



# Place-based outdoor learning: more than a drag and drop approach

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**Abstract** The Forest School movement offers children valuable outdoor experiences; however, pedagogically it is under-theorised and under-researched in diverse contexts. As a result, it has at times become a “drag and drop” program, which does not necessarily acknowledge local place, environment or culture. Alternatively, place-based outdoor learning is examined as a place-responsive approach, where a year-long outdoor program was implemented and evaluated in an Australian primary school. Place-based outdoor learning is a broader integrated approach that is interconnected with place, curriculum and learners. This paper re-envisioning a perspective on outdoor teaching to individualise meaningful learning in nature, within specific contexts.

**Keywords** Forest School · Place-based · Place-responsive · Outdoor learning · Primary curriculum

## Introduction

Outdoor experiences in primary schools have considerable scope for addressing children’s academic goals, social development and overall wellbeing (Lloyd and Gray 2014). Leather (2018) acknowledges the prominent Scandinavian outdoor teaching movement as a salient influence to outdoor programs worldwide. Ideally, outdoor

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learning is localised learning, and as Bentsen et al. (2009) state, “different outdoor traditions have emerged not only in relation to specific geographical landscapes, but also as a consequence of particular circumstances: cultural, social, economic, demographic and political contexts” (p. 30). Modes of outdoor teaching vary significantly among countries and even more subtle differences occur regionally within nations (Bentsen et al. 2017).

The Scandinavian model of outdoor learning underpins the UK Forest School movement, which has forged ahead to offer children valuable forays in the outdoors, in both early childhood and primary school settings. Forest Schools have an emphasis on affective outcomes, experiential learning and self-directed play (Knight 2009; O’Brien and Murray 2007). Leaders are qualified through completing a standardised set of procedures to be imported to their educational setting, often in commercial ventures. The philosophy of Forest School is to encourage and inspire individuals through positive participation during engaging, motivating and achievable activities in supportive natural environments (Knight 2009). Children who complete Forest School programs are reported to develop their affective learning domain (O’Brien and Murray 2007). Through evaluating numerous small case studies of programs, Slade et al. (2013) report that self-confidence stemmed from children having freedom, time and space in the outdoors environment. Cooperation of children during group work is also promoted as a result of completing Forest School sessions (Knight 2009; Slade et al. 2013). While these benefits are admirable, it could be argued the gains may occur in any environment, regardless of the localised features and cultures.

The highly standardised principles and routines of Forest School are adopted as a “drag and drop” approach, and programs are implemented in various countries with little regard to the cultural-ecological context. Arguably, the social construction of Forest School has been packaged into a commercial commodity, rather than an educational theory or pedagogy. Leather (2018) has acknowledged that the “rapid development of Forest Schools has seen pragmatic concerns overtake conceptual understanding” (p. 2). Leaders are trained to establish learning programs based on procedures, rather than the affordances of the environment. While there is reference to pedagogy, it is not central to the training of Forest School leaders. Therefore, it may be suggested the Forest School model has gone through a process of “McDonaldization” (see Ritzer 1993), whereby the localised features have been overlooked in favour of a set of methods and protocols. These methods have resulted in Forest School programs becoming controlled and predictable, two factors that do not characterise the outdoors. Even more troubling from a global perspective, is when the approach is moved to other countries where different environmental factors, history and Indigenous cultures must be taken into consideration.

As the UK Forest School movement is “dragged and dropped” to other countries by training companies, the integrity of outdoor learning is jeopardized. Lloyd (2016) argues that when the Forest School model is “dropped” in an Australian school context it does not reflect the localised curriculum, culture or environmental practices. Leather’s (2018) critique of Forest School highlights three major concerns: that Forest School is a social construction; the lack of pedagogical theory in the approach; and the movement has been packaged into a commercial training venture. This article responds to

Leather's apprehensions by advocating for the implementation of place-based outdoor learning pedagogy as an approach that is relevant to the social context where it occurs, is rich in pedagogical theory, and is delivered by teachers.

