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'We Love Nature and Nature Loves Us': Children's Observations on their Relationship with the More-than-Human World

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Abstract

Nature play is gaining momentum in primary schools. However, few studies have actively incorporated children's voices. Even rarer are articles authored by the children themselves, as academics predominately write these works. This article marks a departure from these trends by sharing the unfiltered reflections of Year One students from a public school in Australia on how a 10 week nature play programme, known as 'bush school', impacted their lives. The idea for this article originated from the students themselves. They wanted to share their views to help adults understand how children connect with nature and why nature play is important. Developed over a school term through discussions and feedback loops, this article includes students' words, drawings, and selected photographs. These media allowed the children to express their innermost thoughts and reflections. Ultimately, their goal is to inspire adults to rethink the design of schools and learning experiences in order to expand nature play opportunities for all children. This article highlights the importance of listening to children to fully understand their lived experience and the true essence of nature play. It also demonstrates how co-authoring articles with children fosters high levels of engagement and ownership.

Résumé Le jeu en nature gagne du terrain à l'école primaire. Cependant, peu d'études ont activement intégré la voix des enfants. Les articles rédigés par les enfants eux-mêmes sont encore plus rares, car ce sont principalement des universitaires qui les rédigent. Cet article s'écarte de ces tendances en partageant les réflexions sans filtre d'élèves de première année d'une école publique australienne sur l'impact d'un programme de jeu en nature de 10 semaines, appelé 'école de brousse', sur leur vie. L'idée de cet article est venue des élèves eux-mêmes. Ils souhaitent partager leurs points de vue pour aider les adultes à comprendre le lien entre les enfants et la nature et l'importance du jeu en nature. Élaboré au cours d'un trimestre

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scolaire, au travers de discussions et de retours d'expérience, cet article inclut des mots, des dessins et une sélection de photographies des élèves. Ces supports ont permis aux enfants d'exprimer leurs pensées et réflexions les plus profondes. L'objectif ultime est d'inciter les adultes à repenser la conception des écoles et des expériences d'apprentissage afin d'élargir les possibilités de jeu en nature pour tous les enfants. Cet article souligne l'importance d'écouter les enfants pour bien comprendre leur vécu et la véritable essence du jeu en nature. Cela démontre également comment la co-écriture d'articles avec des enfants favorise des niveaux élevés d'engagement et d'appropriation

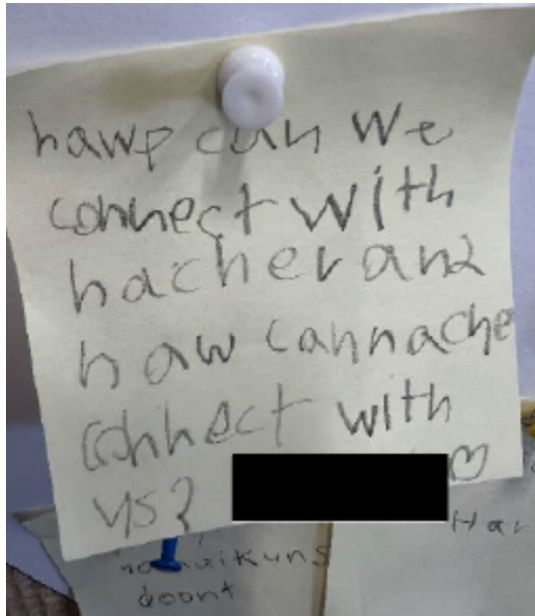
Resumen El juego en la naturaleza está cobrando impulso en las escuelas primarias. Sin embargo, pocos estudios han incorporado activamente las voces de los niños. Aún son más escasos los artículos escritos por los propios niños, ya que son predominantemente académicos los que escriben estas obras. Este artículo se aleja de estas tendencias al compartir las reflexiones sin filtro de alumnos de primer año de una escuela pública australiana sobre cómo un programa de juego en la naturaleza de 10 semanas, conocido como 'escuela de arbusto', impactó sus vidas. La idea de este artículo surgió de los propios alumnos. Querían compartir sus puntos de vista para ayudar a los adultos a comprender cómo los niños conectan con la naturaleza y por qué es importante el juego en la naturaleza. Desarrollado a lo largo de un trimestre escolar mediante debates y retroalimentación, este artículo incluye las palabras, dibujos y fotografías seleccionadas de los alumnos. Estos medios permitieron a los niños expresar sus pensamientos y reflexiones más íntimos. En última instancia, su objetivo es inspirar a los adultos a repensar el diseño de las escuelas y las experiencias de aprendizaje para ampliar las oportunidades de juego en la naturaleza para todos los niños. Este artículo destaca la importancia de escuchar a los niños para comprender plenamente su experiencia vivida y la verdadera esencia del juego en la naturaleza. También demuestra cómo la coautoría de artículos con niños fomenta altos niveles de compromiso y propiedad.

Keywords Children · Nature play · Bush school · Primary school · Australia

Introduction

'These are our drawings, photos, and words. We are happy for you to read them as we love nature.' Signed using our secret names: Belle, Bob, Feleix, Golde, Jim, King, Princess Grape, Princess Pineapple, Queenie, Vampire and Val. Please see the last page for our signatures. After participating in a 10 week nature play intervention programme (named bush school), Val posed a profound question: *'How can we connect with nature and how can nature connect with us?'* (Fig. 1). This question unveils her deep yearning for genuine reciprocity between humans and the more-than-human world. This article presents the candid and unfiltered responses of 11 children to Val's question. It is purposefully designed to give these children a direct platform to share their insights in response to their request to 'tell adults what they need to know'.

