

## Between nature kindergartens and Forest School: Forging pathways for nature play in Australia's ECE sector

Amanda England, Jo Bird, Sue Elliott and Marg Rogers

*University of New England, Australia*

Integral to the global nature play movement, nature play programs have flourished over the last decade, both in Australia and internationally. Internationally, there are two prominent schools of thought in this movement, Danish Nature Kindergartens, and British Forest Schools. The underpinning philosophy of Danish Nature Kindergarten programs has been translated worldwide, raising questions about implementation, and possible decontextualisation, post-translation. Specifically, there are claims that the British translation known as Forest School, has become a marketable commodity and a 'McDonaldised' set of practices that educators have been trained in worldwide, including Australia. In this review article we examine Australian outdoor, nature play programs in early childhood education (ECE) settings to identify the relevance of these claims to Australian ECE contexts. These contexts appear to be diverging from the two international schools of thought, forging a uniquely, Australian 'Nature Play' pathway contextualised to social, cultural, political and educational landscapes. However, we acknowledge the limited Australian nature play program research to date has only been conducted in government regulated ECE settings. In such settings, legislation mandates that early childhood (EC) qualified educators implement programs underpinned by philosophy and pedagogy. Although not infallible, this likely minimises the potential for commodification. Whereas among private-for-profit, outdoor, nature play programs without the same legislated requirements, we argue the potential for commodification may be greater. We identify the need for research to examine the philosophical and pedagogical basis of such private-for-profit programs. As there is no Australian research in these settings, we recommend a research agenda to explore this gap.

### Introduction

Over the last two decades, a nature play educational movement has evolved internationally with impacts for Australian settings. This movement is often framed as a response to decades of risk averse approaches (Harper, 2017), increasing urbanisation (Planet Ark, 2013), the influence of modern technologies (Rhodes, 2017), and the parallel decline of unstructured, nature-based, outdoor play around the world (Clements, 2004; Brussoni, 2012). As the negative impacts of modern lifestyles have become well known, concern for children's health, development, and wellbeing has increased (Tremblay et al., 2015; Vanaken & Danckaerts, 2018). These concerns have been promoted internationally alongside the popularisation of 'Nature Deficit Disorder' (Louv, 2005) and emergent nature play research literature which makes clear the benefits of nature play for children (Elliott & Chancellor, 2014; Knight, 2013; Malone & Waite, 2016). There are two prominent schools of thought in this movement: Danish Nature Kindergartens and British Forest Schools. As the benefits of nature play have become more widely known, the philosophy that underpins Danish Nature Kindergartens has been translated globally (Harwood, 2019; Hindmarch, 2021; Inoue et al., 2019). However, there is growing concern about the world-wide translation, specifically the British 'Forest School' translation, of a philosophy that has been culturally embedded for over a century in its country of origin, Denmark (Blackham et al., 2023; Williams-Sieghfredsen, 2017).

In this review article, we draw on international literature to examine the translation from Danish Nature Kindergartens to British Forest Schools and factors that have led to commodification and the 'McDonaldisation' of British Forest School practices (Leather, 2018) in the latter. We then reflect upon whether this is occurring in uniquely Australian early childhood education (ECE) contexts, by summarising the origins of Australian, early childhood (EC) Forest School programs, and sharing insights about evolving Australian nature play programs, and philosophies and pedagogical approaches in the ECE based on the limited current research. We note that natural play programs in these settings do appear to be forging their own 'nature play' pathway contextualised by Australian social, cultural, political and educational landscapes. However, we are cognisant that all research to date has been conducted in government regulated ECE settings only, identifying a knowledge gap about unregulated, private-for-profit, ECE nature-based settings. We conclude by presenting thoughts about the potential for commodification in Australian, nature play settings, calling for further research into both regulated and unregulated ECE settings. Particularly, we highlight that commodification may be more likely to occur in the unregulated ECE sector, not mandated by Australian legislation and frameworks.

### **Nature kindergartens**

The Scandinavian philosophy, *Friluftsliv* (free-luft-sliv) is translated as 'free air life' and reflects a deep connection to nature (Williams-Siegfredsen, 2017). *Friluftsliv* is indicative of a culture that values life outdoors, and prioritises time spent in nature being better for health, development and wellbeing (Cerino, 2021; Waite et al., 2016). As such, nature kindergartens were a likely evolution in Scandinavia, originating in Denmark during the 19th and 20th centuries, before developing in countries such as Norway and Sweden (Ärlemalm-Hagsér & Sandberg, 2013; Hindmarch, 2021). Contributing factors included a change in nature perceptions (Williams-Siegfredsen, 2017); industrialisation and rising health concerns (Cerino, 2017); the international growth of child-centred and nature-based pedagogies; and, increased environmental awareness (Dean, 2019). In 1854, the first Danish play and preparatory school opened, prioritising natural experiences (Williams-Siegfredsen, 2017), and over time nature kindergartens and their philosophy became firmly embedded in Danish society. This is reflected in the Danish early years curriculum, which incorporates six key areas, including holistic and nature-based learning (Williams-Siegfredsen, 2017).

In Denmark, and now further afield, such nature kindergarten programs are mostly defined by a nature-based, holistic, child-centred approach, viewing children as capable (Williams-Siegfredsen, 2017). Programs commonly occur in natural environments for regular, uninterrupted periods of time (Elliott & Chancellor, 2014), in all-weather with readily available risky play opportunities (Button & Wilde, 2019; Coe, 2017). During this time children engage in child-directed play (Barrable & Arvanitis, 2019) as they explore and experience the dynamics of natural settings, and connect with nature (Elliott & Chancellor, 2014). As children connect with, and learn from one another through hands-on experiences, they build social emotional skills such as independence, confidence and self-awareness (Barrable & Arvanitis, 2019; Williams-Siegfredsen, 2017). In Table 1, we build upon this

definition, combining theories from international research that inform nature play philosophy, and briefly consider the relevant aspects of each.

Table 1: Current theories informing nature play philosophy

Play	Play can include creating, constructing, problem-solving, engaging, imagining, exploring, and inquiring (Zosh et al., 2018). Play, defined by an interwoven continuum, can flow between child-directed, guided and adult-led (Victorian State Government Department of Education and Training [VSGET], 2016), as long as it remains voluntary (Dowdell et al., 2011).
Biophilia	Described as a love of nature (Kellert, 2012), children are considered to have a biophilic need to connect with nature from birth (Kahn, 1999). Their experiences, and whether this connection is nurtured by guiding adults can determine whether they ultimately demonstrate biophobic (fear) or biophilic (love) tendencies (Beasley, et al., 2021).
Childhood studies	The 'new sociology of childhood' reimagines childhood as socially constructed and differentiated by time and place (James & Prout, 1997; Leonard, 2016). Children have rights and are seen as capable, active, equal participants in the community, and can impact those around them (Corsaro, 2005; Pramling-Samuelsson & Kaga, 2008).
Place-based learning	Space becomes place as meaning and value are added through repeated real-life experiences (Gray & Birrell, 2015). The repeated immersion in nature for extended periods builds a connection to that space (Boyd, 2019). Each sense of place is unique to the individual as they attribute meaning and value (Cannatella, 2007) over time.
Social constructionism	Co-constructs knowledge and reality in social groupings, through shared group interactions (Crotty, 1998; Thomas et al., 2014) such as those that take place in nature play contexts.
Social constructivism	Focuses on the individual and their constructions of reality based on their interpretations of knowledge, acquired through social interactions and experiences (Schreiber & Valle, 2013; Thomas et al., 2014).
Affordance theory	Affordance theory is when one is aware of the objects that exist in the immediate environment and possibilities for action or alternative functions (Gibson, 1979). As children perceive unique environmental affordances, they respond to the agency of the environment. Affordance is drawn from the functional perceptions of the person who intends to use the item at that particular time (Gibson, 1979).
Loose parts	Can be natural or synthetic with the potential to be manipulated and employed in multiple ways by children (Nicholson, 1971), who use them to explore, discover, invent, create, construct and imagine (Gibson et al., 2017). Natural loose parts found in the environment include twigs, leaves and stones, while manufactured loose parts commonly include pots and pans, tyres and pallets provided for children's play.
Post-humanism	Removes the boundary between, recognising that nature and humans can co-exist in a responsive and equitable relationship (Harwood & Collier, 2017). Post-humanism questions what we can learn from, with, about and through nature (Harwood & Collier, 2017), inviting deeper consideration of those existents that are more than human (Hughes & Lury, 2013).

