

Teaching First Nations Perspectives Through Nature-Based Early Childhood Education: Insights from Australian Bush Kinder Ethnography

Christopher Speldewinde¹

Southern Cross University

chris.speldewinde@scu.edu.au

Sarah Womersley²

Southern Cross University

s.womersley@scu.edu.au

Suzanne Infantino³

Deakin University

suzanne.infantino@deakin.edu.au

Coral Campbell⁴

Deakin University

coral.campbell@deakin.edu.au

Article Information

Article History:

Received: February-2026

Reviewed: April 2026

Revised: June-2026

Accepted: June-2026

Keywords:

First Nations perspectives; nature-based education; bush kinder; early childhood education.

Abstract

Recent revisions of Australia's Early Years Learning Framework have increased expectations for educators to integrate outdoor learning and First Nations perspectives into early childhood education. However, limited research explains how educators practically embed Indigenous knowledge within nature-based pedagogies. This study explores how early childhood educators incorporate First Nations perspectives within Australian bush kinder programs. Using an ethnographic approach, data were collected through observations conducted within a longitudinal bush kinder project and interviews with an experienced nature-based educator. Findings demonstrate how educators apply a seven-step pedagogical strategy involving professional learning, curriculum integration, community engagement, culturally inclusive environments, reflective practice, everyday integration, and reconciliation awareness. This study contributes a practical pedagogical framework supporting educators to respectfully embed First Nations perspectives within nature-based early childhood contexts.

How to Cite:

Speldewinde, C., Womersley, S., Infantino, S., & Campbell, C. (2026). Teaching First Nations Perspectives Through Nature-Based Early Childhood Education: Insights from Australian Bush Kinder Ethnography. GENIUS: Indonesian Journal of Early Childhood Education, 7(1), 35–58. <https://doi.org/10.35719/gns.v7i1.235>



Submitted for open-access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license. <https://creativecommons.org/licenses/by-sa/4.0/>

INTRODUCTION

Past research on nature-based Early Childhood Education (ECE) programs in the United Kingdom ([Leather, 2018](#)) and Canada ([Harwood et al., 2020](#)) found that teachers' pedagogies are under-theorized – even in nations with long histories of delivering early childhood experiences and programs grounded in the outdoors. This need for deeper considerations of nature-based ECE approaches is similarly reflected in the need for greater scholarship and literature pertaining to ECE pertaining to First Nations Perspectives. Regardless of the international contexts, which can include Canadian, Alaskan, Nordic, or Australian, there is a greater emphasis on case studies and support for non-First Nations ECE educators who draw upon past scholarship ([Kellard & Paddon, 2016](#); [Kitson & Bowes, 2010](#)). An Australian style of nature-based teaching and learning, the 'bush kinder' approach, gained momentum in the mid-2010s ([Elliott & Chancellor, 2014](#)). The approach was aided by the earlier introduction in 2009 of Australia's early years curriculum document *Belonging, Being and Becoming: The Early Years Learning Framework for Australia* (EYLF) ([Belonging, Being and Becoming: The Early Years Learning Framework for Australia, 2009](#)) and influenced by the forest kindergarten approach prevalent in Nordic countries and the United Kingdom, the development of a 'bush kinder' approach to ECE gained a foothold ([Anderson, 2021](#); [Campbell & Speldewinde, 2019](#)).

The importance of access to quality ECE services forms a critical discussion in policy and educational spheres ([Commission, 2024](#)). This paper adds to that discourse on educational quality by considering how non-First Nations educators can develop young children's understanding of First Nations perspectives, that is, histories, knowledge systems, cultures, and languages pertinent to Indigenous peoples ([\[AGDE\], 2022](#)). It reflects upon aligning educator pedagogy to the ECE curriculum associated with place-based education ([Wattchow & Brown, 2011](#)). The paper is timely, as we challenge the status quo to highlight a potential imbalance in the focus of ECE policymakers, underscoring the need to connect nature-based ECE with First Nations perspectives. It is particularly relevant as ECE services that adopt a bush kinder approach are spending between one quarter and one third of children's preschool time in nature. Nature-based education settings are valuable as they are generally used to develop children's understandings of the environment and the world around them, connecting children to the land or, as it is known in Australian contexts, connecting to 'Country' ([Christiansen et al., 2018](#); [Speldewinde & Campbell, 2024](#)). For some Australian ECE services, the use of 'Country' as a place of teaching and learning is often called a nature kindergarten and more particularly in the Australian state of Victoria, where this research was undertaken, the term bush kinder has been popularized for these nature-based teaching and learning contexts ([Anderson, 2021](#)). The terms 'bush kinder' and 'nature-based settings' are applied interchangeably throughout this paper as we respond to the research question, how can educators apply nature-based pedagogies to develop young children's understandings of First Nations peoples' perspectives?

Australian First Nations Perspectives in ECE

Revising the EYLF ([AGDE], 2022) in 2022 placed a greater emphasis on learning outdoors. The original EYLF (*Belonging, Being and Becoming: The Early Years Learning Framework for Australia, 2009*) paid limited regard to the educative benefits of being in nature and experiencing the outdoor environment beyond the confines of a kindergarten's grounds. Also addressed in the EYLF's ([AGDE], 2022) revision was greater emphasis on Australian Aboriginal and Torres Strait Islander perspectives at a time when teaching and learning approaches that 'privilege Aboriginal cultures, hold relationships in high regard and acknowledge the cultural diversity of Aboriginal Nations' (Sinclair, 2024) were coming to the forefront. For many ECE practitioners, this was a given as many had adopted nature-based contexts for early childhood teaching and learning and recognized the rich opportunities to embed knowledge of the relationships Australia's First Nations people have with the land (Anderson, 2021). The EYLF now stated that educators should provide children with:

...an appreciation of the natural world and the interdependence between people, animals, plants, lands, and waters providing opportunities for children to engage with all concepts of sustainability through environmental education (Belonging, Being and Becoming: The Early Years Learning Framework for Australia, 2009).

Away from the EYLF, research on embedding Indigenous or First Nations Perspectives in ECE practices indicates that First Nations worldviews are non-linear and situated in relationships that include learning with/from place and more-than-human others (Hamm & Boucher, 2017). Place is situated as an important actor in knowledge processes, engaging with the construct of place within ECE to center First Nations Perspectives, which means Australian educators need to attend to the challenging issues associated with inhabiting places that were forcibly taken (Hamm & Boucher, 2017). Much of the scholarship on ECE and First Nations perspectives is situated within Canadian contexts. For example, Preston and colleagues confirmed that including First Nations pedagogy, infused with local language and culture, forms a critical component of ECE programs (Preston et al., 2012). They also point to programs needing to be staffed by qualified Aboriginal educators and structured to empower Aboriginal communities. Yet, most teachers across the full spectrum of education, including in ECE and primary schooling, do not have Indigenous heritage, making it challenging to understand First Nations Perspectives (Hogarth, 2020). Hogarth therefore confirms the importance of engaging with local communities to overcome issues such as the potential for dominant cultural perspectives, such as 'white privilege', to influence how issues are portrayed to the exclusion of minority viewpoints (Hogarth, 2020). It makes embedding First Nations Perspectives into ECE a critical area that needs to be included in the EYLF, but one that is full of complexities.

The updated EYLF provided educators with the impetus to give children new ways to become "confident and involved learners" and to develop behaviors to "connect and contribute to their world" ([AGDE], 2022). The EYLF also challenged educators to provide children with a stronger connection to the land and different ways of learning about the natural world. Educators were

compelled to incorporate First Nations knowledge into their pedagogy by ‘co-actioning Indigenous Australian knowledges’ as well as promoting a ‘relational pedagogy’ that encourages active learning, knowledge that is socially constructed and a strengths-based approach to learning ([Chealuck & Campbell, 2024](#)). Influential in the enactment of curriculum policy, the EYLF frames relevant forms of ECE educator pedagogy. The EYLF placed emphasis on two pedagogical approaches: relational pedagogy and place-based pedagogy ([\[AGDE\], 2022](#)), framing these as:

Relational pedagogy underpins the ways in which educators build trusting, respectful relationships between children, families, other educators and professionals, as well as members of the community. Place-based pedagogy refers to an understanding that educators’ knowledge of the setting or context will influence how educators plan and practice. (p. 7)

Relational pedagogy forms an influential element of the incorporation of First Nations knowledge systems into ECE programs, as it can draw First Nations peoples as community members in ECE contexts. As a pedagogical approach, it ‘treats relationships as the foundation of teaching and learning, where caring relationships between children and EC professionals will enhance children’s wellbeing, engagement, and achievement’ ([Chealuck & Campbell, 2024](#)).

