, or that much larger number who suffer from malnutrition and seasonal or temporary hunger? In affluent countries, left-over money is always available for the little luxuries and indulgences of life – spring water from France is bottled into single-use plastic containers and shipped around the world – while 1.9 billion people drink and bathe in water contaminated with parasites and bacteria.

Our affluent lifestyles mean that we are not just overusing the resources of our own countries but increasingly those of poorer countries. Their lands are being exploited and children as young as six, are becoming resource providers for richer nations as a means of generating income. This is *globalisation* and *market competitiveness*, where farmland which was once used for producing food for the local population, is now growing animal feed, strawberries, flowers, exotic fruits and vegetables for year-round supply for the tables of Australia, Europe, Japan, the USA, forcing hungry farmers into marginal, erosion-prone areas (Godrej, 1995).

In other words, the natural and social systems on which our lives and the lives of our children and their children depend, are under threat from human activity *as we go about our daily business*. Those of us who live in relative affluence are ultimately endorsing the poisoning of the environment, the exhaustion of exhaustible resources and the creation of inequitable social relations. Our seemingly limitless desires for more, for bigger, for growth, is diminishing the finite resources of the earth, the earth's capacity for repair, our capacity for justice within and between generations. It makes us *all* responsible for the ecological, social and personal fragmentation that is now part of life on earth. So, what will life be like for our children and their children, in 50 years?

A key role for environmental education

What does this mean for those of us who live with, work with and care about the lives of the very young? What on earth can we do to deal with the major global social and environmental issues confronting us? What can we do when

relationships with each other and our relationship with the **Earth** are undergoing rapid transformation'. We can communicate via the Internet across the world, but we can't keep families talking across the dinner table; we can enjoy a television show about insects in tropical rainforests, but we don't appreciate the wildlife in our own backyards and we blast any spiders that dare to come in with a spray of toxic chemicals. We provide children with new, exciting activities – Computer Gym at 2 1/2 years, so they won't fall behind their peers – but we don't have **time** for quiet walks and quiet talks with our children.

The children we care for and engage with in our classrooms and homes need adults – teachers, parents and others – to become much more concerned with and involved in personal and community decisions about current actions and future prospects. Environmental education, with its major goals of ecological sustainability and social justice *within* and *between* generations, **is** of paramount importance. The 'environmentally educated teacher' (UNESCO-UNEP) is crucial in transforming attitudes, values and actions that lead towards sustainable social and environmental relationships.

What is environmental education?

*If you are thinking a year ahead, plant a seed.
If you are thinking a decade ahead, plant a tree.
If you are thinking a century ahead, educate **the** people.*

(Chinese poem)

In essence, environmental education involves children, teachers and communities working collectively and democratically towards the resolution of environmental questions, issues and problems. It is interdisciplinary, multi-disciplinary and super-disciplinary. It is about values, attitudes, ethics and actions. It is not a subject or an 'add-on'. Nor is it an option. It is a way of thinking and a way of practice. **It is** a positive contribution to counteract the 'doom and gloom' and helplessness that many feel about the enormity of environmental and social problems. **It is** certainly more than recycling, composting and keeping earthworms.

In Australia, environmental education involves three broad but overlapping approaches – education *in*, *about* and *for* the environment. The first provides for direct experiences with environments and seeks to develop positive feelings **and** attitudes towards nature, to foster empathy and to explore, in a practical sense, environmental conflicts and issues. Education *about* the environment encourages learners to understand how natural systems work, to appreciate their complexity

and to understand how these and human systems interact. Education *for* the environment adds a more overtly political dimension that is concerned with social critique and social action for change. It is this form of environmental education that is seen as having the potential to deliver ‘the values transformation necessary to promote sustainable and socially just lifestyle choices’ (Working Party to the Queensland Board of Teacher Registration, 1993:23).

Even though environmental education is still marginal to much of the rhetoric and practice of education, for the very young, *early* environmental education which builds strong relationships between people and between people and the earth, is particularly urgent, when we consider that children are the inheritors of what we have already set in place for them. Yet there is a major absence from early childhood curriculum theory and practice of approaches that stress environmental perspectives.

