

# Chapter 2

## Social Ecology as Education

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**Abstract** This chapter presents the historical and foundational elements of social ecology as it relates to physical and health education, outdoor and environmental education. Four foundational concepts central to the socio-ecological educator are introduced, namely: (a) lived experience, (b) place, (c) experiential pedagogies and (d) agency and participation. While socio-ecological models exist in diverse disciplines, our purpose is to introduce readers to an interdisciplinary philosophy and pedagogical approach that specifically considers the potential of social ecology to education. In doing so we acknowledge that a social ecology for education exists across multiple levels, embracing a broad array of social, cultural, environmental and geographical influences that shape individuals, identities, family, policies and the environment.

**Keywords** Agency and participation • Lived experience • Place • Experiential pedagogies

### Introduction

Traditionally the disciplines of physical and health education, outdoor and environmental education have been viewed as isolated areas largely operating in separate ‘silos’. By way of contrast this book provides rich research case studies, from a range of different vantage points, through which a socio-ecological approach to

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education can be theorised, framed and enacted. Each chapter is underpinned by a socio-ecological approach that will be outlined in this chapter.

Educating individuals about concepts in these diverse disciplines, be they children or adults, requires thinking, acting and doing education differently. Our position is that traditionally the disciplines of health, physical, outdoor and environmental education do not educate holistically and in fact at times might actually be mis-educative, to use Dewey's (1938/1998) term, in their endeavours. In using a socio-ecological approach to education that is informed by interdisciplinary insights, our work as researchers and educators is more likely to promote concepts of movement, wellbeing, health and education that develop lifestyles in tune with students' emotions, the places they live, the education they receive and the meanings that can be developed from their interactions with these unique educative disciplines. A socio-ecological framework encourages collaboration across academic disciplines, attempting to break down discipline 'silos' that often pervade the research and education climate.

## Social Ecology: A Brief History

Historically, socio-ecological models have been developed from the disciplines of psychology and public health. Lewin (1936) first coined the term 'ecological psychology' to examine the influence of the 'outside', be that culture or environment, and its affect on the individual. Bronfenbrenner's (1979) model built on this initial work, suggesting that there existed *multiple* systems of influence on a person's behaviour. He proposed that there existed four such systems: the micro (individual), the meso (interpersonal), the exo (community and organisational) and the macro (intercultural).

At the same time as Bronfenbrenner, Rudolph Moos (1980) proposed a model of health-related behaviour that drew on four categories: physical settings which include natural environments; organisational settings such as schools and worksites; human aggregate made up of socio-demographic and socio-cultural characteristics of people inhabiting a certain environment; and social climate, or the perceived supportiveness of an environment. Following the work of Bronfenbrenner and Moos a range of socio-ecological models, or 'frames', have been developed that continue to be focused on health as a primary outcome. Those researchers who are interested in the process of educative learning have also begun to conceptualise such models to further understand human experiences in physical and health education, outdoor and environmental education (Boyes 2000; Brown and Payne 2009; Greenwood and McKenzie 2009; Krasny et al. 2010; Kyburz-Graber et al. 1997; O'Connor et al. 2011; Reid et al. 2008).

As an example, Wattchow and O'Connor (2003) argued that natural systems supporting healthy life have not yet found a 'voice' in the discourses of the 'physical' in the Health and Physical Education (HPE) curriculum where a positivist deficit-model perpetuates. They claim that socio-cultural perspectives fail to explore a more

ecocentric view of health and physical activity in which emerging socio-ecological approaches argue that "...any consideration of lifestyles of health (through the physical) must extend beyond the social, to include a mutual relationship with the environment" (p. 7). In many ways this example from HPE mimics a similar tension between the competing ideologies of anthropocentrism and ecocentrism that exists in environmental education. As Pepper (1984) articulates, the anthropocentric perspective, sometimes alluded to as a technocentric perspective, is grounded upon the belief that the environment is a resource to be used, whereas the ecocentric perspective is said to value the environment for 'its own sake' (see Eckersley 1992). O'Riordan (1990, p. 143) argues that this dichotomy represents:

... the clash of two world views ... between those who believe that the earth is capable of being improved or manipulated for the benefit both of human kind as well as for life on earth itself, and those who believe that human beings should at best be only equal with other forms of life on the planet and that societies must learn to adjust their economics and aspirations so as to cohabit with the imperatives of earth and life processes for the survivability, or sustainability, of the earth.

Such perspectives afford the opportunity to consider the emergence of 'sustainable development' as a central concept in social ecology. Since the 1980s sustainable development has been touted as the most appropriate response for future environmental, social and economic development. Kyburz-Graber et al. (1997) have suggested that foundations of socio-ecological approaches in environmental education must acknowledge that: (i) environmental education is a component of societal processes towards a sustainable society; and (ii) environmental education contributes to general education. Besides the importance that the authors articulate about environmental education's relationship to general education, it could be claimed that the key objective here is to emphasise that both social systems and ecological systems are inter-related, and that any future education must consider this inter-dependency. As Kyburz-Graber suggest:

In order to change a social lifestyle that is environmentally harmful, it is necessary to include the socially embedded actions that accompany this behaviour, i.e. the actual conditions for action of individuals, social groups, businesses and institutions. (p. 22)

Furthermore, for social ecological approaches to be enacted, educators and researchers must consider the reciprocal relationship between social and natural environments. We concur with these sentiments, but offer that the broader disciplines of physical and health education and outdoor and environmental education can also contribute meaningfully to a sustainable society as well as to general education espoused by these authors. In this book we advocate that educators and researchers must take the next step, which is begin to think and work towards dissolving the old binaries that divide culture and ecology, society and nature.