Fig. 1 Val's Question that Inspired this Article (own photo)



The article is divided into three parts. Part one provides the contextual background and outlines the process used to develop the article. In part two, the children share their insights through the medium of their choice. With their consent, their reflections were organised into four themes: (a) how nature can connect with us?; (b) how we can connect with nature?; (c) how bush school helped us connect with nature?; and (d) what adults need to know about children playing in nature and bush school. All content was verified and approved by the children. Part three concludes the article and offers final remarks.

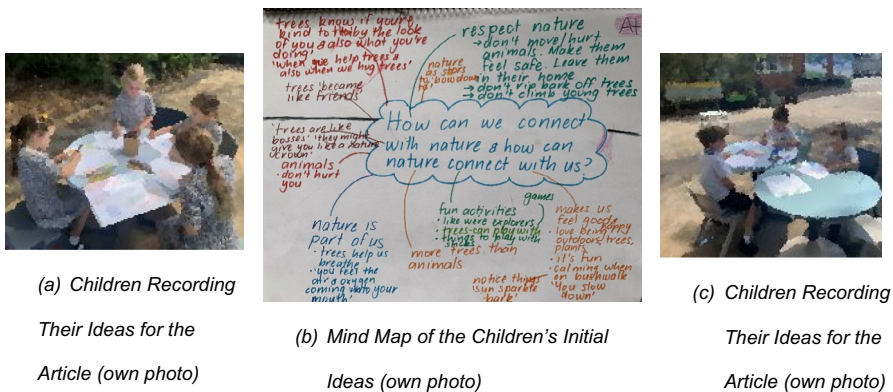


Fig. 2 Article in Development

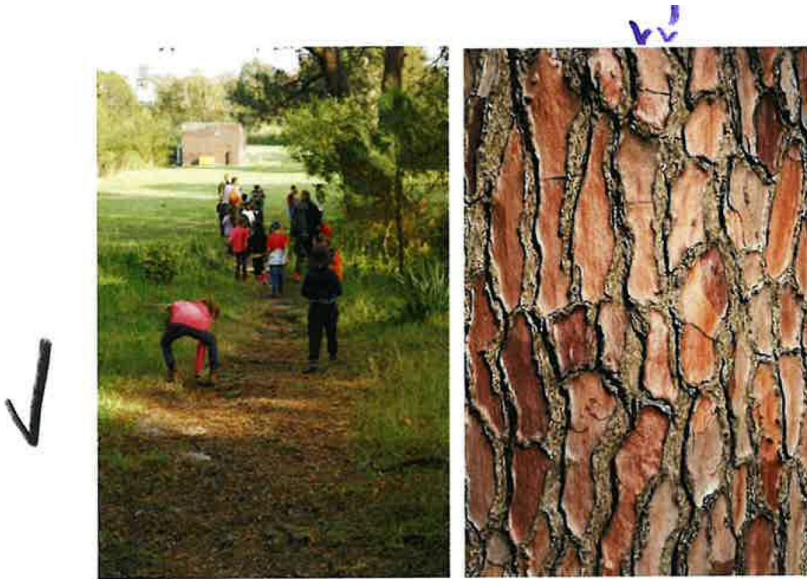


Fig. 3 Using Ticks to Approve Photographs to Include in the Article (own photo)

"I Made Some Art that I Printed and Gave to the Trees."



I used [↑]wet

Fig. 4 Using Circling to Approve Photographs for Inclusion in the Article and Providing Additional Information (own photo)

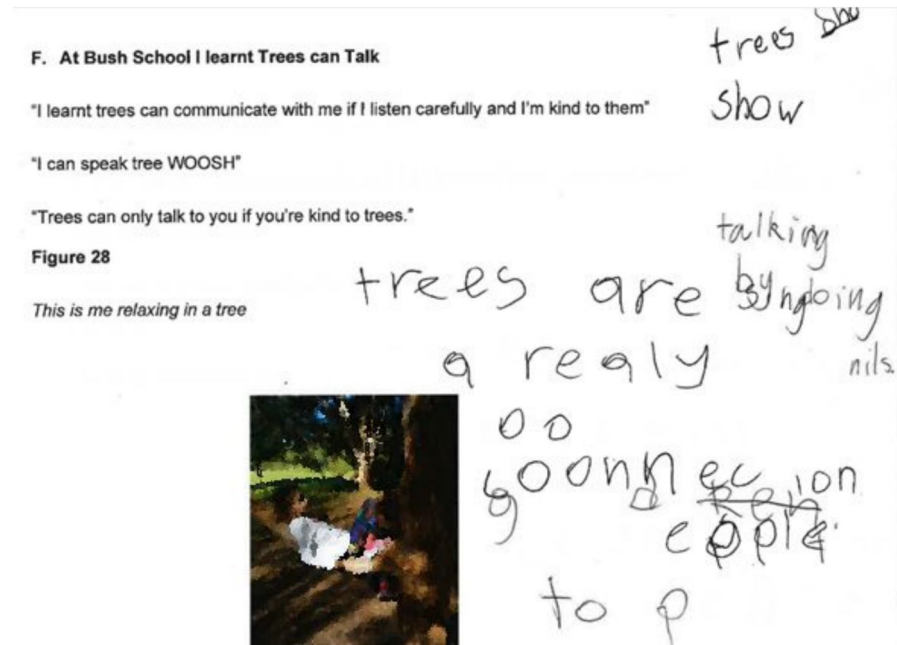


Fig. 5 An Edited Draft (own photo)

Part One: Background

This article arose from a study investigating the impact of 10 weeks of bush school on Year One students' wellbeing and school engagement that took place between May and July 2024. In all, 25 children (mean age 6 years 10 months; 12 girls and 13 boys) from a metropolitan government school in Sydney, Australia, participated in the bush school programme.