The modified EYLF acted as a stimulus for engaging educators and other stakeholders in conversations about how to implement natural learning environments within the day-to-day program to foster children’s love of the environment ([\[AGDE\], 2022](#)). These changes led to an even greater priority to embrace a developing nature-based ECE approach specific to Australia (Speldewinde & Campbell, 2024; Speldewinde & Infantino, 2024). Policymakers demonstrated a greater awareness of the need for more structured guidelines for educators across several ECE contexts. Those educators who had already been incorporating nature-based contexts into their regular program were offered a broader range of contexts to provide teaching and learning spaces for young children ([\[AGDE\], 2022](#)). The use of local coastal areas, deserts, and bushland was promoted to provide children with opportunities to build connections to the environment and encouraged learning to take place outdoors ([\[AGDE\], 2022](#)). These outdoor, nature-based contexts became positioned as valuable learning spaces but needed to relate to First Nations perspectives. Complementary to relational pedagogy, these spaces promoted social and emotional well-being ([Hughes et al., 2022](#)).

Pedagogical approaches to teaching First Nations perspectives

Atkinson ([Atkinson, 2017](#)) writes of the ‘complexities around embedding Aboriginal perspectives in ECE and that:

Embedding is a practice that suggests a position beyond inclusion in that Aboriginal perspectives are fixed firmly, deeply, and centrally within the program. Both Aboriginal and non-Aboriginal early childhood communities may be troubled by this concept. Aboriginal early childhood communities may be concerned about cultural appropriation or cultural theft as expectations of non-Aboriginal early childhood practitioners grow without understanding cultural protocols. Non-Aboriginal early childhood

educators, aware of their lack of ‘cultural competence’, may be frozen into inaction in not ‘wanting to do the wrong thing.’

These complexities challenge educators to reflect on the ethical decisions they make in incorporating First Nations culture in their program and the partnerships with local communities and protocols involved in the authentic application of First Nations perspectives. These complexities are often compounded by educators’ limited knowledge of Indigenous cultural backgrounds, which impedes the inclusion of First Nations perspectives in curricula ([Gorecki & Doyle-Jones, 2021](#)).

Relational and place-based pedagogies provide educators with the opportunity to coalesce education frameworks associated with learning about Australia’s First Nations people. In fact, First Nations people inhabit one-quarter of the world’s land area and safeguard 80% of its biodiversity, so their perspectives in education need to be made prominent ([Abeysekera, 2024](#)). While acknowledging First Nations cultures exist within sustainable development frameworks, they often do not hold a “special place” ([Abeysekera, 2024](#)). Making that special place in curricula for Australian First Nations knowledge systems, integrated with Western science, as part of a broad approach to environmental management, enhances local sustainability practices ([Hill et al., 2012](#)). Including Australia’s First Nations perspectives and their approaches to sustainable practices in teaching and learning is important in a world focused on climate change and guarding the future for its youngest inhabitants ([Speldewinde & Campbell, 2024](#); [Speldewinde & Infantino, 2024](#)). In keeping with the EYLF and its focus on relational and place-based pedagogies, Abeysekera (2024) found that sustainable development requires a “contextual, place-based and people-based orientation” ([Abeysekera, 2024](#)). The EYLF is therefore valuable in the ECE context in drawing together these frameworks by stating that:

Thinking about sustainability means thinking about the future and acting to create healthy, just and vibrant futures for all...Recognizing that Aboriginal and Torres Strait Islander peoples have looked after Country for the past 60,000 years, educators and children need to learn about Aboriginal and Torres Strait Islander history, culture, and rich sustainable practices ([\[AGDE\], 2022](#)).

Regardless of context, place-based education captures several themes that can include local history, sustainability, environmental studies, local ecology, and school-community relations ([Penetito, 2008](#)). Place-based pedagogy has the potential to be applied in nature-based ECE settings and draw upon First Nations peoples’ local knowledge of animals and the land ([Speldewinde & Campbell, 2024](#); [Speldewinde & Infantino, 2024](#)). To confirm its emphasis on building young children’s knowledge of First Nations perspectives, the introduction of the new EYLF stated that engaging Aboriginal children in “culturally appropriate early childhood education” will ensure equity and foster high-quality community connections ([\[AGDE\], 2022](#)). In addition, making First Nations perspectives prominent in the EYLF may assist young First Nations children to see their culture and identity reflected in their ECE surroundings. Nevertheless, research has found that while early childhood professionals should draw on First Nations people where possible to provide children with knowledge, the professionals themselves require a greater level

of understandings of First Nations perspectives to effectively embed this knowledge into bush kinder programs ([Hughes et al., 2022](#)).

Place-based pedagogy remains crucial to the development of nature-based pedagogy, as each natural site is different and independent of others, offering unique learning opportunities for young children if the educator can harness their knowledge of the setting. Greenwood and Hougham (2015, p. 97) indicate that “place-based approaches emphasizing direct experience are the best way to nurture children’s relationships with nature ([Greenwood & Hougham, 2015](#)).’ Similarly, Author ([Campbell & Speldewinde, 2019](#)) highlighted that ‘the experience of ‘place’ draws upon synthesizing natural and human objects, activities and functions; place becomes the experience of the individual and the personal.’

From their rapid growth in numbers since the mid-2010s, Australian ECE services are now using outdoor natural spaces as places for teaching and learning ([Hughes et al., 2022](#)). The updated EYLF has provided educators with added momentum since 2023 to incorporate nature-based pedagogical approaches in Australian ECE that emphasize children’s understanding of First Nations perspectives.

Understanding pedagogical approaches to Australian nature-based education

Australian early childhood educators have tended towards adopting a pedagogical approach suited to teaching in natural environments where bush kinder programs occur. “Nature pedagogy” is an approach to teaching that is both child-centered and humanistic ([McLeod, 2019](#)). Drawing on nature pedagogy, educators can observe and apply “natural methods and practice of working with nature [and how] that sits within a set of values” (Warden, 2015). Yet, despite its value for teaching and learning in nature-based spaces, nature pedagogy remains unaccounted for in policy and curriculum documents such as the EYLF. Educators teaching in nature-based settings have been observed to use solely what nature and the outdoors provide for teaching and learning ([Campbell & Speldewinde, 2020](#); [Christiansen et al., 2018](#); [Hughes et al., 2022](#)). Artificial, synthetic, plastic, or additional items, such as balls or toys, are often not brought into the space for play. Occasionally, educators may provide scientific resources, such as note pads for drawing, magnifying glasses, or small animal traps, which enhance children’s learning experiences about their local environment ([Campbell & Speldewinde, 2020](#)). This challenges children to think creatively about how to play and learn whilst giving educators the opportunity to teach children about the world around them ([Cutter-Mackenzie-Knowles et al., 2021](#)).

Adopting nature pedagogy also gives educators the chance to use the outdoor environment as a range of natural affordances that offer significant benefits for children in terms of learning and engagement ([Hughes et al., 2022](#)). These benefits can include children’s increased social and emotional development, including risk taking and resilience-building. These developmental gains can be made by chatting with their peers about the butterfly they saw fly by, taking risks by climbing a tree, walking over slippery rocks, picking themselves up after a fall, and having a sense of freedom without the walls and routine of center-based ECE programs ([Coates & Pimlott-Wilson, 2019](#)).