Place-responsiveness is heralded as pedagogy to sensitively plan and implement outdoor programs (Dyment and Potter 2015; Gray and Birrell 2015; Gray and Thomson 2016; Hill and Brown 2014; Lloyd 2016; Lloyd and Gray 2014; Mannion and Lynch 2016; Wattchow and Brown 2011). Place-responsive pedagogy incorporates being present in, and with, a place, and recognises the power of place-based stories and narratives (Gray and Birrell 2015; Gray and Thomson 2016). As this responsive way of thinking is a *pedagogy*, rather than a *program*, there is no danger of a “drag and drop” approach being taken. For place-responsive planning, Mannion et al. (2011) propose a typology for the development of educational programs in the categories of: place-ambivalent, place-sensitive, and place-essential. These ‘types’ are not completely distinct from each other and are best considered as a continuum of place-responsiveness. Mannion and Lynch (2016) succinctly describe place-responsive planning as:

1. Place-ambivalence: teaching strategies do not actively plan to take much account of the place as a contributing factor in the teaching and learning.
2. Place-sensitive: teaching strategies do plan to take some active account of the role the place will play in teaching and learning.
3. Place-essential: teaching strategies are planned so that they cannot be enacted if some specific location is not available for teaching and learning (p. 95).

These components of place-responsive pedagogy offer an anchor for devising teaching strategies to be facilitated in place-based education. Planning curriculum with place as the central vehicle for learning affords children benefits of the localised cultural experiences. One of Leather's (2018) major concerns is that Forest School is under-theorised in regard to learning theory. In response to the validity of this point, the remainder of this paper focuses on the conceptual framework and practical implementation of place-based outdoor learning (PBOL) as an example of an outdoor learning program grounded in educational theory.

## Defining place-based outdoor learning

Place-based education programs are being created and delivered in various locations around the world (Gray and Birrell 2015; Gray and Thomson 2016; Howley et al. 2011; Miles 2013; Smith 2002; Sobel 2004; Tanzer 2011). Place-based learning occurs in local environments and focuses on the social, cultural, economic, political and natural contexts in which it takes place (Smith 2002). Delivery, content and focus depend on where the learning program is situated (Gray and Birrell 2015; Gray and Thomson 2016). These education programs have common characteristics, yet as Smith (2002) argues, “place-based education does not come pre-packaged. Its curriculum and activities arise from the individual qualities of specific communities and the creative impulses of particular teachers and students” (p. 31). When implementing place-based education, what works in one community and place does not necessarily work

in another. According to Lloyd (2016) the concept of PBOL can be further articulated by expanding the core principles of:

- Contributing learning theories
- Direct and immersive experiences
- Localised learning environments
- Classroom teachers deliver sessions
- Interdisciplinary curriculum learning
- Development of affective outcomes

### Guiding theoretical framework

Within a constructivist paradigm, sense is made of the world through an individual's own encounters and actions (Adams 2006; Bruner 1983; Cakir 2008; Leather 2013; Quay 2003). Learners utilise the foundation of their previous experiences as a basis for new knowledge. Vygotsky's (1978) social constructivist theory incorporates the role of people and culture in the development of understandings. Paramount to this theory is the social nature of learning and the importance of interactions with others. Additionally, knowledge acquisition through language use and the importance of learning through play are seen as vital elements with children (Dolan 2015; Dowdell et al. 2011; Elliott 2013; Hartmeyer and Mygind 2015; Quigley 2014; Rios and Brewer 2014). According to social constructivist theory teachers are seen as a guide, facilitator, and co-explorer; their primary role encourages learners to question, challenge and formulate their own ideas, opinions and conclusions.

Authentic learning (Beames and Brown 2016; Newmann 1991; Newmann and Associates 1996; Newmann et al. 1996) is a constructivist learning theory with an emphasis on real life experiences. Beames and Brown (2016) posit that authenticity is one of the foundations of adventurous learning, in part because it relates these constructivist concepts to academic work embedded in outdoor and environmental education. By promoting exploration, discovery and meaningful construction of concepts in real world contexts, authentic learning theory amplifies the importance of prior knowledge, knowledge in context and meaningful engagement (Hornstra et al. 2015; NSW Department of Education and Training 2003; Quigley 2014). Higher-order thinking, deep knowledge, substantive conversation and connections to the world beyond the classroom are the cornerstone ideas in authentic learning.

