Reflections on Pedagogy and Place: A Journey into Learning For Sustainability through Environmental Narrative and Deep Attentive Reflection

Ron Tooth[†] & Peter Renshaw University of Queensland

Abstract Narrative is fundamental to our diverse capacities to remember, to provide an account of self, and to represent our actions, motivations and place in society. The narrative mode is concerned with central aspects of the human condition - commitments and personal agency; motivations and emotions; collective experiences and cultural histories and myths. As such it is concerned with relationships between people, their activities within particular places and the ethics that arise in these specific relationships. This paper explores the role of narrative as a pedagogical device and as a form of thinking and valuing for students to use in their everyday interactions. In particular, it considers why a combination of environmental narrative, drama and deep attentive reflection sits so well with the emerging pedagogies of "place", and why this alliance is such an effective means for allowing individuals to experience, understand and value for themselves the entwined and sensorial connections that exist between people and place. Based on a year-long values education case study in eight primary schools, we describe and theorise about why such a narrative approach to pedagogy, when linked to deep attentive experiences in nature, is so effective in developing a new kind of place-based body/ mind meaning-making and learning that inspires individuals to engage with both the inner and outer work of sustainability.

Introduction

We live in an age where the health of "the environment" has become a central concern and the importance of human connections to "nature" are increasingly seen as critical for personal well-being and for the future health of society as a whole. This reawakening of interest in the environment and the natural world is now impacting on mainstream education, particularly as questions relating to sustainability are given greater prominence. However, if the push towards sustainability in education is to remain vital and relevant we will need more than a general consensus that this is a good idea. We will need to infuse new eco-centric thinking and values into our schools that will allow students to live and work as citizens in more interconnected ways in the world.

[†]Address for correspondence: Adjunct Professor Ron Tooth, School of Education, University of Queensland, Australia. Email: r.tooth@uq.edu.au Educators urgently need a new "social ecology" that will allow them to apply contemporary pedagogical research, particularly that occurring in the fields of outdoor, environmental, physical and health education, within broader educational contexts (Wattchow, Burke, & Cutter-Mackenzie, 2008). Citizens for the 21st century need to situate their thinking, values, and actions within an interdependent and interconnected world where individual decisions are seen to have significant distal and proximal consequences. Much more is required than intellectual constructs if a new social ecology is going to be incorporated into schools. The talk about sustainability needs to become a practical and emotional reality in student's lives. Tooth (2008) found that when he applied a social ecology approach in values education by using a "nesting systems model", that is, a model that focused on using a mix of environmental narrative and deep reflection to create attentive and emotional connections between self, others and place, then learning for sustainability occurred.

The new social ecology in education will require a conceptual shift towards a place responsiveness that takes education "away from the environmental constraints of the 'indoors', and its privileging of mind/learning/knowing, to the environmental enablements of the 'outdoors' and body/mind doing, meaning-making and becoming" (Wattchow, et al., 2008, p. 18). There has been a failure in modern educational discourse to take the "out-doors", "place" and "place identity" seriously, and to see their key relevance and importance for mainstream education. At one level this should be no surprise because society is so disconnected from the ecological realities that maintain life on earth (Orr, 1994), but at a more practical level Wattchow et al. (2008) suggests that the devaluing of the "natural environment" in education might be as simple as a failure to understand the difference between the notions of "space" and "place".

The distinction between "space" and "place" is crucial when thinking about the environment because this will allow educators to move beyond "space" as an empty abstraction, into a new appreciation of "place" as that which is lived in through the "body". It is this reconnecting with the world through the body, where knowledge is embodied experientially, physically and sensually over time, that is allowing a new kind of pedagogy to emerge that is ideally suited to the age of sustainability. We endorse this focus on the physicality of place as a basis for a new kind of teaching and learning because it offers us a fresh way of relating to the nature/environment debate that is currently shaping the development of sustainable communities in schools. However, in order to better understand the relevance of this renaissance in place-based thinking, a brief understanding of the history of place-based theory and practice is required.