International research into teaching and learning in nature-based ECE settings highlights that time spent applying nature pedagogy provides children opportunities to develop positive behavioral attributes such as personal agency, collaboration, connection with nature, and development of an environmental ethos of care ([\[AGDE\], 2022](#)). Elsewhere, it is confirmed that when young children spend time in nature-based contexts, they exhibit growth in their understanding of science, technology, engineering, and mathematics (STEM) content knowledge, as well as skills such as observation, reasoning, problem-solving, and questioning ([Cutter-Mackenzie-Knowles et al., 2021](#)). Children also benefit through being required to use creativity and imagination, as they become reliant on only what is available in nature for play ([Campbell & Speldewinde, 2022](#); [Speldewinde, 2022](#)).

The consistent approach to bush kinder facilitation differentiates nature-based contexts from a nature excursion; bush kinders allow children to embed themselves and their knowledge in the familiar landscape to observe daily and seasonal changes. These nature-based contexts can include outdoor settings within the Australian landscape, in green and blue spaces such as paddocks, parklands, natural bush settings, or spaces adjacent to beaches and creeks ([Barrable & Barrable, 2024](#)). Many bush kinder programs now incorporate First Nations' knowledge systems by engaging with local First Nations' community members and inviting their involvement in bush kinder programs ([Speldewinde & Campbell, 2024](#)). Children, then, gain additional understandings of First Nations' cultural systems and knowledge, intertwined with their own experiences.

Theoretical Framing

This paper's four authors are not First Nations People but, like Hogarth (2020, p. 425) who states that 'Embedding First Nations Perspectives is a continuing need, and will require considerable research and development by teachers' ([Hogarth, 2020](#)), we sought to account for the experiences of experienced educators who consistently draw upon members of the local First Nations Community to impart knowledge to young children. Key to our messaging in this paper is that, although all experienced educators, we have relied on First Nations community representatives to build their knowledge on how to appropriately embed First Nations perspectives into our teaching. Educators often apply openly accessible online practitioner resources to embed First Nations teaching and learning into their pedagogy. These online resources, which typically include lesson plans and children's activities, can help guide educator practice. While we acknowledge there is academic discourse that consider Indigenous Ways of Knowing ([Sinclair, 2024](#); [Yunkaporta, 2009](#)), non-First Nations people teaching First Nations students ([Oskineegish, 2015](#)) and supporting teachers to gain confidence in including First Nations perspectives in the practice ([Price et al., 2026](#); [Price & Rogers, 2019](#)), we sought to place ourselves in the position educators not of First Nations descent may find themselves in, working to meet their responsibilities as outlined in curriculum.

Therefore, in seeking to find a way to effectively frame this paper, we adopted two approaches. Firstly, we understood the emphasis the EYLF places on place-based pedagogies, and elsewhere these have been shown to coalesce strongly with bush kinder approaches to ECE ([Speldewinde & Campbell,](#)

[2024](#)). Natural environments have been found to contextually complement learning ([Cutter-Mackenzie-Knowles et al., 2021](#)), and we could not dismiss the importance of place and place-based education in informing our deliberations. We sought to draw on the theories of place-based pedagogies and link them to the learning processes we observed and to how educators would apply the physical place to children's participation and experience with natural phenomena ([Wattchow & Brown, 2011](#)). We understood that the nature of 'place' had been previously theorized as a setting where the families could come repeatedly and 'that affords safety, harmony and spiritual' connection for their children' ([Mohammad et al., 2013](#)). The fusion of landscapes of the cultural and the human allowed us to concentrate on the world around us, and its immediate experiences informed our thinking of how First Nations Perspectives can become embedded in the experience of the bush kinder.

We sought a way to provide educators with a step-by-step strategy to effectively embed First Nations Perspectives into their programs and found a seven-step strategy effective in accounting for our data and, importantly, in demonstrating how experienced educators have drawn on the EYLF to incorporate First Nations Perspectives into programming. We selected this strategy over others to theoretically frame this paper, such as Campbell and Chealuck's (2020) teaching model of relational pedagogy, which we found was not as explicit as the chosen seven-step strategy, which scaffolds for ECE educators a way to embed First Nations perspectives in their teaching ([Chealuck & Campbell, 2024](#)). The strategy resonated with us for its simplicity, the ease with which educators can apply it, and its prioritization of engaging with First Nations peoples to build educator confidence and knowledge. Acting here as a theoretical framing, applying these seven steps positions the data in a way that establishes important elements through which early childhood educators can incorporate First Nations perspectives into their practice. It is important to note that seven-step strategy is not a sequential process, and educators can draw upon each of the steps as needed. These steps are:

- 1) individual and team education about First Nations culture, perspectives, and pedagogies;
- 2) incorporation of First Nations Histories and Cultures in curricula;
- 3) community involvement of First Nations peoples;
- 4) creating a culturally inclusive environment;
- 5) regular reflection on individual and team-teaching practices;
- 6) integration of First Nations perspectives in everyday learning and
- 7) The promotion of First Nations' Reconciliation and Awareness in teaching practice ([Lorina, 2025](#)).

This coalescing of place-based, relational, and nature pedagogies serves to translate learning from the traditional indoor kindergarten space into interconnected with nature and the environment. Place-based and nature pedagogies are consistently grounded in local landscapes and the natural world, which complements the relationality of connecting the children's learning to the First Nations Community and 'Country'. The lens of these seven steps serves as a model through which connections to the three pedagogies under consideration here implement teaching and learning.

Through unpacking the interactions between relationality, place and nature, we theoretically frame the data collected in this study using seven steps that connect to these three valuable pedagogical categories.

METHOD

This study employed an ethnographic research design to explore how early childhood educators embed First Nations perspectives within nature-based education settings, particularly Australian bush kinder programs. Ethnography was selected because it enables researchers to examine social interactions, cultural practices, and pedagogical experiences within authentic educational contexts ([Madden, 2017](#)). Through prolonged engagement with educators and children in natural learning environments, this approach allowed researchers to capture how First Nations perspectives were integrated into everyday teaching practices.

This paper draws on findings from data specific to fieldwork between 2023 and 2025 as part of a longitudinal project. The longitudinal project commenced in 2015, initially titled “Bush kinders: Locating the science”, then revised in 2023 to “Bush kinders: Assessing the teaching and learning in nature”. Our decision to use the more recent data was based on its currency and applicability to the updated EYLF. The project applied an ethnographic research design to capture the stories of people’s sociality ([Madden, 2017](#)), to examine children’s learning in bush kinder and educators’ pedagogical positioning ([Speldewinde, 2022](#)). Ethnography is valuable as a research methodology as it allows researchers to embed themselves in a social-cultural context by developing close and extended interactions with educators and children over an extended period ([Last, 2019](#)). Being an adaptable researcher is an important characteristic when undertaking ethnography ([Madden, 2017](#)), as situations change, requiring the researcher to be adept at alternating between observing and participating in events around them ([Speldewinde, 2022](#)). The ethnographer can directly participate in and observe the teaching and learning, can see and notice what is taking place around them, and, by spending long periods conducting fieldwork with children and educators, can build trust leading to the establishment of strong relationships ([Stan & Humberstone, 2011](#)).

Consistent with ethnographic principles, the researcher’s positionality was considered an important aspect of the research process. The study involved collaboration between a researcher with extensive experience investigating bush kinder practices and an experienced educator actively involved in nature-based teaching. This collaboration provided opportunities for combining researcher interpretation with practitioner knowledge, supporting a deeper understanding of how First Nations perspectives are embedded in pedagogical practice.

Participants

On-the-ground research fieldwork involving participant observations associated with this project occurred in 2015, 2017, 2020, and 2023 at six bush kinder settings in Victoria, Australia. Each bush kinder session included three to four educators and between 16 and 25 children (4–5 years old, in the year before school). Bush kinder groups generally were comprised

of an even distribution of boys and girls who attended sessions that ran for three to five hours once a week. This study's participants were selected due to their proximity to the researchers' university and each bush kinder educator's willingness to participate in this research.

