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Bringing the Inside Out and the Outside In: Place-Based Learning Rendering Classroom Walls Invisible

Katherine Bates

Introduction

As a woman in education for over 30 years, a socioecologic approach has always underpinned the "head, hand and heart" of my teaching (Brühlmeier, 2010). In part, connecting with the natural world began with my own childhood by being immersed *in the wild*—or what I thought at the time was sneaking in on the edge of wilderness and mixing with all that was natural. As a child, I was the only girl amongst the neighbourhood of boys and brothers that played in the creek that ran past our backdoors down to the bay. With very restrictive limits set by my parents on where we were allowed to play and with whom, I never divulged where we roamed or the legless reptiles that we sometimes glimpsed in the grasses for fear of losing permission to explore the *creek out back*.

Nature's Incense

Moss smothered rocks making slippery velvet moccasins for our bare feet
Water striders skating and tadpoles beating tails
Confirmation of the captured crystal creek water
Songs of frogs, cicada calls and dragonflies in flight
Fresh crisp air nipping at our skins turning cheeks pink and hair curly
Willow trees make a twilight canopy making the sun an unreliable timekeeper.

K. Bates (✉)
Western Sydney University, Bankstown, NSW, Australia

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Transformed crowns of sweeping branches become pendulous ropes
for crossing the riparian habitat.
Earthen clay, boggy humus and turpentine residue from crushed oil-laden leaves
—Nature's incense
My sanctuary, my friend, my adversary tester—my undisclosed special place.
—By author

Hung (2014) explains that an authentic sense of place comes from direct personal lived experiences that build up both consciously and unconsciously over time. In alignment with this view and others purporting the same, my childhood experiences of doing, feeling, and watching *in the wild* seem to be early vanguard counsellors of my human–place relationship and teaching pedagogy (Chawla, 2007; Hung, 2014; Kudryavtsev, Stedman, & Krasny, 2012; Malpas, 1999).

This presumption also resonates with eco-psychology's views identifying the importance of transpersonal connections between humans and the natural world (Chawla, 2007; Wolsko & Lindberg, 2013). Retrospective research also indicates that fulfilling experiences in nature during childhood positively affects adults' self-rated pro-environmental attitudes and actions (Collado & Corraliza, 2015, p. 39). To this end, the meaning that emerges from early experiences with nature can be carried forward implicitly into a person's appreciation for, connectedness with, and stewardship of the natural world (Gendlin, 2004). These views, particularly in light of current world environmental issues, emphasize the importance of embedding ecopedagogies in everyday educational practices.

Beginning Teaching

As a teacher graduate in the early 1980s, however, going into *the wild* was somewhere we took students annually or perhaps once a term on an excursion. In these cases, this form of experiential education provided a mediated experience outside of students' *common dwelling* as a type of novelty rather than simple living-in-nature experience (Thoreau, 1854; Wattchow & Brown, 2011).

Particularly evidencing this type of experiential education were the greatly anticipated yearly co-education camps in Stage 3. Students were involved in cookouts, orienteering, bush survival techniques, and bushwalking activities for up to five days. Whilst positive, this experience replicated a tribal initiation into nature returning to an alternative reality back in the classroom.

A notable trend of adventure camp education programmes in the early 1980s was the focus on involving students in high-challenge activities that were risk-centric (Gray & Birrell, 2015; Miranda & Yerkes, 1996). Activities such as abseiling, caving, canoeing, and high ropes were on students' *must do* lists, with the overwhelming majority of the girls taking part in these activities for the first time. Whilst these high-risk, first-time experiences were most popular, these were often accompanied by the most heightened fear and anxiety responses, which Wattchow and Brown (2011) argue can limit a person's positive interpersonal connection with place. In addition, the structure of the camping programme allowed the students a one-time-only participation. This structure limited the opportunity for practising skills and building competence. This approach is now considered myopic with a broader movement towards magnifying the consciousness of walking the ground without dominating or trying to tame it (Gray & Birrell, 2015; Mulligan, 2003). Despite these limitations, there were some significant positive outcomes from these camping experiences in the 1980s. These were around the notions of self-efficacy, peer cohesion, and teacher–student relations.

