Te Whakatika

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In this issue

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Te Whakatika Purpose statement

Sitting at the nexus of academic inquiry and educational practice, *Te Whakatika* seeks to create a space to share good practice, innovative ideas, and critical engagement in outdoor and environmental learning.

In doing so, *Te Whakatika* seeks to:

- Provide access to the space between academics and practitioners to connect these spaces.
- Encourage academics to make their work accessible to practitioners through practical application
- Encourage practitioners (teachers and other education providers) to share good practice and innovative ideas from their work through writing articles.
- Encourage strong connections between theory, research, and practice
- Encourage and support high-quality learning and teaching in outdoor and environmental contexts.

Photo: Hannah Bearing

Editorial

By Celia Hogan

Kia ora koutou, It's a real privilege to be writing my first editorial as the new editor of *Te Whakatika*. I want to begin by acknowledging and thanking Dr Maureen Legge for the beautiful mahi she's done over the years. Maureen has brought care, depth, and a huge heart to this journal, helping to connect practitioners and academics, theory and practice, and most importantly, people. She has left big shoes to fill, and I feel grateful to be continuing this work alongside a passionate community of educators who care deeply about outdoor and environmental learning.

This issue lands at a pivotal moment for our sector. Outdoor Education and Education for Sustainability are no longer listed as senior subjects on the Ministry of Education's new curriculum subject list. That loss hit many of us hard. Yet what has followed has been extraordinary. More than 50,000 people have added their names to a national petition calling for Outdoor Education to be reinstated. Parents, teachers, students, academics, and providers have come together to say, with one strong voice: this learning matters. It's a reminder that we are stronger together, and that the values we stand for: connection, wellbeing, and learning through real experiences, are deeply shared across Aotearoa.

You'll see that same spirit running through the articles in this issue.

Dr. Sarah Aiono reminds us that outdoor learning isn't an add-on; it's a powerful way to deliver the core curriculum and help tamariki thrive across all areas of learning.

Freya Bullock brings the maramataka to life, showing how aligning with the rhythms of the natural world strengthens hauora and connection to whenua.

Natalie McNulty shares a personal story about how Outdoor Education shaped her life and career, a reflection that will ring true for many of us.

Hannah Berning offers a snapshot of exciting new student research at Ara, from reducing screen time to weaving mātauranga Māori into outdoor journeys.

Ashlee Sturme and Mark Barratt share how a school–community partnership has transformed learning and wellbeing through Bush School, an inspiring story of belonging, healing, and the power of time in nature.

And in an interview with Christina Roberts, Dr Chris North explores how AI can support, rather than replace, teachers, freeing up time for the thinking, connecting, and creativity that great EOTC requires.

Together, these stories reflect a field that's alive, evolving, and deeply relevant. They remind us that despite the policy shifts and uncertainty, outdoor and environmental education continues to grow from the ground up, through the passion, persistence, and collaboration of people like you.

As I step into this role, my hope is that *Te Whakatika* continues to be a space where we can share ideas, challenge thinking, and celebrate the mahi happening across the motu. The voices gathered here matter; they remind us that education connected to te taiao, to people, and to place, will always have a place in the hearts of learners, no matter what the government might think.

If you have a story, reflection, or piece of practice to share, I'd love to hear from you, every voice strengthens the collective.

Ngā mihi nui,
Celia Hogan

Beyond the Four Walls: Reframing Outdoor Learning as Core Curriculum, Not an Add-On

Dr. Sarah Aiono, CEO,
Longworth Education

Outdoor learning in primary education is too often treated as a peripheral activity, an enrichment, a reward, or a short break from the 'real work' of the classroom. This perception persists despite mounting evidence that education outside the classroom, when underpinned by clear pedagogy, offers robust opportunities for delivering core curriculum outcomes.

This article argues that outdoor learning should not be viewed as an optional extra but as a core modality for curriculum delivery. Grounded in play pedagogy, place-responsive practice, and principles of curriculum integration, outdoor learning allows tamariki to experience literacy, numeracy, and critical competencies in meaningful, connected ways. Drawing on recent evidence from Aotearoa New Zealand contexts, I propose that outdoor learning strengthens, not sacrifices, the academic and holistic goals of the Aotearoa New Zealand Curriculum.

Rethinking Margins and Centres

Despite decades of educational policy encouraging holistic, student-centred approaches, many primary classrooms still operate within inherited traditions of indoor, teacher-directed learning. Outdoor education is often scheduled irregularly, perceived as a logistical burden, or disconnected from the 'mainstream' curriculum.

Yet this marginal status is a result of structural inertia more than pedagogical rationale. McDowall and Hipkins (2019) note in their synthesis of curriculum integration practices in Aotearoa that traditional timetabling and subject silos remain major constraints on innovation. When learning is fragmented into discrete curriculum areas, experiences that cross boundaries, like outdoor learning, can seem difficult to justify or manage. However, schools that adopt more integrated approaches report significant gains in engagement, coherence, and learning depth.

This is particularly relevant for outdoor learning, which naturally blurs the lines between subjects, competencies, and learning modalities. When learning moves beyond the classroom walls, the curriculum becomes not just something delivered, but something lived.

Pedagogical Foundations: Play and Place

Two pedagogical approaches lend outdoor learning its coherence and potency: play-based learning and place-responsive education. These frameworks are not new, but they remain underutilised in curriculum planning, especially in Years 3–8.

Play pedagogy, particularly in early primary years, is a powerful engine for learning (Aiono, 2018, 2020). Whitebread et al. (2012), highlight how play supports the development of self-regulation, language, problem-solving, and social interaction, all foundational for academic success. Outdoor environments expand the range and richness of play, inviting tamariki to explore, construct, take risks, and collaborate in ways that indoor settings often constrain.

Complementing this is place-responsive pedagogy, which foregrounds the local environment, cultural narratives, and ecological relationships as curriculum content (Kerrigan, 2018). This approach encourages students to see themselves as participants in their place, not just observers. It aligns with key competencies such as participating and contributing and affirms Māori and Pasifika values of learning through collective, embodied experiences on the land. Meaningful place-based learning is deeply strengthened through partnerships between schools, whānau, and community, positioning the local context as a living, dynamic curriculum (Kerrigan, 2018).

While some educators may feel unequipped to teach outside or to incorporate local knowledge, the role of the teacher in this context is not to be an expert in ecology or history, but a guide, helping students make meaning through experience, dialogue, and reflection.