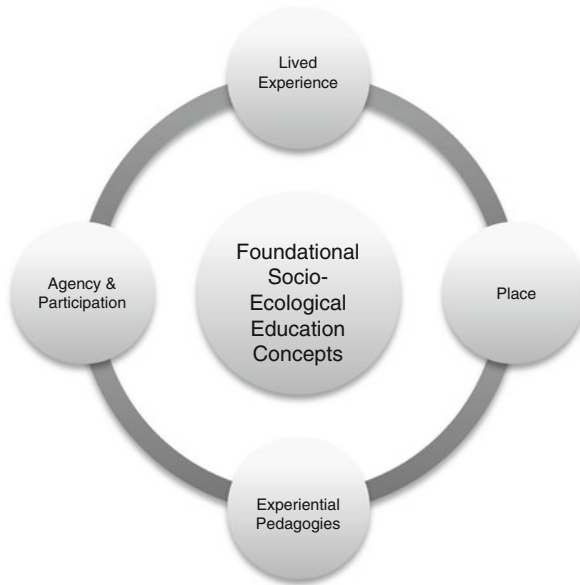
We believe in acknowledging the personal and embodied experiences that often get lost or over-looked in sociological and ecological descriptions and theories in education (Archer 2000). We seek to remedy this by privileging an intra-personal layer (lived experiences, action and agency) that sits alongside societal and environmental processes (place). We acknowledge that this adds complexity to socio-ecological

models, but it adds many more positive layers to our understandings of health and physical education and outdoor and environmental education.

While socio-ecological models exist in diverse disciplines, our purpose is to introduce readers to interdisciplinary concepts that borrow from psychology, health and environmental studies and build upon these to enable academics, researchers and practitioners to better understand social ecology in education, specifically in the areas of physical and health education and outdoor and environmental education. The points of departure for these current discourses, both those aligned to positivism and more socio-critical stances, as we see it is:

- To continue to theoretically develop the inter-disciplinarity of these fields while working towards healthy, active and educated communities;
- To focus on understanding behaviour within a socio-ecological context rather than seeking to change it;
- That education or educative experiences are ‘key’ in the ongoing theoretical development of socio-ecological models;
- That much of the previous conceptualisation work has omitted or marginalised the spatial, place and geographical understandings of selves, identities, cultures and social practices;
- To re-acknowledge the myriad environments that shape human, social, family and cultural behaviours and in this way we privilege the use of ‘ecology’ in the term socio-ecological, as it better represents the relationship between humans and environments; and
- That socio-ecological education is an approach that encompasses and promotes socio-cultural understandings and practices. As educators and researchers we have no problem with socio-cultural approaches, more ecocentric approaches or phenomenological approaches to understanding physical and health education, outdoor and environmental education. As the name implies, it is both a philosophical position and framework that asks us to consider connections, relationships and consequences that are often not given importance in traditional approaches to education.

We acknowledge that a social ecology for education exists across multiple levels that embrace a broad array of social, cultural, environmental and geographical influences that collectively shape individuals and their identities, families and communities, policies and the environment. We also acknowledge that if socio-ecological models strive to accommodate everything and anything, that this presents itself as an inherent weakness. Attempting to be an all encompassing framework can make using it an exercise in futility, because its size and scope, fails to serve at a practical level. Our promotion of a socio-ecological education must be more humble. It must ‘pass the test’ of practicality. Whilst we do not claim to, nor indeed wish to explore the entire jigsaw in any one project; socio-ecological frames serve to help us to acknowledge that our piece is just a part of a bigger puzzle. Used in this book, we see it as a reference from which teachers, researchers and students can ask questions about health, physical activity and sustainability in ways that shift beyond individual decision making psycho-social influences.



**Fig. 2.1** Foundational socio-ecological education concepts

Prior to our presentation of four foundational concepts that are central to our understanding of a socio-ecological education: lived experience, place, experiential pedagogies, and agency and participation, we provide a brief rationale on the importance of these concepts as educators in our diverse fields (Fig. 2.1).

## Foundational Concepts

### *A Rationale*

In elucidating a socio-ecological approach to education in the following section we outline the four principles in greater detail. We do so in an effort to provide readers with a modest understanding and interpretation of such concepts as they inform our work as educators in the marginalised fields of physical and health education, outdoor and environmental education. Our collective engagement as educators and researchers has provided us with lived experiences that we draw on in our day-to-day work, which have been influenced by these concepts. We see that many educators continue to teach content that students fail to meaningfully engage with. In some instances students seem to still be considered as empty vessels in the classroom as outside experts argue over what should or should not be in the curriculum. As a result students fail to get the opportunity to connect

meaningfully with what is taught and how they are being required to learn. As a result, we highlight the importance of dual concepts to socio-ecological education, students' *lived experience(s)* and their *agency and participation*. The concept of *place* shares similarities with lived experience in that neither are well understood. It is an issue of balance. We hope to contrast and counter-balance this by advocating for place and its importance within the communities and ecologies where we live. Finally, we highlight the importance of *experiential pedagogies*. We acknowledge that many educators and practitioners are involved in using experiential pedagogies, often not realising how this represents a significant departure from a conservative or traditional (Dewey 1938/1998) view of educational practice. Here the importance of Deweyan co-dependent concepts of the learner's experience and reflection become an important part of our work. The well-articulated philosophies and practices of experiential educators, extending Dewey's ideals, have much to offer and we share their enthusiasm. Even though it is necessary to discuss the foundational concepts individually, we deliberately follow this discussion with their application through a series of practical vignettes in the next chapter and with a series of case studies in Part Two of the book, to highlight how they work collectively. In doing so we draw the foundational concepts of place, lived experience, agency and participation together with the ongoing development of experiential pedagogies.