Of the 25 children, 11 expressed a powerful desire to write an article exploring Val's question, 'How can we connect with nature and how can nature connect with us?' They were excited to position themselves as authors for a wider audience—specifically, you readers. The decision to embark on this journey reflects the ethos of the larger study, which emphasises slowing down, meandering through experiences, and seizing moments to pause and actively listen to children.

Development of the Article

The lead author took the following steps to write this article:

1. The process began with small group discussions of Val's question. To ensure that the lead author paid complete attention during these discussions rather than focussing on documenting the children's thoughts, she recorded and transcribed the conversations. This approach also helped to recall and accurately capture the

Fig. 6 Re-Experiencing ‘What We Felt at Bush School’ (own photo)



children’s words. The transcripts were synthesised and summarised into a mind map.

2. The mind map was subsequently shared with the children for verification and to ensure that their thoughts had not been misrepresented. Following this, two round table discussions were held. During these discussions, the children explored the ideas recorded in the mind map in greater depth. They also decided how they would like to share their insights. They chose to include direct quotations, drawings, and photographs (Fig. 2).
3. After each discussion, the lead author organised the children’s contributions into a draft for their review. The children then decided what to include using their preferred method of mark-making, such as ticking or crossing out content, and/or adding notations as shown in Figs. 3, 4 and 5.

Next, the children reviewed their completed texts and selected pseudonyms. These pseudonyms protect the child’s anonymity while still allowing them to recognise their own contributions in the article. In cases where images were included, parental consent had been obtained to publish the children’s work and photographs. However, to further safeguard their privacy, any photographs in which children could be identified were digitally edited using IrfanView 64 (version 4.72). These additional precautions (including the use of pseudonyms and the considered handling of visual data) were part of a broader ethical framework, described in detail in the ethics, consent and data management section following Fig. 6.

4. Finally, the children celebrated their achievements with lots of whoop whoops, shouts of ‘we are authors’, and excited dancing!

Having multiple touchpoints throughout the development of this article allowed the lead author to accurately record the children’s intended messages. This approach reflected our commitment to them as co-authors and ensured that their thoughts were captured and represented respectfully and according to their preference.

In each discussion, the children directed the conversation, which, similar to a river, had its ebbs and flows—moments of exuberance, digressions onto other topics, and eddies of reminiscing about bush school—before returning to 'the work'. The conversations were fluid, unconstrained by a set schedule, and ended naturally when the children chose to return to class.

Occasionally, extended pauses led to special moments, such as when the lead author and children were chatting outside, and the children spontaneously moved into the adjacent school garden to connect with the trees and other plants, recreating the physical and emotional sense of connection they felt at bush school (Fig. 6). For us, this beautifully captured the deep synergy and reciprocity they had developed with the more-than-human world during bush school. It also filled us with hope that the future would be in the hands of such thoughtful individuals.

Ethics, Consent and Data Management

This project was guided by a commitment to ethical research practice, particularly to conduct the work honestly and respectfully towards the children who participated and were affected by the study (Gravetter & Forzano, 2012). Ethics approval was obtained from Western Sydney University's Human Research Ethics Committee (ID number, H15600), with additional approval granted by the NSW Department of Education under the State Education Research and Partnerships (SERAP) process (Reference Number, 2021431). Informed written consent was provided by parents/guardians. In addition, children gave verbal assent prior to and throughout data collection. Permission to publish was granted by parents/guardians in accordance with NSW Department of Education requirements.

This project adhered to established ethics principles including: (a) doing no harm, (b) maintaining confidentiality and privacy, (c) responsibly managing personal data, and (d) complying with Western Sydney University's data security and record-keeping protocols. Before publication, all data were carefully reviewed to ensure anonymity and uphold ethical standards. Where anonymization was applied, it was done without compromising the integrity or scholarly meaning of the children's contributions. Finally, the authors declare no competing interests.

Part Two: in their Words

The children's discussions were divided into four themes: (a) how nature can connect with us; (b) how we can connect with nature; (c) how bush school helped us connect with nature; and (d) what adults need to know about children playing in nature and bush school. The following are the quotes, photographs, and drawings selected by the children for each theme. Their reflections were philosophical and, at times, spiritual. The conversation began with the question of how nature could connect with humans.



Fig. 7 'This Drawing Shows Me Connecting with Nature. The Tree and I are Holding Hands, and the Caterpillar is Watching'. *Note* Transcription: Nature connects with me because nature is happy and fun, and it makes me happy

A. How Nature Can Connect with Us

In the first theme, we gain insights into the children's understanding of nature, both in terms of how they know it (epistemology) and what they believe it is (ontology). Their knowledge is relational and reciprocal, built through cognitive and affective engagement with the more-than-human world. This knowledge was acquired through play characterised by embodied, sensorial, experiential qualities, alongside a deep connection to bush school. This connection may have been strengthened by returning to the same site weekly for 10 weeks, fostering a sense of spatial belonging (Sumsion & Wong, 2011), as well as communication across species. Bang et al. (2015) refer to this as 'biological sense making' (p. 225). An example of this can be seen in Fig. 14, included later in the article, where children share their understanding of the 'whoosh' language of trees.