New materialism	The premise of new materialism is an intra-active stance where the role of nature is as important as the role of humans in an equitable relationship (Harwood & Collier, 2017; Lenz Taguchi, 2009). Nature is a co-teacher, and the agency of nature can directly influence children's learning and engagement as they relate to and, co-construct learning 'with', rather than just 'about' nature (Harwood, 2019; Lenz Taguchi, 2009).
Common worlds	Underpinned by both post humanist and new materialist theories, Latour's (2004) common worlds approach asks us to consider the dynamic commonalities between worlds, increasing our understandings of ourselves, others, and removing the human/nature divide. This approach reminds us that we are not only connected with, and dependent on one another, but entangled, as we continually shape and learn from one another (Pacini-Ketchabaw, 2013; Taylor & Pacini-Ketchabaw, 2015).

## From nature kindergartens to Forest School

Nature kindergartens and their philosophy were initially translated and redefined as *Forest School* in Britain, a term first coined in 1993 by British educators, after visiting Danish nature kindergarten outdoor teaching and learning programs (Williams-Sieghfredsen, 2017). Subsequently, organisations were established to train British educators in the translated Forest School model (Forest School [FSA], n.d.a). However, as the Danish nature play philosophy was both culturally and educationally unfamiliar and foreign, the translation appeared to be more aligned with Britain's long history of result-orientated outdoor education experiences (Cree & McCree, 2012). This is evident in the early British parameters as defined by Knight (2012), which included: weekly half day programs for up to ten weeks, defined by a beginning and ending, where activities were guided and facilitated by certified Forest School leaders, although child-led where possible. Hence in contrast to the child-directed nature play philosophy embedded in Danish nature kindergartens, where a deep connection to nature is a way of life, this philosophy appears to have been interpreted as an activity or outdoor experience elsewhere (Dean, 2019). Alongside Lloyd et al. (2018) we question if nature play philosophy has been 'dragged and dropped' without regard for how it fits within other social, cultural and educational contexts.

It has been argued that the varied international translations incorporate little regard for the original underlying contextual elements of nature play philosophy which included social, cultural and educational reform (Bentsen & Jensen, 2012; Lloyd et al., 2018). We question, is this mistranslation similar to the worldwide translation and often misinterpretation of the Reggio Emilia Approach (REA)? Like nature play philosophy, the REA has strong cultural, historical, political and social foundations in Italy, its country of origin (New, 2007). Without the same underpinnings, or educational, social and cultural reforms, it is suggested that the Reggio Emilia philosophy may not translate successfully elsewhere (Alsedrani, 2020). We argue that the same may be true for nature play philosophy, proposing that the 1990's implementation of Forest School in Britain was not part of educational, social and cultural reform. Rather the implementation was to address issues which included low childhood wellbeing (United Nations International Children's Emergency Fund, 2012), increasing emphasis on academia (Maynard, 2007) and a risk averse society with minimal outdoor play

opportunities (Cree & McCree, 2012b). Therefore, perhaps Forest School in Britain is not a full translation, but a ‘drag and drop’ approach to address these issues, resulting in the national Forest School model with certified training in a standardised set of practices (FSA, n.d.a; Harris, 2017).

### **British Forest School training**

Endorsed by the Forest School Association in 2012, anyone with a minimum of two years’ experience leading children’s groups could undertake the certified Level 3 British Forest School qualification and become qualified to lead Forest School sessions both in Britain, and worldwide (FSA, n.d.b; Forest School Training [FSTC], n.d.a). This marketable qualification included certified training in bushcraft, first aid and program delivery (FSTC, n.d.b; Harris, 2018). Whilst a brief overview of Forest School philosophy and pedagogy is included, in-depth understandings were not integral, and the focus was on procedures and activities (Harris, 2018; Lloyd et al., 2018) such as fire lighting and tools. The concern is that this training was neither place responsive, or contextual, and that “lower skilled practitioners who deliver a range of Forest School activities in a standardised performance, with less developed conceptions of play, or understandings of the philosophy of *Friluftsliv*” (Lloyd et al., 2018, p11), is conducive to the current commodifiable, standardised British Forest School approach. An approach that Leather (2018) has critically questioned.

In his critique, Leather (2018) referenced the term “McDonaldisation” (p.11) as “Forest School activities become more standardised, controllable and efficiently delivered” (p.12). Waite et al. (2018) corroborated this viewpoint, expressing that Forest School in Britain has become structured, planned, and increasingly restricted by curriculum objectives. Furthermore, Hindmarch (2021) in a comparative study identified that whilst a child-directed, play-based approach was implemented in Norway by qualified Norwegian pedagogues, the opposite was occurring in Britain. Hindmarch stated (2021, pp. 13-14) that in Britain the philosophy was not child-directed, and opportunities for self-directed play or self-initiated activities were limited as educators planned sessions, directed the learning and included activities with set outcomes and synthetic materials. Like Lloyd et al. (2018) we question was this because the certified British Forest School training is not based on philosophy and pedagogy, place-responsive or contextualised, and provides anyone, irrespective of previous education or qualifications, with a basic set of skills to establish and operate a Forest School?

As the translation of Forest School to Australia occurred over the last decade, Leather (2018) suggested that Australia has adopted an approach similar to the British Forest School model. Likewise, Lloyd et al. (2018) argued that “the highly standardised principles and routines of Forest School are adopted as a ‘drag and drop’ approach” (p.46) internationally. As professional development is unregulated in Australia, the international training of Australian practitioners in standardised British Forest School practices (Forest Schools, 2023) could lead to commodification, in both regulated and unregulated Australian ECE settings. However, we suggest that commodification is less likely to occur in regulated settings because policy protections mandate that programs are facilitated by degree qualified teachers and underpinned by philosophy and pedagogy. We agree with Christiansen et al. (2018) that,

while these programs are “safeguarded” by policy protections, they are not “failsafe” (p. 8). As nature play continues to undergo rapid growth in both regulated and unregulated Australian ECE settings, we are cognisant that with, or without policy protections and government quality monitoring, commodification is possible. As such we offer insights into Australian nature play programs and their potential for commodification, acknowledging that all current research in Australia has been conducted in government regulated settings with limited numbers of participants.

## Nature play in Australia

The first Australian nature play program, ‘bush kinder’ was established in 2011 at Westgarth Kindergarten in Melbourne, Victoria (Elliott & Chancellor, 2014). We argue that unlike the implementation of Forest School in Britain, the development of ‘bush kinder’ was influenced by evolving social, cultural, political and educational landscapes similar to the contextual elements that bolstered the Danish origins of nature kindergartens. For instance, concern for children’s health, development and wellbeing escalated (Australian Institute of Health and Welfare, 2018; Bundy et al., 2011) as the impacts of modern lifestyles had become more apparent and rates of outdoor play declined (Planet Ark, 2013). Alongside growing environmental awareness, state-wide campaigns such as ‘Healthy Parks, Healthy People’ in Victoria and South Australia, advocated for both better access to, and the health benefits of time spent in nature (Department for Environment and Water, 2023; Parks Victoria, 2020). In addition, significant changes in education policy occurred, comparable to the implementation of the early years learning curriculum in Denmark in 2004 (Williams-Siegfredsen, 2017). The first national curriculum framework, *Belonging, Being, Becoming: The Early Years Learning Framework* for Australia [EYLF] emphasised First Nations’ perspectives (Aboriginal and Torres Strait Island peoples are the traditional custodians and first peoples of Australia), children’s engagement with the outdoors, natural elements and self-directed learning through play and risk-taking (Department of Education, Employment and Workplace Relations [DEEWR], 2009).