## *Lived Experience*

All phenomenological human science research efforts are really exploration into the structure of the human lifeworld – the lived world as experiences in everyday situations and relations. Our lived experiences and the structures of meanings (themes) in terms of which these lived experiences can be described and interpreted constitute the immense complexity of the lifeworld. (van Manen 1997, p. 101).

Conceptually socio-ecological approaches to education emphasises the importance of a 'lived experience' (van Manen 1997) and give the body a primacy that is often not seen. The above quote from van Manen provides a succinct introduction to 'lived experiences', the 'lifeworld', or 'Lebenswelt', as Husserl called it. 'Lived experience' is highly personal and subjective. To more fully understand how participants in the diverse disciplines of physical and health education, outdoor and environmental education come to make sense of and understand their 'experiences', the concept of social ecology draws on such existential qualities as spatiality (lived space), corporeality (lived body), temporality (lived time) and relationality (lived other) (Connolly 1995; van Manen 1997).

One approach that is consistently used to understand the lifeworld is that of phenomenology. In this context phenomenology is 'a philosophical approach to studying the nature and structure of experience as it is "lived" and is understood primarily from the subjective position through which meaning and meaning-making of agents as actors is made sense of' (Brown and Payne 2009). Primarily, such

sense is likely to be as a result of the agent's 'intrinsic perspective', which also acknowledges the importance of their social, cultural and historical background: As Ryan and Rossi (2008, p. 40) stated:

meaning-making that is regarded as exclusively socially constructed does not account for the varied and often contradictory perspectives that an individual simultaneously takes up and rejects, yet theories that consider meaning-making to be based only on individual psychology neglect to explain the influence of the social milieu on any verbal or non verbal interaction.

Beyond philosophy, and according to Patton (2002), phenomenology can also refer to an inquiry paradigm (Lincoln 1990), an interpretive theory (Denzin and Lincoln 2000), a social science analytical perspective or orientation, a qualitative tradition, or a research methods framework (Moustakas 1994). There exist many differing perspectives within phenomenology. Transcendental, existential, hermeneutic and phenomenological representation are contested traditions that have been informed by the three best known phenomenological philosophers of the twentieth century, namely Edmund Husserl (1859–1938), Martin Heidegger (1889–1976) and Maurice Merleau-Ponty (1908–1961). Given that phenomenology has been considered as both philosophy and methodology, it is often referred to as a moving philosophy (Spiegelberg 1982). Phenomenology as an approach is anti-reductionist in nature and attempts to get at the 'the essence of an experience' (Thorburn 2008, p. 265).

In attempting to understand the essence of experience, specifically the Husserlian strand of phenomenology, we must first attempt to 'bracket' or limit our preconceived notions of the essence of the thing being studied. Proponents of Husserlian phenomenology use terms such as 'noema' (that which is experienced) and 'noesis' (the perceptual meaning; the way it is experienced). Heideggerian phenomenology is also known as *existential phenomenology* or *philosophical hermeneutics*. Heidegger further developed Husserl's ideas by deriving two important notions: the history of understanding and the hermeneutic circle. Further to these concepts are the sub-concepts of the hermeneutic circle known as background, pre-understanding, co-constitution and interpretation, which are all interrelated. These sub-components are part of the fundamental difference between Husserlian and Heideggerian phenomenology. Heidegger's belief was that personal background and pre-understanding of an essence cannot be bracketed out; that researchers bring their own background and pre-understanding, making approaches such as Husserl's inappropriate for use in movement or practical subjects. The final philosophical position is that of the French philosopher Maurice Merleau-Ponty. His contribution to phenomenological philosophy included the role of the body in perception and society. In direct contrast to the objectified body, Merleau-Ponty's position was that the subjective body should be given ascendancy where it 'refers to the basic, intuitive experience of bodily existence as being-in-the-world' (Kerry and Armour 2000, p. 7).

Our interest in physical and health education, outdoor and environmental education and their respective meaning-making capacities, orients our attention in inquiry

to dimensions of human experience, via lived experiences, as a hidden precursor of learning. Imagine a student, let's call him Oliver. Oliver regularly goes for a run in a national park only a short distance from his house. Prior to attending university, where he studies physical education, he would often wear a heart-rate monitor that gave off an alarm whenever his heart rate dropped below a certain threshold point, suggesting that his run pace was too easy and he needed to push himself harder. After he completed a tutorial in one of his first-year classes he discarded the heart-rate monitor and went for a run on the same circuit. This time his focus was solely on what he experienced subjectively – what did he feel when running on the track, what did he 'listen' for in his body, what did he hear in his body or in the park around him? At the end of both episodes of training he wrote his reflections. Not surprisingly, there was a marked contrast in the 'knowledge' that he reflected on. Physiology, heart rate and science were the focus of his initial journal writings, whereas his second entry was a rich narrative description of interconnectedness of many aspects of his run.

While both examples provide Oliver with lived experiences, according to van Manen (1997, p. 37) they only gain 'significance as we [reflectively] gather them by giving memory to them. Through meditations, conversations, day dreams, inspirations and other interpretive acts we assign meaning to the phenomena of lived life'. What this also highlights are that educators and policy makers' conception of lived experience directs our teaching practices and curriculum inquiry and development. We become far better informed to work with people, places and communities if we understand how individuals experience (live) their health, movement or engagement with the environment.