Place-Based Environmental Education and the Sustainability Transition

Place-based environmental and outdoor education have their roots in the thinking of progressive educators of over a century ago who advocated an experiential approach to learning based in the local environment. Dewey (1915) argued that education should move beyond the school and offer opportunities for students to be part of what he describes as the one earth and our "common life lived upon it" (Dewey, 1915, p. 91). As part of this experiential journey towards sustainability, environmental educators have for years struggled to reconcile a number of distinct paradigmatic positions ranging from the behaviorist to the critical. In recent times, it has been the critical theory expounded by writers such as Huckle & Sterling (1996) and Fien (1993, 2001) that has helped set the scene for a creative partnership between "place-based education" and "environmental and outdoor education" as a way of moving towards a deeper understanding of "learning for sustainability" (Sterling, 2003). In particular, the notion that sustainability is something we actively discover through a process of democratic participation and transition has emerged as an important idea (Sterling, 2001, 2003).

O'Riordan & Voisey (1998) understand sustainability as a rich ecological, ethical and economic "sustainability transition" that allows us to slowly move towards a new way

of thinking, valuing and living. This is not an idea that sits well with simple solutions or formulas, but requires ongoing experimentation and inquiry. It is an optimistic concept because it suggests that sustainability is an evolving and creative process that we cannot totally plan for or control. Biologists like Suzuki (1997) suggest that what we need is an ethic of sustainability based on the biological idea of "biophilia"—which describes the innate tendency of all living things, including humans, to connect with other life (Suzuki, 1997). This interest in how values education and the sustainability transition intersect is currently offering new insights into how an ethic of sustainability might be worked out in schools (Tooth, 2008).

Place-based education is an educational approach that is conveyed in metaphors such as "listening to the land" (Woodhouse & Knapp, 2000). Theobald (1997) speaks about place-conscious classrooms as a focus for all schools regardless of their specific location. There is "ecological education" (Smith & Williams, 1999) which defines human beings and human culture in terms of their relationship to particular places. Orr (1994) calls for a new "ecoliteracy" to drive education, and Haymes (1995) focuses on a "pedagogy of place" to address issues related to race, class, power and politics in urban environments. When we are connected to place, then we understand more about what it means to be compassionate to each other and for all things (Thomashow, 1996).

These observations suggest that the development of sense of place and place identity in students can result in significantly improved environmentally responsible behaviour (Vaske & Kobrin, 2001). Place-based education is now re-asserting itself as a pedagogical approach that offers students new ways of connecting to themselves, others and to their place (Giuliani & Feldman, 1993; Nabhan & Trimble, 1994; Noddings, 2003). Place-based environmental and outdoor education are now opening up fresh avenues of thought around the notion of sustainable schooling and this is allowing place-based thinking to enter more directly into mainstream education.

Breaking into the Mainstream through a Synergy of Traditions

It is well documented that while there have been many examples of successful environmentally-focused programs across the world (experiential, environmental, outdoor and place-based education as major traditions), the attempt to mainstream these has generally failed (Benedict, 1999). It is only now as the world faces the realities of climate change, and the early whispers about sustainability have become a groundswell, that the wider importance of these alternative approaches is being recognised. Each has, in its own way, been journeying towards a new place-based pedagogy of sustainability, and now their stories and insights are being picked up by researchers in an attempt to offer schools a framework for action. This is why the work of researchers like Ballantyne & Packer (2008) and Payne and Wattchow (2008) is so important, because it is helping us to clarify what a new place-based pedagogy and social ecology for sustainability might look like.

We know that teachers and schools can bring about significant and enduring change in students, and this offers hope that something like learning for sustainability might be achievable (Brady, 2005; Darling-Hammond, 1997; Lovat, 2006; Luke, Ladwig, Lingard, Hayes, & Mills, 1999; Newmann, 1996; Palmer, 1998; Rowe, 2004). But what is the defining feature of this new pedagogy? While authentic and productive pedagogy might have been helpful in framing our thinking about quality teaching, they have not been enough to move educators assertively into the realm of learning for sustainability. The work of Ballantyne & Packer (2008) in proposing a "fifth pedagogical dimension" and Payne & Wattchow (2008) with their work on "slow pedagogy" offers us insight into what the elements of a new pedagogy for sustainability might be, and what it could offer mainstream education.