Furthermore, it advocated for children’s voices and child-directed play with five broad, non-prescriptive learning outcomes for children (AGDE, 2022; DEEWR, 2009). Simultaneously, the National Quality Standard [NQS] was designed to ensure that early year’s services effectively implemented the framework and adhered to quality expectations and regulations (NSW Government, 2011; ACECQA, 2012). In particular, regulations mandated Early Childhood Teacher [ECT] qualifications and child: ECT ratios to ensure that ECT expertise, including philosophical and pedagogical views (Hughes et al., 2021) informed Australian practices. Consequently, in line with the changing social, cultural, political and educational landscape, ‘bush kinder’ programs were instigated as an integral component of some regulated early childhood services [ECSs] (Christiansen et al., 2018).

As the benefits of nature play were noticed at Westgarth Kindergarten, other regulated ECSs rapidly followed in Victoria, New South Wales, and then Australia-wide (Christiansen et al., 2018; Elliott & Chancellor, 2014). Currently, there are possibly hundreds of nature play programs around Australia, variously labelled as ‘bush kinder’, ‘beach kinder’, ‘bushwalk’,

‘forest school’, ‘nature school’ or ‘nature play programs’, where children experience diverse local landscapes weekly (Christiansen et al., 2018; Hughes et al., 2021). The Victorian Kids in Nature Network (KINN) report (2018) identified over 300 ECE nature play programs operating in Victoria alone, both regulated and unregulated. To date this is the only statewide report available. Alongside the rapid spread of nature play programs in ECE (Hughes et al., 2021), professional groups were established including: Nature Play Western Australia (2022); Nature Play Queensland (2020); NSW Early Years Nature Connections (2023); the Early Childhood Outdoor Learning Network [ECOLN] (n.d.); and the Victorian KINN (2018). Most recently the Australian Forest School Association (AFSA, 2023), a grassroots network designed to connect nature play practitioners nationwide, was formed. These groups have increasingly significant, but varied roles around advocacy, policy, resourcing, partnerships and practitioner training. As nature play continues to undergo rapid growth in both regulated and unregulated ECE settings in Australia, we are mindful that commodification is possible, if practitioners forgo contextualised nature play philosophy and pedagogy training for marketable, standardised practices imported from elsewhere.

### **Australia’s emerging nature play approaches**

Australian nature play programs are significantly influenced by the previously mentioned national policies, regulations, and frameworks that incorporate child-directed play, inclusion, natural environments, risk taking, First Nations’ perspectives, sustainability and community connections (AGDE, 2022). Hence, in place of the British term Forest School, “immersive nature play programs” (INPPs) was coined by Hughes et al. (2021, p. ix). Their intention was for the term to encompass all Australian demographics and landscapes with potential to be commonly used to describe nature play programs. They argued that Australian ECTs are translating programs to localised natural spaces with respect to Australian social, cultural, political and educational contexts, not simply ‘dragging and dropping’ (Hughes et al., 2021). They also contended that Australian programs are unique and based upon localised topography, vegetation, wildlife and communities, often incorporating local First Nations’ perspectives (Hughes et al., 2021). Within this context they proposed three key practice themes as integral to the foundation of INPPs: Education for Sustainability [EfS], First Nations’ perspectives, and Community. Hence, whilst ‘bush kinder’ was based on the ideals of Scandinavian nature kindergartens (Alexander, 2012; Elliott & Chancellor, 2014, 2017), these themes account for the suggestion by Lloyd et al. (2018) that “different environmental factors, history and Indigenous cultures” (p. 46) must be contemplated in localised contexts and demonstrate that regulated Australian nature play programs are place responsive. They are contextualised to Australian social, cultural, political and educational landscapes, and not standardised like their British counterparts.

#### **Education for sustainability**

For two decades, Australia has been at the forefront of EfS in ECE (Inoue et al., 2016). Early Childhood [EC] EfS aligns with contemporary images of children as agentic and active citizens who are enacted when educators explore sustainability issues through formative and empowering pedagogies (Davis & Elliott, 2024). Through EfS, children move beyond surface level environmentally aware practices, learn to listen to the environment, observe

environmental changes, question current practices, and identify sustainable solutions (Elliott & Young, 2016; Phillips, 2014; Prasetyo, et al., 2020; Sulistyarini et al., 2022). The intent is to guide children's deeper understandings and empower beliefs about sustainable practices (Inoue et al., 2016). EfS is being incorporated in INPP contexts as children are repeatedly immersed in natural environments. As they explore, they question and notice the different roles of natural elements in play, learning with and from them. For example, when a tree falls over in a local nature space, rather than exerting our agency and removing it, educators may engage in deeper conversations with the children to provoke critical thinking about why the tree should be left in situ and learn with it as the new roles of the tree become apparent (Hughes, 2020).

### **First Nations perspectives**

The connection to land is deeply regarded within many Australian INPPs, because "Indigenous ways of seeing, being and knowing country remain firmly embedded within the roots of our cultures" (Hughes et al., 2021, p. xii). Aboriginal and Torres Strait Island peoples are the traditional custodians and first peoples of Australia. First Nations people are strongly connected to the land, acknowledging the interrelatedness of the land and humans, ensuring each is accountable to the other (Harwood et al., 2020; Tuck et al., 2014). As children spend time in outdoor spaces, their awareness of, and connection to the land may deepen (Cumming & Nash, 2015). Embedding these perspectives within INPPs may occur through local community partnerships and relationship building with First Nations peoples (Lloyd & Gray, 2014). This may cultivate knowledge of First Nations perspectives about local flora and fauna with advocacy and sustainability outcomes (Beasley, et al., 2021; Hughes et al., 2021). Furthermore, elements of First Nations cultures may be incorporated through indigenous guests, professional learning, acknowledgement of country rituals and storytelling (Masters & Grogan, 2018; Ziemer & Lee, 2021).

### **Community**

Regulated Australian ECSs are developing nature play programs as integral to both the EYLF (AGDE, 2022) and their community-based philosophy, and not as an add on program offered by external experts (Christiansen et al., 2018). The foundations of these programs and relationships within them are strengthened when local community capacities are acknowledged (Elliott & Chancellor, 2014; 2017), for example, staff, parents or grandparents that may share local flora or fauna knowledge or identify as First Nations peoples. This establishes links to the wider community, and expertise from beyond the regulated ECS is included in the program (Hughes et al., 2021).

In summary, INPPs are just one example of how qualified ECTs in regulated settings are facilitating Australian nature play variations informed by philosophy and pedagogy. Australian ECTs appear to be diverging from British standardised commodifiable Forest School practices, uniquely defining programs in Australian landscapes.



## Current pedagogical approaches evident in Australia

Beyond the three emergent INPP practice themes, the limited Australian nature play literature documents multiple pedagogical principles and nature play theories across the regulated Australian nature play programs. Like the INPP themes, these align with Danish and Norwegian philosophies through “a pedagogy of play, of child-initiated interactions and a holistic approach to learning” (Hindmarch, 2021, p. 12). Whilst play-based learning pedagogies are not new, according to Hindmarch (2021) they differ from those currently seen in British Forest Schools. She argued that more adult-directed outcomes and less play-based learning is occurring in Britain compared to Norway where the nature play philosophy has been embedded for decades. Current Australian research literature (Christiansen et al., 2018; Hughes et al., 2021) and policies (ACECQA, 2018; AGDE, 2022) suggest Australian settings are more aligned with Scandinavian countries such as Norway and Denmark. In Australian regulated settings, facilitation by degree qualified ECTs with a focus on philosophy and pedagogy is considered highly influential (ACECQA, 2018, 2020; Christiansen et al., 2018; Robinson, et al., 2021). Rather than drawing on a set of standardised practices and skills, the ECTs’ approach is often informed by their unique educational background and perspectives (Speldewinde et al., 2021). The pedagogical approaches which most often inform play-based learning (Hughes et al., 2021) in these settings include: unstructured, scaffolded, child-directed, emergent, intra-active, place-responsive, naked and inquiry-based approaches (Figure 1).