Curriculum Integration: A Natural Fit

One of the strongest arguments for embedding outdoor learning as core curriculum is its alignment with the principles of curriculum integration. As McDowall and Hipkins (2019) describe curriculum integration in Aotearoa New Zealand schools, typically involves designing learning around broad themes or real-world problems that matter to students. These themes provide a "spine" through which learning objectives from different curriculum areas are naturally and meaningfully addressed.

Outdoor learning offers an ideal platform for this integration. For example, a project investigating water quality in a local stream can involve scientific testing (science), data analysis (mathematics), persuasive writing to local council (literacy), and critical reflection on human–environment relationships (social sciences and key competencies). These are not contrived connections, but authentic applications of curriculum goals in context.

Importantly, McDowall and Hipkins note successful integration requires deliberate teacher planning and cross-disciplinary thinking. Outdoor learning is not simply a context, it is a pedagogical strategy that, when thoughtfully designed, supports the weaving together of curriculum strands into cohesive, engaging experiences.

Supporting Core Outcomes

Concerns that outdoor learning detracts from literacy and numeracy achievement have been amplified in recent years by a renewed focus on "the basics". While foundational skills are undeniably important, an overly narrow interpretation of what counts as effective instruction can lead to rigid, indoor, and decontextualised teaching practices. This traditional model not only limits learner engagement but also restricts the time and professional freedom teachers have to design integrated, place-based learning experiences.

In contrast, research shows that students involved in well-structured outdoor learning often demonstrate improved outcomes in areas such as writing, vocabulary development, and problem-solving, key components of literacy and numeracy, precisely because the learning is meaningful and connected (Beames et al., 2012; Whitebread et al., 2012).

In Aotearoa New Zealand, primary teachers have found ways to harness outdoor settings for core skill development. Writing tasks based on outdoor exploration produce vivid descriptive language and stronger narrative structures. Measurement and geometry lessons in the playground or garden offer real-world contexts for maths vocabulary and reasoning. Oral storytelling, navigation challenges, or collaborative construction activities outdoors foster communication and critical thinking in ways that are difficult to replicate indoors.

Furthermore, key competencies such as managing self, relating to others, and thinking are activated continuously in outdoor settings. These are not 'soft' skills, but essential components of lifelong learning and active citizenship, embedded in the very aims of the New Zealand Curriculum.

Shifting Mindsets and Systems

While the benefits are clear, scaling outdoor learning requires shifts at both practice and system levels. Teachers need time and professional learning to design integrated, place-responsive experiences that align with curriculum expectations. School leaders must support a culture of trust and experimentation, where learning is not confined by physical walls or rigid schedules. Policies and guidelines need to be interpreted in ways that empower, not restrict, safe and creative outdoor learning.

Most importantly, there needs to be a shift in mindset, from seeing outdoor learning as an ‘extra’ to recognising it as a powerful, equity-enhancing pedagogical tool. As McDowall and Hipkins (2019) remind us, integrated learning is not just about combining subjects, it is about creating meaningful, connected learning that reflects how the world actually works.

Outdoor learning does exactly this. It allows students to ask questions that matter, collaborate in authentic contexts, and develop a sense of belonging and responsibility to the world around them. It prepares them not just to succeed in tests, but to thrive in complexity.

Photos: Estelle Moore from Te Kura o Take Kārara in Wānaka

References

Aiono, S. (2020). *An investigation of two models of professional development to support effective teaching through play practices in the primary classroom: A thesis presented in partial fulfilment of the requirements for the degree of Doctor of Education at Massey University, Manawatū, New Zealand* (Doctoral thesis). Massey University. https://mro.massey.ac.nz/items/e28c6eb7-4b8d-4b5f-84d5-8ea76047af08

Beames, S., Higgins, P., & Nicol, R. (2012). *Learning outside the classroom: Theory and guidelines for practice.* Routledge.

Kerrigan, A. (2018). *Place-based learning and the importance of partnerships within schools and communities to foster engagement in education.* College of Education, Health and Human Development, University of Canterbury.

McDowall, S., & Hipkins, R. (2019). *Curriculum integration: What is happening in New Zealand schools?* New Zealand Council for Educational Research. https://www.nzcer.org.nz/research/publications/curriculum-integration

Whitebread, D., Coltman, P., Jameson, H., & Lander, R. (2012). *Play, cognition and self-regulation: What exactly are children learning when they learn through play?* Educational and Child Psychology, 29(2), 44–52.

About the Author

Dr Sarah Aiono is CEO of Longworth Education and a leading voice in play pedagogy. Drawing on her background as a classroom teacher, she supports educators to embed meaningful, play-based approaches that nurture cognitive, social, and emotional growth. Sarah leads an international team delivering professional learning across Aotearoa New Zealand, Australia, Canada, Nigeria, and India. An advocate for indigenous knowledge systems and evidence-informed practice, she also represents New Zealand for the Global Recess Alliance, serves as Oceania Community Lead for Hundred, and hosts the Play Conversations podcast.

The Smartest Move I Ever Made? Going Outdoors

By Natalie McNulty

Year 13 Outdoor Ed trip at Waikaremoana

7th attempt at high ropes first successful traverse yr 13

Looking back, I can see that Outdoor Education has shaped every part of who I am as a learner, leader, and person. It taught me lessons no classroom ever could and opened doors I never imagined. To guide this reflection, I have drawn on Ngā Whetū he whai, the guiding principles of Education Outdoors New Zealand: Poipoiā te kākano, *Nurture the Seed*; Poipoiā te taiao, *Nurture the Environment*; Poipoiā te iwi, *Nurture the People*; and Kia puāwai te aroha, *Our Aspirations will Flourish*. These sit within Pae Tawhiti, the EONZ vision: I hohonutia te taiao e tātou, *Deep connections to the natural world*, and shape how I understand learning, leadership and connection.

Poipoiā te kākano *Nurture the Seed*

If you had asked my mother if I would grow up to be an Outdoor Instructor, let alone a manager, she would have laughed. She still reminds me that I hated getting cold or dirty and that I wouldn't even put my feet on the grass. The scary thing is that my school almost took this path away from me. Outdoor Education has been my dream career, a way of helping others that I've now worked in for over sixteen years. It's a job that fills me with pride and has given me opportunities I never imagined. Yet in high school, I was told that Outdoor Education wasn't the right place for me.