In Search of a New Pedagogy for the Age of Sustainability

Ballantyne & Packer (2008) have suggested that the Productive Pedagogy model (Luke et al., 1999) should be extended to a 5th Pedagogy or dimension that foregrounds learning from environmental experiences for sustainability. Productive pedagogy is a teaching and learning framework that emerged out of a longitudinal study conducted by the University of Queensland for the Department of Education in Queensland, Australia (Luke et al., 1999). This study built on and extended the insights developed by Newman (1996) around Authentic Pedagogy and sought to understand more about which pedagogies were most effective in contributing to the enhancement of academic and social performance for all students. The researchers suggested that there were at least four Productive Pedagogy dimensions of classroom practice that were critical for improved student learning: high degrees of intellectual quality, high levels of demonstrated relevance and connectedness, highly supportive classroom environments and strong recognition of difference. Ballantyne and Packer propose that there is an additional fifth category beyond the four dimensions of Productive Pedagogy, which encapsulates those unique approaches to teaching learning for sustainability that are the speciality of Outdoor and Environmental Education Centres. This experiencebased pedagogical dimension is described as having five key elements: - Being in the environment - students encouraged to experience and appreciate the special characteristics of the natural environment; Real life learning - learning activities based on real places, real issues, and authentic tasks; Sensory engagement - opportunities provided to explore the environment using all five senses; Learning by doing - students actively involved in hands-on exploration and investigation; Local context - students encouraged to explore and investigate environmental problems and issues in their own backyard (Ballanytne & Packer, 2008).

We endorse Ballantyne & Packer's (2008) effort to critique and extend the Productive Pedagogy model, but we would see the current dimension of Connectedness (when applied beyond the classroom in outdoor settings and including first hand experiences and authentic investigations) as covering many of the issues that they have identified. Where we do see support for something *quite new*, beyond Productive Pedagogy, is in Ballantyne & Packer's identification of "reflective response within the natural environment" (Ballantyne & Packer, 2008, p. 12–23) as a particularly effective way of working with the experiential elements of the 5th pedagogy that deepens understanding and develops new insights about sustainable living. "Reflective response", when applied in this way in "real environmental contexts and natural places" by skilled teachers, was identified as standing out from other strategies because of the way it focuses on full mind/body sensory engagement and reflective connections between people, and between people and place. This deep reflective connection to nature and place produced higher than average learning outcomes across knowledge, values, attitudes and behaviours related to learning for sustainability (Ballantyne & Packer, 2008, p. 19). The work of Payne and Wattchow (2008) around "slow pedagogy" offers us a particularly an alternative model for teaching and learning in this age of sustainability. "Slow pedagogy", for Payne and Wattchow, focuses on the importance of the body in education as a necessary balance to the "fast pedagogies" that threaten to overrun and exhaust teachers and students at every turn. This need to slow down and reconnect in an embodied way with the cycles of life that are all around us is a message that "rings true" for many of the teachers that we have been working with. Slow pedagogy is about spending time in places for more than a fleeting moment so that we can listen and receive meaning from that "place" (Payne & Wattchow, 2008). It is about creating authentic educational experiences that move us into a deeply reflective space where we not only focus on the "learning mind" but also on the "sensuous physicality of the

body" as we make new meaning in the world. Slow pedagogy draws us back into the sensuous and into our own bodies in ways that re-engage us with life and the living world (Abram, 1997).

Working with Deep Reflection in Real Places

Tooth (2007) can attest from his experience across two decades of engagement with teachers and students at the PEEC, that first-hand encounters with the natural world, and deep reflection arising from emotionally engaging and imaginatively charged experiences of *place*, provoke vividness and sensuality and heightened responsiveness that cannot be simulated in the classroom (Tooth & Renshaw, 2008). We suggest that it is these raw experiences, recollected, discussed, shared and reflected upon deeply that provide the basis for a new kind of learning that brings together conceptual knowledge, emotional responsiveness and positive values regarding sustainability. We suggest that this particular kind of reflective re-alignment and connection between *people and the environment* is the defining feature of a new experiential pedagogy for sustainability that has been evolving for many years as part of the outdoor and environmental education tradition, as well as in other educational settings nationally and internationally, and has the potential to reshape education in our time.