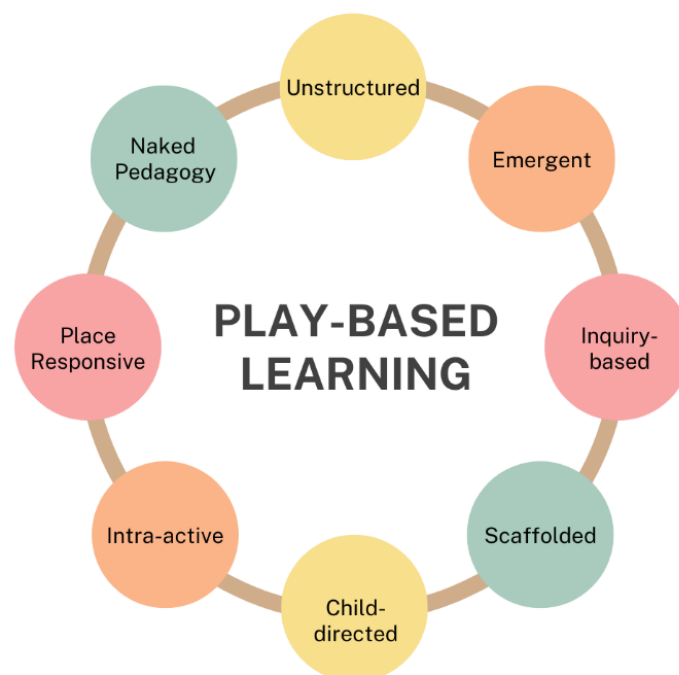


Figure 1: Key play-based learning pedagogies evident in Australian nature play programs.

As Australia is a geographically and ecologically diverse continent, pedagogy can be described as place-responsive in these unique environments, and not adherent to a standardised set of practices (Lloyd et al., 2018; Masters & Grogan, 2018). Within these settings, naked pedagogy prioritises natural elements, affordances and loose parts as educators bring minimal tools and art supplies, or none at all (Christiansen et al., 2018). Rather than being directed by adults, children direct the learning, frequently engaging in a process of learning through inquiry as they explore, experiment, and investigate (Elliott & Chancellor, 2017; Lloyd et al., 2018). The curriculum can be emergent as children's interests take precedence, and educators follow their lead, responsively altering their pedagogical approaches (Campbell & Speldewinde, 2019). Through play-based approaches to learning, educators may capitalise on nature play teachable moments in negotiation with children (Christiansen et al., 2018). These may translate to moments of scaffolded, intentional inquiry or direct instruction extended by the educator's expertise (Speldewinde et al., 2023), and not be outcomes focused.

The concept of unstructured play is integral here because alongside nature, peers and educators, children may co-construct learning 'in the moment' (Lloyd et al., 2018; Masters & Grogan, 2018). Nature provides "playspaces, resources and provocations" (Hughes et al., 2021, p. 64) and is the co-teacher (Piersol, Russell & Groves, 2018). As children learn with nature, intra-active pedagogies emphasise the relationships between the human and non-human (Lenz Taguchi, 2009). These relations become more equitable as agency shifts from being child-centric to including the agency of natural materials (Lenz Taguchi, 2009). The intra-action between children and environmental affordances, weather, nature and natural materials, and a reciprocity of agency between the human and non-human are integral in shaping the learning taking place (Lenz Taguchi, 2009).

Whilst these pedagogies do suggest that Australian nature play programs are more aligned with Danish rather than British practices, we reiterate this is based on limited research, in limited settings, within Australian regulated ECS contexts. Christiansen et al. (2018) called for more in-depth research within a variety of Australian ECE contexts, both regulated and unregulated, to explore Danish alignments. Integral to such research should be consideration of imported British Forest School training in Australia. We argue that in addition to policies and theories, a key factor informing Australian philosophical and pedagogical principles is additional British Forest School training that practitioners may undertake.

### **A path to commodification?**

As the Australian nature play movement has expanded, targeted training has become a priority. Initially, Australian educators travelled overseas, witnessing Danish or British programs, in an effort to inform Australian-based programs (Elliott & Chancellor, 2017). In recent years, localised Australian training and professional development has been established through both state networks, and unregulated ECE businesses. However, these options are fragmented and not accredited in comparison to their British and Canadian counterparts where national Forest School associations offer accredited training (Child and Nature Alliance of Canada, 2023; Harris, 2017). Hence, similar to Canada (MacEachren, 2018), we speculate that the more significant influential growth factor in Australian nature play contexts

has been the importation of British based Forest School training which qualifies Australians as Forest School Leaders (Forest Schools, 2023; Lloyd, et al., 2018). As nature play programs rapidly evolve beyond regulated settings in Australia (KINN, 2018), we wonder how many practitioners, in both regulated and unregulated ECE settings have been informed and certified by imported British training. Based on the authors' anecdotal observations we recognise that Australian practitioners trained in British practices are leading both regulated and unregulated ECE nature play programs. We question if this is the best way forward, and whether these standardised British practices align with the contexts and curriculum frameworks within Australia.

Whilst Leather (2018) drew attention to Australian nature play programs sharing the same model as British Forest Schools, the limited research available demonstrates that commodification is not currently occurring in regulated Australian settings (see for example Christiansen et al., 2018, Masters & Grogan, 2018). Thus, echoing Christiansen et al. (2018) we call for more research to construct informed understandings. We suggest that although ECTs in regulated settings may be trained in standardised British practices, they are still mandated to facilitate programs based on EYLF philosophy and pedagogy (AGDE, 2022), which prioritises process over outcomes, in direct contrast to British Forest School practices. However, no such mandates for unregulated ECE settings exist. In the authors' anecdotal observations across Australia, the unregulated EC nature play practitioners have minimal place-based training, or at best, British imported training around a standardised set of practices. Alongside such training, we question how unregulated EC nature play programs are emerging beyond Australian ECS policies and regulations in the privatised market.

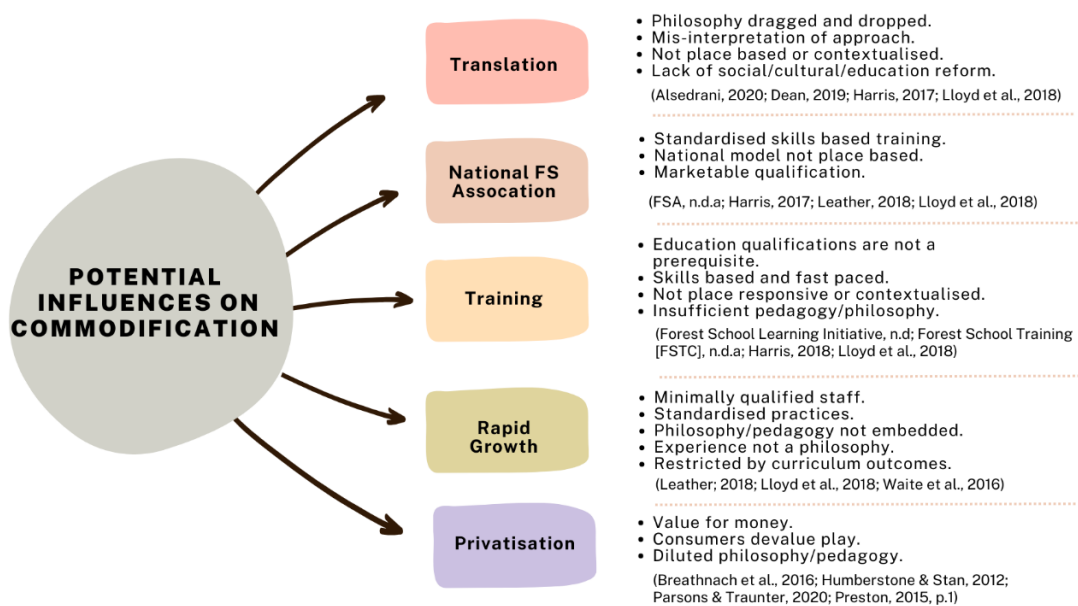


Figure 2: Potential British Forest School factors influencing commodification (use 'zoom in' function in web or PDF reader to view)

As nature play programs continue to emerge in unregulated EC settings, they may be influenced by market forces. Parents can drive uptake in a competitive marketplace (Pyper et al., 2016) and may hold consumer expectations that devalue play and seek more tangible outcomes (Breathnach et al., 2016; Parsons & Traunter, 2020). Humberstone and Stan (2012) argued, the move towards privatised educational experiences can dilute philosophy and emphasise outcomes, forcing privatised institutions to attach monetary values to everything they do and “justify their existence according to the remorseless and nightmarish logic of the markets” (Preston, 2015, p. 1). Whilst privatised institutions can be both regulated and unregulated, we question what is happening in EC settings beyond regulatory policy protections. There is a legitimate Australian concern that alongside rapid growth, philosophy and pedagogy may be lost as unregulated EC, nature play programs establish in a competitive market, with minimally qualified staff, perhaps only certified with standardised British Forest School practices. Figure 2 illustrates a combination of professional anecdotal information and referenced literature to document the factors influencing British Forest School commodification, which are informative for Australian contexts.