The essence of lived experiences occurs through the body, where intrinsic and subjective qualities of experiences provide us with opportunities for insight and understanding. This method or approach prioritises how the body feels, sees, reacts and thus knows and understands. The body therefore becomes a 'site' for experience, knowledge creation and knowledge understanding (Kirk 1993). For our work within the diverse contexts of education previously mentioned, the importance of 'lived experiences' clearly frames the intrapersonal lens of any (re)conceptualised socio-ecological approach. As educators and researchers, both our ontological and epistemological 'stances' attempt to deconstruct inherent dualisms in our work from mind–body, organism–environment, biophysical–sociocultural, and so on. Importantly for the educator, their role is *not* to impose a predetermined experience upon the students they are working with. Rather it is to allow individuals to engage with movement (in physical and health education), the environment (in environmental education), the place (in outdoor education), the community (in physical activity) sensually. In other words, the initial task for the educator is to craft a learning encounter where students fully experience their moving bodily response and their personal aesthetic of human understanding via its perceptual, sensory and kinaesthetic dimensions.



## Place

Place is dynamic by its nature. Human perceptions of places and the ways they are experienced and interpreted are derived from the natural environment and the social, political and cultural responses that people have to a location. Place within our socio-ecological approach is about how people develop and experience a sense of attachment to particular locations and has both imaginative and physical realities (Wattchow and Brown 2011). Notions of place are important in the work of health and physical education, outdoor and environmental education. This is because a focus on place helps educators: (a) historically understand how humans live (including their experience of games, sport and the outdoors) and are intimately connected to places; (b) explain how a meaningful life is unlikely to occur if people's identity is severed from a deep attachment to a place; and (c) to investigate how contemporary assumptions, ideals and practices in education can silence or deny the experience of place (Wattchow and Brown 2011). As a result, place and how it is constructed, experienced and understood is inherently part of the work that educators and researchers do.

According to Gruenewald (2003b) there is a need for place-based education and pedagogy, as the educative process is vitally important in the development of a community that values the social and the environmental location. Several terms are often used to describe the intention of place-based education, such as *place-based teaching*, *place-responsive teaching*, *pedagogies of place*, *ecological or eco literacy* (Cutter-Mackenzie and Smith 2003; Orr 1992) and *ecological identity* (Thomashow 1996). A place-based or place-responsive approach, by its very nature, connects learning in school with community life and the ecologies that sustain these communities. Staff and students can participate directly in their community and become involved in local political processes that inevitably shape their lives.

Place-based approaches to education have been linked to experiential learning, experiential education, problem-based learning, outdoor education, environmental education, as well as rural education. While in and of itself this is not problematic, the way that place is presented may perpetuate a dichotomy between rural and natural places on one hand and urban, suburban and industrial places on the other. Gruenewald's (2003a) work provides a meta-theory for education to consider the pedagogical significance of places. His critical pedagogy of place (Gruenewald 2003a) presents places as centres of human experiences, as they give us knowledge about our 'place' in the world and how it works. In other words, all places are profoundly pedagogical. Further, he writes that there are five dimensions of places.

**The perceptual:** Gruenewald draws on the work of David Abram and Merleau-Ponty to explore the importance of the human perception and how people imagine and interpret places. He suggests that, '[p]henomenologically, places are the ground of direct human experience' (2003b, p. 623). In his book *Spell of the sensuous*,

Abram (1996) laments the modernist perspective, which disconnects the human from the natural world. He attempts to bridge and reawaken human experience via sensual perception of the worlds that humans inhabit. It is this connection, or coupling, where the reciprocal possibilities between the human body and its environment are continually forged that lends plausibility to an ecological ethic that enables a caring and understanding of place and its connections to others.

**The sociological:** Gruenewald writes that ‘place is where the world manifests itself to human beings’ (2003b, p. 625). As several authors have noted (Gruenewald 2003a, b; Wattchow 2007; Wattchow and Brown 2011), dependent on our philosophy and ideologies, places are said to hold culture and are sites where identities develop. In this way our experience of places is mediated by culture, education and personal experience. But places themselves are also products of culture. Highlighting the reciprocal relationship between people and their places is what makes place, as opposed to nature, environment, landscape, etc., such a useful and dynamic concept. Drawing on Casey (1996), our experiences of places are never free of culture or sociality. Importantly for education, as Gruenewald (2003b) writes, understanding the sociological dimension of places requires humans to undertake conscious reflection to understand and critique not only their beliefs, but those before them (indigenous peoples, ancestors, etc.), and potentially to contemplate those who will come after them. Abram (1996) would have us go even further, arguing that a fuller consideration of place must also include our interactions with the more-than-human-world which includes other beings, inorganic matter the webwork of ongoing relationships that continue to unfold through time.

**The ideological:** Drawing on the work of Lefebvre (1976), Gruenewald describes how relationships of space shape culture, identity and social relationships. According to this dimension, if space is moulded from historical, cultural and natural environments then it becomes political and ideological in character – our perception of place moves from being inert and relatively empty to something that is full of life, with values, beliefs, thoughts and actions, ‘when social relationships are analyzed with respect to the material spaces that contain them, one discovers that these spaces are not just cultural products; they are, reciprocally, productive of particular social formations’ (2003a, p. 628).

**The political:** highlights the role and distribution of power and capital and its consequential impacts on places. For educators places inform as a result of interactions with people and cultures. Within the literature on place, the political element for those groups that are oppressed is often described using terms like ethnic space, marginality, displacement, segregation, territoriality, annexation, and these terms are used to further understand how places are used by the powerful to exert forms of social control. As Gruenewald states ‘Exploring any single metaphor – such as territoriality, habitat, colonization, or marginality – can yield new insights on social relationships’ (2003a, p. 631).