The broader longitudinal project involved more than 200 children and 20 educators across six bush kinder settings in Victoria, Australia. However, the present paper focuses on selected observational data collected in 2023 and interview data from an experienced bush kinder educator collected in 2024 and 2025. These data sources were purposively selected because they provided rich examples of how First Nations perspectives were embedded within nature-based pedagogical practices.

The research focus itself has shifted during that time, as is often the case with ethnographic projects. From a 2015 study specifically devoted to science teaching and learning, several lines of inquiry emerge. Relevant to this paper was the author's 2017 observation that the bush kinder educators were using local Indigenous words to describe the place, seasons, animals, and plant life. We were keen to explore this in 2020 when we returned to the field; however, this was curtailed by the COVID Pandemic, and this line of inquiry was then taken up in 2023.

Data Collection

Ethnographic studies have participant observation as their foundation ([Madden, 2017](#)). Therefore, at times during the research, the researcher's observations occurred at a distance from the children however, there were times when, despite attempts to remain distant and observe, the children and educators beckoned the researcher to experience their discovery in nature. Author One would shift between the role of observer and participant as include an additional adult in the learning that was occurring was important to the children ([Speldewinde, 2022](#)).

The data was collected through a range of research methods. Fieldwork was predominantly undertaken by Authors One and Four (names removed for review). Conversations between the researcher and educator, the educator and children, and the researcher and children were documented in researcher diaries that detailed observations of pedagogy and children's play. Video-stimulated teacher interviews and impromptu teacher conversations were documented, as were the observations of the researchers in this study.

When the study commenced in 2015, there were limited bush kinders operating in Australia, which impacted upon the choice of research field. Educators who aligned their practice to the EYLF often would apply an emergent curriculum (Speldewinde & Campbell, 2024), teaching at the point of need as children discover through their nature play. To align this study more closely to the 2022 revision of the EYLF, this paper draws upon the observations of bush kinders in 2023 included as vignettes and responses to two structured interviews conducted in September 2024 and June 2025, between Author One, the lead researcher, and Author Two, an experienced bush kinder educator who had been previously observed to actively integrate First Nations perspectives as part of her nature pedagogy. We believe that drawing upon one experienced educator's knowledge here still allows for transferability of the findings and models and aligns to the work of Stalmeijer

and colleagues (2024) who note that transferability can be managed through applicability (the data allows readers to determine whether findings can be applied to their local framework) ([Stalmeijer et al., 2024](#)); resonance (a sense of familiarity or shared experience for practitioners in similar domains) and; theoretical engagement (whereby findings can be connected to broader concepts and models to explain phenomenon). It is important to highlight here that the data provided is a cross-section drawn from many examples observed in the field over the duration of the research. Multiple examples of indigenous knowledge incorporated into many sessions have been witnessed, such as the educators using a mat purchased locally with indigenous markings, or educators talking about the seasons, or local First Nations' people being included as part of the bush kinder session. As there are too many to include here, therefore we apply a representative sample.

University ethics and regulatory bodies' approval was gained for the study (Removed for review), and procedures were put in place following Human Research Ethics protocols. Participation in the research was voluntary and signed consents by the kindergarten organization, its educators, and its parents were obtained using the University's formats. When the children were introduced to the research team, their assent as research participants was obtained, and they were given the option of excluding themselves from any observation, discussion, or videoing. All names of individuals and places used in the vignettes are pseudonyms.

Data analysis

To facilitate data analysis in this paper, a deductive thematic analysis approach ([Braun & Clarke, 2022a](#)) has been applied, using the seven-step model as predetermined themes to categorize what was evident in the vignettes and the interview. The deductive orientation to the analysis, and having an instrument to test, refute, or confirm a hypothesis, was important as using the seven-step model gave us a 'lens through which to interpret the data' ([Braun & Clarke, 2022a](#)) and to demonstrate through the data, how educators can include First Nations perspectives in their teaching. The vignettes were selected to provide examples of what was observed during a bush kinder session, enactments of children's play and learning and educator-guided learning, and to demonstrate educator's practice of First Nations perspectives in teaching, and to represent what was occurring regularly during the beach kinder session. Author One developed the vignettes from the data, then Author Four validated the data and its applicability to the thematic categories of First Nations Perspectives. Through deductive orientation in reflexive thematic analysis, the 'preexisting theory' of how First Nations Perspectives can be incorporated into an educator's nature pedagogy was applied 'as a lens through which to interpret the data' ([Braun & Clarke, 2022b, 2022a](#)).

RESULT

The findings for this study draw on two forms of data. Firstly, the observations of Author One during time spent in bush kinders. While hundreds of hours have been spent observing and participating during bush kinders between 2015 and 2023, the observational data applied here was collected in 2023.

The interview data applied as part of these findings was collected in two interviews from one educator, the first interview in September 2024 and the second interview in June 2025. Two interviews were conducted as further considerations regarding the educator's approach were needed for the study.

Researcher Observations

Being outdoors, opportunities present themselves to observe natural wildlife. Much of Australia's animal and plant life is native to the continent and, as such, has played an important role in First Nations life and folklore. One such example is that of the Crow, or, as it is called in some First Nations language groups, the Waa.

Vignette 1: The Waa

Three children were playing on a sunny spring day at Sunrise Bush Kinder. The setting was an open parkland with several tall native Australian trees. Being spring, the native wildlife was more prevalent, birds were particularly observable as many had begun nesting in the trees, and the abundance of insects and other small animals at the site made for an abundance of food. I sat and watched the children playing, and they were pretending to be birds, moving their arms from side to side, mimicking the noises of two black crows that were high in a tree, talking to each other. Emily, one of the bush kinder educators, joined in the play, also mimicking the bird's noise. Emily said to the children, 'Look at the Waa high in the tree, can you hear it making its waa-waa noise?' My attention was sparked as I wanted to know why Emily was calling this bird a 'Waa'. I listened as Emily told the children the story of the Waa, and its place in the beliefs of the local First Nations people of the Kulin nation. She explained that the Waa was a trickster and that many First Nations groups and cultures across Australia saw the Crow as important, as it carried fire to the local people. Later, when the focus on the Waa ended, I spoke to Emily as I was interested in how she had gained that knowledge. Emily mentioned that she had not only read much about the local people and their relationship to the land but had attended a Professional Development session facilitated by the local First Nations People. The professional development she had participated in inspired her to use keywords to describe the local living and non-living things at bush kinder so that the children would deepen their understanding of the local environment and how it plays an important part in the lives of First Nations People. Emily was also able to take the bush kinder learning and incorporate it into her regular kindergarten program, using the children's learning to connect to picture story books Emily was using at the time.

Vignette 2: Acknowledging Country

Across Non-Indigenous Australia, there is a greater awareness of the Country and Traditional Owners (elders past, present, and emerging) of the land on which a meeting takes place. This awareness has become an important aspect within education, particularly as there is a movement to support Indigenous people in caring for Country, while acknowledging their pre-eminence in doing so ([Ross & Nursey-Bray, 2020](#)). It has been observed that a way educators can deepen children's knowledge of First Nations perspectives is by acknowledging Country through song.

It had been a busy five-hour bush kinder session in the middle of winter. The children had spent much of the time running and playing, and many had spent most of their energy and were now preparing to depart as the session was concluding. All the children were now sitting on a large mat, talking about their

bush kinder when Joanne, the lead educator, caught their attention as she was holding a gum leaf. Joanne said to the group ‘We’re on Wadawarrung land. Auntie Emma told me that when you are welcomed onto Wadawarrung land, you are given a gum leaf and you mush it up in your hands to make the Eucalyptus warm up because Eucalyptus is good for cleaning your hands, and then you smell your hands and it smells amazing, so I’ll give everyone a leaf as you leave’. She then asked the group, ‘How do we thank the Wadawarrung people?’. The children loudly burst into song:

*We live on Wadawarrung land.
We play on Wadawarrung land.
Every day we come to kinder, we learn on Wadawarrung land.
Nyatne (thank you) Wadawarrung land.
Nyatne Wadawarrung people for caring for the land.*

At the song’s completion, acknowledging the contribution First Nations people have made to Country and their bush kinder site, the children began to depart.