Self-efficacy is one of the four processes of goal realization in social cognitive theory. Perceived self-efficacy about a person's capabilities plays a major part in motivation for undertaking a task, how the task is approached, and persistence in completing it (Bandura, 1994). The activities provided to the students over these five-day camps provided them with opportunities to develop their self-efficacy. One example where this was clearly expressed was after the high ropes course. This course was a particularly challenging activity for many of the girls. Whether their goal was sitting in the harness, balancing on the low rope structure, completing the first level, or the entire course—they all experienced a sense of achievement and shared this through gesture and dialogue. This pattern of positive reinforcement, more sustained efforts in vicarious experiences, and visible improvements in students' motivation to participate became more prolific over the period of the camp. Research supports this response by arguing that those individuals who engage in positive experiences in nature report experiencing higher levels of flourishing, subjective vitality, and positive emotions (Wolsko & Lindberg, 2013). As such, self-efficacy is a useful tool for students' lifelong learning and active citizenship.

The adventure experiences also provided students with opportunities to develop esprit de corps amongst the group, facilitating prosocial behaviours. These behaviours included a greater degree of acceptance, perspective taking, and decision-making during group tasks. More democratic discussion and decisions were also made such as when deciding on a path to take during

orienteering or how to paddle a two-person canoe most effectively. In these situations, students were more open to considering alternative solutions offered by individuals as they worked towards achieving a common goal.

Other prosocial behaviours were evident such as encouragement and responding to each other in empathetic ways. Empathy, as the ability to understand another living thing's experience from its frame of reference, reduces biased thinking and intolerance. As a key element of emotional intelligence, empathy also encompasses a broader awareness of what is happening in the world. Empathy is therefore both beneficial for an individual's everyday life and also ecologically valuable because *applied empathy* leads to change-making and action-taking (Duchesne & McMaugh, 2016; Gordon, 2009).

Improved student–teacher relations with the teenage girls were also experienced over the course of the camp. In the construct of experiencing nature alongside my students, I became a critical co-investigator (Freire, 1970). And, as we assisted each other through the challenges, encouraging and supporting each other, we built mutual trust and acceptance, thus developing stronger bonds during and after the nature-based experiences.

Experiencing Nature Whilst Leading Nature-Based Outdoor Experiences

Despite the rise of the girls' camping movement and the expanding feminist-based theory in experiential education of the 1990s, the camps I attended were operated by an all-male crew both onsite and in the hierarchical company structure (Allin & Humberstone, 2006; Martin, 2005; Miranda & Yerkes, 1996). This situation reflects the historical male *gender trend* in outdoor education. A body of research supports this trend by acknowledging the continuing cultural struggle and under representation of females in the field of outdoor education (Bialeschki, 1992; Dalla-Longa, 2013; Gray & Birrell, 2015; Wright & Gray, 2013).

However, in the context of Australian primary schools, female gender disproportion is reversed from that of outdoor education, with 83% of primary school teachers identifying as female (Centre for Education & Statistics, 2015). Discussion about this gender dichotomy is beyond the scope of this chapter; however, attention is drawn to this disparity because it highlights the important role that female educators play in everyday primary school experiences for bringing the *outside world in* and *the inside dwellers out*.

Bringing the Outside World In and the Inside Dwellers Out

This section discusses a place-based approach, as a subset within the broader ecopedagogical pedagogy, for engaging students in relevant, authentic lived-in nature experiences that continue over time rather than those one-off adventure-based experiences of the 1980s (Gray & Birrell, 2015; Hill, 2012). Experiential, place-based experiences do not come without their challenges in today's social contexts. A body of research identifies that outdoor immersion experiences are competing with other demands such as increased technology, media-based recreation, and virtual social connections that keep children inside and alienated from nature (Andrejewski, Mowen, & Kerstetter, 2011; Dowdell, Gray, & Malone, 2011; Gray & Martin, 2012; Kellert, 2013). This challenge is accompanied by suggestions that a *bubble wrap* generation has increased the number of children growing up in walled gardens, thus limiting their immersion in nature's playground (Malone, 2007).