This knowledge and understanding also shaped the children's ontology, where they saw their existence as inextricably linked to the more-than-human world. This view transcends typical anthropocentric thinking, which often places the



Fig. 8 'Some Animals Want to Be with Us' (own photo)

more-than-human world in a subservient role. In contrast, the children recognise nature as agentic, capable of intentional action, and ultimately, as their friend. They explore this through five topics—we are nature, animals want to be with us, trees are there for us, nature makes us feel things and nature likes kids to be kids, which we will now explore.

We are Nature

In their words	Insights
'Trees help us breathe, so nature is part of us' 'Because you feel the air and oxygen coming into your mouth' 'Nature brings us to life. It makes us really happy' 'Nature is kind to us. Nature makes lots of medicine, and animals help the environment to grow' 'My drawing (referring to Fig. 7) shows me connecting with nature'	These comments show the children's understanding of humanity's deep relationship with nature and its essential role in humankind's survival, health, and happiness. The latter is reminiscent of the biophilia hypothesis (Kellert & Wilson, 1993) that suggests that humans have an innate connection to and a need to interact with nature for psychological and physical wellbeing. Also evident is conceptual and abstract knowledge and reasoning, which is a result of young children engaging with nature (Inagaki, 1990)

Animals Want to be with Us

In their words	Insights
<p>‘I think nature connects with me because of the animals. Sometimes, people can be scared of animals, but animals do not want to hurt you. They just think that you are going to come up and scare them or eat them. So, I think connecting with nature is fish, humans coming together and feeling safe’</p> <p>‘I chose the photo below (referring to Fig. 8) as it shows magpies wanting to be with us and join in our chalk drawing’</p>	<p>The children express their ‘ecophilosophical’ selves grounded in harmony (Naess, 1973, p. 99), and advocating for the safety of both humans and the more-than-human world. In contrast to mainstream, ego-centric thinking, they emphasise a biospheric relationship based on ecocentrism. The second comment highlights the benefits of cultivating such relationships</p>

Trees are there for Us

In their words	Insights
<p>‘Trees grow branches which are just right for us to lie in or climb’</p> <p>‘The trees are like the boss of nature, and if they see you being kind to other parts of nature, it means that the trees might make you like a nature star, and they might give you a nature crown’</p> <p>‘Remember that day at bush school when we walked through the two gum trees and there was a kookaburra in each tree? They were watching us and, like your Aboriginal friend said, were Welcoming us onto Country. The animals and trees welcome us if they are happy for us to visit. It makes you feel amazing’</p>	<p>These comments provide the first glimpse into the children’s diaphanous connection with elements of nature, especially trees. This bond may begin through agentic engagement (Reeve, 2013), such as climbing or lying in trees, but evolves into a deeper, more-than-human sense of belonging, a spiritual belonging (Sumsion & Wong, 2011). This is also evident in the children’s recognition of Aboriginal people and their connection to Country. This understanding has moved from being words said at the start of school assemblies to a visceral, lived experience, which results in a true understanding of its meaning</p>

Nature Makes Us Feel Things

In their words	Insights
<p>‘I love being outdoors, and I love trees and plants’</p> <p>‘Trees bring happiness. They just make you feel happy because they bring bugs and nature to life. Bugs are nature, and they make little homes in the trees, so trees are home’</p> <p>‘Nature makes me feel calm. I breathe the air, and it makes me feel calm’</p>	<p>The effects of being in nature are clear in these comments. The children express happiness, contentment, and love, which are components of positive emotions (Fredrickson, 2004). Their feelings of calmness are indicative of stress reduction theory (Ulrich et al., 1991), which claims that being in nature elicits responses in humans, including lowered stress levels</p>



Fig. 9 a 'This is Us Playing Demons'. *Note* The children made the following comments regarding the drawings: **b** 'See me saying 'hooooo' from the top of the hill. We were noisy. It was fun'; **c** The child said when explaining his labels that 'the best' refers to nature, as it helped him play demons and do many other things

Nature Likes Kids to be Kids

In their words	Insights
<p>'Nature gives us places to hide. To be ourselves'</p> <p>'Nature likes kids to be kids. We can hide, and adults cannot see us'</p> <p>'These drawings (see Fig. 9) are of us playing demons. We loved this game as you could do whatever you wanted—climb, run, jump. You feel free'</p>	<p>Fascinating comments that draw attention to the challenges children are facing in their play and lives. They point out their yearnings including unsupervised play free from adults' watchful gaze so they can be themselves. There is also an allusion to this being associated with agency in stating 'you can do whatever you want'. This sense of agency is also given to nature, who gives them 'places to hide'. Once again, the children's thoughts align with Indigenous views of an 'agentive natural world' (Bang et al., 2015, p. 303)</p>

B. How We Can Connect with Nature

This second theme brings forth the deep connection to place that the children have gained through repeated visits to bush school (spatial belonging) and the resultant deep-seated responsibilities that they feel towards this space (ethical belonging) (Sumsion & Wong, 2011). These feelings ripple out to encompass all of the

more-than-human world. This can be seen in their strong affiliation with trees, which are given the status of ‘the stars of nature’.

