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Mud pies and daisy chains: Connecting young children and nature by Sue Elliott and Julie Davis

Can you remember?

Can you remember making mud pies and daisy chains, rolling down grassy hills, drawing with sticks in the dirt, creating fairy perfumes from flowers and building bush cubbies?

These are some of the experiences we had as children that connected us with the natural environment. While they may not be part of our conscious thought as adults they are significant nonetheless in shaping who we are and our values about the natural environment. Chawla (1990 p18) poetically describes these experiences as "radioactive jewels buried within us, emitting energy across the years of our life". Sebba (1991 p395) suggests that the natural landscapes of childhood become the inner landscapes of adulthood. What we explored as children in the natural environment is carried within us throughout life.

If experiences with the natural environment are of such great import in our lives, we must question where these experiences are in the lives of children today. Every Australian early childhood educator has observed the increasing busyness of children's lives and an orientation away from nature towards the latest toy, electronic gadget or tantalising entertainment. According to Brown (2004) such technologisation is not merely an orientation, but an addiction pervading all levels of communities. Children are most vulnerable to this addiction, but at the same time have an undeniable affinity with nature. If, as Thomas and Thompson (2004 p4) claim, "children's ability to experience the natural environment is under threat" and "children's access to outdoor play has evaporated like water in sunshine" (Rivkin 1995 p2) what does the future hold?

In light of these statements can we still just smile when children naively say "milk comes from milk bars" and "peas come from the supermarket freezer"? A smile is no longer an appropriate response if sustainability is to be achieved. Both children and adults need to understand that our survival is directly linked to the plants and animals around us and not shops. Early childhood educators have an active and significant role to play ensuring children experience connections with the natural environment in meaningful ways, ways that will assist their understanding of connectedness both with and in the natural environment and ultimately, promote action for sustainability.

A biological connection

The earth's human population is increasing exponentially, and humans as a species have broken all the biological rules that normally keep populations and species in check. We have been able to do this largely due to our reliance on the energy stored in fossil fuels formed over many millions of years (Age newspaper Wed 11th Aug). Each time we turn on a light or drive a car this connection is realised. Understanding this connection between humans as a species and the earth that supports our existence is fundamental and not to be ignored even in early childhood.

The biological connection between humans and the natural environment is described by E. O. Wilson's biophilia hypothesis (cited in Rivkin, 1995). He suggests that humans have evolved in the natural environment for many thousands of years and therefore, our connections with the natural environment are innate. It has even been suggested that our connections with water are hard wired into our genetic make up (Deakin University and Parks Victoria, 2002) as a survival mechanism from our hunter gatherer days. Any early childhood educator who has observed young children spend hours playing with water will attest to this possibility. "E. O. Wilson and others suggest that since we evolved in natural environments, technology cannot replace but only atrophy the development of our links to nature. If this is the case children reared apart from nature are necessarily limited " (cited in Rivkin 1995, p6). Early childhood educators have an opportunity to capitalise on these innate connections and build strong foundations for sustainability.

Early childhood, a window of opportunity.

In early childhood there is a window of opportunity to facilitate the connections with the natural environment that will last a lifetime. To ignore this window is to risk "generational amnesia" as described by Kahn and Kellert (2003). They propose that with each successive generation we become more removed from the natural environment. No doubt some of the children in our childcare centres, kindergartens and preschools have never been outside a city, negotiated a bumpy bush track or listened to the sound of water cascading over river rocks. Will they ever have these experiences or will they undergo generational amnesia? These experiences cannot be described verbally or portrayed by images in picture storybooks or on television and computer screens; they must be explored up close and personal! One can only hope that the classic Leunig cartoon of the 70's does not become a reality. ***(As illustrated, may need to seek permission can be found in Penguin Leunig 1974, cartoon of child and adult watching a sunset on TV and a sunset out the window)***

Direct experiences with the natural environment are also important for sensory development. It is not beyond the realms of possibility for a baby to experience little more than human made synthetics from nappies to bottles, toys, pacifiers and pushers. The catch phrase "babies need books" could be replaced with "babies need grass". Sebba (1991) extends this notion beyond babyhood suggesting that a process of sensory integration occurs until ten years of age. How can one be expected to care for or protect the natural environment if one has never been immersed in it?