Hasn't ‘environment’ always been considered in early childhood?

We accept that children’s attitudes and values towards books and reading, towards numeracy, in social interactions, on issues such as gender and race, are formed early, and we believe there is a key mediating role for parents and teachers in helping to shape these attitudes and values. However, we ignore the importance of shaping environmental attitudes and values. Perhaps this lies with the fact that *environment* in many respects, *is* deeply embedded in early childhood practice. However, this tends to be a rather narrow definition which focuses on the child’s immediate setting, rather than the much broader view used by environmentalists and environmental educators – that is, the totality of personal, social, spiritual, natural, global, past and future dimensions. In other words, we think that we *are* giving due consideration to environmental concerns. However, an early childhood view of *environment*, is not enough to understand environmental issues, like holes *in* the ozone layer or the effects of lead when it enters a child’s blood stream, or to develop the attitudes, skills and strategies to take action to restore and create *sustainable* environments for the long term. Thinking is just as short-term and focussed on the immediate as it is in other educational sectors. Key concepts needed *to* understand environmental issues, such *as* biodiversity or ecological sustainability, are virtually unheard of by the vast majority of early childhood teachers. Thinking about the environment is just not expansive enough to embrace the broad range of ecological and social concerns that we are facing. If we truly care about the lives of young children, how can we ignore having concerns about environmental quality, not just for now, but also for their lives beyond the age of eight!

Environmental education and early childhood education

*Keep in mind always the present you are constructing.
It should be the future you want.*

(Walker, A. (1989) The Temple Of My Familiar)

Yet, in spite of there being little intersection between early childhood education and environmental education, these two fields are indeed 'natural' allies. They share similar philosophical orientations and endorse similar educational practices. Central to early childhood has been a focus on equitable, democratic and inclusive ways for people to interact – the building of trusting relationships with one another that affirm, nurture, support and focus on negotiation rather than domination. In other words, there is already a strong commitment to building quality relationships between people, a necessary tenant for sustainable social justice. There has also been an historical valuing of the outdoors for children's play and learning. Pestalozzi, Eroebel, Montessori and Dewey appreciated that children's learning and development were greatly enhanced through direct experiences with nature and natural materials and quality early childhood programmes today ensure that children continue to have these opportunities. This underpinning belief that children's contact with nature is important provides a strong basis for building sustainable relationships between people and nature. In other words a solid platform already exists within early childhood education for developing the major goals of environmental education – social justice and ecological responsibility *for the future* as well as for the present.

In a number of other ways, too, early childhood education and environmental education are in accord. Both fields embrace ideas of 'wholism' and *connected* ways of viewing the world. Both fields place integrated curriculum approaches as central, with practical and relevant experiences for learners as most appropriate. Both fields hold strong commitments to democratic practice and the facilitation of supportive environments for living and learning. Both focus on the importance of learning as being a sum of attitudes, values and skills, as well as content. Both recognise the importance of personal empowerment **and** advocacy as critical for learners, teachers and the profession.

Greater links between these two educational fields is well overdue and each field has much to offer the other. Practitioners in environmental education would be surprised to find that many early childhood settings provide working models of democratic, non-hierarchical, wholistic approaches to education and building community. Yet, there is little attention or apparent interest, few resources or

much research from environmental educators, focuses on the needs of young children and their teachers. The domination of the environmental education agenda by the issues and concerns of secondary school students and teachers and, more recently, by the tertiary sector, has ensured that early childhood environmental education remains the most marginal of the marginal!

The early childhood field would benefit, too, from greater links with environmental education, to ensure it is better honed to current community concerns about environmental issues and to deliver more on social justice. In particular, social justice needs to be redefined to consider a longer-term view of justice, so that equity *between* generations, is as important as *within* generations. To not play a role in shaping sustainable futures is to short-change our children in fifty years and to be totally oblivious to the lives of *their* children.