Vignette 3: Caring for Country

Children are always encouraged to care for the plants and animals they encounter in nature. They are challenged to play with what are called ‘loose parts’ ([Nicholson, 1971](#)) or the natural material on the ground such as fallen leaves, sticks, and flowers. Having a sense of preserving and caring for the environment is often instilled in educator practice, and this is complemented by First Nations perspectives.

Often, as I observed a bush kinder session, I would hear one of the four educators say to the children, ‘How can we care for Country?’ It immediately became apparent to me that there were educators deliberately adopting language that supported young children’s interaction with the land. Michaela, one of the bush kinder educators, recounted to me a story regarding how the bush kinder group embraces the concept of caring for Country through tree planting. Michaela informed me that at Whitesands Bush Kinder, their program uses different locations for bush kinder each term. This allows children to connect to different locations while also aiming not to overuse the land and cause damage to the living things. At the end of a school term, after approximately ten bush kinder sessions, they relocate to a different site. At the end of one term, Michaela had arranged for the children to work with a local planting group, a group she had contacted earlier that term. Each child was provided with one native tree to plant at the location where they had played for the whole term. Michaela explained to the children that this was a way that we can care for Country and acknowledge that this land had been cared for by the Wadawarrung people for thousands of years.

Interview

To develop a deeper understanding of educator practice, we wanted to draw on the experience of an educator who had been applying First Nations Knowledge in a bush kinder setting. We framed the interviews using the seven-step model to convey how teaching practice in nature-based settings incorporates and presents this data.

To begin, we wanted to document how one educator developed their own knowledge of First Nations perspectives. As an experienced educator, it was important that the recognition of a need for greater knowledge and for

knowledge sharing among the group was part of the educator's practice. The educator stated that:

I take any opportunities that are provided for professional development. I have looked at anti-bias as a person, critically reflecting on my own beliefs, before bringing them into my classroom.

Then, considering how they work as part of a team, they will say to their staff:

I'm going to this truth-telling event. Does anybody want to come? Oh no, it's a bit late in the evening, so I'll just make sure that I tell them. So, it's not so much that I'm going to do all these things. It's me going and transferring that knowledge to them.

One priority (for including First Nations perspectives) in my bush kinder program is attending and participating in cultural events as an individual, not necessarily as a Kindergarten teacher (but just being there), to educate yourself.

The prominence in the ECE curricula has led to educators taking a purposeful approach to how they include First Nations perspectives in the program. To indicate how this occurs for a bush kinder educator, examples included:

We use a lot of Wadawarrung words when we are outdoors. We use the names of birds, so a bird's name is Djirinap. We also saw a cockatoo and a possum, so we are using animal names. It's now wattle time, and we use the local words for the seasons.

The mat that the children sit on (at bush kinder) is an Aboriginal design.

As an educator who is not a First Nations person, drawing upon the knowledge that local First Nations people can impart is critical to the success of educators. To adopt this as part of bush kinder pedagogy, ways to draw on the community can include:

I attend and am seen at the kinds of events involving First Nations people and talk to the local elders, so when it's time for you to book them into your bush kinder, they feel safe coming, knowing that you are taking the extra step to be interested in them.

I think also it's like committing to going to those conferences, like going all in and having the confidence to do that, but also having those conversations, like with families, if you know, you get a bit of racism or something, and just being brave, taking a risk, and having that difficult conversation head-on and with staff as well.

Creating a culturally inclusive environment is also an important factor and to achieve this:

I look for picture story books written by a First Nations person. And for books published by First Nations companies.

The thing is to make (First Nations perspectives) visible in your bush kinder. If you do anything with programming, I always think how can this have a First Nations lens on it. Straight away I try to imagine, say if I have a First Nations family coming into the bush kinder, what are they going to see and what's going to make them feel included and welcomed where they can see themselves there.

As with any teaching practice, reflecting as an individual and as a teaching team is important. This is particularly so when including First Nations perspectives therefore regular reflection on individual and team-teaching practices is important. This has been achieved:

Because we do so much nature play, that is probably the biggest way that we program with First Nations perspectives in mind, even things like I think it was NAIDOC (National Aborigines and Islanders Day Observance Committee) week. I don't know what it was, but I had the T Shirt, the Heal Country one. I think that was the first time that it clicked for me, that caring for Country was a First Nations priority and that also mine with my background in environmental science.

The result of regular reflection on First Nations perspectives has led to this becoming an important part of bush kinder curricula as it is viewed as part of the regular practice and is integrated in ways which include:

We specifically say 'caring for country' which embeds a First Nations perspective can mean not hurting anything in nature taking care of any animals or creatures we find, like a dying dragonfly, making sure we don't pick fungi.

The act of going out to nature and having a sit down, having a yarn around a campfire, so the running of the program is First Nations perspectives.

And finally, we wanted to understand how educators can promote First Nations' Reconciliation and Awareness as an element of bush kinder teaching practice. Ways in which this may be achieved are:

By attending the reconciliation symposium, truth telling was a big part of that and that the children should be part of this in an appropriate way. My go-to activity when it comes to NAIDOC Week or every year although you know me. I don't do the same thing every year but next week at Bush Kinder, we're gonna make wattle seed damper on the fire.

I don't want it to be, this is about reconciliation week. We're going to do this activity, but it's more. I'm going to talk to the children about why (we are doing this activity). It is to show the First Nations people that we support them, and we want to help them in the future, and we do that by encouraging children to explore their own cultural identities.

DISCUSSION

Analytical Interpretation Through the Seven-Step Framework

Through two disparate data sources, researcher observations and an educator interview, it can be demonstrated that bush kinder programs provide educators with a breadth of opportunities to incorporate First Nations perspectives into nature-based ECE programs. The Vignettes provide a snapshot of educator practice as Emily, Joanne and Michaela each found opportunities to apply their knowledge of First Nations perspectives into their bush kinder session. The educator interview provides deeper knowledge of how an experienced educator has, over time, built deeper knowledge of how to apply First Nations perspectives as part of her practice. Important when meeting the EYLF requirements is ensuring educators are fully equipped to incorporate First Nations perspectives into their program. Through an approach such as the seven-step strategy, experienced bush kinder educators have been found to draw on a range of sources to be prepared to meet Learning Framework requirements. Here we discuss, through the lens of the seven-step strategy, how the observations and the interview data coalesce to support the embedding of First Nations perspectives into bush kinder teaching and learning.

1. Individual and team education

Professional development has been found to be vital for teacher growth in pedagogy and content knowledge ([Goldschmidt & Phelps, 2010](#)). Author challenged her own beliefs and practices through personal education and critical reflection leading to teacher development. Author's action supports the belief of Hughes and colleagues that educators need greater understandings of First Nations perspectives to effectively embed the knowledge into bush kinder programs ([Hughes et al., 2022](#)). Education leading to greater knowledge can extend to attending local events which, in the case of First Nations perspectives, can include events that teach non-First Nations people about the lives and challenges of First Nations peoples. Promoting staff awareness by inviting fellow staff to events and to be part of professional development has formed an important component of teacher education. It is a practical way to transfer knowledge to fellow educators. In practice as shown in Vignette 1, Emily took the opportunity to educate herself in the local language specific to animals and places. Using these words gives young children a sense of nature and how First Nations people constructed language such as in the case of the Wah, a name which captures the birdsong.

2. Incorporation of First Nations Histories and Cultures in curricula

An emergent curriculum is often applied to teaching and learning in bush kinders ([Speldewinde & Campbell, 2024](#)), that is, educators teach at point of need and do not prepare formal lessons. The emergent curriculum can be observed being applied in Vignette 1, Emily's response to the children's discovery of the Wah, using the nomenclature that local people would have used. Author's (interview) use of names mirrors that of Emily and confirms the important role identifying native living things have in supporting young children to better understand local people. Similarly, in Vignette 3, Michaela's decision to include tree planting as part of the bush kinder program attends to caring for the land and provides evidence of how educators can link that to First Nations culture to the curriculum. Author's point that prioritising these perspectives as a component of a bush kinder program and 'attending and participating in cultural events as an individual not necessarily as a Kindergarten teacher to educate yourself' provides a salient point in the importance of connecting self-education to then embedding knowledge as part of curricula.