Dewey (1938) is seen as the “parent” (Priest and Gass 2005) of modern experiential learning. This theory recognises that knowledge is constructed in social contexts where students are engaged as active learners, rather than passive recipients of knowledge (Quay 2003, 2015). Dewey's work continues to permeate current theory (Quay and Seaman 2013) and has relevance in continued educational reforms. The importance of Dewey for outdoor educators and the implications of experiential learning cycles have been explored by Ord and Leather (2011). These cycles lead participants through a range of stages to develop direct experiences into concrete learning. In outdoor learning, these experiential experiences occur in direct and immersive environments.

### *Direct and immersive experiences*

PBOL follows the guiding principle that if we want people to live well in this world, they need to be educated in this world (Orr 2004). This includes our gardens, green spaces, local businesses and towns. Truong (2017) highlights the importance of giving attention to children's engagements, connections, and relations with environments and objects, in order to increase our consideration of children's embodied learning opportunities in local outdoor spaces. Outdoor learning emphasises a deep love and affection for the planet through immersion in the outdoors; learning in the outdoors is a holistic way of educating children. As such, Humberstone and Stan (2012) acknowledge that "learning in the outdoors, like learning more generally, does not occur in isolation" (p. 183). Children are immersed in the out-of-doors environment and learning is specific to the context where it occurs.

### *Localised learning environments*

PBOL is localised learning conducted in situ and within an authentic context (Lloyd and Gray 2014). Additionally, it is characterised by immersive, engaged and personalized learning for students (Gray and Birrell 2015; Gray and Thomson 2016). Beames et al. (2012) propose the four 'zones' of outdoor learning and argue it should occur in the local environments of the first two zones, as this is most contextualised to children's lives. The zones are defined as:

- Zone one: school grounds;
- Zone two: local neighbourhoods, which can be explored on foot, or by using public transport;
- Zone three: day trips that require group transport some distance from the school, and are normally conducted by external providers;
- Zone four: residential outdoor centres for overnight experiences that are located further away from the school (p. 6).

Using the school's grounds and the local neighbourhood means that taking children outside does not involve transport nor added expense (Dolan 2015; Mannion et al. 2015). Hence, PBOL is accessible for all as there can be little to no cost involved. Additionally, completing outdoor learning on school grounds means there is minimal disruption to the regular timetabling of a primary school, ensuring regular learning and lesson continuation (Beames et al. 2012). PBOL promotes visiting and conducting learning activities in places nearby the school, and in locations close to where children actually live. In this way they develop relationships with the places closest to their daily lives.

### *Classroom teachers deliver sessions*

Relationships with people and place are central to outdoor learning. Classroom teachers report an increased bond and deeper relationships with their students after completing outdoor experiences (Wattchow and Brown 2011). In PBOL, it is the classroom teacher who develops a relationship with the children, as teachers themselves are the ones to

deliver sessions. Teachers are reported by Waite (2010) to value the outdoor environment strongly as they have the “chance to observe the whole child in contrast to their more narrowly-focused teaching role within the classroom” (p. 120). As teachers deliver outdoor learning, the programming becomes part of their standard interdisciplinary classroom teaching and learning program.

### *Interdisciplinary curriculum learning*

Research has detailed increasing opportunities to include interdisciplinary outdoor learning within the formal school curriculum (Bentsen et al. 2010; Dolan 2015; Gray 1997; Gray and Martin 2012; Gray and Perusco 1993; Lloyd et al. 2016b; Ryan and Gray 1993; Waite et al. 2015). School grounds, gardens, and green spaces provide rich opportunities for teaching across the curriculum, and possibilities for children to bridge the nature/culture binary themselves (Truong 2017; Truong et al. 2016). Learning in the outdoors is achievable in primary schools due to established organisational structures. Contributing factors include: children have one main teacher; a high degree of parent input and teacher/parent trust exists; pre-planning for outdoor experiences can be intensive as the class work together all day; and, the integrated nature of the curriculum allows outdoor experiences to be cross-curricula.