When I signed up for my high school's first Outdoor Education programme, I was called into the principal's office. I was told the class wasn't for the "smart kids" and that I should choose something else. I wasn't the only one. They even went as far as asking my parents to get me to change classes. The subject that challenged and inspired me most was being treated like a second-tier option, something for students who weren't "good enough" for the classroom.

Thankfully, I didn't listen.

That choice opened the door to experiences I could never have had in a traditional classroom. Outdoor Education was where I first discovered the power of experiential learning, how it can build confidence, connection, and a sense of capability that textbooks alone can't provide. To be honest, I often struggled and there were tears (lots of them). But through those struggles I developed the confidence to lead groups, the resilience to keep pushing myself, and an overwhelming love of the outdoors. It planted the seeds of who I would become and set me on a path toward an incredibly meaningful career.

Poipoiā te taiao *Nurture the Environment*

When I was leaving school, I didn't picture the outdoors as a career option. I knew I loved outdoor education, but I didn't yet understand the depth of opportunity it could offer. Not willing to commit to a degree until I was certain of what I wanted. I took a "gap year" during which I worked as a Lifeguard, managed a café and sold electricity door to door to fund my Camp America Trip.

America drove home the leading abilities and technical skills I had learnt through three years of Outdoor Education, although working with American kids was a whole different ball game. The restrictions were huge, with a constant fear of being sued shaping everything we did. Imagine walking past a raspberry bush and not being allowed to let the kids eat the berries. It felt like stepping into a movie with camp cheers, poisonous plants, ticks, bears, snakes and a culture very different to Aotearoa. Thanks to my Outdoor Education foundation I was able to get a role there and travel across the world for work.

When I returned home, my Outdoor Education teacher encouraged me to continue into tertiary study, and I enrolled in a Diploma in Outdoor Recreation Leadership. Two years filled with inspirational lecturers, incredible outdoor trips, and placements with organisations including; Sir Peter Blake Marine Education and Recreation Centre, Bigfoot Adventures, Adventure Works, Clip and Climb, and even my old school. These allowed me to shape my own personal outdoor philosophy and refine my technical skills.

Camp America

Work On Cruise Ship

I never expected that it would lead to the career I have now.

Since those early days, the outdoors has taken me around the world. For three years I ran the adventure programme on cruise ships, and across Aotearoa I have worked everywhere from Motutapu Island in the Hauraki Gulf to St Cuthbert's Kahunui campus in Ōpōtiki, to urban communities in South Auckland. I have had the privilege of supporting youth development and delivering assessment-based outdoor programmes as Programme Manager at Kokako Lodge, as well as leading large-scale, award-winning initiatives for rangatahi as a Rangatahi Recreation Advisor with a Regional Sports Trust.

Today I have completed my degree, a certificate in youth work, and never stopped learning from the outdoor classroom. I now manage the Adventure Series for Scouts Aotearoa, where I design inclusive programmes that connect young people with themselves, their whānau and the outdoors.

My work brings together community engagement, programme design, volunteer coordination and risk management.

Beyond Scouts, I contribute to the wider recreation sector through governance and leadership roles that focus on strengthening connection and collaboration across the sector. My path has not been linear, but I have learned to pivot when projects (or weather) change, to lead teams through uncertainty, and to advocate strongly for young people, especially those often left out of recreation spaces. Whether I am reviewing health and safety protocols, co-designing programmes with young people, or getting outdoors for mahi, I know I am doing work that matters.

Poipoiā te iwi *Nurture the People*

Outdoor Education has given me a toolkit I rely on daily, not just in work but in life. It is where I learned how to lead without having all the answers, how to hold space for vulnerability, and how to navigate uncertainty with calmness and clarity.

I now believe that growth takes time, that feedback is a gift, and that relationships are the real curriculum. Being in nature taught me how to listen to myself, to others, and to the land. It made me more resilient, adaptable and values driven. It showed me how to create experiences that stay with people long after they pack their gear away.

Outdoor Education didn't just shape my career, it shaped who I am, and through that the lives of everyone I have the privilege to work with.

Kia puāwai te aroha *Our Aspirations will Flourish*

To today's Outdoor Education kaiako and kaiārahi, we need you more than ever. In a world that often feels disconnected, divided and uncertain, you offer something rare and powerful: the chance for people to reconnect, to challenge themselves, and to find joy, confidence and purpose outdoors.

To principals, deans and career advisors, encourage students to see themselves in Outdoor Education classrooms.

AUT Bush Trip

Outdoor learning is not a fallback. It is a foundation for leadership, resilience and real-world capability. It can open doors to pathways in science, leadership, emergency response and so much more. These pathways can include tertiary study and apprenticeships that lead to rewarding and meaningful careers.

You don't have to have it all figured out as educators. Keep showing up for your students. Keep learning alongside them. Keep grounding your work in tikanga, in place and in people. Keep holding space for growth. And remember that you are part of a long line of educators who believe the outdoors can change lives. Outdoor Education didn't just change my life. It awakened who I was meant to be.

Outdoor Education in 2025: The Case for Urgency

In 2023, over 3,300 students were enrolled in outdoor education-related tertiary courses across Aotearoa. These programmes included outdoor leadership, environmental education and adventure tourism (Education Counts, 2024). Yet, despite this growing interest, the Outdoor Education workforce continues to face critical shortages in culturally competent, youth-focused, instructors, Outdoor Education teachers and EOTC professionals.

AUT Kayak Trip

At the Recreation Aotearoa 2025 National Outdoors Hui, a survey of 40 sector leaders revealed seventy-four percent needed to recruit new staff in the past 12 months, and 85 percent expected to recruit next year. 92 percent categorised the current state of the outdoor workforce as undersupplied or critical shortage and lack of awareness among students of clear career pathways from school into the sector was identified as a key cause of this challenge.

This shortage results in lost opportunities for thousands of young people to experience the growth, connection and learning that Outdoor Education provides. If even a small number of the thousands of students currently taking Outdoor Education chose to continue into roles as instructors or educators, the sector would be transformed.

My wero is this:

To students, consider the possibilities.

To educators, point clearly to these career pathways.

The future of Outdoor Education depends on it.