Whilst the nature play philosophy in Australia is anecdotally evident across both regulated and unregulated ECE settings, the only research insights we have around philosophical and pedagogical approaches are in regulated settings (Christiansen et al., 2018; Hughes et al., 2020). In these settings, we suggest that uniquely Australian nature play practice is often informed by international nature play philosophy and pedagogy, but we reiterate the narrow research scope and minimal participants. This lack of literature and the commodifiable state of Forest Schools in Britain, raises concerns for both regulated and unregulated EC Australian nature play programs, specifically, considering claims that Australia may be following the British Forest School approach (Leather, 2018). As the number of unregulated EC Australian nature play programs increases (KINN, 2018), we argue that a research focus on the philosophies and pedagogies evident in unregulated ECE settings is both timely and warranted.

We reflect on these programs, and wonder if they are offering a ‘McDonaldisation’ (Leather, 2018) of British Forest School practices as certified by British training, or are they contextualised to the local landscape and underpinned by nature play philosophy and pedagogies? We propose that, although not failsafe, without regulatory protections mandating practices underpinned by philosophy and pedagogy, commodification of the British Forest School approach may be more likely to occur in unregulated ECE Australian settings, where a marketable nature-based commodity is identified.

### **Acknowledgements**

There are no further acknowledgements required for this work.

The lead author of this paper is the recipient of an Australian Government Research Training Program Stipend Scholarship.

## References

- ACECQA (Australian Children's Education and Care Quality Authority) (2012). *2012 National Quality Standard*. <https://www.acecqa.gov.au/sites/default/files/2018-01/2012%20National%20Quality%20Standard.pdf>
- ACECQA (Australian Children's Education and Care Quality Authority) (2018). *National Quality Standard*. <https://www.acecqa.gov.au/nqf/national-quality-standard>
- ACECQA (Australian Children's Education and Care Quality Authority) (2020). *Guide to the NQF*. <https://www.acecqa.gov.au/nqf/about/guide>
- AGDE (Australian Government Department of Education) (2022). *Belonging, Being and Becoming: The Early Years Learning Framework for Australia (V2.0)*. Australian Government Department of Education for the Ministerial Council. <https://www.acecqa.gov.au/sites/default/files/2023-01/EYLF-2022-V2.0.pdf>
- Alexander, L. (2012). Bush therapy. *Sydney's Child, Sydney*, 1 September. [https://www.academia.edu/6708260/Media\\_article\\_on\\_Bush\\_School](https://www.academia.edu/6708260/Media_article_on_Bush_School)
- Alsedrani, G. S. (2020). Reggio Emilia approach around the world. *Al-Azhar Journal of Education*, 608-636. [https://journals.ekb.eg/article\\_148105\\_87617994d1fc159bcbc7a2941731af2b.pdf](https://journals.ekb.eg/article_148105_87617994d1fc159bcbc7a2941731af2b.pdf)
- Ärlemalm-Hagsér, E. & Sandberg, A. (2013). Outdoor play in a Swedish preschool context. In S. Knight, (Ed.), *International perspectives on Forest School: Natural spaces to play and learn* (pp. 55-66). SAGE Publications. <https://sk.sagepub.com/books/international-perspectives-on-forest-school>
- Australian Forest School Association (AFSA) (2023). *A note on the term "Forest School"*. <https://australianforestschoollassociation.org/>
- Australian Institute of Health and Welfare (2018). *Physical activity across the life stages*. <https://www.aihw.gov.au/getmedia/c249ef97-e219-44df-a8bd-f5e50d04064c/aihw-phe-225.pdf.aspx>
- Barrable, A. & Arvanitis, A. (2019). Flourishing in the forest: Looking at Forest School through a self-determination theory lens. *Journal of Outdoor and Environmental Education*, 22(1), 39-55. <https://doi.org/10.1007/s42322-018-0018-5>
- Beasley K., Lee-Hammond, L. & Hesterman, S. (2021). A framework for supporting the development of botanical literacies in early childhood education. *International Journal of Early Childhood*, 53(2), 119-137. <https://doi.org/10.1007/s13158-021-00291-x>
- Bentsen, P. & Jensen, F. S. (2012). The nature of *udeskole*: Outdoor learning theory and practice in Danish schools. *Journal of Adventure Education and Outdoor Learning*, 12(3), 199-219. <https://doi.org/10.1080/14729679.2012.699806>
- Blackham, L., Cocks, A. & Bunce, L. T. (2023). 'Our Forest School isn't just the trees.' Forest Schools: Micro-communities for social and emotional development. *Journal of Adventure Education and Outdoor Learning*, 23(2), 158-169. <https://doi.org/10.1080/14729679.2021.1984964>

- Boyd, D. (2019). Utilising place-based learning through local contexts to develop agents of change in Early Childhood Education for Sustainability. *Education 3-13*, 47(8), 983-997. <https://doi.org/10.1080/03004279.2018.1551413>
- Breathnach, H., O'Gorman, L. & Danby, S. (2016). 'Well it depends on what you'd call play': Parent perspectives on play in Queensland's Preparatory Year. *Australasian Journal of Early Childhood*, 41(2), 77-84. <https://doi.org/10.1177/183693911604100211>
- Brussoni, M., Olsen, L. L., Pike, I. & Sleet, D. A. (2012). Risky play and children's safety: Balancing priorities for optimal child development. *International Journal of Environmental Research and Public Health*, 9(9), 3134-3148. <https://doi.org/10.3390/ijerph9093134>
- Bundy, A. C., Naughton, G., Tranter, P., Wyver, S., Baur, L., Schiller, W., Bauman, A., Engelen, L., Ragen, J., Luckett, T., Niehues, A., Stewart, G., Jessup, G. & Brentnall, J. (2011). The Sydney playground project: Popping the bubblewrap - unleashing the power of play: A cluster randomized controlled trial of a primary school playground-based intervention aiming to increase children's physical activity and social skills. *BMC Public Health*, 11, article 680. <https://doi.org/10.1186/1471-2458-11-680>
- Button, J. & Wilde, A. (2019). Exploring practitioners' perceptions of risk when delivering Forest School for 3- to 5-year-old children. *International Journal of Play*, 8(1), 25-38. <https://doi.org/10.1080/21594937.2019.1580334>
- Campbell, C. & Speldewinde, C. (2019). Bush kinder in Australia: A new learning 'place' and its effect on local policy. *Policy Futures in Education*, 17(4), 541-559. <https://doi.org/10.1177/1478210317753028>
- Cannatella, H. (2007). Place and being. *Educational Philosophy and Theory*, 39(6), 622-632. <https://doi.org/10.1111/j.1469-5812.2007.00319.x>
- Cerino, A. (2021). The importance of recognising and promoting independence in young children: The role of the environment and the Danish forest school approach. *Education 3-13*, 51(4), 685-694. <https://doi.org/10.1080/03004279.2021.2000468>
- Child and Nature Alliance of Canada (2023). *Forest and Nature Schools Practitioner course*. <https://childnature.ca/forest-school-canada/>
- Christiansen, A., Hannan, S., Anderson, K., Coxon, L. & Fargher, D. (2018). Place-based nature kindergarten in Victoria, Australia: No tools, no toys, no art supplies. *Journal of Outdoor and Environmental Education*, 21(1), 61-75. <https://doi.org/10.1007/s42322-017-0001-6>
- Clements, R. (2004). An investigation of the status of outdoor play. *Contemporary Issues in Early Childhood*, 5(1), 68-80. <http://doi.org/10.2304/ciec.2004.5.1.10>
- Coe, H. A. (2017). Embracing risk in the Canadian woodlands: Four children's risky play and risk-taking experiences in a Canadian Forest Kindergarten. *Journal of Early Childhood Research*, 15(4), 374-388. <https://doi.org/10.1177/1476718X15614042>
- Corsaro, W. A. (2005). *The sociology of childhood* (2nd ed.). Pine Forge Press. [6th ed.] <https://us.sagepub.com/en-us/nam/the-sociology-of-childhood/book277921>
- Cree, J. & McCree, M. (2012a). A brief history of the roots of Forest School in the UK. *Horizons*, 60, 32-34. <https://www.outdoor-learning-research.org/Portals/0/Research%20Documents/Horizons%20Archive/H60.History.of.FS.pt1.pdf>