The blurred distinction between ‘play’ and ‘work’ where playful learning is not seen as valuable lesson time, is recognised as an obstacle for out-of-doors sessions (Waite 2010). In playful learning the environment and its possibilities are directed by the child; they can engage alone or with others. The space becomes one where children can explore their interest through playful engagement on tasks (Broadhead and Burt 2012). A natural environment can become a learning tool as the structures are flexible, according to the interests of individual children. Playful learning allows children to use their imaginations, and create and practice vocabulary in an informal setting. Within the early childhood sector it is recognised that both unstructured play and playful learning prepare children for the transition to school (Hirsh-Pasek et al. 2009). The justification that outdoor play is relevant as school work for primary school children is not commonly noted in related literature. Therefore, playful learning has sizable barriers to implementation in primary schools due to curriculum pressures.

However, PBOL aims to overcome these contentious issues by offering an outcome-based, curriculum model. As such, outdoor learning promotes the completion of content centric outcomes. Beames et al. (2012) have stipulated that it is not the *content* that changes, rather it is the *context* where it occurs. PBOL curriculum aims to cover the same learning outcomes that would be covered inside the classroom. In relation to the place-responsiveness typology (Mannion and Lynch 2016), PBOL would be positioned on the place-sensitive to place-essential part of the continuum, which allows for curriculum content to be covered, yet also promotes learning related to outdoor locations, and directed by specific places. Beames and Ross (2010) state that in the outdoors “the learning is often inherently cross-curricular and situated, as much of what a child encounters in the ‘real world’ cannot be considered in isolation from the often fragmented and decontextualised subject areas presented in the curriculum” (p. 98). PBOL allows children to cover curriculum content in an authentic context; one that is not bounded by subjects, but rather occurs across learning areas.

## Researching place-based outdoor learning

PBOL was enacted within an Australian Primary School for the duration of one academic year. Weekly sessions were conducted in the school grounds and in nearby natural spaces. An integrated learning curriculum, spanning science, geography, art and English, was taught. The outdoor components were embedded within the general class teaching and learning program. There was an emphasis on the transfer of learning between the indoor and outdoor environments; often outdoor experiences were the stimuli for indoor learning tasks. The classroom teacher taught all sessions, consulting environmental experts, or local Indigenous elders, where necessary.

A case study methodology was adopted to research the phenomenon as “the naturalistic style of case study research makes it particularly appropriate to study human phenomena, and what it means to be human in the real world ‘as it happens’” (Gillham 2000, p. 2). A mixed method convergent design guided the quantitative and qualitative data collection for evaluation. A Year One class of 27 children, 14 girls and 13 boys, participated in the study. The children were five or six years old at the commencement of the study.

Drawing on the work of Clark (2004), the study was guided by the ‘mosaic approach’ that involves the use of multiple research tools, such as photography and visual methods, which are considered to be more child-friendly. These participant-centred methods are suited towards children’s interests thereby increasing engagement in the research process (Truong and Mahon 2012). Whole class data collection included academic results, behavioural records and general observations. In addition, eight focus children were involved in further research tasks to ensure a depth of understanding. These tasks included: semi formal interviews, visual methods, photographs, photo elicitation, structured observations, body-worn GoPro cameras, and the collection of work samples (Lloyd et al. 2016a, 2018). The data was analysed using inductive open coding, allowing emergent themes to be identified. Subsequent results were organised by the themes of curriculum and engagement, making connections to place, and wellbeing (see Lloyd 2016). The following discussion provides an analysis of the emergent PBOL program in relation to the Forest School movement, in advocating for an approach that is localised, culturally responsive, and grounded in educational theory.

## Comparisons of forest school and place-based outdoor learning

Before comparing Forest School and the PBOL research, it is important to clarify the salient differences between the two approaches. In PBOL, the classroom teacher delivers sessions within an embedded curriculum framework, experiences are designed to be responsive to place, and the concept is based in educational theory. According to Leather (2018), Forest School sessions for the most part are guided by external facilitators, may be lacking a basis in educational theory, and are built on a set of “drag and drop” procedures.