Some educators in Australia and around the world are now moving towards a deeper more creative and emotionally attuned vision of sustainability that aligns with what Senge, Laur, Schley, & Smith (2006) call the "inner work of sustainability", which is about setting in motion a reflective cycle "where people start to deliberately slow down their lives to cultivate broader awareness and reflective practice" (Schley in Senge, et al., 2006, p. 97). This "slowing down" is a critical factor it seems in allowing individuals to value, understand and connect to themselves, other people and the world around them in new and creative ways. Schley (2006) suggests that developing this "inner work of sustainability" consists of the following four interconnected learning phases: - reflection and contemplation; deeper awareness of connections to all life; creative tension caused by the awareness of the gap between desired futures and current realities; and coherence of action that connects mind, body and heart. This is a process that moves individuals beyond simply thinking about the interconnections that exist in nature to emotionally feeling them (Schley, 2006).

Using Story and Deep Reflection to Explore the 5th Pedagogical Dimension

We have found that one particularly effective way of engaging students in this kind of deep emotional reflection in natural places is through an mix of story and drama; an approach that has been a focus for Tooth (2007) and the Pullenvale Environmental Education Centre (PEEC) for many years through the development of the Storythread approach. Storythread is an imaginative form of the "environmental narrative" genre that was iteratively designed during the 1980s at PEEC and within a few years generated interest both nationally (Tooth, Wager, & Proellocks, 1988) and internationally (Robottom, 1993). At the PEEC, students and teachers are both audience and participants in stories about characters - real and fictional - living in harmony and in conflict with their environment. The choices and dilemmas they face, their knowledge and actions, their motivations and interests, and the impact of their choices and actions, are played out for the students and teachers to appreciate in real places, to predict and partly influence, and subsequently to reflect upon and reconsider in scaffolded dialogues. In its simplest form, Storythread is a way of connecting people and place. Storythreads are designed as environmental narratives (Tooth, 1995) that combine story and drama to engage individuals in deep reflective outdoor learning that connects them emotionally and intellectually with the people

and places around them. The design and deployment of *Storythread* at PEEC has led to a deeper understanding of "environmental narrative" as a powerful teaching and learning approach, particularly in terms of how it might be used as a cognitive tool to develop "environmental imagination" and "sense of place" as key ingredients in the growth of an informed and engaged citizenry (Hayes, Mills, Christie, & Lingard, 2006). Ballantyne & Packer (2008) and Payne (in press) also highlight the value of combining story and reflection to engage students in deep reflective place-based learning.

While *Storythread* is still delivered in its traditional excursion format at PEEC, over the last decade its principles and core practices have been deployed to change classroom pedagogy and schooling practices more generally (Tooth, 2007). To understand what such a reflective mind/body pedagogy of place might look like in practice we need concrete examples of how educators have attempted to apply this kind of teaching with students.

The Storythread Values Project

The Storythread Values Project was one of a number of local initiatives across Australia that were funded through the *National Values Education Good Practice in Schools* Project from 2006 to 2008. This project enabled teams of teachers from eight primary schools to take students on a values journey that used environmental narrative and educational drama to connect them with natural settings and places. Our core purpose was to give students and teachers a deeper experience of place that would expand their thinking well beyond traditional boundaries of "self" and "others" to incorporate the "wider world of nature". We found that by applying an "environmental narrative" approach that mixed story, drama and attentiveness to connect students and teachers with nature, they were able to more easily understand and value for themselves the entwined connections that exist between people and place, as opposed to "space" (Wattchow et al., 2008).

We believe this happens because this pedagogy offers students an opportunity to develop what (Abram, 1997, p. 69) calls a "renewed attentiveness ... through a rejuvenation of (their) sensorial empathy with the living systems that sustain us". Abram suggests that this is what will lead to a new "environmental ethic" and not more logical elucidation of philosophical principles. We found that by using *Storythread* to focus attention on the three dimensions of self, others and place that a new way of talking about values began to emerge that had a significant impact on the way students treated each other and the places around them. We called this the *Values Nesting Systems Model* (Figure 1).

