

Prince, Heather (2018) Making sense of the sensory outdoors. In: Leather, Mark, (ed.) Book of extended abstracts: 16th European EOE conference: Outdoor atmospheres and narratives - connecting young people to the world. Plymouth Marjon University, Plymouth, UK, pp. 91-96.

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Making Sense of the Sensory Outdoors

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Many practitioners introduce young people to sensory activities outdoors to encourage them to make a connection with the environment. This is an inclusive approach to engaging a group of children, which is low cost, utilises little equipment, does not require technical expertise and can take place in a local environment. However, in respect of pedagogy and learning, there are questions about its justification and meaning, and whether or not young people can derive a wider understanding of sensory deprivation and disability. Furthermore, through experiencing nature, do young people actively seek a relationship or connection with it?

Educationalists following Montessori approaches promote sensory integration in young children by providing sensorial materials, usually in a 'prepared' indoor environment. More recently through such pedagogies, the potential of the outdoors for enabling sensory exploration has been recognised: '...the connection between child and nature is of critical importance' (Noddings, 2017, p.45) and should be more inclusive. i.e. not only for children with sensory challenges.

Graham (2014) provides evidence that the most important outcomes for young people of outstanding Outdoor Learning are creativity, ownership and progression. Pedagogical approaches that stimulate sensory awareness, by their very nature encourage and stimulate curiosity, exploration, inquiry, experience and communication and address these outcomes well. Klein, Moon and Hoffman (2006) use similar approaches to define the concept of sense-making as '... a motivated, continuous effort to understand connections (which can be among people, places, and events) each to anticipate their trajectories and act effectively' (ibid.p.71) and involve the concepts of creativity, curiosity, comprehension, mental modelling and situation awareness. Some formal education initiatives and schooling are founded on these outcomes and approaches to outdoor learning, such as nature kindergartens, forest school and bush kinder, and within these and other early year settings,

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outdoor play is supported and encouraged. The integration of environmental education including sensory activities in Early Childhood Education (ECE) through its application to the theoretical models of Piaget and Vygotsky has only recently been recognised in the literature (Hebe, 2017). Within outdoor settings for older children, the justification for the inclusion of sensory activities in outdoor learning or environmental education is weaker. Key early proponents of sensory activities in the outdoor environment included educators such as Joseph Cornell and Steve van Matre, 'Learning experiences in our field should include more M & M (magic and meaning) and less 'N & N's (names and numbers)' (van Matre, 1999, p.4). Van Matre included a range of sensory activities in progressive programmes such as 'Earthkeepers' and 'Sunship Earth' popular in the 1980's and 1990's. There have been re-iterations of many of these activities often used out of the intended context, wrongly appropriated or not at all. However, there is a belief that when children are using their senses in the outdoor environment, this plays a key role in knowledge retention and intellectual and cognitive development (Kalisch, 1999; Louv, 2008) although there seems to be little research evidence to support this.

A simulation of sensory deprivation, for example sight, may allow young people to understand the issues of visual impairment and supports the co-construction of narratives about equality, diversity and inclusion and an appreciation of disabilities (Prince, 1999). Conversely, viewed from the perspective of a visually impaired person, disabling the enabled in this way, albeit temporarily, is seen to affect corporeal movement and body language and promotes non-visual 'pictures' or somatic conceptions of the land and a heightened awareness of other senses.

Kellert (2012) introduces the term 'naturalistic necessity' – the role of children's direct experience in nature for growth and development. The question is whether such sensory experiences in the outdoors can develop a relationship or connection with nature. Bögeholz (2006) provides some empirical evidence for experiences in nature contributing to the individual development of attitudes and values and thus suggests that such education promotes and enhances sustainable practice (Cooper, 1999). Outdoor experiences that involve understanding and experiencing nature can change behaviour and attitudes and are key attributes of sustainability (Barnes and Sharp, 2004). Prince (2017a) provides vignettes

of outdoor experiences within formal education that promote a shift towards pro-environmental behaviour.

Are the senses equally addressed with outdoor experiences with young people? It is often the case that 'Ways of seeing' privileges sight relative to other sensory modalities' (Macpherson & Minca, 2005) recognised as 'ocularcentrism' (Jay, 1994). An example of this is asking young people to explore their environment through the lenses of a colour following a prismatic ecological approach (Cohen, 2013) 'Colour ...as a multispecies sensory process or network that generates biosemiotic material effects with their own metaphorical meaning ...' (Yates, 2013, p.85). However, touch is also important and can break the distance between subject and object, assuming a proximal and performative form of knowledge that exceeds representation (Goesser, 2014). The more recent understanding of 'haptic' (of, or pertaining to, touch) experiences, within outdoor adventure education and experiential learning, draws from haptic geographies. These encompass more than the tactile or tactile sensations towards embodiment (Paterson, 2009). In sensory activities, the feeling of an object relative to the body and a body relative to the object supports the understanding of the importance of the involvement of tactile, proprioceptor (the sense of bodily position) and kinaesthetic experiences.

Sensory activities in the outdoors enhance the interest and motivation of young people, and can support cognitive development and changes in behaviour, values and attitudes. Much evidence is anecdotal and more research is needed to substantiate this supposition. Education and learning are important for the development of knowledge and understanding of sustainability amongst young people (Christie, 2012) although the link between outdoor learning experiences and a shift towards pro-environmental behaviour is complex (Prince, *ibid*). However, in a recent survey of the provision of outdoor learning in the formal curriculum of primary schools in England (Prince, 2017b) teachers were keen to use activities in the local environment that are low cost, equipment light, required a low level of teacher expertise in the area of outdoor learning and address core curriculum areas (science, literacy and numeracy). Sensory activities are examples of pedagogical approaches meeting these criteria.

Making sense and eliciting meaning of sensory activities in the outdoors is viewed here from the perspective of the adult and of educators and facilitators of outdoor learning. The voice of the young person ('generation Z') should be heard, as illustrated here:

Note: A & E is the 'Accident and Emergency' department in UK hospitals.

Wild is a child

*Wild is a child who stays out until dark
Wild is the child that lights fire with bark
Wild is a child with mud on their knees
Wild is the child who climbs up in the trees
Wild is a child a long way from home
Wild is the child with no need for a comb
Wild is a child who wipes their bum with a leaf
Wild is the child who uses a stick to brush their teeth.
Wild is a child who sleeps under the stars
Wild is the child who keeps tadpoles in jars
Wild is a child who fell out of a tree
Wild is the child with their own parking space at A&E
Wild is a child that I would like to be.*

Rowan Ashworth (9), Winner of the Wordsworth Poetry Prize (2017)

The extent to which sensory experiences outdoors should be mediated and facilitated, or whether young people simply need space, place and opportunity to explore and make sense of their environments before adult intervention or interpretation, are complex and debated questions. Sensory experiences outdoors do give young people agency and ownership and undoubtedly promote creativity and enquiry. To achieve progression and promote learning, an outdoor experiential pedagogical approach utilising the senses is invaluable.

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