The results from the PBOL case study, and those presented in Forest School research, reveal some similarities. Both approaches to outdoor learning offer meaningful learning opportunities for children. Significantly, both develop children’s interpersonal relationship skills and develop overall wellbeing. Dillon et al. (2005) argue that



interpersonal skills cannot be practised in a classroom environment to the same extent as in the outdoors. Forest School research has highlighted that when motivation increases, so does independence and self-confidence (Knight 2009; O'Brien and Murray 2006). In the PBOL case study, as children became confident in their abilities, they were increasingly likely to use creativity and imagination during tasks. In PBOL sessions, the communication, positive group dynamics, and the high degree of care that children demonstrated for each other, was consistently evident. Interpersonal relationships within the class broadened to include a network of friendships that reached out to all children in the class. Murray and O'Brien (2005) argue that in Forest School, when children's confidence in a skill is present they are able to communicate proficiently and take on leadership roles amongst their peers. In PBOL, leadership qualities in children also became pronounced when they were confident in their own abilities. Forest Schools have a steadfast history of promoting interpersonal skills in the outdoors, and it is argued that PBOL offers similar gains for children completing outdoor learning.

Forest School research reports that in the outdoors, opportunities to engage in spontaneous talk, which plays a role in the development of descriptive language and communication, occur frequently (Knight 2009; O'Brien and Murray 2006). Slade et al. (2013) propose that children's "more sophisticated uses of written and oral language and communication is prompted by their visual and sensory experiences" (p. 67). During the PBOL case study, play and construction experiences ensured children had time to experiment with their oral language communication skills. The results indicate that children were able to communicate and interact with their peers using oral language with continually improving proficiency.

A PBOL approach extends the success of Forest School, in that the oral language components were also relevant to classroom writing lessons. Play experiences and formal lessons worked in tandem to increase engagement, communication, imagination, creativity, contextual knowledge, and oral language development. Providing a stimulus for learning prompted longer, more detailed writing than was completed in general writing samples. Utilising photographs from outdoor experience as a planning tool generated interest, and a stimulus for what to write in their sentences. The children could write about their actual experiences, rather than relying on vicarious situations or set formats provided by the teachers. This was possible because, in PBOL, the classroom teachers taught inside and outside lessons.

As a result of the PBOL curriculum being embedded within the general learning program, there was a salient advantage recorded across the learning experiences of the class whereby the outdoors became a place of interest, enjoyment and stimulus for formal learning tasks. Children were considerably motivated to complete set tasks when in the outdoor environment. Heightened motivation for learning is a common factor amongst outdoor learning program research, including Forest School (Dillon et al. 2005; Hartmeyer and Mygind 2015; Knight 2009). Unique to the current study is the finding that motivation to learn also transferred to indoor tasks, when activities were linked to the outdoor sessions. In these instances children completed a greater depth and quality of work than in general indoors-only tasks. Central to the gains in English was the children's ability to utilise authentic, real-world knowledge to "make deliberate language choices when composing texts" (Board of Studies 2012, p. 173). Therefore, their texts based on outdoor experiences were analysed to be factually correct.



The analysis of the science curriculum data strongly suggests motivation for the subject increased as a result of PBOL. Children were observed as interested and curious about emerging phenomena, and constantly seeking further understandings in their explorations. In accordance with understandings of place-based educational theory, this study found children became increasingly curious about environments as they became more familiar with them. During the case study, the development of science syllabus, *Working Scientifically*, skills ensured children could complete inquiry tasks with increased ability. This is significant as the NSW Science K–10 Syllabus (Board of Studies 2012) emphasises the importance of fieldwork processes. However, to date, little research on the implementation of this new Syllabus document is evident. Rios and Brewer (2014) also believe outdoor science can develop scientific processes such as observing, classifying, measuring, communicating and inferring. Completing science activities in PBOL meant children had to interact with authentic contexts, which is also the case when geography lessons were taken outside.

The geography curriculum content of PBOL was covered effectively in an outdoor environment. Largely guided by implementing the place-essential components (Mannion and Lynch 2016), activities were responsive to place. The most significant finding in this subject area was that when children were learning about local landscapes the place-essential activities successfully accomplished the set academic outcomes relating to identifying types of environments (Board of Studies 1998). The majority of this unit was taught in the outdoors by immersing children in local environments.