As part of the Storythread Values Project "story" was used in three main ways. First, to reflect on the values of story characters and how they lived these values out in different ways that impacted on the people, creatures and places around them. This gave teachers and students an opportunity to think about values at a distance but in ways that approximated the realness of life. Many teachers found that this allowed students to engage in meaningful values dialogue because they were emotionally and intellectually engaged with the story characters. Second, the story dimension of Storythread was used to help students understand more about themselves and their own values. We refer to this as the "mirror experience" where story is used as a kind of self-reflective tool that allows students to gain new insights into themselves. This involved students talking about similarities and differences that they recognised between themselves and the story characters. Third, story was used to reinforce the outdoor attentiveness and deep listening experiences that students had been asked to participate in as part of the Storythread Values Project. This involved students exploring, observing and connecting to natural places in and near their school, often

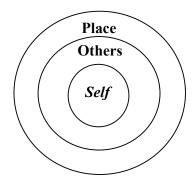


FIGURE 1: Values Nesting Systems Model

using the techniques of silence and stillness, and then linking these experiences back to the adventures of story characters. It was these quite deliberate combinations of story, attentiveness and deep reflection in nature, over an extended period of time, that seemed to make a major difference to how students understood the nesting idea and whether they finally saw it as something valuable and meaningful for them.

One child wrote – "I thought I was going to hate it in the bush and now by coming over here this term it has opened up a whole new world for me" That was quite good considering in the beginning he said "I don't do environmental stuff, I don't care what happens to the forest or any forest in the world". That is such a transformation.

Interview Year 7 Teacher 10.9.07

New research by Tooth and Renshaw (2008) will focus on the ongoing effectiveness of this kind of environmental narrative pedagogy of place by building on an extended history of professional engagement with teachers and students through the PEEC (Tooth, Wager & Proellocks, 1988; Tooth, 1995), as well as scholarly inquiry into the forms of narrative and place-based pedagogy that emerged from this prolonged professional engagement (Tooth, 2007). This research will inform current theorising and research on the centrality of narrative forms in school-based learning (Egan, 1988, 1997, 2005; Bruner, 1986, 1987) and will clarify why enabling students to enter "imaginary worlds" as part of focussed inquiry and reflective problem solving in natural settings, can be effective in generating deep conceptual and value-laden learning. One of the forms of learning that will be tracked includes changes in how students and teachers see, understand and connect to the environments and places around them and what impact a combination of environmental narrative and deep reflection will have on learning and behaviour change.

This ongoing research is significant because it will offer insight into how the Productive Pedagogy framework might be extended by further elaborating the key elements of a narrative pedagogy and its relationship to a new pedagogy of place. In the Queensland Longitudinal Study of Productive Pedagogies (Luke et al., 1999), extensive observational data indicated that while teachers were quite supportive and engaging with their students, they do not have readily available repertoires of professional knowhow to engage students in narrative experiences and active citizenship. This research will address this gap by adding to our collective understanding of how a new pedagogy of sustainability might use narrative and deep reflection in more creative and attentive ways to build on Productive Pedagogy to achieve transformed teaching and learning in schools.

Conclusion

Gardner (1999) believes that the primary purpose of schools is to develop attentive citizens who have studied the world most carefully and lived in it most thoughtfully. Simone Weil (1950, 2002) claims that *attention* is the real object of education because only when human beings make the effort to connect to the social and material world around them, do they grasp truth and gain deep understanding. Many cultures throughout the world have similar notions that relate to the practice of deep reflective listening (McNeill, Macklin, Wasunna, & Komesaroff, 2004). Similarly, the *Ngangikurungkurr* people of far northern Australia refer to *dadirri*, an inner deep listening or quiet, still awareness. In each instance, we are dealing with a notion of full human engagement with the world as the basis for purposeful education (McNeill et al., 2004).

This thoughtful reflective connection to the world as described by Gardner (1999) and Weil (1950) is what the eclectic biologist Mary Clark (2004) calls profound attentiveness. For Clark, this is the skill we urgently need to reclaim if we are to see the world with fresh eyes (Clark, 2004). It is this "profound attentiveness" that, for Clark, resides at the heart of great science and art, an experience that she equates to falling in love again (Clark, 2004). What Clark means by profound attentiveness is allowing our emotions to influence the way we see the world and relate to others. She argues that our society is in crisis right now because we have lost our ability to appreciate the world aesthetically as well as scientifically. This is what resides at the heart of the sustainability crisis.