References

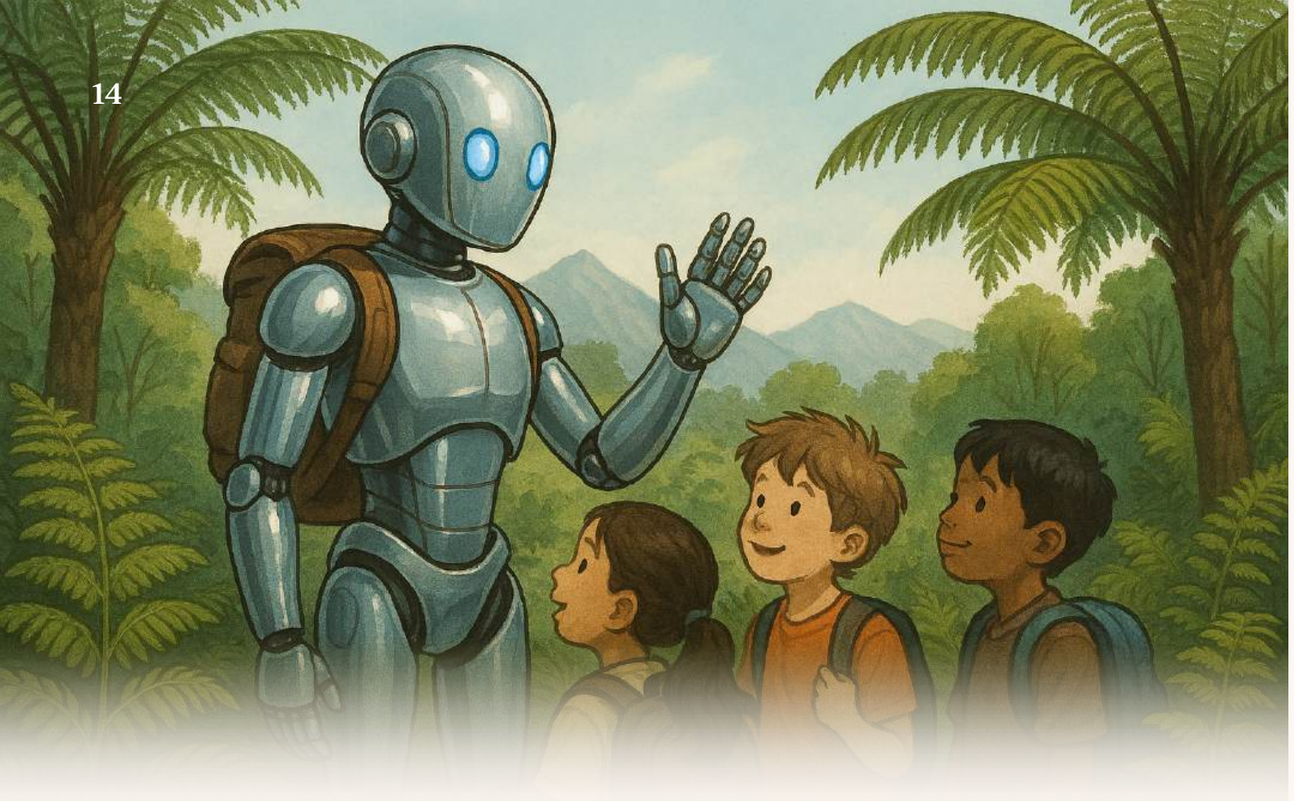
Education Counts. (2024). *Tertiary Education Enrolments by Field of Study*. New Zealand Ministry of Education. Retrieved from https://www.educationcounts.govt.nz/statistics/tertiary-education

Recreation Aotearoa. (2025, June 13). *Outdoors National Hui Survey Results*. Recreation Aotearoa.

About the Author

Natalie Kelly McNulty lives in Tāmaki Makaurau and manages the Adventure Series for Scouts Aotearoa. She holds a degree in Outdoor Education, with research focused on overcoming barriers to accessing the outdoors. A forever learner, she is often found taking courses, networking or working toward her next qualification, growing her own mātauranga so she can grow the young people she serves. Deeply committed to accessibility, equity and inclusion, Natalie contributed to the development of the Accessibility and Inclusion in Outdoor Education and Recreation Good Practice Guidelines. She also serves as an Associate Board Member of Education Outdoors New Zealand and contributes to sector leadership through Recreation Aotearoa and the Generate NZ Network Steering Committees.

Recreation Award



Smarter EOTC with AI: Freeing up teachers to focus on student learning. An interview with Christina Roberts

By Dr Chris North

I am a sceptic when it comes to AI and particularly planning for EOTC outdoor education trips. Last year a group of us published an article specifically on EOTC paperwork and said:

The rise in the ability of artificial intelligence to generate text has further heightened concerns that production of documentation (paperwork) can be largely disconnected from thinking… we are concerned that [with] a superficial treatment of planning and preparation…important safety steps are likely to go missing. (North et al., 2024, p. 13)

Basically we worried that if AI is doing the planning, is anyone doing the thinking?

Christina Roberts and a small group of Kaiako and Principals from Rotorua are leading the way with AI in EOTC and OE. So an interview with Christina (in my OE teaching course) was a great chance to find out more. In keeping with the AI focus, I used Copilot to clean up the transcript (generated on Teams), asked it to keep the te reo, and provide definitions of things like a bot. I still did a lot of proofing, editing and sorting out the flow (and Christina went over it with some further clarifications).

Q: Can you please tell us a bit about your background?

I'm the Deputy Principal at Rotokawa School in Rotorua, and I also have the privilege of working alongside the Rotorua East Kāhui Ako.

Within the kāhui ako, and over the past six years, I've been involved in a wide range of kaupapa, including:

- Transitions from early childhood education (ECE) through to primary, intermediate, and secondary kura
- Attendance and engagement
- Local curriculum development
- Strengthening connections between ECE, iwi/hapū, kura, and whānau

Whether within our kura or Kāhui Ako, my role is essentially: *whatever is good for our tamariki*. Whether it's data, assessment, or pastoral care, I'm here to support our learners in every way possible.

Q: So how did you get into AI?

Our AI journey only began in December last year. Our principal, Regan Williams, attended a Principals Conference and came back with the idea of exploring AI. We said, "We need a plan. We need to be strategic about what we're doing and how we're doing it." He then provided support and time for me to carry out this role within our kura.

Two principals—Regan Williams from Rotokawa and Hinei Taute from Lynmore—put out a tono, a call to schools interested in AI and education. Three Rotorua schools responded: Western Heights Primary, Lynmore Primary, and Rotokawa. From there, an AI working group with 4 kaiako was created. Why, may you ask? Teaching has become more complex, with increasing curriculum demands, socio-economic challenges, and the needs of our tamariki. We asked ourselves: how can AI make things easier for our staff?