Fieldwork components completed in PBOL included direct experiences, mapping environments and the use of geographic equipment. The Geography K–10 Syllabus (Board of Studies Teaching and Educational Standards 2015) promotes the use of geographical tools such as visual representations and maps. During the planning of outdoor sessions, children regularly looked at maps to ascertain a location, distance, devise a route, and inspect the type of environment that they would be visiting. In effect, it was not the teacher who organised the itinerary, but instead children proposed routes by using maps and authentic knowledge.

Lloyd (2016) acknowledges maps should be used to enable simple inquiry activities. Within the PBOL case study, children successfully referred to online maps to find the distances and times it would take to travel certain routes. The children developed spatial thinking which, according to Dolan (2015), “is important for all daily navigational functions including estimating distance, direction and rate of speed” (p. 7). Engaging in physical map-making is an important aspect of place-based education (Sobel 1998). In the case study, children gained understandings of place as they constructed natural material maps in the playground, and at the off-site locations.

While Forest School practice recommends revisiting the same location to complete programs (Knight 2009), we argue the theoretical grounding to support this practice is not examined in detail within the Forest School approach; thus, further research is required to examine the rationale for this routine. One of the emergent themes that developed through the PBOL research was the importance of a connection to place. Paramount to the design of PBOL program was that children were able to regularly connect to places in their local area such as the town, parks and river. Revisiting these places enabled ongoing bonds to be established and a more intricate knowledge of them to be formed. Similar findings have been reported by Hill and Brown (2014), Kellert (2012), and Wattachow and Brown (2011). In the PBOL case study, attachments to

places were articulated throughout the semi-formal interviews, photographs, map-making activities and written work.

Due to the children's detailed knowledge of place, the entire class became proficient at planning off-site ventures. The students gained an understanding of: how to organise routes; areas to shelter in case of inclement or hot weather; where difficult terrain would be encountered; the location of possible risks; and where to find natural materials for creations they built. A predominant pedagogical principle was that PBOL sessions became increasingly flexible as the children responded to familiar places with growing comfort. This is an important finding, which supports the need for ongoing and regular visits to the same location to optimise the potential for meaningful learning to occur. A distinct finding of the PBOL case study was that as children became more aware of their surroundings, a significant increase in learning occurred, directly relevant to curriculum outcomes.

Within the PBOL program the teachers consistently refocused their attention to be receptive to the unique curriculum connections that specific places could promote. The teachers enacted incidental opportunities to offer significant enhancements to learning, beyond the planned curriculum. Supporting this finding, Blenkinsop et al. (2016) argue that the goal of a teacher implementing place-based education – “having done the preparation with regards to each student and to the curriculum, and having carefully nurtured that curiosity of the world and the flexibility to respond to it” – is to “approach any situation that emerges” so as “to make use of that situation to generate learning” (p. 8).

Adopting a place-responsive pedagogy effectively provided a theoretical platform for planning PBOL. The locus of control in place-responsive planning is situated where the learning occurs, rather than simply with the teacher. According to Blenkinsop et al. (2016), this “challenges the educator to prepare the students and to trust in the students to locate themselves in the place in such a way that they too are able to intuit the materialisation of learning moments” (p. 8). This process may be difficult to achieve in the Forest School model, which emphasises routines rather than place itself.

A unique finding of this study is that Australian primary school curriculum outcomes can be achieved to a high standard during place-responsive activities. When implementing outdoor tasks it is recognised that teachers must possess a high degree of knowledge pertaining to specific locations. This means considerable time is required in planning, visiting environments and researching the opportunities for learning. As teachers may not have the time to dedicate to this prolonged pursuit, this is a possible limitation of a place-responsive pedagogy. However, as Leather (2018) recognises, teachers should possess the skills to implement sound educational theory in an outdoor environment, given they have the bushcraft, risk assessment and outdoor experience to enable them to confidently do so.