In the Australian schooling context, these challenges are coupled with competing educational demands and growing sociocultural diversity. A body of research indicates that pressure from an increased locus of accountability around standardized and national testing is arguably impacting on how, how much, and what curriculum is addressed in order to *teach to the test* (Bates, 2014; Higgins, Miller, & Wegmann, 2006; Hipwell & Klenowski, 2011; Klenowski & Wyatt-Smith, 2011; Kostogriz & Doecke, 2013). This increased need to find time for assessing, rather than doing, may place unnecessary pressures on repeated immersion experiences in nature. Of no less importance are the complex and intertwining *intra-actions* between humans in and with nature (Malone, 2016). From the sociocultural perspective, all participants are sign-makers and sign-readers who bring different cultural, social, and geographical experiences to their context of learning in and about the world. As Fig. 50.1 illustrates, these experiences are not only different from one individual or group to another but vary for each individual at different times in their lives. This sociocultural view (Thibault, 2004) suggests that individuals' motivations, values, engagement, and responses to nature are relational to their prior experiences. Thus, today's educators require a broad brush if they are to engage children in nature-based learning beyond the *white middle-class view* (Malone, 2016; Robinson, 2013). Furthermore, developing students' understanding of the beneficial exchanges between humans and the non-human natural world is critical (Abram, 2010). This approach requires

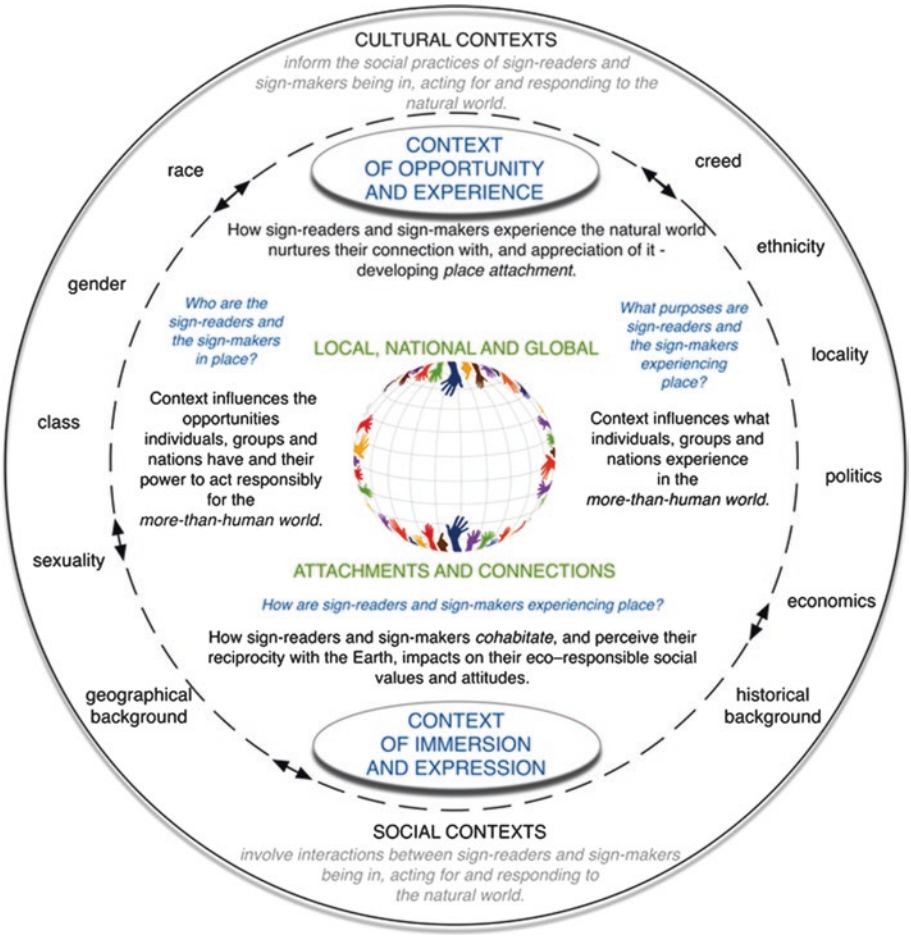


Fig. 50.1 Place attachment and global citizenship from a sociocultural perspective

incorporating the plurality of ways that humans see, immerse, and respond to nature (Reiss, Boutler, & Tunnicliffe, 2007). Considering these challenges, it could be argued that balancing ecological literacy and connectivity to nature in a culturally and socially diverse twenty-first century is growing in complexity.