In Scandinavia, children attending nature nursery schools experience a complete immersion in the forest as their outdoor playspace. Adhemar (2000 p44) questions "What better way could there be to learn about animals, plants and the changing of the seasons? What more effective way to teach children about basic ecological concerns, when they arise so spontaneously and in such a genuine context?" In Australia some early childhood centres have recognised the importance of nature for children and created nature based outdoor playspaces. Such playspaces usually include significant plantings, diverse and natural ground surfaces, flexible equipment and special features such as trickle streams, bush cubbies, vegetable gardens and butterfly houses. These playspaces become a sea of natural sensory stimuli for children. Early childhood educators need to be aware that the potential for sensory experience lies beyond the specific play experiences we set up, and should include the whole outdoor setting.

Direct experience with natural elements is only part of the story. Chawla (1990) researched the significant life experiences that had guided environmentally active adults and found that significant adults were a primary influence. Such adults are those who model, mentor, share and interpret with children, their positive connections with the natural environment. The most inspiring essay about this crucial role of adults is "The Sense of Wonder" written in 1956 by Rachel Carson. She summarises "If a child is to keep alive his inborn sense of wonder...he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement and mystery of the world we live in" (Carson, 1998, first published 1956, p55). Her essay has not dated and is more pertinent now than ever before.

Research in fields other than early childhood education also supports the importance of establishing connections between with the natural environment early in life. An article entitled "Let Them Eat Dirt" by Hamilton (1998) suggests a link between the increasing incidence of allergies and autoimmune disease with the trend to cocoon children in a sterile world. The chemicals we use to create such sterile worlds are adversely affecting children's health and development - and the environment - in many ways (Immig, 2000). We need more mud pie experiences for children, not fewer!

Leafy green spaces

Research on the effect of natural or green settings on adults concludes that there are many positive mental and physical health benefits (Deakin University and Parks Victoria, 2002). One only has to take a walk in a local park to verify this conclusion! In particular, green leafy spaces have a restorative function that allows us to return to tasks and other stimuli refreshed and focussed. Kaplan and Kaplan (1989) define these green leafy restorative places by the following criteria: a sense of fascination and curiosity, a sense of being away from usual settings, a sense of being part of a larger whole and compatibility with an individuals needs. These criteria are easily translated into natural playspaces for children. Further research, however, is needed to clearly identify the health and well being outcomes for children of opportunities for outdoor play in restorative environments. Some research has been conducted focussing on children in inner urban areas and children with Attention Deficit Disorders. In both instances, the exposure to green leafy places had positive behavioural outcomes (Deakin University and Parks Victoria, 2002).

Conclusion

This article does not provide a recipe for how to promote connections with the natural environment in early childhood services, but a rationale. With this rationale in mind, we invite early childhood educators to make mud pies and daisy chains with children for a sustainable future!

Bibliography

Adhemar, A. (2000). Nature Schools, *Resurgence*, No. 199, March/April, p44.

Age newspaper Wednesday 11th August 2004

Brown, B. (2004). *Memo for a Saner World*. Camberwell, Australia: Penguin.

Carson, R. (1956 reprinted 1998). *The Sense of Wonder*. New York: Harper and Row.

Chawla, L. (1990). Ecstatic Places. *Children's Environments Quarterly*, 7(4) pp.18-23.

Deakin University and Parks Victoria (2002). *Healthy Parks Healthy People The Health Benefits of Contact with Nature in a Park Context*. Melbourne: Deakin University and Parks Victoria.

Hamilton, G. (1998). Let Them Eat Dirt. *New Scientist*, No. 2143, pp26-31.

Immig, J. (2000). *The Toxic Playground, A Guide to Reducing the Chemical Load in Schools and Childcare Centres*. Sydney: Total Environment Centre.

Kaplan, R. and Kaplan, S. (1989). *The Experience of Nature: A Psychological Perspective*. New York: Cambridge.

Rivkin, M. (1995). *The Great Outdoors. Restoring Children's Rights to Play Outside*. Washington: NAEYC.

Sebba, R. (1991). The Landscapes of Childhood. *Environment and Behaviour*, Vol 23 No. 4 pp 395-422.

Thomas, G. and Thompson, G. (2004). *A Child's Place: Why environment matters to children*. London: Green Alliance/DEMOS.