## Reflections from an Australian perspective

Reflecting on the comparisons between Forest School and PBOL reveals significant similarities in terms of the overall benefit to children. Forest School offers children rewarding outdoor opportunities, and as an initiative of innovative learning has demonstrated measurable success. However, Leather (2018) has highlighted three main areas of concern regarding the Forest School model and movement.

The first concern is that Forest School is a social construction, which does not have a strong emphasis on the local. Leather (2018) provides the example of lighting a fire as useful for warmth in the UK, and highlights how this is indicative of the constructed practices of Forest School. Historically, in Australia the use of fire was for Indigenous burning techniques and in the current day, is not always appropriate given bush fire trepidations and high temperatures in the summer. In comparison, a place-responsive pedagogy would use fire in context of the local environment. Hence, in this Australian PBOL case study, fire was not even considered; sessions occurred in places where fires are banned, namely in specific National Parks. In the PBOL case study the children spent time with local rangers, and in their fire engine, to gain an understanding of fire management in the local national park. Rather than lighting fires in protected environments, the focus was on fire safety and bushfire risks, and about Indigenous uses of fire. Had the location been suited to the use of fire it would have been considered; however, fire was not used, as in this example, fire did not match the specific location or context.

Secondly, Leather (2018) argues that there is a lack of clearly defined pedagogy in Forest School. There is an emphasis on play in Forest School, which is an important aspect of child development, however it lacks the robust pedagogy to make it viable in a curriculum model. Playful learning was also an integral part of the PBOL case study, the point of difference being that it occurred within a theoretically informed pedagogical approach. In the case study, children harnessed their imaginations when using natural materials, such as in the various map-making activities to represent the buildings, school, river and parks visited. The play experiences were based on constructivist and experiential learning methods to achieve curriculum outcomes. Immersive experiences were planned so the children were consistently acquiring and practising new vocabulary to explain their opinions and experiences orally in conjunction with curriculum outcomes. Both the case study (Lloyd 2016) and the critique of Forest School (Leather 2018) recognise that curriculum-focused play in a primary school setting can be difficult to implement. Notably, the PBOL case study recommends that in order to strengthen pedagogy, teacher professional development must occur to support the understanding of play within the curriculum. This should include the opportunity for teachers to ascertain the value of play for social skills, oral language and vocabulary development, and the encouragement of creativity.

Leather's (2018) third disquiet is the commodification of the Forest School movement, as a brand and in training programs. Training programs for Forest School in the UK are delivered to many individuals, not just those with an education background. Therefore, there is a place for delivering training, though this should not be mandatory for teachers who simply want to take their class outdoors. Leather argues that teachers with outdoor experience, understanding of relevant pedagogy, and bushcraft skills, do not need additional training. While the PBOL case study lends support to this statement, for successful implementation, teachers do need skills that are not consistently taught in teacher education programs. The recommendation is that outdoor and place-based pedagogies must be included in pre-service teacher training courses for primary school teachers, and accredited professional development for existing teachers. The specific focus of such training should emphasize place-responsiveness as a guide to planning outdoor learning. This in order to enhance teachers' ability to plan and deliver meaningful outdoor learning experiences with their students.

## Conclusion

A place-responsive pedagogy is an integrated approach to outdoor learning that creates bridges between place, learners and curriculum. The benefits of a place-responsive pedagogy include connecting children to specific places and contexts relevant in their everyday lives. In the PBOL case study, the findings strengthen the rationale for adopting a localised pedagogy. A place-responsive pedagogy provides a robust base for learning outside the classroom.

Notably, there are substantial understandings which can be transferred from the Forest School movement, particularly noting the program's origins in Scandinavia. However, these are not always culturally and ecologically relevant. There are numerous practices from Forest School, in terms of play, and the development of interpersonal skills, that offer important pragmatic ideas for outdoor teaching. Arguably, it is the responsibility of the teacher to utilise these examples as best suits their setting, rather than importing ideas without careful consideration of their specific environment and context. Outdoor learning is broad; it encompasses existing pedagogy and emergent ideas, such as PBOL. These significant learning theories cannot be readily packaged into a set of instructions or training manual. Instead they must be responsive to place for outdoor learning to be more than a “drag and drop” approach.

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