Acknowledging this complexity, I respectfully argue that the fluidity of ecopedagogical principles allows educators to design transformative educational experiences that provide nature-based inquiries in students' everyday learning experiences that are culturally and socially inclusive, authentic, relevant, and child-centred (Andersen, 2013; Chawla, 1999; Collado & Corraliza, 2015; Louv, 2008; Wattchow & Brown, 2011).

Research suggests that the core elements of place-based learning can be interwoven into pedagogy for ecological education very effectively (Judson, 2015; Wright, 2013). Examples of transformative ways that ecopedagogical approaches explore cohabitation and nature immersion are evidenced by a number of successful current educational programmes, both nationally and internationally. Notably these are, but not limited to:

- Bush Kinder (Elliot, 2013)
- Children & Nature Network (Morag, Tal, & Rotem-Keren, 2013)
- "My Schools Kitchen Garden" Programme (Yeatman et al., 2013)
- Nature Play organisations (http://www.natureplay.org.au/)
- Focus on nature and schools underpinned by Reggio Emilio philosophies (Hall, 2013; Louv, 2008)
- Forest Schools (Knight, 2017; Williams-Siegfredsen, 2013)
- Wilderness Awareness Schools (Young, Haas, & McGowan, 2010)

Sustaining Connections with the Environment in Light of New Curriculum Directives

In Australia, a new national curriculum three key areas as priorities for students' learning across all subjects from the early years (Australian Curriculum, Assessment and Reporting Authority [ACARA], 2012). These three key areas, termed the "cross-curriculum priorities (CCPs)," are:

- Aboriginal and Torres Strait Islander histories and cultures,
- Asia and Australia's engagement with Asia, and
- Sustainability.

These priorities draw on the Melbourne Declaration (Ministerial Council on Education, Employment, Training and Youth Affairs [MCEETYA], 2008), identifying the collective responsibility of governments, school sectors, parents, care givers, and education providers to assist "all young Australians to become successful learners, confident and creative individuals, and active and informed citizens" (MCEETYA, 2008, p. 8). As part of the elaboration within Goal Two of the Melbourne Declaration, there is a clear direction to educate students to "work for the common good, in particular sustaining and improving natural and social environments" (MCEETYA, 2008, p. 9). This is a positive move to ensure ecopedagogies move from a peripheral to centroidal position across all levels and educational disciplines (ACARA, 2012; Dyment & Hill, 2015; Hill, 2012).

Whilst all three CCPs embed aspects of sustainability through culture, society, and nature, the *sustainability* priority is of focus here as the three concepts supporting this priority provide:

> The opportunity for students to develop an appreciation of the necessity of acting for a more sustainable future and so address the ongoing capacity of Earth to maintain all life and meet the needs of the present without compromising the needs of future generations. (ACARA, 2012)

Preparing Tomorrow's Educators for Teaching Sustainability Through Place-Based Pedagogy

Preservice teacher education plays a critical role in developing teachers who are ready, willing, and able to teach for sustainability (Dyment & Hill, 2015; Nolet, 2009). Evans, Whitehouse, and Gooch (2012) also identify a number of key areas when preparing preservice teachers for their future work in schools. From these viewpoints, supporting teachers for teaching sustainability through place-based pedagogy requires:

- challenging their dispositions, perceptions, and attitudes;
- developing their knowledge, understandings, confidence, and preparedness for teaching the nine multifaceted dimensions of sustainability highlighted in the Australian Curriculum.

This final section of the chapter reports on how place-based notions of curriculum, as a subset of ecopedagogies, are introduced to preservice teachers in a number of subjects and contexts. Not to be interpreted as the *soft end* of pedagogy, place-based learning sustains students through embodied experiences in the *here* and *now* (Bateman, 2015; Casey, 2001; Hung, 2014; Kudryavtsev et al., 2012). This approach explores the world through students' connections in their local situ moving outwards to a broader understanding of community, national, and global perspectives (Gruenewald, 2003). The approach moves from focusing on environmental catastrophes or fear that can result in detachment, despair, or a sense of powerlessness for making a difference (Andersen, 2013; Cameron, 2003; Gray & Birrell, 2015; Orr, 2004; Winograd, 2016). Rather, place-based pedagogy provides opportunities for a balance between initiating positive connections with nature along with learning facts about ecological issues and actions to protect and restore biodiversity.