AI Integration in Our Kura: Honouring Local Stories and Supporting Kaiako

As a team, we set out to create AI tools that support our kaiako and ākonga in meaningful, culturally-grounded ways. Our team began by designing the instructions and code for our bot[1] — embedding the richness of the New Zealand Curriculum, *Tātaiako*, and other key documents. We included our own kura documents to ensure the bot reflected our local context.

We created a bot that could generate:

- Custom learning overviews
- Inclusive lessons that reflect our curriculum
- Resources
- Vocabulary
- EOTC recommendations

For use here at Rotokawa School, we were fortunate to have an embedded local curriculum that was reflective of, and aligned with, our local stories and histories gifted by hapū and iwi. These were embedded into the bot so our tamariki learn through the lens of their own whenua and whakapapa, which was personalised and unique to our kura!

Previously, some kaiako had been hesitant to engage with these stories—worried they might get something wrong. But through collaboration with our hapū, and with the support of AI, everything in the bot is approved and mana-enhancing.

The Birth of the EOTC Bot

Our AI journey started with curriculum planning support, but then we thought—*how awesome would an EOTC bot be?* At our kura, every class goes on an EOTC trip once a term, each connected to a local story. These trips might involve:

- Visiting maunga, awa, or other significant landmarks
- Learning about names and their origins
- Exploring the journeys of people who shaped our rohe

But many kaiako—like others around the motu—found these trips hard to organise because of the paperwork, safety requirements, and compliance with policies.

After discussing this with our AI team, I reached out to Sophie Hoskins and Fiona McDonald (from Education Outdoors New Zealand) to discuss the idea and to ensure compliance with kura and national policies. From there, the EOTC bot was born. This bot supports teachers with:

- Planning EOTC trips, reducing admin load
- Navigating safety and policy requirements
- Aligning with national and school policies
- Connecting trips to local stories and curriculum

[1] *A bot is an AI-powered program designed to perform tasks or interact with people automatically; it can save time or improve efficiency. It's built by telling it what resources to use, how to present outputs and trained using data so it can understand and respond accurately.*

The EOTC bot collects trip details—time, date, supervision structure, and more. Teachers follow the prompts, and the bot helps complete the initial paperwork. Then we use a second bot, which takes the intention form and generates the RAS (Risk Assessment and Supervision), safety briefings, parent letters, and more.

What used to take hours now takes around 20 minutes—and everything still meets policy and safety standards.

Q: So if AI is doing the planning, does that mean the teacher doesn't need to do anything?

We've realised we need to have quite stringent processes in place – because we still have a vital role to play in everything we do. We say: it's 80% bot and 20% human.

In every presentation, we emphasise the teacher's role—especially in reviewing outputs, delivering lessons, resourcing, and this reduces cognitive load.

The same goes for our tamariki. For those who struggle to put pen to paper, tools like speech-to-text allow all learners to engage. And that's the direction we're heading in.

Q: Could you give us an example of an EOTC trip?

To really understand the EOTC bot, you need to know how our curriculum bot works first. Each bot is personalised to its kura—ours contains our values, strategic goals, graduate profile, term topics, national documentation and local stories. You can't just share it with another school. We've been supporting other kura to build their own, based on their local stories and aspirations.

When we go into our curriculum bot, if I prompt our bot to create a lesson about *The Great Migration*, with a focus on The Arts and English, it generates a learning sequence grounded in local stories and curriculum.

The bot will generate content that's aligned with that theme and grounded in our local stories and environment, exploring the story with a focus on understanding, narrative structure, storytelling, and visual literacy. It then moves into leadership during the walk, exploring leadership themes, and transitions into the migration—choreographing parts of the journey using movement and rhythm. The learning ends with a final performance that includes dance and spoken word.

If I don't like a particular part, I can tell the bot to change it. Otherwise, I ask for "Lesson One," and it creates a full plan that includes:

- Achievement objectives
- Learning intentions and success criteria
- Pedagogy
- Lesson structure
- Resource list and cost
- Vocabulary (in English and Māori)
- Assessment opportunities
- EOTC suggestions
- School value focus

Once I've chosen an EOTC suggestion, I move to the EOTC Intention bot and RAS bot to plan the trip. Everything is connected—and that's what makes it work.

Q: One of the worries with AI, is that it scrapes information from anywhere in the world. Has that been a problem for you?

That was something we thought about a lot. We've set up our bots so they *don't* search the internet. Take the story of Hinemoa and Tūtānekai. It's well-known across Aotearoa, but it's also specific to this region. Our hapū want that story told in *their way*. So we turned off internet search. The bot only pulls from the resources we give it. That way, Mana Whenua stories stay protected and are shared how our communities want them to be.

Q: What problem is AI solving for you?

Time. It's giving time back to teachers.

We're time-poor—trying to balance everything from planning to paperwork to pastoral care.

AI helps with the upfront load, and it generates ideas we might not have thought of ourselves.

At our school, I've been given the opportunity to use some of my time to build and grow our AI capabilities—not only to support our local curriculum, but also to help ease these pressure teachers face. By doing so, we're finding ways to restore balance and, most importantly, give time back to those who need it most—our teachers.

Q: What is your take home for our readers?

Christine Masters (one of our Kaiako) shared that one of the biggest wins has been in planning. AI helps unpack curriculum levels, identify achievement objectives, and build clear learning intentions—so teachers can focus on creating rich, meaningful learning experiences. Planning is now faster, more coherent, and more culturally responsive.

We're seeing changes in our tamariki, too. The learning is more place-based, and that's making it stick. Students are asking deeper questions, making stronger connections to their lives, and sharing their learning with more confidence. And because they can express themselves in lots of different ways—including with AI support—every learner has a voice.

We do need to be intentional with our tamariki. The jobs they'll move into don't even exist yet. This is the world they're stepping into. So why would we hold them back?

Let's be strategic. Let's be visionary.

The more you work with your AI assistant—asking it to draft, refine, create, translate—the better it gets. It doesn't just give you what you ask for; it gives you things you hadn't thought of yet. For us, AI is helping us stay future-focused—*without losing who we are*. We're not just using tech for the sake of it—we're using it to uplift our people, our stories, and our teaching. And that's what makes it powerful.