3. Community involvement

Sinclair (2025, p.23) is noted as identifying that 'reflective processes that encourage consultation with Aboriginal families and communities contribute to the development of shared understandings of what could and should constitute Indigenous knowledges in the curriculum' ([Sinclair, 2024](#)). Drawing upon community expertise and knowledge as part of a relational pedagogy is one way to achieve this curriculum goal. What became apparent with the conversations with Joanne (Vignette 2) and Author (interview), was that both drew upon the knowledge of local First Nations people to support their own knowledge. Joanne's knowledge of the role of the gum leaf was important in educating the children at bush kinder about the importance of cleansing their hands applying knowledge of the role of plants as part of local First Nations peoples' daily lives, in particular the importance of cleansing their hands as eucalyptus oil is a disinfectant and antibacterial cleanser. Author's active pursuit of inviting local First

Nations people to her bush kinder is critical in growing the knowledge of children. Likewise, Author's own involvement in local events, becoming part of the broader community and Michaela's drawing upon a local tree planting group demonstrate the benefits of drawing community into the bush kinder to strengthen children's knowledge of First Nations perspectives.

4. Creating a culturally inclusive environment

Relational pedagogy, as outlined in the EYLF is a foundation upon which children can build trust and respectful relationships ([AGDE], 2022). Inclusive relationships are a foundation of Australian education policy and are underpinned by 'international statements such as Article 24 of the United Nations Convention on the Rights of Persons with Disabilities (United Nations (UN), 2006), as well as Australian national policies and statements (Woodcock et al., 2022). Within the EYLF, educators are challenged to provide new ways for children to develop behaviours to 'connect and contribute to their world' ([AGDE], 2022). Fostering cultural inclusivity within a bush kinder is an important consideration here for educators and is demonstrable through Author's use of First Nations picture story books particularly where the books are published by First Nations companies. Understanding how to appropriately address First Nations peoples also ensures inclusivity but most importantly is the visibility that an educator can provide such as the example of using mats that depict First Nations drawings. Educators need to be aware of how they can apply a First Nations lens and put themselves in the place of 'a First Nations family coming into the bush kinder, what are they going to see and what's going to make them feel included and welcomed where they can see themselves there.'

5. Regular reflection on individual and team-teaching practices

Critical reflection of one's practice has been found to 'broaden the scope of valued ways of knowing and interrogate our assumptions of what knowledge is' (Sinclair, 2024). Reflective practices such as Emily's (Vignette 1) lead to bush kinder learning being taken back into the regular kindergarten and broadening the scope of the children's understanding of First Nations perspectives. Having such perspectives at the forefront of planning is evident in Author's work and replicable for educators who can translate events commemorating Australia's First Nations peoples into activities in outdoor settings such as bush kinder that lead to caring for country as was exhibited by Michaela.

6. Integration of First Nations perspectives in everyday learning

Throughout the evidence provided here are examples of First Nations perspectives being integrated into everyday learning. Educators can draw on myriad opportunities to apply Indigenous knowledges and terminologies into bush kinder sessions. The natural environment and the living and non-living things all play an important role in First Nations culture. Emily's use of not only the nomenclature of the Waa but the story of its role in folklore enriches the children's learning. Likewise, Joanne drawing on how gum leaves, which are often present in bush kinders, are a sign of welcoming people onto Country contextualises the children's learning.

7. The promotion of First Nations' Reconciliation and Awareness in teaching practice

Applying pedagogical approaches such as Atkinson's Possum Skin Pedagogy draw in opportunities to promote reconciliation and awareness. Observable in Michaela's (Vignette 3) questioning of children and subsequent explanations of caring for Country challenge children to think about their own understanding of the world around them and the knowledges First Nations peoples bring to caring for the land. Educators can adopt approaches such as Author's in which activities suited to young children's learning, often which include play, such as cooking, or singing such as Joanne's thank you song, all are rich examples of how educators can promote awareness and reconciliation in ECE bush kinder settings.

Over the past decade, the Australian context has seen considerable uptake of nature-based approaches to early childhood education and care ([Speldewinde, 2025](#); [Speldewinde et al., 2025](#)). This has, in part, been driven by amendments to and revising of Australia's national early years curriculum framework, the EYLF ([\[AGDE\], 2022](#)). A major element of those revisions was emphasis being placed on Australian Aboriginal and Torres Strait Islander perspectives. Also, added emphasis was placed upon children being outdoors. As these changes were implemented, the important themes of First Nations Perspectives became more clearly integrated into educator practice; teaching and learning approaches that honor Aboriginal cultures, and their diversity ([Sinclair, 2024](#)) meant that educators were becoming aware that they needed to consider the ethical inclusion of Indigenous knowledges as part of their practice.

At the outset of this paper, it was noted that the scholarship pertaining to teaching First Nations perspectives in ECE is skewed towards is Canadian exemplars ([Preston et al., 2012](#)). Canadian early childhood educators, as noted by Preston and colleagues (2012), have long practiced immersing their teaching within the contexts of local language dialects and culture. They (2012) also point to programs needing to be staffed by qualified Aboriginal educators and structured to empower Aboriginal communities. This is less so in Australia where most teachers across the full spectrum of education including in ECE and primary schooling do not have Indigenous heritage making it challenging to understand First Nations Perspectives ([Hogarth, 2020](#)). This lack of a strong connection to heritage makes this study an important addition to the scholarship.

A rich tapestry of educator practice is being implemented in bush kinders because of the growth in nature-based teaching and learning on Country and the findings here should imbue other educators with confidence that they can include such practices. Yet, past research finding that educators' limited confidence and knowledge of Indigenous cultural backgrounds is impeding the inclusion of First Nations perspectives in everyday practice ([Gorecki & Doyle-Jones, 2021](#); [Price & Rogers, 2019](#)) meaning processes to support early childhood educators are needed. This study proposes a set of steps which educators have been witnessed as part of a pedagogical approach to culturally inclusive practice. The seven-step model we propose not only leads to the embedding of, and passing on of local, indigenous knowledge through team building (Steps 1 and 5), an active curriculum that encourages inclusive

practice (Steps 2, 6 and 7) but also, embracing and including local First Nations peoples as a valuable part of community that can support the building of culturally inclusive environments in early childhood settings (Steps 3 & 4).

Examining the study's findings through the lens of place-based, relational and nature-based pedagogies adds nuance to the considerations here. Natural environments have been found to contextually complement learning ([Cutter-Mackenzie-Knowles et al., 2021](#)) and we could not dismiss the importance of place and place-based education ([Wattchow & Brown, 2011](#)) in informing our deliberations. The 'place' in which nature pedagogy can be applied and practiced has been shown previously to be one where community is welcomed, offering 'safety, harmony and spiritual' connection for all ([Mohammad et al., 2013](#)). The immediacy of the experiences we observed, which we supplemented with the knowledge of one practicing, experienced bush kinder educator, informed our thinking of how First Nations Perspectives can become embedded in nature-based teaching and learning in a welcoming manner. As importantly, we searched through the data, finding components that have been successfully adopted through a stepped approach that ensure appropriate, contextualized representation of Indigenous knowledges could be part of educator nature pedagogy.

What we came to suppose was a finding here, somewhat unexpectedly, that the evidence base of a seven-step approach may not simply be one that was limited to our own context. These findings have the potential to be transferred to any Indigenous education context globally as each step is critical in ensuring culturally responsive and inclusive practices can form part of early childhood education. They make these findings important for policy as, by adopting a proposed framework, we have an evidence-based, via observational and interview data that confirms the merits of applying an approach that treats the inclusion of First Nations perspectives as highly valued in nature-based teaching and learning.