- Cree, J. & McCree, M. (2012b). A brief history of Forest School in the UK – Part 2. *Horizons Magazine*, 62, 32-35. <https://www.outdoor-learning-research.org/Portals/0/Research%20Documents/Horizons%20Archive/H62.HistoryofForestSchool.Pt2.pdf>
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Allen and Unwin.
- Cumming, F. & Nash, M. (2015). An Australian perspective of a forest school: Shaping a sense of place to support learning. *Journal of Adventure Education and Outdoor Learning*, 15(4), 296-309. <https://doi.org/10.1080/14729679.2015.1010071>
- Davis, J. & Elliott, S. (Eds.) (2024). *Young children and the environment: Early education for sustainability* (3rd ed.). Cambridge University Press. <https://www.cambridge.org/highereducation/books/young-children-and-the-environment/AA4020331CB6867541CF897B35FE715A#overview>
- Dean, S. (2019). Seeing the forest and the trees: A historical and conceptual look at Danish Forest Schools. *International Journal of Early Childhood Environmental Education*, 6(3), 53-63. <https://files.eric.ed.gov/fulltext/EJ1225663.pdf>
- Department for Environment and Water (2023). *Healthy Parks Healthy People South Australia 2021-2026: Making contact with nature, second nature*. Government of South Australia. <https://www.environment.sa.gov.au/topics/park-management/statewide-park-strategies/healthy-parks-healthy-people>
- Department of Education, Employment and Workplace Relations (DEEWR) (2009). *Belonging, Being and Becoming: The Early Years Learning Framework for Australia*. [V2.0, 2022] <https://www.acecqa.gov.au/sites/default/files/2023-01/EYLF-2022-V2.0.pdf>
- Dowdell, K., Gray, T. & Malone, K. (2011). Nature and its influence on children's outdoor play. *Journal of Outdoor and Environmental Education*, 15(2), 24-35. <https://doi.org/10.1007/BF03400925>
- Early Childhood Outdoor Learning Network (ECOLN) (n.d.). *About us: Early Childhood Outdoor Learning Network*. <https://ecolearningnetwork.org.au/about-us/>
- Elliott, S. & Chancellor, B. (2012). *Westgarth Kindergarten bush kinder evaluation report*. <http://bushkinder.blogspot.com.au/2012/10/bush-kinder-evaluation-report.html>
- Elliott, S. & Chancellor, B. (2014). From forest preschool to bush kinder: An inspirational approach to preschool provision in Australia. *Australasian Journal of Early Childhood*, 39(4), 45-53. <https://doi.org/10.1177/183693911403900407>
- Elliott, S. & Chancellor, B. (2017). Beyond the fence: Exploring Forest preschool/school approaches in Australia. In H. Little, S. Elliott & S. Wyver (Eds.), *Outdoor learning environments: Spaces for exploration, discovery and risk taking in the early years* (pp. 243-261). Allen and Unwin. <https://www.routledge.com/Outdoor-Learning-Environments-Spaces-for-exploration-discovery-and-risk-taking-in-the-early-years/Elliott/p/book/9781760296858>
- Elliott, S. & Young, T. (2016). Nature by default in early childhood education for sustainability. *Australian Journal of Environmental Education*, 32(1), 57-64. <https://doi.org/10.1017/aee.2015.44>
- Forest Schools (2023). *Imagine a classroom without walls*. <https://www.forestschools.com/>
- Forest School Association (FSA) (n.d.a). *History of Forest School*. (viewed 14 February 2023). <https://forestschoollassociation.org/history-of-forest-school/>

- Forest School Association (FSA) (n.d.b). *Qualifications*. (viewed 14 February 2023).  
<https://forestschoollassociation.org/forest-school-qualification>
- Forest School Training (FSTC) (n.d.a). *Levels of Training*. (viewed 14 February 2023).  
<https://www.forestschoolltraining.co.uk/training/levels-of-training/>
- Forest School Training (FSTC) (n.d.b). *Level 3 Certificate in Forest School Programme Leadership*. (viewed 14 February 2023) <https://www.forestschoolltraining.co.uk/training/levels-of-training/>
- Gibson, J. J. (1979). The theory of affordances. In J. J. Gibson, *The ecological approach to visual perception*. Houghton Mifflin.  
[https://monoskop.org/images/c/c6/Gibson\\_James\\_J\\_1977\\_1979\\_The\\_Theory\\_of\\_Affordances.pdf](https://monoskop.org/images/c/c6/Gibson_James_J_1977_1979_The_Theory_of_Affordances.pdf) [also  
<https://www.taylorfrancis.com/books/mono/10.4324/9781315740218/ecological-approach-visual-perception-james-gibson/>]
- Gibson, J. L., Cornell, M. & Gill, T. (2017). A systematic review of research into the impact of loose parts play on children's cognitive, social and emotional development. *School Mental Health*, 9(4), 295-309. <https://doi.org/10.1007/s12310-017-9220-9>
- Gray, T. & Birrell, C. (2015). 'Touched by the Earth': A place-based outdoor learning programme incorporating the arts. *Journal of Adventure Education and Outdoor Learning*, 15(4), 330-349. <https://doi.org/10.1080/14729679.2015.1035293>
- Harper, N. J. (2017). Outdoor risky play and healthy child development in the shadow of the "risk society": A forest and nature school perspective. *Child and Youth Services*, 38(4), 318-334. <https://doi.org/10.1080/0145935X.2017.1412825>
- Harris, F. (2017). The nature of learning at forest school: Practitioners' perspectives. *Education 3-13*, 45(2), 272-291. <https://doi.org/10.1080/03004279.2015.1078833>
- Harris, F. (2018). Outdoor learning spaces: The case of forest school. *Area*, 50, 222-231. <https://doi.org/10.1111/area.12360>
- Harwood, D. (2019). The blue car in the forest: Exploring children's experiences of sustainability in a Canadian Forest. *Nordina*, 15(4), 403-417.  
<http://doi.org/10.5617/nordina.6169>
- Harwood, D. & Collier, D. R. (2017). The matter of the stick: Storying/(re)storying children's literacies in the forest. *Journal of Early Childhood Literacy*, 17(3), 336-352.  
<https://doi.org/10.1177/1468798417712340>
- Harwood, D., Whitty, P., Green, C. & Elliot, E. (2020). Unsettling settlers' ideas of land and relearning land with Indigenous ways of knowing in ECEfS. In S. Elliott, E. Ärlemalm-Hagsér & J. Davis (Eds.), *Researching early childhood education for sustainability: Challenging assumptions and orthodoxies* (2nd ed., pp. 25-37). Routledge.  
<https://www.routledge.com/Researching-Early-Childhood-Education-for-Sustainability-Challenging-Assumptions-and-Orthodoxies/Elliott-Arlemalm-Hagser-Davis/p/book/9781138332263>
- Hindmarch, T. (2021). Chapter One: Forest School in Norway and in England: Ten years on. In T. Hindmarch & D. Boyd (Eds.), *A path made in the walking: Forest School in Norway and in England*. Britain: SchemaPlay Publications, pp. 11-20. <https://www.omep.org.uk/wp-content/uploads/2021/08/A5-Forest-School.pdf>
- Hughes, F. (2020). *Problematising sustainability in nature play programs: Pedagogical transformations and ambitious alignments*. PhD thesis, University of New England, Australia.  
<https://hdl.handle.net/1959.11/53574>