Interviewer reflection:

For me, the interview with Christina was a combination of inspiring and daunting. Many of my concerns were addressed; particularly the way that AI can simplify a process and save educators time to focus on the most important parts of planning. I had no idea that AI could incorporate elements of local pūrakau, the national curriculum, school values, and EOTC guidelines to generate a locally relevant curriculum. I also love the idea that the workload of teachers can be reduced to let the important work with students come to the fore. I am daunted by the idea of engaging a lot more with AI to achieve these benefits. It will be interesting to look back in a few years' time at planning EOTC and OE. Everything is changing so rapidly!

References

Microsoft CoPilot. Accessed 2025-07-20. Prompt: 'Clean up this transcript and reduce to 1000 words. Organise the transcript under these question headings (listed). Include te reo' Generated using https://copilot.microsoft.com/.

North, C., Boyes, M., Irwin, D., Cosgriff, M., Hill, A., & Watson, S. (2024). The work that the law does in education outside the classroom: Part 2, the paperwork dilemma. *Journal of Adventure Education and Outdoor Learning*, 1-16. https://doi.org 10.1080/14729679.2024.2372391

About the interviewer and interviewee:

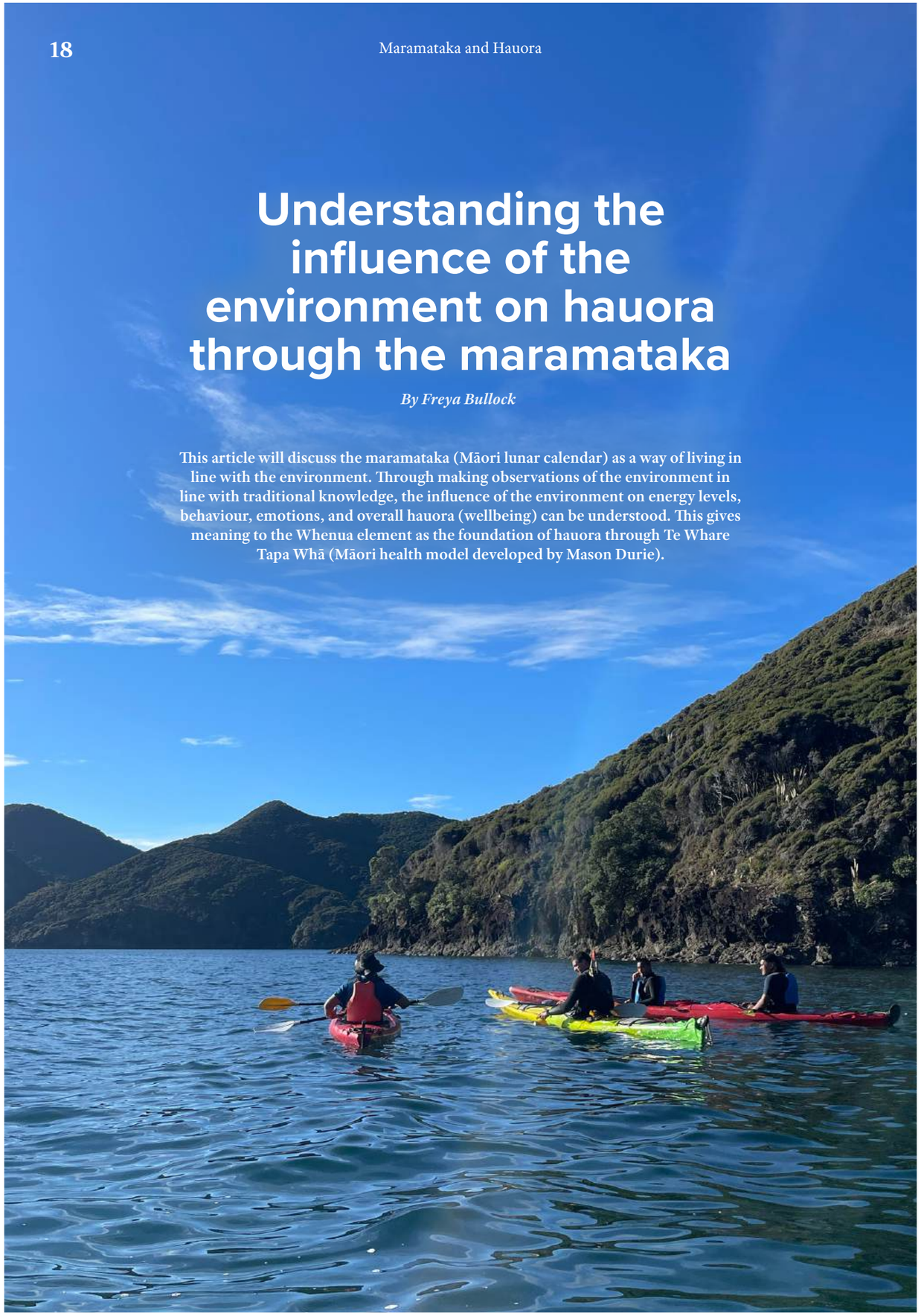
Christina Roberts is a Deputy Principal at Rotokawa School and an Across School Leader within Rotorua East Kāhui Ako (Students with Additional Needs – SWAN). Based in Rotorua, New Zealand, she is deeply committed to equitable and future-focused learning. Christina leads professional development in curriculum design, assessment and data, and the integration of digital and AI tools in education. Grounded in te ao Māori perspectives, her leadership champions authentic, place-based learning that connects tamariki to their whenua and identity. She is passionate about empowering educators to design and engage with meaningful, integrated learning experiences that enable all learners to thrive.

Chris North is an Associate Professor in Te Kaupeka Oranga/Faculty of Health at the University of Canterbury, New Zealand. Chris' research is in the areas of outdoor education practices, environmental education and initial teacher education. He uses mainly qualitative methodologies to closely examine teaching and learning in outdoor and out of school contexts. While specialising in secondary education, his interests extend to all school years and tertiary education.

Understanding the influence of the environment on hauora through the maramataka

By Freya Bullock

This article will discuss the maramataka (Māori lunar calendar) as a way of living in line with the environment. Through making observations of the environment in line with traditional knowledge, the influence of the environment on energy levels, behaviour, emotions, and overall hauora (wellbeing) can be understood. This gives meaning to the Whenua element as the foundation of hauora through Te Whare Tapa Whā (Māori health model developed by Mason Durie).