What is required is a new kind of pedagogy that can engage students and teachers with the natural world in practical, emotional and deeply attentive ways that can draw them into the thinking, values and actions of sustainability. Highlighting the importance of the body/mind sensorial connection to place in pedagogy offers mainstream educators a new and creative way of achieving this by moving them into a more reflective and attentive space that draws on the experiential traditions of environmental, place-based and outdoor education. Our research suggests that a focus on "environmental narrative pedagogy", with its mix of story, drama and attentiveness, and its ability to connect students and teachers to nature in deeply sensorial ways, is a particularly effective way of giving students a deep understanding of sustainability as part of a new eco-centric way of thinking and valuing.

Keywords: Environmental narrative; Pedagogy; Place; Attentiveness; Reflection; Learning for sustainability.

References

- Abram, D. (1997). The spell of the sensuous: Perception and language in a more-thanhuman world. New York: Pantheon.
- Ballantyne, R., & Packer, J. (2008). Learning for sustainability: The role and impact of outdoor and environmental education centres. A joint initiative of The University of Queensland and Education Queensland. Draft Final Report (09/07). Retrieved from http://tourism.uq.edu.au/learning-for-sustainability/index.html
- Benedict, F. (1999). (Workshop Proceedings) From the Pilot to the Mainstream, Generalisation of good practice in Environmental Education. Paper presented at the An OECD-ENSI Strategy Workshop, Hadeland, Norway.
- Brady, L. (2005). Dimensions of teaching. Curriculum and Teaching, 20, 5-14.

9

Bruner, J. (1986). Actual minds, possible worlds. Cambridge, MA: Harvard University Press.

Bruner, J. (1987). Life as narrative. Social Research, 54, 11–32.

Clark, M. (2004, May 1). Falling in Love Again. *ABC Radio National Science Show*. Interview by Alexandra de Blas.

- Darling-Hammond, L. (1997). The right to learn: A blueprint for creating schools that work. San Francisco: Jossey-Bass.
- Dewey, J. (1915). The school and society. Chicago: The University Chicago Press.
- Egan, K. (1988). Teaching as storytelling. London: Routledge.
- Egan, K. (1997). *The educated mind: How cognitive tools shape our understanding*. Chicago: University of Chicago Press.
- Egan, K. (2005). An imaginative approach to teaching. San Francisco: John Wiley.
- Fien, J. (1993). Education for the environment: Critical curriculum theorising and environmental education. Geelong: Deakin University Press.
- Fien, J. (2001). Education for Sustainability: reorientating Australian schools for a sustainable future. Fitzroy, Victoria: Australian Conservation Foundation.
- Gardner, H. (1999). The disciplined mind: Beyond facts and standardized tests, the k-12 education that every child deserves. New York: Penguin Putnam.
- Giuliani, M. V., & Feldman, R. (1993). Place attachment in a developmental and cultural context. Journal of Environmental Psychology, 13, 267–274.
- Hayes, D., Mills, M., Christie, P., & Lingard, R. (2006). *Teachers and schooling making a difference: Productive pedagogies, assessment and performance*. Sydney: Allen & Unwin.
- Haymes, S. N. (1995). *Race, culture, and the city: A pedagogy for Black urban struggle.* Albany, NY: State University of New York Press.
- Huckle, J., & Sterling, S. (Eds.). (1996). Education for sustainability. London: Earthscan.
- Luke, A., Ladwig, J., Lingard, B., Hayes, D., & Mills, M. (1999). School longitudinal study. St Lucia: The University of Queensland.
- Lovat, T. (2006, May). Values education: The missing link in quality teaching. Paper presented at the National Values Education Forum, Melbourne.
- McNeill, M. P., Macklin, R., Wasunna, A., & Komesaroff, A. P. (2004). An expanding vista: Bioethics from public health, indigenous and feminist perspectives. Paper presented at the The 7th World Congress of Bioethics: Deep Listening - Bridging divides in Local and Global Ethics, Sydney.
- Nabhan, G. P., & Trimble, S. (1994). The geography of childhood: Why children need wild places. Boston: Beacon Press.
- Newmann, F. M. (1996). Authentic achievement. San Francisco: Jossey-Bass Publishers.
- Noddings, N. (2003). *Happiness in education*. New York: Cambridge University Press.
- O'Riordan, T., & Voisey, H. (1998). The politics of Agenda 21 in Europe. London: Earthscan.
- Orr, D. W. (1994). *Earth in mind: On education, environment, and the human prospect.* Washington, DC: Island Press.
- Palmer, J. P. (1998). The Courage to teach: Exploring the inner landscape of a teacher's life. San Francisco, California: Jossey-Bass.
- Payne, P., & Wattchow, B. (2008). Slow pedagogy and post-industrial outdoor education. Australian Journal of Outdoor Education, 12(1), 25–38.
- Payne, P. (in press). Remarkable tracking: Experiential education of the imagination. Environmental Education Research. Special Edition: Children's literature and environmental education.