Immersing Preservice Teachers in "A Sense of Place"

Explanations of *place* by Cameron (2003) and Relph (1976) are drawn on to describe the relevance of place attachment in today's society and the value of place-based pedagogy. From their perspective, *a sense of place* is an attuned embodiment and realization of human experience with fabricated and natural landscapes, in particular, geographical spaces. These experiences lead individuals to feel a sense of belonging or attachment to those surroundings that positively influence an individual's motivations for living sustainably.

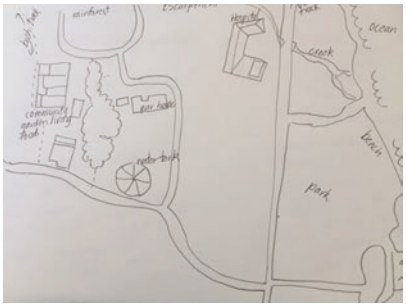
Research also acknowledges the importance of the affective domain as a critical aspect of developing a bond with the environment through *slow engagement* with place and storied landscapes (Gray & Birrell, 2015). With a connection to the natural world, an appreciation of it, and a feeling of comfort when being in it, individuals are more likely to maintain, restore, and protect it (Cameron, 2003; Sobel, 2014). Therefore, the notions of place are important contributors to active global citizenship and environmental stewardship, and are therefore valuable aspects of teaching and learning.

Place-based learning has been a part of my pedagogy across various contexts throughout my teaching career up to and including my current role in the tertiary sector preparing preservice teachers for their future work in schools. This section reports on some examples of implementing a place-based pedagogy across subjects that I have been involved with in teacher education. They build on from my 25 years in primary and secondary teaching in classrooms and my ongoing love for being in nature.

Exploring Place-Based Approaches Using Literature

In 2008, whilst teaching in Human Society and its Environment (HSIE) Bachelor of Primary Education with the University of Wollongong, place-based pedagogy underpinned the close study of *My Place* (Wheatley & Rawlins, 2008). This picture book was selected as an appropriate text for exploring notions of place attachment through historical recounts from various children's connections with significant places, people, and events.

Using a similar approach, preservice teachers composed place maps from their own local childhood area recording in a personal place journal along with significant places and activities in place. These descriptions were repre-



Every worldview describes a universe in which everything is connected with everything else. Stars, clouds, forests, oceans and human beings are interconnected components of a single system in which nothing can exist in isolation. (Suzuki, 2006, p. 22)

Fig. 50.2 Students constructed place journals mediated by text and image

sented through drawings, photos, artefacts, written recounts, and poems. Students also selected quotes from *The Sacred Balance: Rediscovering Our Place in Nature* (Suzuki, 2006) to accompany their photos as personal expressions of their attachment to place Fig. 50.2.

Place-Based Experiential Learning as a Sustainability Project

The opportunity to be involved in Education for Sustainability came about again in 2014 as an invited member of a participatory action research project with Western Sydney University (WSU, formerly University of Western Sydney). This project was concerned with implementing the CCP of "sustainability" in preservice teacher education subjects. The initial Professional Development Day for the Education for Sustainability project was situated at the Hawkesbury Riverfarm in New South Wales, Australia (Fig. 50.3). As a participant, I experienced the potential of *place as a site for learning* incorporating notions of place-based learning into English and HSIE subjects in the Master of Teaching course at WSU.

To initiate the project, participants were asked to create place maps as a visual method for sharing connections and as a way of introducing group members to each other. A group process to design an inquiry unit around place immersion then followed. This process began with an exploration of the Hawkesbury Riverfarm where all group members had the opportunity to collect photographic material, some of which is illustrated in Fig. 50.4. These images became the stimulus for tutorial discussions and planning for teaching back on campus.