The maramataka referred to in this article is based on a collation of mātauranga tuku iho (traditional knowledge) regarding the patterns of the environment and human behaviour during specific maramataka phases across Aotearoa, not isolated to a specific iwi. Additionally, the knowledge of the maramataka has been collated by the author's own observations while living in Tāmaki Makaurau. It is encouraged that iwi and wāhi (place) specific knowledge and observations are sought by readers to ensure that learning is aligned with the relevant environment.

Within indigenous cultures, people traditionally lived in line with the lunar cycle which informed time, seasons, and appropriate activities to carry out through observation of environmental tohu (signs). The environment is held in high regard for Māori and other indigenous cultures, forming the foundation and purpose for the way in which people live. An indigenous worldview emphasises that we are a part of the environment, and the environment is a part of us, described in the following whakataukī,

> **"Ko au te taiao, ko te taiao ko au –**
> ***I am the environment,***
> ***and the environment is me."***

Therefore, not only is the environment a rich source of learning, but it also informs whakapapa, identity and hauora.

The lunar cycle is known as the maramataka within te ao Māori and translates to moon (marama) turning (taka). Just as the moon has gravitational pull over the tides, it also has the ability to pull all other sources of water within te taiao (the environment). Humans are made up of approximately 70% water, therefore we are also influenced by the gravitational pull of the moon. As the moon turns, we can observe different environmental tohu, or impacts of the moon on
the environment around us, and we can also observe tohu within ourselves caused by the turning of the moon.

There are thirty phases of the maramataka, beginning with either the new moon (Whiro) or the full moon (Te Rākaunui), and forming a complete cycle across the thirty phases. Throughout generations our tūpuna (ancestors) observed the way the moon affected the environment and people which has given us guidance today for how we can expect ourselves, others and the environment to behave on each different phase. The mātauranga tuku iho (knowledge passed down) highlights common behaviours, energy levels, emotions and appropriate activities to expect for each phase.

There is also an atua associated with each phase to enhance depth of understanding of what might be expected on the specific phase in line with the nature of the atua. For example, Whiro is the new moon and is also the atua of darkness, demonstrating a time of renewal where we may lack clarity, but it is a chance to reset and trust the growth which occurs in times of darkness. The atua of Tamatea phases are Tāwhirimātea (atua of wind and chaotic weather) and Rūaumoko (atua of volcanic activity), therefore we can expect unpredictable and often chaotic emotions, behaviours and events, encouraging us to be aware and patient.

We can also use the knowledge of the maramataka as a way of managing our emotions and behaviours, for example using the wind of Tāwhirimātea to breathe and bring calm amongst heightened emotions. Additionally, Tangaroa phases inform us of an abundant time, in line with the abundance of the ocean which Tangaroa is the atua of. Therefore, ocean activities, any other outdoor activities or high energy activities would be favourable to carry out during this time.

Understanding the mātauranga associated with each phase of the maramataka allows us to improve our hauora by completing appropriate activities in line with the environment. This provides an understanding of the whenua element of Te Whare Tapa Whā, being the foundation upon which to build our wharenui. Without being grounded or informed by the whenua, our hauora will be unstable. Physically, we can embrace the natural fluctuations of energy levels present within the environment by completing high energy activities at high energy phases and vice versa. This means that we maximise the physical potential of our tinana on the aligned phases, while using the lower energy phases to rest and restore.

Mentally and emotionally, the maramataka provides us with understanding of our thoughts and emotions based on common observations associated with the different phases. This allows us to understand the environmental influence over the way that we feel rather than blaming ourselves when we lack motivation or are feeling low. Therefore, we can be proactive in managing our feelings and knowing what to expect emotionally during each phase.

Socially, the maramataka helps us to have understanding for others' behaviour and emotions, initiating support instead of being reactive. When we know what to expect of ourselves on certain phases, we can also have compassion, understanding and patience for others in the same regard.

Spiritually, the maramataka provides a deeper connection with the world around us. It gives us a meaningful and internal connection with the environment, allowing us to value the taonga (treasures) which we have been given. The unexplained elevation in wairua when we are in te taiao can be credited to our internal whakapapa connection with the environment and atua.

The maramataka can be used as a framework to enhance teaching and learning. When we design our learning activities in line with the phases of the maramataka, tauira become more engaged with learning and their hauora is enhanced. For example, within outdoor education we would plan our outdoor activities during favourable phases, such as Tangaroa, for tauira to have the most abundant experience. In contrast, if we were to plan outdoor activities on a low

Photos: Freya Bullock

energy phase, such as Korekore, it is likely that tauira will lack motivation and interest and may miss out on valuable learning. During Tamatea phases, we know that this is an unpredictable time and therefore may be unsafe, so we would need to be extra vigilant with safety measures. Therefore, the maramataka can also be used as a framework for risk management within outdoor education.

When incorporating maramataka into curriculum, the challenge is to embed it as a framework for learning rather than an add-on. The depth and holistic nature of the maramataka as a knowledge system means that it cannot be incorporated authentically unless it forms the foundation for learning. Therefore, a consideration when implementing the maramataka to maintain cultural authenticity should be noted: How can maramataka determine the way in which learning occurs to derive more effective outcomes for learning, behaviour and hauora?

Maramataka Teaching Resources

Using maramataka as the framework for a teaching and learning programme creates greater depth of learning and encourages cultural, environmental and spiritual connection with curriculum content; factors which can often be neglected due to the difficulty of incorporating them authentically within curriculum.

Maramataka can be effectively implemented as a junior Health and Physical Education framework for learning to determine the way in which learning is carried out and the specific content taught during each phase. The maramataka can also form the basis for learning within the NCEA Level 1 Physical Education achievement standards (particularly for 1.3 & 1.4). The author has created resources which are available on the Education Outdoors New Zealand (EONZ) website (www.eonz.org.nz/curriculum/te-ao-maori). The notes on the resources for 1.3 & 1.4 further explain how maramataka can be incorporated as the underlying framework for understanding both the impact of movement on hauora, and the impact of maramataka on movement. Additionally, the planning resources can be used to guide students in making observations about the impacts of maramataka on movement, and hauora.

When tauira are empowered to learn through a Māori knowledge system, they experience connectedness with the environment, their culture, and their identity, as they understand their place in the world through the interconnected and holistic nature of the environment. Tauira also form more positive interactions with others as they learn to understand shared emotions, behaviours and energy levels through implications of the environment. Lastly, tauira form deeper spiritual connections with their environment by appreciating the knowledge, meaning and whakapapa it has to offer.