Playing for keeps: the challenges for early childhood

There is a clear place, then, for environmental education in the early childhood agenda. Some challenges to the field where 'the importance of environmental education for the early years has been grossly underestimated' (Peters and Wilson, 1996:51), are highlighted below.

Developing Stewardship: Rethinking outdoor play

Stressing ecologically sustainable principles for early childhood means having early childhood teachers with the understanding that we are all 'stewards of the earth' and we need to capitalise on many existing pro-environment practices and use them with greater impact. We need to heighten understanding of ecological principles. We need to teach these ideas to children and to demonstrate their meaning through practical application. We need to match action with rhetoric and not just talk about recycling and energy conservation but practice it too. Importantly, early childhood education needs teachers with environmental perspectives, who actively help children to resist a focus on consumption and possessions; who help them learn to act collaboratively to be caretakers and protectors of the earth and of each other.

We need to strengthen the well-established commitment towards outdoor play and learning. The current orientation for early childhood outdoor experiences focuses on their beneficial role in developing a range of children's abilities – their physical, social and communication skills and their conceptual development. The outdoors is also used as a source of ideas, inspiration and materials for the creative arts.

However, outdoor experiences for young children can be much more **than** this. There are significant 'environmental' lessons to be learned regarding sharing nature with other species, nurturing native plants and animals and taking responsibility for their care, including the maintenance and protection of habitat. Children can learn sustainable practices through gardening, composting, adopting water use minimisation strategies and through repairing soil erosion. They can extend these outdoor practices in conservation, by engaging in energy efficiency practices, waste recycling and waste reduction in the indoors, too. They can learn the important habits of being resource conservers rather than resource consumers! As Dighe (1993:62) says:

One can hardly imagine a generation of persons with neither interest in nor knowledge of the outdoors making responsible decisions regarding the environment.

Advocating for green spaces

The large amounts of time that some children spend in childcare, mandates early childhood professionals, parents and the community at large to ensure the highest quality interactions and environments for young children and the adults who use these services. Many children will spend more time in childcare before starting school than they will spend in classes during their entire primary and secondary schooling (National Childcare Accreditation Council, 1993). Furthermore, the opportunity for children to engage in 'natural' settings appears to be diminishing as children spend increasing amounts of time indoors at computers, videos and television *or* in organised sports and other educational and recreational activities. As parents work longer and harder, there seems to be even fewer opportunities for visits to the backyard, let alone to the local park.

Yet the decisions by planners, regulators and centre owners appear *to* operate on 'minimalist' principles in relation to educational, environmental and social considerations. In many centres, *cars* are better catered for than children! Expanding the internal space of a too small site obviously improves the odds for economic viability and profit making but the result of this reductionist thinking is that outdoor space is often grossly inadequately provided for. Opportunities for outdoor play and learning and for quality experiences with nature become greatly reduced.

Indeed, in many early childhood centres, outdoor environments are so small for the number of children using the grounds that they become severely degraded. The solution adopted is often the laying of a grass substitute, perhaps even concrete,

as the impact of the children's busy feet confined to a too small area, renders the natural surface useless for play of any sort. In some centres a living weed or insect dares not raise its head for fear of being trampled to death! If it does **try** to survive, it may well end up as a curiosity on the 'science table' or the 'interest table' – that place where living things go to die!

There is also the need to resist the application of our **own** constraints on children's experiences in outdoor settings. The fear of litigation appears to be preventing some early childhood practitioners and policy makers from **taking the risk** of letting children move outside the boundaries of their kindergartens into the relative freedom of the great outdoors. It is better, and more pro-active, for teachers and others to seek safe and precautionary ways to expand children's experiences rather than to give in to speculations about possible legal action. In the longer term, the greater risk lies in *not* allowing children the right to play with some freedom in natural settings.