Examining the semantic structure of the children’s sentences provides further insights into their thoughts on trees. The children typically refer to trees as nouns or personal pronouns such as ‘them’ or ‘she’ with ‘it’ rarely used. This suggests that the children perceive trees as either gender—neutral or feminine. Furthermore, by using personal pronouns, the children may be expressing a special connection and relationship with the trees.

In this theme, we first describe the children expressing gratitude for nature through the giving of gifts (Fig. 10), indicating feelings of reciprocity and mutual care. This may be seen as similar to Indigenous cultures’ connections to Place (Kimmerer, 2013).

Respect Nature

In their words	Insights
<p>‘Being kind to nature’</p> <p>‘I think a tree would know we respect them because we do not take their bark off. We do not rip leaves off, and we check in on them’</p> <p>‘Make nature the stars that you have to bow down to and do lots of stuff for. The trees are the stars of nature as they grow bigger and bigger and are the heart of nature’</p> <p>‘Everything in nature has feelings like us, even the sky, so we should be kind to nature’</p>	<p>These statements illustrate how children perceive nature as sentient, similar to themselves, with feelings that deserve the same care, notably kindness. They highlight a reciprocal relationship with nature that carries ethical responsibilities. Furthermore, trees are seen as sacred, described as ‘the heart of nature’, reflecting a deeper connection beyond mere objects to climb or rest in</p>

Help Nature

In their words	Insights
<p>‘Helping them because they might like that’</p> <p>‘Food and water that would help them survive, and trees that would help them breathe and lots of things’</p> <p>‘They know that they are stronger than us and also their roots are connected into the ground. But the tree actually knows that you are kind by the look of you and also what you are doing and also when it looks at you, they can see what you are actually doing like gardening it. And I think they would want you to come near because you are helping the tree grow with sun, soil, and water’</p>	<p>Once again, we see the children’s conceptual and abstract knowledge in action. In this instance, the children are applying this knowledge to predict the responses of the trees to their actions, a concept that requires both abstract reasoning and cognitive empathy (Alan & Turkum, 2024). Notably, this occurs much earlier than the age of 12, as theorised by Piaget (White et al., 2016)</p>

Hanging, Clay and Chalk-Based Artworks Made for the Paperbark Trees



(a) A Hanging Artwork Made as a Gift for the Tree (own photo)



(b) Creating In-Situ Artworks for the Trees (own photo)



(c) A Blanket Made to Keep the Tree Warm (own photo)



(d) A Clay Figure Made as a Present for the Tree (own photo)



(e) Painted Tree Branch with a Clay Bowl (own photo)

Note. The children made the following comments regarding photograph 10(e): 'we asked the tree's permission before painting her' and 'this painting is like jewellery for the tree'.

Fig. 10 Hanging, Clay and Chalk-Based Artworks Made for the Paperbark Trees. *Note* The children made the following comments regarding photograph 10(e): 'we asked the tree's permission before painting her' and 'this painting is like jewellery for the tree'. *Note* The young girl who made this artwork wanted to add 'I made some art that I printed and gave to the trees. I used wet chalk. The tree liked it. I know this as her leaves waved in the wind happily to me'

(f) *The Artwork*
(own photo)



(g) *The Artwork Printed onto the Tree*
(own photo)

(h) *The Process of Transferring the Artwork onto the Tree* (own photo)

Note. The young girl who made this artwork wanted to add 'I made some art that I printed and gave to the trees. I used wet chalk. The tree liked it. I know this as her leaves waved in the wind happily to me'.

Play with Trees

In their words	Insights
'We pretended the trees were sick. We had to make them better with our sticks. We medicined the sick out with fluffy sticks' (Figure 11).	<p>There are two main reflections here: (1) how the children engage the trees in their play, which is primarily through imaginary play where the trees are seen as active participants, and (2) the specific affordances (Gibson, 1986) that the trees provide for their play, such as sticks, which contribute to the children's enjoyment and sense of happiness. Nature is unique in the affordances that she provides, which, unlike play equipment, can be moved, combined, and repurposed as desired (Nicholson, 1971). Different uses can be seen in Figure 13.</p> <p><i>Note:</i> The children wanted to reassure the adults reading this article not to 'freak out' about the names of their games. They wanted to remind you that they were simply playing and having fun. They say that it is not real, so there is no need to worry.</p>
'We pretended that everyone was our enemy, and we tied them up to the trees, every human, and we put them in the dungeon. And also, every afternoon at lunch, we like to still play it because we love it. Princess and the Dead'.	
'You can use nature for all different things. You can use nature for games like when we were pretending to tie humans onto the tree when we were devils' (Figure 12).	
'Trees can bring some parts of the world to our play that make us happy'.	
'Nature gives us sticks to play with. We used sticks to make a crazy stick family'.	