**The ecological:** According to Gruenewald, ecological consciousness of places is fundamentally at odds with schooling, primarily due to schooling being seen as part of a modern globalised economy. As a result, not only can the curriculum

be experienced as abstract and disconnected to where we live and learn but it can ultimately contribute to ecological degradation. One concept that potentially fulfils the ecological promise of place is the notion of bioregionalism, which merges ecological and cultural thinking. As an example: wherever and whenever possible, people should produce food and materials, consume them, recycle and re-use them and manage their waste products locally. This focus on the local as opposed to the global provides opportunity and knowledge that will lead people to care more for places that they share with others. The archetypal bioregionalist tends to be fairly trenchant in this view, valorising the local and demonising the global. A place-responsive approach acknowledges the continuum of experience from local, through regional, national and even to the global. But Gruenewald's main points stand, where much of contemporary educational curricula and practice ignores the local in preference for a globalising agenda.

Some authors and researchers, such as Wattchow (2007), agree with the premises made by Gruenewald on the importance of place-responsive pedagogies, but believe that these stem from predominantly Western ideologies of space, where 'places are [seen as] empty spaces upon which certain desires and ideologies can be projected' (Wattchow 2007, p. 87) and that this does not take into account how indigenous peoples understand and conceptualise the places where they live. More in tune with indigenous thinking is the idea that a place has its own inherent spirit and meaning, waiting to be discovered (see, for example, Tacey 1995, 2000), and that humans must strive to maintain a place and live within its limits. Wattchow (2007) poses the question, 'Which comes first, space or place?' (p. 87). Differences between place as culturally constructed and place as a site of intrinsic meaning are important to understand. Exploring conceptualisations of 'insider' and 'outsider', where Wattchow and Brown (2011) draw on the work of Heidegger and Relph, is a useful way of examining such fundamental questions. 'To be an insider' according to Wattchow (2007), 'is to belong. To live in a place is to be safe and secure in the world, to have a centre of meaning and existence' (p. 62). By way of contrast, the outsider is someone who is adrift; someone who does not possess a home; someone who is alien to a place.

As we have previously highlighted, place is important to education. We share Gruenewald's position that as individuals we are capable of perceiving places and learning through that direct experience, and secondly that our ability to perceive places can be either thwarted or fostered by educational experience. As a result, there is much potential 'power' in the concept of place in the processes of education for health, environmental, outdoor and physical education. In their book, *A pedagogy of place: Outdoor education for a changing world*, Wattchow and Brown (2011) have provided (outdoor) educators with 'signposts' for a place-responsive approach to teaching and learning in the outdoors. They ask educators to take up the challenge to 'explore new ways of practice in order that they may enrich the lives of their students, their communities and their places' (NP; Book dedication). For such 'signposts' to be enacted, it is important to consider that lived experience, place, experiential pedagogies and agency/participation must be combined to offer those we are educating lived, meaningful educative experiences. These signposts consist of the following (adapted from Wattchow and Brown 2011):

*Signpost 1: Being Present in and with the Place* As an example, educators need to acknowledge that places are significant and meaningful, and that there is opportunity for the learner to explore and develop their thoughts of a place through their experiences.

*Signpost 2: The Power of Place-Based Stories and Narrative* It is well accepted that conscious reflection is an important part of experience, what is less well acknowledged is that as individuals we have been enculturated in society (via technology, schools, media, culture, family, friends) in a way that filters and conditions our sensory experiences. In better understanding these meanings and their personal interpretations, Wattchow and Brown encourage the use of stories and story telling as a mechanism for developing meaningful understanding of place(s) and their connections with lived experiences.

*Signpost 3: Apprenticing Ourselves to Outdoor Places* This signpost suggests that a combination of signposts 1 and 2 is required, as neither is enough – the embodied (sensed) and the rational/interpretive (reflective) – to gain a more holistic experience of a place.

*Signpost 4: Representation of Place Experiences* This signpost guides educators to consider how learners develop their critical competencies to interpret place. It seeks to ask questions of learners about how place is currently represented (cultural literacy, word, image, etc.). It suggests learners seek to represent their experiences using multi-modal forms: prose, poetry, video, photos, sculpture, drama.

As can be seen from the analytical work of Gruenewald more generally and Wattchow and Brown (2011) within the context of outdoor education, place is a complex concept. As physical and health education, outdoor and environmental education educators and researchers, we believe that place is an underlying foundational concept of a socio-ecological approach to education. We sense that there is an opportunity for proponents of socio-ecological approaches to be more place-responsive in their work. There are several examples from physical and health education, outdoor and environmental education that follow in this book, which highlight this promise. We finish this section with a quote from Gruenewald (2003b, p. 627):

Recognizing that places are what people make of them – that people are place makers and that places are a primary artifact of human culture – suggests a more active role for schools in the study, care, and creation of places.

## ***Experiential Pedagogies***

An ounce of experience is better than a ton of theory simply because it is only in experience that theory has vital and verifiable significance. – John Dewey

The following section on experiential pedagogies will seek to expand the concept of experiential learning and experiential education, and how it fits within a socio-

ecological approach to education. Philosophically, according to Breunig (2008), this form of education is one of the earliest forms of learning known in the Western world. Furthermore, examples of experience-based learning via ‘pedagogies’ passed through story telling, oral traditions and apprenticeship models have existed for thousands of years in ‘first nations’ and indigenous cultures and in pre-industrial approaches to learning.

Within the broad field and understanding of experiential education it is likely that most readers will be familiar with cyclical type models of experiential learning/experiential education from Joplin (1981/2008) and Kolb (1984), amongst others. In attempting to provide a definition, Joplin’s early work (1981) suggested that although all learning is experiential, not all learning is intentionally planned. There is similarity here to the work of John Dewey on experience and education. Dewey’s assumptions were that people learn experientially and that some experiences are educative whereas others are not. Importantly, for Dewey, is the understanding that all experiences need to be understood as being continuous. That is, that past experiences are always connected to future experiences. This was Dewey’s principle of continuity in education. The second principle that guided his thinking on experiential learning was that of interaction. This included everything from the physical setting of the classroom and school to the learning materials and subject matter that students engaged with. For Dewey the principle of interaction made educators acutely aware of the contextual factors of the situation in which the learning experience occurred. So for socio-ecological educators, the importance of the teacher understanding the lived experiences, spaces and places of the classrooms is inherently important for how one comes to experience (Dewey 1938/1998).

