

essential, not optional: education for sustainability in early childhood centres

by Sue Elliott

As the impact of humans on the Earth and on its ecological systems that sustain us become more visible — in terms of climate change, resource depletion, and species extinctions — so, too, it is becoming clearer that living sustainably is essential, not optional. To live sustainably requires a mind shift for many people. Education for sustainability is about promoting such a mind shift. Bonnett (2004) describes sustainability as a “frame of mind,” a frame that impacts on every thought, decision, or action and a frame that is inclusive of social, economic, and environmental perspectives. Education for sustainability is about questioning the way we live, the impacts we create as a unique part of Earth’s systems, and about creatively thinking of ways to live more lightly on the Earth. But, can this happen in early

childhood centres? And why is it essential to begin in early childhood?

Sustainability in the early childhood sector

Davis (2009) states that internationally, over recent decades, the early childhood sector has been slower than other education sectors to engage with education for sustainability. The pace, however, is quickening and in the last few years several publications have described how early childhood centres are engaging with education for sustainability (Davis, Gibson, Pratt, Eglington & Rowntree, 2005; UNESCO, 2008a; Vaealiki & Mackey, 2008). Nevertheless, despite earlier calls — by individual authors, Wilson (1994) in the United States and Elliott and Emmett (1991) in Australia — it is only now internationally acknowledged that lifelong learning about education for sustainability begins in early childhood from birth, not at school (UNESCO, 2008a). One recommendation of the Gothenburg Recommendations (UNESCO, 2008b) is that education for

sustainability be incorporated in the early childhood sector without delay. It is essential that all early childhood practitioners contribute to this uptake and help to create a mind shift to sustainability in the early childhood sector.

Creating a mind shift to sustainability is as much about practices as process for early childhood centres. Sustainable practices such as recycling or conserving water might be instigated by an individual centre staff member or prompted by regulatory compliance, but broader uptake, leading to multiple mind shifts and ultimately to a centre culture that embraces sustainability is not assured. Drawing on the limited early childhood research to date (Davis, Gibson, Pratt, Eglington, & Rowntree, 2005; Elliott, unpublished; Elliott & Davis, 2009; UNESCO, 2008a; Vaealiki & Mackey, 2008) there are some key pointers that early childhood communities can utilise when undertaking their essential journey towards sustainability.



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Pedagogical advantage

An outcome of the recasting of environmental education as education for sustainability has been a broader pedagogical interpretation beyond acquisition of environmental knowledge, skills, and attitudes. Two significant documents that contribute to this wider interpretation include the National Environmental Education Statement for Schools in Australia (Commonwealth of Australia Department of Environment and Heritage, 2005) and the UNESCO Decade of Education for Sustainable Development (2005). Both documents provide lists of teaching strategies and educational features that indicate a pedagogical advantage in early childhood education with respect to the implementation of education for sustainability:

- The National Environmental Education Statement for Schools in Australia (Commonwealth of Australia, 2005) suggests experiential learning, values clarification, creative thinking, problem solving, story telling, and inquiry learning to be important strategies.
- The UNESCO Decade of Education for Sustainable Development (2005) cites the following key education features: interdisciplinary and holistic, values driven, critical thinking and problem solving, multi method, participatory decision-making, applicability, and locally relevant.

These lists are reassuring because so many of these pedagogical elements are fundamental to early childhood education. In other words, early childhood education has a pedagogical advantage for education for sustainability. In reflecting about pedagogy and education for sustainability, it is not so much about changing what we do, but understanding that there are additional reasons why it might be important. For example, problem solving is cited in the lists above and is a common skill promoted

with young children; it is also an essential skill for living sustainably and working towards a sustainable future. Both Vaealiki and Mackey (2008) and Davis et al. (2005) provide illustrative examples of children's eager and successful engagement in problem solving around sustainability issues. Early childhood practitioners need to view pedagogy from a wider perspective and understand that how we choose to work with children is a key part of the process in nurturing sustainable living skills and embracing sustainability at a centre level.

People not practices

In describing education for sustainability in early childhood centres, it is tempting to simply list practices that can be easily and effectively implemented such as composting, nature walks, growing vegetables, and using alternative cleaning products. Such practices are important, but, as research (Davis et al., 2005; Elliott, unpublished; Vaealiki & Mackey, 2008) indicates, it is the people — staff, children, and parents — who participate in early childhood communities and implement the practices, that are the key to broader and embedded cultural change. Change is more likely to be facilitated when:

- strong advocates for sustainability act as mentors and role models and provide inspiration for others;
- individuals work in responsive and collaborative ways such that a collective responsibility is demonstrated;
- action and leadership on sustainability issues is facilitated by any participant (child, staff, or parent) in the early childhood community;
- participants have shared values, but also respect differences.

In working together to implement sustainable practices, sustainability becomes lived rather than learnt and a shared journey for all participants in an early childhood community.