Fig. 10 (continued)



Fig. 11 'This is Me Playing Tree Hospital. I am Making the Tree Better. Trees are Great to Play with' (own photo)



Fig. 12 'I Liked to Play Devils and Princesses. Adults may think it is a Bad Game, but it is Not Scary, and it is Not Real, but it is So Much Fun'



Fig. 13 ‘My Drawing Shows Different Things I Did with Trees. I Played Devils with My Friends. I Sat in a Tree to Relax. I Played Tree Hospital and the Stick Game, and I Played with My Friends’ (left to right)

Become Friends with Trees

In their words	Insights
<p>‘You might give them a hug’</p> <p>‘When I hug the trees’</p> <p>‘We pretended we knew the trees’ names. Then, we ran over to every single tree and said, “Oh, I know this one” or another person said, “I know this one”’</p> <p>‘The trees became like friends. We liked to play games that included trees and also we went to the trees to play’</p> <p>‘Trees bring nature into our play, which helps us connect to nature, and we think she’s our friend’</p>	<p>In these comments, the children explain how they become friends with trees as follows: First, through non-verbal expressions of affection, such as hugs which are an expression of affective engagement associated with feelings of belonging (Fredricks et al., 2004); and second, through play. Recalling your own childhood play memories, you may remember how crucial play was in forging friendships. The children are explicit in saying this is the case as bringing the trees into their play helps them ‘connect to nature’</p>

Give Trees Presents

The following photographs (Figure 10) show the gifts that the children made and gave to the trees, which include carefully crafted hangings, clay creations, and printed art. Figure 10c shows a blanket created to keep a specific tree warm. These

gifts were offered as a way for the children to express their gratitude and mutual care, highlighting their deep sense of connection and reciprocity with nature.

Play with Trees

In their words	Insights
<p>'We pretended the trees were sick. We had to make them better with our sticks. We medicined the sick out with fluffy sticks' (Fig. 11)</p> <p>'We pretended that everyone was our enemy, and we tied them up to the trees, every human, and we put them in the dungeon. And also, every afternoon at lunch, we like to still play it because we love it. Princess and the Dead'</p> <p>'You can use nature for all different things. You can use nature for games like when we were pretending to tie humans onto the tree when we were devils' (Fig. 12)</p> <p>'Trees can bring some parts of the world to our play that make us happy'</p> <p>'Nature gives us sticks to play with. We used sticks to make a crazy stick family'</p>	<p>There are two main reflections here: (1) how the children engage the trees in their play, which is primarily through imaginary play where the trees are seen as active participants, and (2) the specific affordances (Gibson, 1986) that the trees provide for their play, such as sticks, which contribute to the children's enjoyment and sense of happiness. Nature is unique in the affordances that she provides, which, unlike play equipment, can be moved, combined, and repurposed as desired (Nicholson, 1971). Different uses can be seen in Fig. 13</p>

Note: The children wanted to reassure the adults reading this article not to 'freak out' about the names of their games. They wanted to remind you that they were simply playing and having fun. They say that it is not real, so there is no need to worry

C. How Bush School Helped Us Connect with Nature

This theme highlights the key insights that the children gained from their experiences at bush school. They communicate the physical and experiential aspects of their encounters. They also demonstrate relational and abstract reasoning. With no prior knowledge of how they thought before bush school, we tentatively point to possible alignment with a study by Hatano and Inagaki (1994) that found engaging in activity-based experiences with the biological world (raising goldfish) influenced the children's 'mechanisms of personification' and 'vitalistic causality', generating their understanding of biological phenomena (p. 171). This leads us to ask, does engagement with nature enhance children's abstract reasoning skills?



(a) 'This is Me Talking With a Tree. Whoosh'



(b) 'You Can Talk to Trees'



(c) 'This is a Conversation I Had with Nature. I Said, "I Love Nature" and She Said "Thanks. You're the Best."'

Fig. 14

We Did Fun Activities

In their words	Insights
<p>'It helped all of us connect to nature a lot especially because it was fun'</p> <p>'I loved all the things we collected and when it was raining it made it like we were explorers. It was like how we had to survive if we were living out there'</p>	<p>In short, these statements show how nature-based activities engender positive emotions</p>

Bush School Had Lots of Nature that School Does not

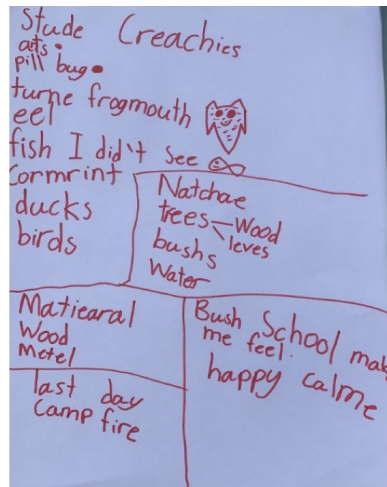
In their words	Insights
<p>'Bush school was a place with lots of trees'</p> <p>'There is a big barrier in the school. A wombat cannot climb up the barrier, but at bush school, there is no barrier. We can just run free and see the animals and connect with them'.</p> <p>'We did not see as many animals as we saw trees. I feel like everywhere I went, there were always trees, which is nice'</p>	<p>In our discussions, the children were clear about the differences between school and bush school. Highlighted here are some of the reasons they like bush school: access to trees and animals and the chance to 'run free'. The latter indicates the value children place on autonomy</p>



(a) 'We Liked Walking Slowly as You See More' (own photo)
(b) Amazing Pine Cone Bark (own photo)
(c) 'Us Slowing Down to Explore' (own photo)

Fig. 15 a 'We Liked Walking Slowly as You See More' (own photo), b Amazing Pine Cone Bark (own photo), c 'Us Slowing Down to Explore' (own photo)