Joplin writes that the provision of an experience and the facilitation of that experience through reflection that is intentionally planned by the educator delineates experiential learning from experiential education. Moreover, Joplin posits that if the processes occur *within* the individual then this is experiential learning, it is when such learning becomes part of a broader public discussion that experiential *education* results. Experiential learning considers that knowledge is an emergent, fluid and dynamically interactive process, where knowledge develops as a result of practice or experience and, via reflection, becomes embedded as a kind of personal ‘theory’. Joplin developed a five-stage model, which is ‘organised around a central, hurricane-like cycle, which is illustrated as challenging action’ (2008, p. 17). Wattchow (2008) writes that this model reworks Dewey’s scientific method as it ‘involves a process of leading individuals and groups through challenging activities in a series of pre-emptive and predictable stages’ (2008, p. 65). The stages are as follows:

1. The focus stage: Learners are presented with material to be learned and challenged.
2. The action stage: Learners are placed into the learning environment, where the problem is at hand. This may cause stress for learners, as they might be unfamiliar with the task at hand. This stage requires students to be individually responsible and take forms of action.

3. The support/feedback stage: Support and encouragement assist learners in persisting with the challenging task. Joplin expects that ‘adequate feedback will ensure that the student has the necessary information to be able to move ahead’ (p. 18).
4. The debrief stage: During this stage the learning objective is recognised and educators support learners’ understanding of their experiences.

The other model of historical importance to development of an understanding of experiential learning and experiential education comes from Kolb (1984). Kolb’s experiential learning cycle consists of four components: (a) active student involvement in a meaningful and challenging experience (concrete experience); (b) reflection on the experience individually and in a group (reflective observation); (c) development of new knowledge about the world (abstract conceptualisation); and (d) application of this knowledge to a new situation (active experimentation).

It is important to remember that experience and reflection are integrally linked in the cyclical processes advocated by Kolb, Joplin and others. While some would argue that it is via the process of reflection that experiences become meaningful (Arnold 1979; Bain 1995), this is an overly simplistic summary of a complex phenomenon. Within much educational discourse – be that within physical and health education, or outdoor and environmental education – the reflection process often occurs superficially at the end of learning programs, camps or trips where debriefs or facilitation approaches are employed, or at the end of class where questions are posed by educators, like ‘What did you learn today?’, ‘What did you find memorable’, ‘What would you do differently?’ Unfortunately, this does little to examine the deeper significance of the processes of reflection and their role in an individual’s learning or understanding of their lived, embodied and educative experiences.

In examining the processes of reflection, Pagano and Roselle (2009) acknowledge the importance of reflection but suggest there are concerns with the process: (a) there is less than optimal clarity of the purpose and systematisation of reflection; (b) reflection exercises often rely heavily on students’ own, uncontextualised accounts of events that do not directly discern the learning that takes place; and (c) reflection is seen as educational outcome, not as a process that can lead to an outcome. Some have argued that a deeper understanding of reflection is as important as how the experience is first encountered. Educators need to both craft rich experiences and foster a deep examination of how the experiences are reflected upon. Beyond critiques of reflection there also exists commentary on issues surrounding the experiential learning cycles.

The processes of experiential learning/education are not without their critics. Briefly, there appears to be a fourfold concern with experiential learning/education cycles: (a) that it is an overly cognitive, internal psychological process commensurate with rationalist, mechanistic and deterministic worldviews (Loynes 2002; Fenwick 2001; Kemmis 1985); (b) that it reifies mind over body, in line with Cartesian dualistic tendencies (Brown 2008; Kemmis 1985; Fenwick 2003); (c) that the processes of learning are treated independently from the social, cultural,

historical, political and ecological *contexts* in which the learning occurs; and (d) that it privileges those educators and learners who seek to articulate their experiences through spoken language – often seen as common experiential education pedagogical practice (Wattchow 2008).

There are others, such as Roberts (2008), who argue that there is little or no theoretical or philosophical interrogation of the term experiential. This lack of critique has led, according to Roberts, to a homogenous definition of experiential learning that is problematic for those working in fields where practice is of utmost importance. He proposes three variations of experiential education that have potential to bridge this theoretical–philosophical gap. He describes these as experience as interaction, embodied experience and experience as praxis. He goes on to argue that each of the three may be under threat from a fourth notion, called neo-experiential education, which combines neo-liberal logics of market, efficiency and control.

This brief introduction to experiential pedagogies, experiential learning and education draws attention to issues for those working in the field (or classroom, lab or gym) where experience and reflection are seen as the crucial medium of learning. Imperative in our vision for education is that socio-ecological educators clearly understand the constraints of such ‘cycles’ and are prepared to work in an environment that actively critiques experiential pedagogies from Dewey, through Kolb and Joplin, and into the future in an attempt to develop even more sophisticated learning cycles that are responsive to the particular needs of social groups and their learning contexts. In other words, the temptation to use experiential cycles as a kind of formula needs to be revisited. Our concern is that if this does not occur, there is a risk of engaging with the concepts of experiential learning and education superficially, therefore reinforcing and privileging a ‘way of knowing’ that is more rationalist and functionalist than it is deeply experiential. Paying lip service to experiential pedagogies occurs at the expense of more holistic, embodied and ecological ‘ways of knowing’, concepts that are at the heart of becoming a socio-ecological educator.