Play materials and playspaces

The implementation of sustainable practices by participants in early childhood centres can be reinforced by decisions made about play materials and types of playspaces. Essentially, play materials and playspaces are the 'nuts and bolts' of early childhood settings, and glossy catalogues of equipment or quick-fix solutions can lead practitioners toward unsustainable choices. For example, a dramatic play area could comprise specially purchased plastic pots/utensils and synthetic pretend food or cooking equipment collected from a second-hand shop and natural materials such as leaves or seed pods for pretend food. Similarly, an outdoor playspace could comprise primary colours, fixed equipment, and synthetic sensory experiences or be a natural space that offers diverse sensory experience and the potential to discover and explore nature.

The latter alternatives in both examples provide many more opportunities for living sustainably and reflecting on the social, environmental, and economic parameters of sustainability with children. A mind shift towards sustainability requires a rethink of — perhaps a return to — the 'nuts and bolts' of early childhood programs. Synergies emerge between the pedagogies that promote sustainability and the sustainably selected play materials and playspaces of early childhood centres. One reinforces the other, such that a cultural change towards sustainability becomes both embedded and readily visible to the wider community.

Community engagement

There is also potential for synergies to be created between early childhood centres and the wider local community. Shifting towards a centre culture of sustainability can be supported through connections with places such as local community gardens, wildlife shelters,

parks, forests, and farms. Vaealiki (2008) describes the partnership developed between an early childhood centre and a local community garden over two years that led to benefits for all participants, plus a specially made scarecrow for the community garden and the addition of a kindergarten plot in the community garden. Sometimes synergies arise from not so expected places in the community. Vaealiki and Mackey (2008) reported a local café owner who was inspired by a centre's worm farm to establish her own at the café. And Davis et al. (2005) reported on a centre project about the issue of abandoned supermarket trolleys that led to involvement of not only the local supermarket, but local media too. These are examples of advocacy in action, of early childhood centres making their sustainability frame of mind visible in the wider community and in turn, contributing to shifts in thinking and action in the wider community. Such advocacy serves to reinforce a centre culture of sustainability, as well as demonstrate leadership.

Children as active participants and leaders

Images of young children have changed dramatically in recent years. With inspiration from Malaguzzi and the impacts of socio-cultural theory, young children are now viewed as capable and competent learners with an active role in their own learning and the learning of others (Arthur, Beecher, Death, Dockett, & Farmer, 2008; Edwards, Gandini, & Foreman, 1998). As demonstrated by several studies (Davis et al., 2005; Palmer & Suggate, 2004; Vaealiki & Mackey, 2008), young children are capable of thinking creatively about, and engaging with, environmental issues. If early childhood practitioners are open to children's leads, act as facilitators, and create settings that invite problem solving, critical thinking, and partici-

patory decision making, then children can be part of the empowering and transformative process that is education for sustainability. As Davis (2007) states, adults can encourage children to be "problem seekers, problem solvers, and action takers in their own environments."

The implications of these contemporary images of children are not just tangible sustainable impacts in their early childhood settings and family homes, but longer-term impacts that will echo throughout children's lives. Sobel (1990) states, "If we allow people to shape their own small worlds during childhood, then they will grow up knowing and feeling they can participate in shaping the big world tomorrow" (p. 12) — a big world of tomorrow that is sustainable because of the important actions of early childhood practitioners today.

A transformative journey

Education for sustainability is described as education with a transformative agenda (UNESCO, 2005), an agenda that promotes change. It is not about change per se, but change that challenges thinking and actions, empowers both individuals and communities, and must be a lived journey. Research by both Davis et al. (2005) and Elliott (unpublished) documents early childhood communities as they rise to the challenge of a transformative journey that involves asking questions, researching issues, sharing ideas, and implementing sustainable practices. As a research participant in this author's current (2009) study responded:

"It is only since you came and started talking about wanting to interview the staff that several staff came to me and said, 'Betty, I don't know what sustainable means.' I said, 'Oh okay' and then I realised at what level we

were at, and this is so embarrassing. I think I sort of knew a little bit, but 50% of the staff here wouldn't know what [sustainability] really means and then, I thought 'How is that reflecting in our teaching and what we are doing?' It's a bit of a learning curve for me!"

The rewards of a shared transformative journey are multiple: providing a sense of empowerment, tangible achievements, and contributions towards sustainability. Davis (2005) also notes that each journey is "unique, belongs to the participants, and they are responsible both individually and collectively for what happens" (p. 53). No two transformative journeys will be the same, as each early childhood community is different, but the key message here is that the journey must begin without delay.

Conclusion

Early childhood educators have a professional responsibility to ensure that young children are active participants in a centre culture of sustainability, and that through their participation, they are able to construct a 'sustainability frame of mind.' The current international leadership demonstrated by UNESCO (2008b) in the area of early childhood education for sustainability is to be applauded. However, all early childhood communities around the world must respond positively to this call for leadership and action. Embracing education for sustainability is essential not optional.

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