Fig. 50.3 The Hawkesbury Riverfarm

All Semiotic Resources Used in Seeking, Finding, Making, and Reporting

Multimodal representations are mandatory requirements in the Australian Curriculum (ACARA, 2012). As semiotic resources, they provide an engaging and relevant platform for story-making and telling using place-based notions. The photos taken on the Riverfarm site immersion were therefore useful visual stimuli for modelling how to initiate an inquiry process for teaching HSIE in the primary school setting. Preservice teachers were guided through various *front-loading* strategies designed to draw on collective existing knowledge about the participants, settings, and actions depicted in the photos. Individual reflections also provided students with time to mind map and record ideas about sustainability on coloured slips of paper. In random groupings, ideas were then categorized into sustainability themes and, after considering *big ideas* around the topic, inquiry questions and supporting strategies for investigating, finding, recording, making, and sharing about topics were developed. Tutorials groups also undertook a *planning for teaching* process using the following set of resources:

- photograph of a significant object from the Hawkesbury Riverfarm immersion experience;

Fig. 50.4 Photos from the Hawkesbury Riverfarm immersion experience

- factual text such as a research article, persuasive argument, or information text about an environmental issue around a topic; and
- stage-appropriate quality picture book related to the topic or issue represented.

Using Images to Read and Tell Stories

The Australian Curriculum mandates that the CCPs are not subjects in themselves but are a set of organizing ideas through the learning areas (ACARA, 2012). Therefore, the collected photographic data were used as a stimulus for connecting learning across subjects underpinned by the sustainability CCP. One of the photos depicted a beehive constructed from natural materials

K What do we know about bees?	W What do we need to learn more about?	L What did we learn about bees from the texts?

Fig. 50.5 KWL chart for gathering information

as a *bee's nesting place*. After an initial discussion about the photo, the groups collectively shared existing knowledge about the topic using a graphic organizer chart more commonly referred to as a *KWL chart*. Students recorded their ideas into the three columns of K (what we know), W (what we want to find out), and L (what we learnt). The groups were then provided with an article from the Bumblebee Conservation Trust on the plight of the bumblebee (https://bumblebeeconservation.org/about-bees/why-bees-need-help/). New information that the groups gathered from reading the factual material provided was then added to the KWL chart (Fig. 50.5).

High-quality stage-appropriate picture books were then explored and strategies for making and telling factual and imaginative stories about bumblebees were developed. Three examples for students in different primary stages of schooling are now briefly summated.

(a) Stage One: *Rosie's Walk* (Hutchins, 1968)

The choice of a traditional picture book was made to discuss the interconnectedness between animals and the use of animals on farms over time. We also discussed the understory being shown and not told in the story. The discussion centred on comparing the opportunities and challenges for telling the bee's story using a picture book compared to using a multimedia resource. The following resource was used as stimulus for this discussion: http://www.schooltube.com/video/13e5b71bb3663c832b4b/Rosie%27s%20Walk

(b) Stage Two: The Adventures of Maya the Bumblebee (Bonsels, 1922)

This classic story about the adventures of *Maya the Bee* was discussed as a topic for storyboarding using the multimedia technique Claymation (https://vimeo.com/tag:claymation). The discussion included representing current environmental issues for native bees and possible future actions. In this way, the story became a stimulus for illustrating negative human impacts on the nonhuman living world. It was also used to promote constructive public actions for safeguarding and restoring biodiversity.

In keeping with curriculum directives, students were made aware of multimodal versions of the classic text that are currently available such as an anime television series and *Maya the Bee: The Movie* (Screen Australia, 2014). These recently released film genres bring the language used in the classical 1922 text into languages and images that are more colloquial for young viewers in the twenty-first century (http://www.imdb.com/title/tt3336368/?ref_=vi_tt_t_tt_ov_vi). Again, the KWL chart provided opportunities for students to record their prior knowledge about the topic, which was revealed during their engagement with the various stimuli (Fig. 50.5).

(c) Stage Three: *The Harry Potter Series* (Rowling, 2001)

The groups discussed the inclusion of bees in this popular culture novel series. We discussed the possible author intentions for referencing bees in such symbolic ways such as the Weasley beekeeper family and the use of the eighteenth-century English word for bumblebee as one of the main characters—Dumbledore.

Discussions were also undertaken based on significant objects from the Riverfarm immersion such as an abandoned water tower. Environmental audits of their local areas were introduced with preservice teachers using Google Maps and Google Earth to undertake water tower and water reservoir audits. Other factual aspects for sustainable water practices were highlighted, such as sustainable water use and storage, climatic weather patterns, and different uses of water in regions of Australia as further possible inquiry avenues for primary-aged students. Opportunities for accompanying these factual inquiries with stage-appropriate quality picture books were considered as ways for enriching topic knowledge and sustainability themes such as those listed below.