Fig. 16 'I Wrote This to Show the Different Creatures That We Saw at Bush School and How I Felt at Bush School. On the Last Day, We Had So Much Fun Because We Had Fire'



Bush School Helped Me See Animals Differently and Learn Their Language

In their words	Insights
<p>'It helped me by seeing animals are more than just little slimy things'</p> <p>'It is so you felt you got to know the animals better'</p> <p>'It made me realise that animals do not hurt you. On my first day of bush school, a caterpillar crawled onto me. I was scared and screamed. Then, I realised it was just saying hello and was not going to hurt me'</p> <p>'If animals like us, they would not hide behind things. They would stay there. They would not hide. Like the ducks, they did not come to bite us. They just stayed there and looked at us. They were not scared. They were not hiding, and they were not running away. That is because we were not doing a big reaction. They knew we were not going to dive in and grab one and eat them'</p> <p>'I like nature now'</p>	<p>The children clearly express how they built relationships with the animals at bush school. This process was facilitated through embodied experiences, such as observing and getting to 'know the animals' first-hand. The relationships that they developed were deep and authentic, generating feelings of connectedness and appreciation, which Fredricks et al. (2004) describe as affective engagement. This engagement also enabled the children to view interactions from the animals' perspective, pointing to an empathetic connection. Additionally, repeated visits allowed the children to experience the animals in new ways, leading to shifts in their perceptions, as seen with the caterpillar</p>

At Bush School, I Learnt Trees Can Talk

In their words	Insights
<p>'I learnt trees can communicate with me if I listen carefully and I'm kind to them'</p> <p>'I can speak tree: WHOOSH' (Fig. 14a)</p> <p>'Trees can only talk to you if you're kind to trees'</p> <p>'Trees show talking by doing signals'</p> <p>'Trees are a really good connection to people'</p> <p>'I learnt that trees are alive'</p> <p>'We want to show you how trees talk to us'. (Fig. 14)</p>	<p>These comments reveal the children's sense of social and spiritual belonging to trees (Sumsion & Wong, 2011). They feel a deep, sacred connection with the trees, engaging with them as active participants in their world. They speak to the trees and feel part of the tree community. For the children, trees are not abstract entities but cherished and integral parts of their lived experience. 'I learnt that trees are alive. Now I know they are like us'. There is a profound sense of oneness, where the human and more-than-human worlds are united</p>



Fig. 17 'Animals Will Help Parents Find Us if We Get Lost. Do Not Worry Adults, Kids Are Safe in Nature'. *Note* Transcription: Nature is good because animals like people. You are safe because if you get lost, animals will find you

In Their words

Insights

- 'We slowed down at bush school and could do more things like you can help with nature more. It made us happy slowing down'
- 'We also went on a walk, and we sat, and we found special bark that I like to call sun sparkle bark because when you put it in the sun, it goes like sparkling'
- 'Bush school was very calming'
- 'The trees made us slow down because it was actually really fun when we played with the trees. That made us slow down'
- 'The trees made us feel sleepy'
- 'It is nice to walk slowly sometimes. You see more things that may help the trees'
- 'These photos (Fig. 15) show us slowing down at bush school. When we slowed down, we noticed more things such as the amazing bark on the pine trees that the yellow-tailed black cockatoos like to visit' (middle photo)

Being in nature seemed to create a sense of suspended time, offering space for discovery, building of relationships and improving attention. It allows children the freedom to live in the moment, increasing their awareness of often-overlooked experiences (Seamon, 2023). This is important given the pressures children face today, which can lead to a childhood that is hurried and overly structured (Elkind, 2007; Sahlberg & Doyle, 2019). Spending time in nature appears to counteract this, as suggested by Clark's (2023) concept of slow pedagogy. It is not surprising, then, that the children report feeling calm. This sense of calm may also stem from nature's ability to restore attention by reducing brain overstimulation (Kaplan, 1995)

I Learnt, Experienced, and Felt Lots of Different Things at Bush School

This theme concludes with a document shared by a child, detailing all the aspects of bush school that impacted them. They list landscapes, flora, fauna, and various resources, ultimately expressing feelings of happiness and calm. Figure 16 shows how these elements are interconnected, illustrating parts of the whole.



Fig. 18 'What Nature School Parks Could Look Like'

D. What Adults Need to Know About Children Playing in Nature and Bush School

The final theme documents the children's advocacy for nature play and their desire for change in school. They begin by sharing the many enriching experiences that children can have in nature, clearly highlighting the numerous benefits. The children also demonstrate a strong awareness of adult concerns, especially those of parents, and actively take steps to reassure the latter of the value of nature play.

Next, they discuss the deep and inextricable connection between humans and the more-than-human world, making the case that it is a child's right to have regular opportunities to engage with nature. This theme concludes with the children's thoughtful suggestions on how schools can incorporate more nature play. They propose the idea of 'nature school parks', where children can still learn traditional subjects but through the lens of nature, blending outdoor and conventional learning. Their advocacy recognises that engagement with nature is a powerful tool for both educational and wellbeing development.

You Learn

'It is very fun, and you learn too. You learn to help and play with nature'.

You Get Healthy

'You get healthy at bush school as you breathe in fresh air'.

You are Happy and Calm and can Concentrate Better

'You need to let kids go free into nature almost every day because it helps them learn about nature and makes them feel happy and calm'.

'All kids should go to bush school because it makes you feel happy and helps you concentrate better in class'.