CONCLUSION

Impetus for improving quality Australian ECE can be attributed to the implementation of the EYLF and the recognition that natural environments are an excellent context to support the teaching of First Nations perspectives. When ECE environments are not culturally sensitive, the sector runs the risk of (continued) under-representation of those who are perhaps in need of ECE the most. Currently, First Nations Australians present as one group in need. The seven step strategy educators can adopt that includes education, curriculum, community involvement, inclusivity, reflective practice, integration and promoting reconciliation each have an important part to play and can be a way to enrich children's knowledge. While there are many differing factors that contribute to First Nations Australians under-representation, one important aspect is that ECE programs need to be redesigned so that they can become more suited to the requirements of this section of the community. Again, considerations of the strategies currently being implemented can be reconsidered to align with the strategies we provide here. When ECE programs become more inclusive of First Nations perspectives, including traditions and understandings, they are more likely to

deliver a higher quality early childhood education for all involved. The curriculum then becomes richer, educator pedagogy becomes intercultural, and children's learning experiences are broader.

First Nations Australians see the land and their cultural heritage as two of the most valued components of their livelihoods that contribute towards gaining a vital sense of belonging ([Lohoar et al., 2014](#)). This concept of belonging is also one of the key aspects of the ECE document ([\[AGDE\], 2022](#)). There is a correlation between the long-held beliefs of First Nations Australians and current documentation that governs the Australian ECE sector; even so, a disconnect remains between the documentation and the long-held beliefs of First Nations Australians. This disconnection highlights that a solution linking these two concepts is still to be discovered. The missing link can be found by increasing children's playful learning in the outdoor environment, where they can explore the land and the natural settings in which they live. Recently, the addition to some Australian ECE programs, particularly in Victoria, that addresses this concept, is the implementation of bush kinder in ECE programs. The Vignettes drawn from bush kinder teaching each show that components of the seven-step strategy can include caring for and acknowledging the traditional custodians of the land, leading change through role modelling and drawing on simple local words and being present at events arranging by local First Nations peoples.

This paper has sought to raise a critical conversation currently evident in nature-based ECE. The strength of this study is its longitudinal nature and the expertise drawn on by experienced educators. The study's limitation is that further observational and interview data could be applied here to further support the discussion. A further limitation is that there is insufficient space to include all the examples of indigenous knowledge that were observed. Yet, this does not detract from the issue of how to ensure that educators, both new and existing, can be supported to become successful in teaching First Nations perspectives within nature-based contexts. If bush kinders are to proliferate, and more time is spent in parklands, paddocks and beach settings, in effect increasing a preschool child's time spent in the outdoors, more time needs to be devoted to teacher education and educator confidence in including First Nations perspectives in their programs. The seven-step strategy (Aussie Childcare Network, 2025) employed here provides a way to frame educator development. We highlight several future directions for this research, firstly, investigations into how teacher education providers employ the importance of these contexts and including training in their preservice teacher training courses will be an important step forward. Secondly, we need to consider more than just what is happening at the university level and broadening the research to different sites to confirm the findings or seek variations in approaches. Finally, the vignettes we provide here are vivid examples of the types of learning present and pose the opportunity for further consideration of important themes of analysis such as the discourse being applied here, interpreting the pedagogical approaches applied and considerations of children's meaning-making of the experience of being in nature and First Nations Perspectives.

REFERENCES

- [AGDE], A. G. D. of E. (2022). *Belonging, being and becoming: The Early Years Learning Framework for Australia: Vol. 2.0*. <https://www.acecqa.gov.au/sites/default/files/2023-01/EYLF-2022-V2.0.pdf>
- Abeysekera, I. (2024). Integrating First Nations peoples' cultural capital for sustainable development. *Sustainable Development*, 32(1), 43–56. <https://doi.org/10.1002/sd.2643>
- Anderson, K. (2021). Listening with First Nations People's Voices through Immersive Nature Play Programs. In F. Hughes, S. Elliott, K. Anderson, & B. Chancellor (Eds.), *Early Years Learning in Australian Natural Environments* (pp. 170–188). Oxford University Press. [https://global.oup.com/academic/product/early-years-learning-in-australian-natural-environments-9780190325664?view=Grid&start=0&facet_narrowbytype_facet=Books for Courses&lang=3n&cc=na#](https://global.oup.com/academic/product/early-years-learning-in-australian-natural-environments-9780190325664?view=Grid&start=0&facet_narrowbytype_facet=Books_for Courses&lang=3n&cc=na#)
- Atkinson, S. (2017). *Possum Skin Pedagogy: A Guide for Early Childhood Practitioners*. fka Children's Services (fkaCS). <https://www.yarnstrongsista.com/wp-content/uploads/2020/04/Possum-Skin-Pedagogy-A-Guide-for-Early-Childhood-Practitioners.pdf>
- Barrable, D., & Barrable, A. (2024). Affordances of coastal environments to support teaching and learning: outdoor learning at the beach in Scotland. *Education* 3-13, 52(3), 416–427. <https://doi.org/10.1080/03004279.2022.2100440>
- Belonging, being and becoming: The Early Years Learning Framework for Australia*. (2009). Australian Government Department of Education and Training. for the Council of Australian Governments. https://www.acecqa.gov.au/sites/default/files/2020-05/belonging_being_and_becoming_the_early_years_learning_framework_for_australia.pdf
- Braun, V., & Clarke, V. (2022a). Conceptual and design thinking for thematic analysis. *Qualitative Psychology*, 9(1), 3–26. <https://doi.org/10.1037/qup0000196>
- Braun, V., & Clarke, V. (2022b). *Thematic Analysis: A Practical Guide*. SAGE Publications Inc. <https://us2.sagepub.com/en-us/nam/thematic-analysis/book248481#preview>
- 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>
- Campbell, C., & Speldewinde, C. (2020). Affordances for Science Learning in "Bush Kinders." *International Journal of Innovation in Science and Mathematics Education*, 28(3), 1–13. <https://doi.org/10.30722/IJISME.28.03.001>
- Campbell, C., & Speldewinde, C. (2022). Early Childhood STEM Education for Sustainable Development. *Sustainability*, 14(6), 1–11. <https://doi.org/10.3390/su14063524>
- Chealuck, K., & Campbell, C. (2024). Indigenous Australians' Ways of Knowing in science. In C. Campbell & C. Howitt (Eds.), *Science in Early Childhood* (5th ed., pp. 119–135). Cambridge University Press. <https://doi.org/10.1017/9781009339766.010>

- 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(4). <https://doi.org/10.1007/s42322-017-0001-6>
- Coates, J. K., & Pimlott-Wilson, H. (2019). Learning while playing: Children's Forest School experiences in the UK. *British Educational Research Journal*, 45(1), 21–40. <https://doi.org/10.1002/berj.3491>
- Commission, P. (2024). A path to universal early childhood education and care Inquiry report. In *Inquiry report no. 106* (Vols. 1–3). <https://www.pc.gov.au/inquiries-and-research/childhood/report/>
- Cutter-Mackenzie-Knowles, A., Osborn, M., Lasczik, A., Malone, K., & Knight, L. (2021). *The Mudbook: Nature play framework* (Q. G. D. of Education (Ed.)). Queensland Government Department of Education. <http://www.childhoodnatureplay.com/the-mudbook-nature-play-framework/>
- 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>
- Goldschmidt, P., & Phelps, G. C. (2010). Does teacher professional development affect content and pedagogical knowledge: How much and for how long? *Economics of Education Review*, 29(3), 432–439. <https://doi.org/10.1016/j.econedurev.2009.10.002>
- Gorecki, L., & Doyle-Jones, C. (2021). Centering Voices: Weaving Indigenous Perspectives in Teacher Education. *Canadian Journal of Action Research*, 21(3), 115–141. <https://doi.org/10.33524/cjar.v21i3.536>
- Greenwood, D., & Hougham, R. (2015). Mitigation and adaptation: Critical perspectives toward digital technologies in place-conscious environmental education. *Policy Futures in Education*, 13(1), 97–116. <https://doi.org/10.1177/1478210314566732>
- Hamm, C., & Boucher, K. (2017). Engaging with Place: Foregrounding Aboriginal Perspectives in Early Childhood Education. In N. Yelland & D. F. Bentley (Eds.), *Found in Translation* (1st ed., p. 18). Routledge. <https://doi.org/10.4324/9781315165042>
- Harwood, D., Boileau, E., Dabaja, Z., & Julien, K. (2020). Exploring the national scope of outdoor nature-based early learning programs in Canada: Findings from a large-scale survey study. *The International Journal of Holistic Early Learning and Development*, 6, 1–24. <https://ijheld.lakeheadu.ca/article/view/1761>
- Hill, R., Grant, C., George, M., Robinson, C. J., Jackson, S., & Abel, N. (2012). A Typology of Indigenous Engagement in Australian Environmental Management. *Ecology and Society*, 17(1), 23. <https://doi.org/10.5751/ES-04587-170123>
- Hogarth, M. (2020). Aboriginal and Torres Strait Islander Histories and Cultures. In R. Gilbert, L. Tudball, & P. Brett (Eds.), *Teaching Humanities and Social Sciences* (7th ed.). Cengage Learning Australia.
- Hughes, F., Elliott, S., Anderson, K., & Chancellor, B. (2022). *Early Years Learning in Australian Natural Environments*. Oxford University Press. <https://catalogue.nla.gov.au/catalog/8608855>
- Kellard, K., & Paddon, H. (2016). *Indigenous Participation in Early Childhood Education and Care - Qualitative Case Studies*.