- Hughes, F., Elliott, S., Anderson, K. & Chancellor, B. (2021). *Early years learning in Australian natural environments*. Oxford University Press. <https://www.oup.com.au/books/higher-education/education/9780190325664-early-years-learning-in-australian-natural-environments>
- Hughes, C. & Lury, C. (2013). Re-turning feminist methodologies: From a social to an ecological epistemology. *Gender and Education*, 25(6), 786-799. <https://doi.org/10.1080/09540253.2013.829910>
- Humberstone, B. & Stan, I. (2012). Nature and well-being in outdoor learning: Authenticity or performativity. *Journal of Adventure Education and Outdoor Learning*, 12(3), 183-197. <https://doi.org/10.1080/14729679.2012.699803>
- Inoue, M., Elliott, S., Mitsuhashi, M. & Kido, H. (2019). Nature-based early childhood activities as environmental education?: A review of Japanese and Australian perspectives. *Japanese Journal of Environmental Education*, 28(4), 21-28. [https://doi.org/10.5647/jsoc.28.4\\_21](https://doi.org/10.5647/jsoc.28.4_21)
- Inoue, M., O’Gorman, L. & Davis, J. (2016). Investigating early childhood teachers’ understandings of and practices in education for sustainability in Queensland: A Japan-Australia research collaboration. *Australian Journal of Environmental Education*, 32(2), 174-191. <https://doi.org/10.1017/ae.2016.4>
- James, A. & Prout, A. (Eds.) (1997). *Constructing and reconstructing childhood: Contemporary issues in the sociological study of childhood* (2nd ed.). Falmer Press. [3rd ed.] <https://www.routledge.com/Constructing-and-Reconstructing-Childhood-Contemporary-issues-in-the-sociological-study-of-childhood/James-Prout/p/book/9781138818804>
- Kahn, P. H. (1999). *The human relationship with nature: Development and culture*. MIT Press. <https://doi.org/10.7551/mitpress/3604.001.0001>
- Kellert, S. R. (2012). *Birthingright: People and nature in the modern world*. Yale University Press. <https://www.jstor.org/stable/j.ctt32bq08>
- KINN (Kids In Nature Network) (2018). *The state of nature play, outdoor learning and bush kinder in Victoria. Key findings and recommendations November 2018*. [https://3c9b4507-3b71-401c-aff3-4e14ac9612a3.filesusr.com/ugd/c8e3a7\\_a8a8b070b9624525b0f660e9143be700.pdf](https://3c9b4507-3b71-401c-aff3-4e14ac9612a3.filesusr.com/ugd/c8e3a7_a8a8b070b9624525b0f660e9143be700.pdf)
- Knight, S. (Ed.) (2012). *Forest School for all*. SAGE Publications. <https://us.sagepub.com/en-us/nam/forest-school-for-all/book235112>
- Knight, S. (2013). *International perspectives on Forest School: Natural spaces to play and learn*. SAGE Publications. <https://sk.sagepub.com/books/international-perspectives-on-forest-school>
- Latour, B. (2004). *Politics of nature: How to bring the sciences into democracy*. Harvard University Press. <https://www.hup.harvard.edu/books/9780674013476>
- Leather, M. (2018). A critique of “Forest School” or something lost in translation. *Journal of Outdoor and Environmental Education*, 21(1), 5-18. <https://doi.org/10.1007/s42322-017-0006-1>
- Leonard, M. (2016). *The sociology of children, childhood and generation*. Sage Publications. [https://us.sagepub.com/sites/default/files/upm-assets/73141\\_book\\_item\\_73141.pdf](https://us.sagepub.com/sites/default/files/upm-assets/73141_book_item_73141.pdf)
- Lenz Taguchi, H. (2009). *Going beyond the theory/practice divide in early childhood education: Introducing an intra-active pedagogy*. Routledge. <https://doi.org/10.4324/9780203872956>

- Lloyd, A. & Gray, T. (2014). Place-based outdoor learning and environmental sustainability in Australian primary schools. *Journal of Sustainability Education*, October. [http://www.susted.com/wordpress/content/place-based-outdoor-learning-and-environmental-sustainability-within-australian-primary-school\\_2014\\_10/](http://www.susted.com/wordpress/content/place-based-outdoor-learning-and-environmental-sustainability-within-australian-primary-school_2014_10/)
- Lloyd, A., Truong, S. & Gray, T. (2018). Place-based outdoor learning: More than a drag and drop approach. *Journal of Outdoor and Environmental Education*, 21(1), 45-60. <https://doi.org/10.1007/s42322-017-0002-5>
- Louv, R. (2005). *Last child in the woods: Saving our children from nature deficit disorder*. Algonquin Books. <https://richardlouv.com/books/last-child/>
- MacEachren, Z. (2018). First Nation pedagogical emphasis on imitation and making the stuff of life: Canadian lessons for indigenizing Forest Schools. *Journal of Outdoor and Environmental Education*, 21(1), 89-102. <https://doi.org/10.1007/s42322-017-0003-4>
- Malone, K. & Waite, S. (2016). *Student outcomes and natural schooling: Pathways from evidence to impact report 2016*. [https://outdooreducationaustralia.org.au/wp-content/uploads/Student\\_outcomes\\_and\\_natural\\_schooling\\_pathways\\_to\\_impact\\_2016.pdf](https://outdooreducationaustralia.org.au/wp-content/uploads/Student_outcomes_and_natural_schooling_pathways_to_impact_2016.pdf)
- Masters, J. & Grogan, L. (2018). A comparative analysis of nature kindergarten programmes in Australia and New Zealand. *International Journal of Early Years Education*, 26(3), 233-248. <https://doi.org/10.1080/09669760.2018.1459507>
- Maynard, T. (2007). Forest schools in Great Britain: An initial exploration. *Contemporary Issues in Early Childhood*, 8(4), 320-331. <https://doi.org/10.2304/ciec.2007.8.4.320>
- Nature Play Queensland (2020). *About us*. <https://natureplayqld.org.au/about-us>
- Nature Play Western Australia (2022). *Our history*. <https://www.natureplaywa.org.au/our-history/>
- NSW Early Years Nature Connections (2023). *About NSW Early Years Nature Connections*. <https://www.nsweync.org/about-eync>
- NSW Government (2011). *Education and Care Services National Regulations (2011 SI 653)*. New South Wales Government. <https://legislation.nsw.gov.au/view/html/inforce/current/sl-2011-0653>
- New, R. S. (2007). Reggio Emilia as cultural activity theory in practice. *Theory Into Practice*, 46(1), 5-13. <https://doi.org/10.1080/00405840709336543>
- Nicholson, S. (1971). How NOT to cheat children: The theory of loose parts. *Landscape Architecture*, 62, 30-34. <https://media.kaboom.org/docs/documents/pdf/ip/Imagination-Playground-Theory-of-Loose-Parts-Simon-Nicholson.pdf>
- Pacini-Ketchabaw, V. (2013). Frictions in forest pedagogies: Common worlds in settler colonial spaces. *Global Studies of Childhood*, 3(4), 355-365. <https://doi.org/10.2304/gsch.2013.3.4.355>
- Parks Victoria (2020). *Healthy Parks Healthy People Framework 2020*. Victorian Government. <https://www.parks.vic.gov.au/healthy-parks-healthy-people/healthy-parks-healthy-people-framework>
- Parsons, K. J. & Traunter, J. (2020). Muddy knees and muddy needs: Parents perceptions of outdoor learning. *Children's Geographies*, 18(6), 699-711. <https://doi.org/10.1080/14733285.2019.1694637>