## Agency and Participation

We consider that a central aspect of our socio-ecological vision for education is the development of learning contexts that enable the promotion of agency and active participation amongst learners. Ultimately, education should take place in a way that allows individuals and communities to facilitate positive change over their lives, environments and communities or, as Emirbayer and Mische (1998, p. 971) suggest, use education to provide actors with the capacity ‘to critically shape their own responsiveness to problematic situations’. The connections between education and agency can be traced back to the Enlightenment (Biesta and Tedder 2006) from which agency has been understood as ‘an educational aim and educational ideal and as the desired outcome of educational processes’ (Biesta and Tedder 2006,



p. 5). Education, we suggest, provides the setting in which individuals develop their capacity to make critical, independent judgments, which in turn translate into self-directed action.

Before examining the relationship between agency, education and social ecology, we need to outline how we understand the contested concept of agency. In simplistic terms agency is understood as individual capacity to act independently and make free choices (Barker 2005). Agency is a central notion in various streams of social theory, including sociology, economics and political science (Biesta and Tedder 2006). Sociological theory is largely characterised 'according to the relative emphasis placed on agency or structure' (Biesta and Tedder 2006). Structure refers to physical, cultural or social patterns that influence, limit and enhance the opportunities available to individuals and communities (Roberts 2009). The structure–agency debate gained considerable momentum within sociological analyses in the 1970s and 1980s, with several notable theorists (e.g. Bourdieu 1977; Elias 1978; Giddens 1984) seeking to overcome the limitations created by adopting a dualistic understanding of structure/agency. These perspectives instead view structure and agency as inextricably linked: structure is created through human agency and this in turn shapes how individuals interact within particular structures. According to Giddens, structures are 'both the medium and the outcome of practices which constitute social systems' (1984, p. 27). Within these perspectives individuals are neither entirely responsible for their own interactions within society or the helpless victims of circumstances beyond their control; the 'truth likely lies somewhere between the two' (Ravenhill 2008, p. 33).

This brief overview illustrates the complexity of understanding agency before we attempt to frame it within a socio-ecological context. The theoretical underpinning of agency we feel we align most closely to, and that reflects the empirical data discussed within our case study chapters, is the notion of a reciprocal relationship between structure and agency as advocated in the work of Bourdieu and Giddens. Within this, individuals both create social structure and are influenced by it.

Social transformation or the performance of agency is challenging but, because individuals are ultimately responsible for creating social structure, there is always potential for both children and adults to reshape and challenge dominant and repressive social forces. However, to do so requires an awareness that current structures are inadequate, or the development of critical consciousness (Freire 1972) and the ability to access particular physical, social and cultural resources needed for transformation. The educator is responsible for increasing learners' critical awareness, but also has responsibility to assist them with the acquisition of resources necessary to act on this new knowledge. In the following sections we will consider how this understanding of agency fits into our proposed socio-ecological approaches.

A recognition and understanding of the concept of agency has traditionally been missing from ecological analysis. McLaughlin (2001, p. 12) criticises both sociological and ecological perspectives for systematically failing to capture the 'dialectic between structure, agency and environment'. He suggests that ecological analyses have traditionally viewed actors as passive, viewing physical and social en-



vironments as ‘natural’ and in doing so have failed to adequately address questions of ‘power and conflict’ and how these shape individuals’ interactions with their surroundings and subsequent behaviour. Sociological perspectives, by comparison, while recognising how actors negotiate and contest cultural conventions, fail to adequately address the dynamics of social structure through a lack of consideration of the broader environment (McLaughlin 2001).

More recently, various authors have explored the potential connections between agency and social ecology. McLaughlin (2001) discusses a ‘ecology of social action’, while Maton (2000) outlines the ‘social ecology of social transformation’. Costall (2000) suggests a ‘ecology of agency’, which describes agency not in terms of individual capacity but as an outcome of transactions that occur between the individual or actor within particular contexts. Agency is achieved through the individual acting ‘by means of an environment, rather than simply *in* an environment’ (2000 p. 18). This position enables understanding of how agency is achieved through particular contexts but not others. As Biesta and Tedder (2006, p. 18) suggest, utilising this framework explains agency as resulting from:

the transactions of individuals within particular situations, within particular ecologies ... agency is not something people can have. It is, as we suggest something that people can achieve, and they can only achieve it in transaction with a particular situation. This allows for the empirical possibility that in some cases the achievement of agency requires more effort from the individual than in other cases, something that is connected to the availability of resources.

This understanding is valuable for reconciling the disparity between social ecology and the various sociological conceptualisations of agency. Individual and community capacity to act and transform is dependent on the resources they have available within their social, physical and cultural environments and how much the broader macro-level or policy context encourages or limits their interactions in each of these settings. This understanding has certain implications for the socio-ecological educator. Fostering agency and empowerment within individual learning contexts will not automatically result in learners developing agency in other contexts of their lives. A more holistic framework needs to be adopted, that not only encourages agency within the learning environment but provides participants with the opportunity to critique and examine how the various layers of the socio-ecological framework constrain and enable agency more broadly. Maton (2000, p. 29) suggests that attempts to facilitate agency amongst marginalised young people often have limited effect because of the failure to acknowledge and respond to the ‘powerful, countervailing nature of the local social environments in which daily life and social problems are embedded’. He provides an example of a school-based intervention that enhances the competencies of inner-city youth, which may not alone be enough to

reverse, negative trajectories sustained in the neighbourhood, family and peer group environments. That is, the ongoing, cumulative impact of multiple, negative environments affecting many inner city youth may prove stronger than positive gains in individual capacity of these youth resulting from a given social program. (2000, p. 29)

The challenge therefore is to provide individuals with experiences of agency but recognise that this alone is insufficient to develop capacity to make change. We must also recognise how the various layers of the socio-ecological framework may support empowerment – or create disempowerment – and subsequently equip individuals with the necessary tools to gain agentive capacity within wider contexts/environments that currently disempower them. To achieve this Maton (2000) postulates that education needs to be ongoing, to relate specifically to the setting and community environments in which the individual is located, and to engage not only with individuals in the immediate learning context, but also with key actors across each socio-ecological layer, be these other teachers, parents, peers or policy makers.