<https://www.education.gov.au/early-childhood/resources/indigenous-participation-early-childhood-education-and-care-qualitative-case-studies-september-2016>

- Kitson, R., & Bowes, J. (2010). Incorporating Indigenous Ways of Knowing in Early Education for Indigenous Children. *Australasian Journal of Early Childhood*, 35(4), 81–89. <https://doi.org/10.1177/1836939110035004>
- Last, M. (2019). Medical Ethnography over Time: Penetrating “the fog of health” in a Nigerian community, 1970–2017. *Anthropology in Action*, 26(1), 52–60. <https://doi.org/10.3167/aia.2019.260106>
- Leather, M. (2018). A critique of “Forest School” or something lost in translation. *Journal of Outdoor and Environmental Education*, 21(2), 5–18. <https://doi.org/10.1007/s42322-017-0006-1>
- Lohoar, S., Butera, N., & Kennedy, E. (2014). *Strengths of Australian Aboriginal cultural practices in family life and child rearing*. Child Family Community Australia. <https://apo.org.au/node/41447>
- Lorina. (2025). *Importance Of Embedding ATSI Perspectives And Pedagogies In The Early Years Education Environments*. Aussie Childcare Network. <https://aussiechildcarenetwork.com.au/articles/childcare-articles/importance-of-embedding-atsi-perspectives-and-pedagogies-in-the-early-years-education-environments>
- Madden, R. (2017). *Being Ethnographic: A Guide to the Theory and Practice of Ethnography* (J. Seaman (Ed.); 2nd ed.). SAGE Publications.
- McLeod, N. (2019). Danish outdoor nature pedagogy. In N. McLeod & P. Giardiello (Eds.), *Empowering Early Childhood Educators* (1st ed., p. 26). Routledge. <https://doi.org/10.4324/9781315143729>
- Mohammad, N., Saruwono, M., Said, S., & Hariri, W. (2013). A Sense of Place within the Landscape in Cultural Settings. *Procedia - Social and Behavioral Sciences*, 105, 506–512. <https://doi.org/10.1016/j.sbspro.2013.11.054>
- Nicholson, S. (1971). How not to cheat children: The theory of loose parts. *Landscape Architecture*, 62(1), 30–34.
- Oskineegish, M. (2015). Are You Providing an Education that Is Worth Caring About? Advice to Non-Native Teachers in Northern First Nations Communities. *Canadian Journal of Education Revue Canadienne De l'éducation*, 38(3), 1–25. <https://cje-rce.ca/index.php/cje-rce/article/view/1770>
- Penetito, W. (2008). Place-based education: Catering for curriculum, culture and community. *The New Zealand Annual Review of Education*, 18, 5–29. <https://doi.org/10.26686/nzaroe.v0i18.1544>
- Preston, J. P., Cottrell, M., Pelletier, T. R., & Pearce, J. V. (2012). Aboriginal early childhood education in Canada: Issues of context. *Journal of Early Childhood Research*, 10(1), 3–18. <https://doi.org/10.1177/1476718X11402753>
- Price, K., & Rogers, J. (Eds.). (2019). *Aboriginal and Torres Strait Islander education: an introduction for the teaching profession*. Cambridge University Press (CUP). <https://doi.org/10.1017/9781108552905>
- Price, K., Rogers, J., & McCabe, L. (2026). *Aboriginal and Torres Strait Islander Education: An Introduction for the Teaching Profession* (4th ed.). Cambridge University Press. <https://doi.org/10.1017/9781009640701>
- Ross, H., & Nursey-Bray, M. (2020). Acknowledging Country properly. *Australasian Journal of Environmental Management*, 27(3), 245–248.

- <https://doi.org/10.1080/14486563.2020.1810873>
- Sinclair, K. (2024). Aboriginal pedagogies: exploring Indigenous ways of knowing, being and doing. In *Teaching to Transform Learning* (pp. 12–29). <https://doi.org/10.1017/9781009019378.002>
- Speldewinde, C. (2022). STEM Teaching and Learning in Bush Kinders. *Canadian Journal of Science, Mathematics and Technology Education*, 22(2), 444–461. <https://doi.org/10.1007/s42330-022-00207-4>
- Speldewinde, C. (2025). Nature play enhances kids’ social, emotional and physical skills. *Educating Young Children: Learning and Teaching in the Early Childhood Years*, 31(1), 13–14. <https://search.informit.org/doi/10.3316/informit.T2026031600013100291107255%0A>
- Speldewinde, C., & Campbell, C. (2024). Bush Kinders: Building Young Children’s Relationships with the Environment. *Australian Journal of Environmental Education*, 40(1), 7–21. <https://doi.org/10.1017/ae.2023.36>
- Speldewinde, C., Guarrella, C., & Campbell, C. (2025). Listening to children in nature: emergent curriculum in science teaching and learning in bush kinders. *International Journal of Science Education*, 47(15–16), 2180–2202. <https://doi.org/10.1080/09500693.2024.2365459>
- Speldewinde, C., & Infantino, S. (2024). “How do families know what makes a great bush kinder?”: understanding the provision of nature-based early childhood education programs in Victoria, Australia. *Research on Preschool and Primary Education*, 3(1), 9–19. <https://doi.org/10.55976/rppe.3202513049-19>
- Stalmeijer, R. E., Brown, M. E. L., & O’Brien, B. C. (2024). How to discuss transferability of qualitative research in health professions education. *The Clinical Teacher*, 21(6), e13762. <https://doi.org/10.1111/tct.13762>
- Stan, I., & Humberstone, B. (2011). An ethnography of the outdoor classroom – how teachers manage risk in the outdoors. *Ethnography and Education*, 6(2), 213–228. <https://doi.org/10.1080/17457823.2011.587360>
- Warden, C. (2015). *Learning with Nature: Embedding Outdoor Practice*. SAGE Publications Ltd. <https://doi.org/10.4135/9781473909700 NV - 0>
- Wattchow, B., & Brown, M. (2011). *A Pedagogy of Place: Outdoor Education for a Changing World*. Monash University Publishing. <https://doi.org/10.26180/5f3be12b9d719>
- Woodcock, S., Sharma, U., Subban, P., & Hitches, E. (2022). Teacher self-efficacy and inclusive education practices: Rethinking teachers’ engagement with inclusive practices. *Teaching and Teacher Education*, 117, 103802. <https://doi.org/10.1016/j.tate.2022.103802>
- Yunkaporta, T. (2009). *Aboriginal pedagogies at the cultural interface* [James Cook University]. <https://doi.org/10.25903/qw6q-2h64>