- Robottom, I. (1993). Policy, practice, professional development and participatory research. Supportring environmental initiatives in Australian schools (An Australian Report to The Environment and School Initiatives (ENSI) Project Organization For Economic Co-operation and Development.): Centre for Studies in Mathematics, Science and Environmental Education Deakin University.
- Rowe, K. J. (2004). In good hands? The importance of teacher quality. *Educare News*, 149, 4–14.
- Senge, P., Laur, J., Schley, S., & Smith, B. (Eds.). (2006). *Learning for Sustainability*. Cambridge, MA: Society for Organizational Learning.
- Schley, S. (2006). Sustainability: The inner and outer work. In P. Senge, J. Laur, S. Schley, & B. Smith (Eds.). (2006). *Learning for sustainability*. Cambridge, MA: Society for Organizational Learning.
- Smith, G. A., & Williams, D. R. (Eds.). (1999). Ecological education in action: On weaving education, culture, and the environment. Albany, NY: State University of New York Press.
- Sterling, S. (2001). Sustainable education re-visioning learning and change. Bristol: Green Books.
- Sterling, S. (2003). Whole systems thinking as a basis for paradigm change in education: Explorations in the context of sustainability. Unpublished PhD, University of Bath, Bath.
- Suzuki, D. (1997). The sacred balance: Rediscovering our place in nature. St Leonards: Allen & Unwin Pty Ltd.
- Theobald, P. (1997). *Teaching the commons: Place, pride, and the renewal of community.* Boulder, CO: Westview Press.
- Thomashow, M. (1996). Ecological identity. Cambridge: MIT Press.
- Tooth, R. (1995). Environmental history through story. In *Red Gold: Environmental History Through Story*. Brisbane: Pullenvale Environmental Education Centre.
- Tooth, R., Wager, L., & Proellocks, T. (1988). Story, setting and drama A new look at environmental education. *Australian Journal of Environmental Education*, 4, 31–34.
- Tooth, R. (2007). *Growing a sense of place: Storythread and the transformation of a school.* Doctoral Thesis, University of Queensland, Brisbane.
- Tooth, R. (2008). The Storythread Values Project part of the Values Education Good Practice Schools Project Stage 2. A Case Study Report to the Curriculum Corporation. Funded by the Federal Department of Education, Employment and Workplace Relations.
- Tooth, R., & Renshaw, P. (2008). Australian Research Council Submission. Storythread Pedagogy: transforming teachers' and students' knowledge and values regarding environmental sustainability through narrative and place-based education. University of Queensland.
- Vaske, J. J., & Kobrin, K. C. (2001). Place Attachment and Environmentally Responsible Behaviour. The Journal of Environmental Education, 32(4), 16–21.
- Wattchow, B., Burke, G., & Cutter-Mackenzie, A. (2008). Environment, place and social ecology in educational practice. In P. Payne (Ed.), *The social ecology of movement, environment and community*. Frankston, Victoria: Monash University.
- Weil, S. (1950). Waiting on God: Letters and Essays: Harper Collins.
- Weil, S. (2002). *The need for roots: Prelude to a declaration of duties towards mankind*. New York: Routledge.
- Woodhouse, J. L., & Knapp, C. E. (2000). Place-based curriculum and instruction: Outdoor and environmental education approaches. ERIC Digest, ED448012.