Participation is an essential part of ‘agency in action’. Participation refers to more than simply allowing learners to take part in activities, or consulting them on what and how they would like to learn. While consultation is an important first step in encouraging participation, active participation only occurs when learners have specific involvement in key decision-making processes (Thomas 2007).

One of the most substantive bodies of literature to emerge in this area has focused on the active participation of children in all aspects of social life. Driven largely by the UN Convention on the Rights of the Child (1989), there has been increasing importance placed on facilitating decision making amongst young people. Despite this focus, various authors have argued that while consultation with children has improved (Thomas 2007), a ‘culture of non-participation ... is still endemic’ (Matthews 2003, pp. 254–255). Various typologies have been developed to assist with understanding children’s participation. Hart’s (1992) ladder with various ‘rungs’ from manipulation to the child-initiated, shared decisions with adults as the top layers, has come to dominate understanding of children’s participation, particularly amongst practitioners. Various amendments have been subsequently made to the ladder (Hart 1997; Thomas 2000; Franklin 1997; Treseder 1997).

Hart (2008) clearly acknowledges ‘the need for alternate models’ (e.g. Schier 2001; Treseder 1997) that ‘explore the relationship between different aspects of children’s participation and have relevance in different cultural contexts ... recognising the problems of applying Western notions and democratic models of participation to other cultural and political contexts’ (Barratt Hacking et al. 2012, p. 10). Franklin in particular altered the top section to make the top rung ‘children in charge’, followed by ‘children lead adults help’ to ‘joint decision’. Thomas (2007) suggests that there is a far more explicit focus on how power is shared by adults and handed over. This is particularly important in understanding active participation, as to gain agency and participate, individuals have to have access to power, while others have to be prepared to share and relinquish the power they have. At the most basic level this involves the relinquishing of power by educators and engagement with a more dialogical teaching approach with learners (Freire 1972). Wicker (1987) suggests a range of characteristics that are essential for activities or projects aimed at facilitating participation. These provide a useful framework for understanding participation in an educative context.

### Conditions of convergence:

- The project builds on existing community organisations and structures that support learner participation
- As much as possible project activities make participation seem natural
- The project (or curriculum or educational focus) is based on children's own issues and interests.

### Conditions of entry:

- Participants can choose freely whether they are involved
- The project is accessible in scheduling and location
- Involvement does not require skills that are not within the learners' current capacity.

### Conditions for social support:

- Participants are respected human beings with essential worth and dignity
- There is mutual respect amongst participants
- Participants support and encourage each other.

### Conditions for competence:

- Participants have real responsibility and influence
- They understand and have a part in defining the goals of the activity
- Participants play a role in decision making and accomplishing goals, with access to information they need to make informed decisions
- They are helped to construct and express views
- The project results in tangible outcomes.

### Conditions for reflection:

- There is transparency at all stages of decision making
- Participants understand the reasons for outcomes
- There is opportunity for critical reflection
- There are opportunities for evaluation at both group and individual levels
- Participants deliberately negotiate differences in power.

(Adapted from Chawla and Heft [2002](#))

While Wicker has provided this framework as guidance for individual projects, we would suggest that teaching in ways that provide these participatory conditions should be an ongoing enterprise. Developing agency and participation should be embedded within our overall practice, not a one-off or term-long project we seek to facilitate. It is only through this that individuals can access agency and undertake sustainable and meaningful participation in all layers of their lives.

## Chapter Summary

The purpose of this chapter has been to provide readers with a historical and theoretical overview of the key foundational concepts we are utilising to develop our socio-ecological approach for education. We have outlined the development of socio-ecological thinking and, importantly, sought to clarify how our socio-ecological approach for education (which is outlined more extensively in Chap. 3) diverges from existing socio-ecological frameworks that have their origins more in the disciplines of psychology and public health. Our proposed socio-ecological approach is built around four central concepts, as we have illustrated: lived experience, place, experiential pedagogies, and agency and participation. Our theoretical underpinnings for lived experience are drawn heavily from phenomenological theories. We have used these to illustrate the importance of guarding against pre-defining learners' lived experiences as educators, but instead finding ways to encourage students to engage with activities that allow them to develop deeply meaningful and divergent experiences. Our understanding of place extensively utilises the work of Gruenewald and Wattchow and Brown (2011) to emphasise the complexities involved in interpreting and understanding the notion of place before considering its value in the educative process.

We drew these two themes together in our analysis on experiential pedagogies and discuss the contributions made by Dewey, Joplin and Kolb, and how they have influenced our thinking. We again indicate a point of difference in our socio-ecological interpretations and the established theories within this area. We have suggested that a socio-ecological approach should encourage greater critique of existing 'cycles' of experiential pedagogy and move away from their formulaic application in some educative contexts.

Finally, the chapter has outlined the potential value of broadening traditional sociological understandings of agency and participation to incorporate socio-ecological thinking, particularly recognising the important role the environment can play in empowering or disempowering individuals.

Together these four foundational concepts underpin our socio-ecological approach to education. Chapter 3 provides an illustration of how these theoretical concepts can be understood within everyday education.

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