As advocates for young children, early childhood professionals need to lobby for the provision of adequate 'green spaces' for children to have quality experiences with nature in all early childhood settings and in their communities. Places for exploration have already gone or are fast disappearing from many local suburbs or have become too polluted or dangerous. Parents are becoming afraid to let their children visit the local parks, creeks or bushlands for fear that children will step on discarded syringes, be cut by glass, taken by abductors or knocked down by cars. Perhaps the rise in formal, supervised activities for younger and younger age groups – football for the under fives, Kindy Gym and Computer Gym for toddlers – is connected to community fears about the safety of the suburbs. The net result, though, is further alienation from the natural world and the local neighbourhood. Children need places where they can explore and get dirty, touch living plants and care for and about the insects, earthworms, birds, fish, frogs and other forms of life. Children, their parents and members of the wider community need places where they can meet, make friends and interact. We need to advocate for safer and more inclusive communities.

(Greening Pre-service Teacher Education

While there is not yet generalised engagement in and concern for environmental perspectives in early childhood teacher education, there is no doubt that **student teachers** have an interest in environmental issues. In working with students, I have come to understand the deep levels of concern these young people have for **their** own futures as well as for the children they expect to be working with **as** graduates. There is a challenge for teacher education to examine ways to

incorporate environmental education into current teacher education programmes so that graduates feel positively about the future, have some awareness of environmental education principles and practices and some capacity to create positive change.

Teacher Networking

There is also an emerging interest in environmental education amongst practitioners and it seems that teacher networking is a useful way to build on this interest and to expand it. In Australia, there are at least two early childhood teacher networks supporting the efforts of teachers, carers and parents seeking to apply environmental perspectives into their teaching.. The *Environmental Education in Early Childhood Network* has been running in Victoria since June 1992. Indeed, this group was the inspiration for the establishment of the Queensland Early Childhood Environmental Education Network, in late 1995. Knowledge of the network in the United States, *Environmental Education for Preschoolers*, was also a motivator.

Even though expanding awareness and understanding of environmental education will not be easy, especially with the diversity of services, settings and qualifications within the early childhood sector, networking actually reinforces the non-hierarchical, democratic, collaborative ways of working that are the hallmarks of both early childhood and environmental education. In the end, this may prove to be the most effective way of building momentum for environmental education and ensuring that it is no longer left off the mainstream early childhood agenda.

Challenging old paradigms: facing the future

Obviously, there needs to be some major rethinking in the early childhood field for the acceptance and encouragement of environmental perspectives into theory and practice. For those prepared to challenge accepted frameworks of early childhood curriculum, it is imperative that this re-conceptualising also takes into account environmental and futures perspectives. In particular, what is needed is greater foresight to extend concerns beyond the present lives of children, to the quality of their lives, and their children's lives, for fifty years and longer. This is vital for a curriculum aiming to be more responsive to current issues and dilemmas as well as more appropriate to meeting future challenges.

What is needed

We need a register of quality early childhood settings that are engaged in sound environmental education and workplace change to act as exemplars of **good** practice to inspire others. We need many more resources that are developed specifically for the early childhood field. We need a research base for early childhood environmental education to support teachers as they embark on curriculum change. **As** professionals, we need to encourage **our** education institutions and professional associations to advocate for environmental education **as** a necessary part of both the pre-service and ongoing professional development of early childhood teachers. We need to work in, support and extend teacher networking in this area.

As was indicated in the introduction to this paper, it is *adults* who must first accept the responsibility for setting in train the changes that are needed for us to move to ecological and social sustainability. As parents, teachers and teacher educators we need to advocate *now* for the rights of children to have enriching contact with living things, where a love of nature is fostered and where children can truly learn to become caretakers and nurturers of the earth. We need to reinforce the values of cooperation and shared responsibility and to encourage children to become not just problem-solvers but also problem-seekers and solutions-creators. **As** members of the community, we all need to be more environmentally and socially active to ensure that our communities are safe, sustainable and worthwhile places in which to live.

The challenges are great, but with an environmental education perspective in early childhood and early childhood practices informing environmental education, I believe we can create positive change for better futures. This comes from a committed belief that:

*The future
is not some place we are going to,
but one we are creating.
The paths to it are not found
but made.
And the activity of making them
changes both the maker
and the destination.*

(Commission for the Future, Australia)

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