- Phillips, L. G. (2014). I want to do real things: Explorations of children's active community participation. In J. Davis & S. Elliott (Eds.), *Research in early childhood education for sustainability: International perspectives and provocations* (pp. 194-207). Routledge.  
<https://www.routledge.com/Research-in-Early-Childhood-Education-for-Sustainability-International-perspectives-and-provocations/Davis-Elliott/p/book/9780415854498>
- Piersol, L., Russell, L. & Groves, J. (2018). Nature education for sustainable todays and tomorrows (NEST): Hatching a new culture in schooling. *Australian Journal of Environmental Education*, 34(2), 97-114. <https://doi.org/10.1017/ae.2018.31>
- Planet Ark (2011). *Climbing trees: Getting Aussie kids back outdoors*.  
<https://treeday.planetark.org/documents/doc-534-climbing-trees-research-report-2011-07-13-final.pdf>
- Planet Ark (2013). *Missing trees: The inside story of an outdoor nation*.  
<https://treeday.planetark.org/documents/doc-1052-missing-trees---inside-story-of-an-outdoor-nation-report-2013.pdf>
- Planet Ark (2017). *The learning from trees: Life lessons for future generations*.  
<https://treeday.planetark.org/documents/doc-1537-ntd17-full-report.pdf>
- Pramling-Samuelsson, I. & Kaga, Y. (2008). *The contribution of early childhood education to a sustainable society*. UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000159355>
- Prasetyo, W. H., Ishak, N. A., Basit, A., Dewantara, J. A., Hidayat, O. T., Casmana, A. R. & Muhibbin, A. (2020). Caring for the environment in an inclusive school: The Adiwiyata Green School program in Indonesia. *Issues in Educational Research*, 30(3), 1040-1057.  
<https://www.iier.org.au/iier30/prasetyo.pdf>
- Preston, A. (2015, March 29). The war against humanities at Britain's universities. *The Guardian*, 29 March. <https://www.theguardian.com/education/2015/mar/29/war-against-humanities-at-britains-universities>
- Pyper, E., Harrington, D. & Manson, H. (2016). The impact of different types of parental support behaviours on child physical activity, healthy eating, and screen time: A cross-sectional study. *BMC Public Health*, 16(1), article568. <https://doi.org/10.1186/s12889-016-3245-0>
- Robinson, C., O'Connor, D. & Treasure, T. (2021). Education or care? Childcare or school? Pre-service teacher perspectives of teaching in the childcare sector. *Issues in Educational Research*, 31(4), 1231-1248. <http://www.iier.org.au/iier31/robinson.pdf>
- Schreiber, L. M. & Valle, B. E. (2013). Social constructivist teaching strategies in the small group classroom. *Small Group Research*, 44(4), 395-411.  
<https://doi.org/10.1177/1046496413488422>
- Speldewinde, C., Kilderry, A. & Campbell, C. (2023). Beyond the preschool gate: Teacher pedagogy in the Australian 'bush kinder'. *International Journal of Early Years Education*, 31(1), 236-250. <https://doi.org/10.1080/09669760.2020.1850432>
- Speldewinde, C., Kilderry, A. & Campbell, C. (2021). Ethnography and bush kinder research: A review of the literature. *Australasian Journal of Early Childhood*, 46(3), 263-275.  
<https://doi.org/10.1177/18369391211011264>

- Sulistiyarini, Komalasari, A., Dewantara, J. A., Prasetyo, W. H., Rahmanic, E. F. & Martono. (2022). Futures for pro-environment and social responsibility activities in Indonesian schools: An *Adiwiyata* case study. *Issues in Educational Research*, 32(2), 746-764. <https://www.iier.org.au/iier32/sulistiyarini.pdf>
- Taylor, A. & Pacini-Ketchabaw, V. (2015). Learning with children, ants, and worms in the Anthropocene: Towards a common world pedagogy of multispecies vulnerability. *Pedagogy, Culture and Society*, 23(4), 507-529. <https://doi.org/10.1080/14681366.2015.1039050>
- Thomas, A., Mennon, A., Boruff, J., Rorríguez, A. M. & Ahmed, S. (2014). Applications of social constructivist learning theories in knowledge translation for healthcare professionals: A scoping review. *Implementation Science*, 9, article 54. <https://doi.org/10.1186/1748-5908-9-54>
- Tremblay, M. S., Gray, C., Babcock, S., Barnes, J., Bradstreet, C. C., Carr, D., Chabot, G., Choquette, L., Chorney, D., Collyer, C., Herrington, S., Janson, K., Janssen, I., Larouche, R., Pickett, W., Power, M., Sandseter, E. B. H., Simon, B. & Brussoni, M. (2015). Position statement on active outdoor play. *International Journal of Environmental Research and Public Health*, 12(6), 6475-6505. <https://doi.org/10.3390/ijerph120606475>
- Tuck, E., McKenzie, M. & McCoy, K. (2014). Land education: Indigenous post-colonial, and decolonizing perspectives on place and environmental education research. *Environmental Education Research*, 20(1), 1-23. <https://doi.org/10.1080/13504622.2013.877708>
- United Nations International Children's Emergency Fund (2012). *The state of the world's children 2012: Children in an urban world*. <https://www.unicef.org/media/89226/file/The%20State%20of%20the%20World's%20Children%202012.pdf>
- Vanaken, G. J. & Danckaerts, M. (2018). Impact of green space exposure on children's and adolescents' mental health: A systematic review. *International Journal of Environmental Research and Public Health*, 15(12), article 2668. <https://doi.org/10.3390/ijerph15122668>
- Victorian State Government Education and Training (VSGET) (2016). *Victorian early years learning and development framework: for all children from birth to eight years*. Department of Education and Training. <https://www.education.vic.gov.au/Documents/childhood/providers/edcare/veyldframework.pdf>
- Waite, S. & Goodenough, A. (2018). What is different about Forest School? Creating a space for an alternative pedagogy in England. *Journal of Outdoor and Environmental Education*, 21(1), 25-44. <https://doi.org/10.1007/s42322-017-0005-2>
- Williams-Siegfredsen, J. (2017). *Understanding the Danish Forest School approach: Early years education in practice* (2nd ed.). Routledge. <https://doi.org/10.4324/9781315542027>
- Wood, E. A. (2014). Free choice and free play in early childhood education: Troubling the discourse. *International Journal of Early Years Education*, 22(1), 4-18. <https://doi.org/10.1080/09669760.2013.830562>
- Ziemer, T. & Lee, E. (2021). *Learning on country – Gowrie Broadmeadows' story of connecting with country*. Lady Gowrie Qld. <https://gowrieqld.com.au/learning-on-country-gowrie-broadmeadows-story-of-connecting-with-country/>
- Zosh, J. M., Hirsh-Pasek, K., Hopkins, E. J., Jensen, H., Liu, C., Neale, D., Solis, S. L. & Whitebread, D. (2018). Accessing the inaccessible: Redefining play as a spectrum. *Frontiers in Psychology*, 9, article 1124. <https://doi.org/10.3389/fpsyg.2018.01124>

**Miss Amanda England** (corresponding author) is an experienced primary and early years educator who has worked in various educational environments. She established, and currently manages a nature play setting, alongside offering nature play professional development courses. Amanda is completing her doctorate in the School of Education, University of New England, Armidale, NSW, Australia, focusing on Australian nature play philosophy and pedagogy.

ORCID: <https://orcid.org/0009-0008-5357-7926>

Email: [aenglan5@myune.edu.au](mailto:aenglan5@myune.edu.au)

**Dr Jo Bird** is a Senior Lecturer, Course Coordinator, Higher Degree by Research Coordinator, and researcher in Early Childhood Education at the University of New England, Australia. Her research focus includes digital technologies in children's play, in outdoor education and ways to scaffold educators' digital programming and to streamline their documentation.

ORCID: <http://orcid.org/0000-0002-3345-1815>

Email: [jbird21@une.edu.au](mailto:jbird21@une.edu.au)

**Dr Sue Elliott** is an Adjunct Senior Lecturer in Early Childhood Education at the University of New England, New South Wales, Australia and visiting scholar at the University of Cincinnati, Ohio, USA. Sue is a researcher and advocate in early childhood education for sustainability and nature play.

ORCID: <https://orcid.org/0000-0001-5956-356X>

Email: [sue.elliott@une.edu.au](mailto:sue.elliott@une.edu.au)

**Dr Marg Rogers** is a Senior Lecturer in Early Childhood Education at the University of New England, Australia. Marg researches marginalised voices within families and education, especially in regional, rural and remote communities. Marg is a Postdoctoral Fellow with the Commonwealth Government funded Manna Institute.

ORCID: <https://orcid.org/0000-0001-8407-7256>

Email: [marg.rogers@une.edu.au](mailto:marg.rogers@une.edu.au)

**Please cite as:** England, A., Bird, J., Elliott, S. & Rogers, M. (2024). Between nature kindergartens and Forest School: Forging pathways for nature play in Australia's ECE sector. *Issues in Educational Research*, 34(3), 953-973.

<http://www.iier.org.au/iier34/england.pdf>