You Make Friends

'Bush school helps you make friends because you do more playing than you do at school, and you get to meet other kids not in your class'.

'Building shelters helped us make friends because you had to work together'.

You are Safe

'Kids are safe at bush school and in nature. Adults may worry about kids getting lost. We will not, but if we do, animals will help our parents find us. My drawing shows how they can do this' (see Fig. 17).

Playing is Different

'Nature has lots of things that you cannot do with other toys like you can climb trees. You cannot climb Lego!'

You Log Off Technology

'If you're always on the gaming console your eyes will go square. Nature gives you a break from technology. Nature helps your brain, and technology ruins your brain'.

'You need a mix of technology and nature'.

Nature is Part of Us

'I think adults need to know that nature is responsible for the start of the earth, so it is important to all of us. Bush school helped us connect with nature'.

It is a Child's Right

'All kids should get to play in nature'.

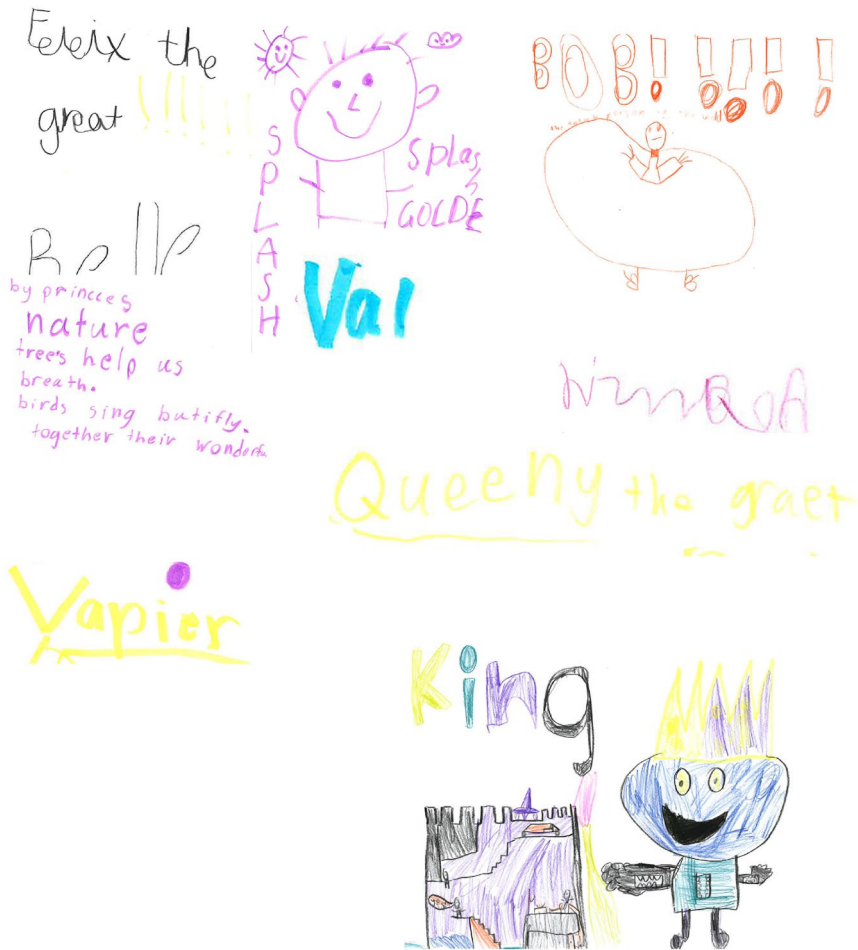
'I think we should tear down schools so they can be nature school parks. I have drawn one example (Fig. 18). We can still learn math by measuring how tall trees are, how old they are, and how many leaves they have. In science, we can learn about nature. It is easy to write about nature. It would be easy to do investigations in nature'. 'You should have nature school parks and children should also visit free nature'.

Part Three: Concluding Remarks

It was an absolute honour and privilege to support these 11 remarkable children write this article. We extend our heartfelt thanks to the children for their generosity in sharing their remarkable insights, which serve as a reminder that everything is at once both ordinary and extraordinary (Brownlee, 2004). We are also deeply grateful to their teachers for welcoming the lead author into their classrooms and for the support and warmth of the school community. The experience was truly exceptional.

Throughout the process of writing this article, the children were acutely aware that adults would read their words, view their drawings, and examine their chosen photos. They found this empowering and motivating which led to their purposeful and active engagement in collecting and analysing data. They took full ownership over the information they wanted to share about their bush school experience. Their stories offer valuable new insights, highlighting the importance of including children's unfiltered voices in research about their lives. In this case, their reflections capture the true essence of nature play.

One of their goals in writing this article was to advocate for expanded opportunities for nature play, so that more children could experience bush school, and schools could incorporate more nature into their designs. The children hope that this article will give adults a better understanding and appreciation of how children connect with and engage with the more-than-human world. With this in mind, we conclude this article by asking, 'what actions will you take to amplify this message and help create opportunities for nature play for all children?'



Note: The Princess signature represents Princess Grape and Princess Pineapple.

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Data Availability The participants of this study did not give written consent for their data to be shared publicly, so due to the sensitive nature of the research supporting data is not available.

Declaration

Conflict of interest The author(s) declare no potential conflicts of interest with respect to the research, authorship, publication of this article and/or any financial or non-financial interest that has arisen from the direct application of the research.

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