- Crew, G. (2011). *The Watertower*. Northampton, MA, USA: Crocodile Books.
- French, J. (2011). *Flood*. Sydney, Australia: Allen &Unwin.
- Suzuki, D. (2014). *Rivertime*. Sydney, Australia: Allen & Unwin.

Shaun Tan's (2000) picture book *The Lost Thing* was also selected as an appropriate text for exploring consequences of unsustainable practices and the positive impact individuals can make for restoring and "feeding": biodiversity as active and responsible citizens.

A comparative analysis between the obsolete farm machinery on the Riverfarm and imaginative representations were undertaken. Images from *The Lost Thing* (Tan, 2000) were selected and compared with photos of disused machinery for tuning students into an inquiry about the effect of unsustainable practices and advances in technologically informed sustainable farming practices.

Group *think tanks* also explored current curriculum content and the sustainability CCP using an inquiry process. Their ideas were recorded via a planning template. Visual data collected from the place immersion and quality literature were incorporated into the planning of the inquiry process.

Planting the Seeds for Future Teaching Practice and Sustainable Living

The chapter now closes with the voice of one preservice teacher's experience in *being, doing, and seeing* experiential place-based learning within a garden school. The vision of this not-for-profit initiative is to feed the minds, bodies, and futures of every Australian student through a kitchen garden experience. Currently, 10% of primary schools in Australia grow, harvest, prepare, and share fresh food as part of an ecopedagogical approach to teaching and learning. The voice of this teacher is a purposeful conclusion to this chapter as evidence of the important role of dedicated teachers in transformative ecopedagogically sound schools. Teachers in these schools provide critical channels for developing students' capabilities as active and informed citizens in sustainable communities.

Research indicates that permaculture taught through school kitchen gardening transfers to home and the broader community (Yeatman et al., 2013). Thus, the initiative to include kitchen gardens in schools supports ecological communities of practice and is a seed in growing education for sustainable schools, communities, and futures from the ground up (Robinson, 2013).

In the Australian context, the Australian Professional Standards for Teachers (Australian Institute for Teaching and Leadership [AITSL]) requires teachers to:

> appreciate the role of an ecological approach to school organisation, events and programs in enhancing HSIE and civics and citizenship, outcomes, stage statements and organisation of content, including assessment. (AITSL, 2014)

In my role as a tertiary educator, it is so encouraging to see theory in practice, especially for preservice teachers building their pedagogical stance for their future teaching. Therefore, to receive an email from Roy, a dedicated preservice teacher describing his professional experience in a garden school was very exciting. Roy explained that three years into operations, the school is currently running a completely sustainable garden where students from Years 3 to 6 "harvest the seeds, take cuttings to grow plants and use water tanks to water the garden" (email correspondence, May 2016).

Successful implementation of ecopedagogies such as this is evidence that schools are moving from an abstract propagation about the environment to *participatory and metacognitive engagement*. This moves the ecopedagogies approach from one that is based on fear and adventure experiences outside of students' common dwelling, to one of living in a nature-connected society as living, learning organisms supporting the well-being of our planet (Gordon, 2009; Kahn, 2010; Robinson, 2013). These experiences, like the early adventure programmes in the 1980s, also provide opportunities for developing students' self-efficacy, group cohesion, and teacher–student relations. However, these activities involve participatory lived-in experiences rather than high-risk challenges against nature, outside of students' common dwelling place (Fig. 50.6).

Fig. 50.6 Experiencing nature-based pedagogy (Photo credit: Roy Nixon)

> This was one of the most unique learning experiences I have seen in a school. This program involves students caring for and maintaining the garden beds in their school. This involves planting, watering, weeding and taking cuttings to make a completely sustainable garden. Every week, students also participate in a kitchen class where they cook the produce harvested from their garden. (Excerpt from Roy Nixon's journal, May 2016)

> We rejoice in our humanity and our connection to our planet. Such experience should be part of the everyday. (Bateman, 2015, p. 15)

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