The resources created for the Education Outdoors New Zealand website include practical applications for providing a base understanding of the maramataka by learning the mātauranga involved with the maramataka and the way it

operates. There are a variety of resources which can be used for both classroom learning and practical activities. The purpose of these resources is to assist with foundational knowledge; however, they should also lead to adaptations in the way learning occurs (e.g. aligning teaching and learning with the knowledge that each phase of the maramataka offers). As we live in line with the maramataka, we align ourselves with the natural rhythms and fluctuations of energy as affected by the environment we live in.

It is encouraged that individual observations and reflections are made to track and understand the effects of the maramataka on personal energy levels, emotions, hauora and appropriate activities to fully understand the influence of the maramataka. This can be done through reflective journals, simply making notes of connections between maramataka knowledge and the correlations with personal observations of energy levels, emotions, behaviours, and environmental tohu across each phase. The maramataka resources on the EONZ website will assist with making observations and noticing patterns between personal hauora and the environment. These resources are appropriate for use across all school levels, containing both beginner and advanced versions to encourage progress. Where necessary, the resources can also be further simplified or enhanced to ensure learning is suitable for all tauira.

Access the resources on the EONZ website here: www.eonz.org.nz/curriculum/te-ao-maori

Additional readings to assist with understanding the maramataka can be found in the references below.

About the author

Freya Bullock is of Ngāpuhi and Ngāti Kahu whakapapa and has previously worked as an Outdoor Education teacher in Tāmaki Makaurau. Freya is currently completing a Master of Indigenous Studies through Te Whare Wānanga o Awanuiārangi. Additionally, Freya operates a business called Kuaka Kōhatu which aims to assist kaiako, health providers, and community organisations to authentically implement Mātauranga Māori as the foundation of their practice.

References

Collins, H. (2021). *Te Maramataka: A way to live and know.* AKO Journal. Retrieved from https://akojournal.org.nz/2021/01/13/te-maramataka

Matata-Sipu, Q. (2018, August 7). *Move over astrology, it's time to return to the Māori lunar calendar.* The Spinoff. Retrieved from https://thespinoff.co.nz/atea/07-08- 2018/move-over-astrology-its-time-to-return-to-the-maori-lunar-calendar

Warbrick, I., Makiha, R., Heke, D., Hikuroa, D., Awatere, S., & Smith, V. (2023). *Te Maramataka—An Indigenous system of attuning with the environment, and its role in modern health and well-being. International Journal of Environmental Research and Public Health*, 20(3), 2739. https://doi.org/10.3390/ijerph20032739

Ngā Pae o te Māramatanga. (2019). *Tangaroa Ara Rau: Tangaroa the Atua of Human Movement.* Retrieved from https://www.maramatanga.ac.nz/project/tangaroa-ara-rau-tangaroa-atua-human-movement

Holistic Outdoor Classroom

Ashlee Sturme & Mark Barratt

Ashlee Sturme leads a one-day nature playgroup in the Eastern Bay of Plenty and Mark Barratt is an experienced principal of over 30 years. This article has been co-written by Ashlee and Mark, reflecting their experience working together over the last few years.

The sun is filtering through the trees, speckling upon the children's faces. They don't appear to notice the cool breeze despite standing in knee-deep freezing water. Instead, they're focussed on using a pipe offcut to divert a small bush stream around a rock they've been unable to move. The engineering skills being employed are impressive. They've tried several ideas and have settled on a solution that is working, water is now flowing through the pipe. Their supervisor is perched on a fallen log almost out of their sight, listening to the conversation.

It's another day in the bush 'classroom' in the Eastern Bay of Plenty. Now in its fourth year, Bush School runs three sessions a week, 9am to 3pm. Two sessions are for the public (a mix of home schoolers and schooled children across the Bay) and one is specifically for Edgecumbe school. Through conversations with other one day bush and nature schools around Aotearoa it is estimated that there are 60 similar services and up to 800 children benefiting from these one-day programmes.

Adults onsite at Bush School first play a role to first keep tamariki physically safe (easy in this case, they're over 10 years old and the water is shallow), and then to support them emotionally if needed. This is essentially the job description for all Bush School kaiako, who operate collaboratively on a flexible roster and communicate constantly to stay in the loop about the issues cropping up for children at home, school, and within the Bush School.

When the newly appointed principal of Edgecumbe School, Mark Barratt, arrived in 2023 he was surprised at the high level of dysregulation and traumatic behaviour displayed by the students in the school. Significant numbers of students didn't turn up whilst others spent large parts of their day just wandering around the school which frequently resulted in violent outbursts.

Staff, the community, and students wanted something to be done but there wasn't any clarity about what to do. What was serendipitous was that the local Kāhui Ako was moving into the trauma space and had arranged area wide PLD. This initiative allowed the principal to dust off a trauma informed response framework that he'd developed while working in the Middle East.

One of the primary system changes that the framework emphasised was the creation of spaces within the school week that allowed students to just be. The principal built this into the school's strategic plan, setting a goal to provide environments where students could experience freedom and a sense of calm. This included greater diversity in their Education Outside the Classroom (EOTC) experiences, the development of supportive spaces at school, and opportunities for students to access a local Bush School.

Mark says that he was lucky that his presiding member of the board, Ashlee Sturme, was a huge advocate of the school starting a Bush School and dragged him off to nature education events. This helped him contextualise the framework. These changes were embedded into PLD opportunities for staff so that they understood the 'why' for dysregulated behaviour and the 'what to do'. Similarly, Ashlee argues that it's Mark's support of out-of-box solutions that hugely benefits the children. School management buy-in is critical for the establishment and success of alternative programmes.

It hasn't been a quick fix with all the problems going away in a term. Nevertheless after collecting data on the impact of two years of intervention, the school can say that the investment into Bush School has led to a reduction in violence (there hasn't been a knife fight in two years, and a 60% drop in fights), increased attendance (moved from 33% to 57%) and the number of students achieving "At or Above" age related benchmarks has doubled (31% to 63%).

As principal, Mark is constantly under pressure from students and parents who want more time at Bush School, so in Term 3, 2025 we extended the sessions to two days a week to allow greater access. Some school staff, keen on

Photos: Ashlee Sturme

wider participation, have suggested shorter sessions so that more children can attend. However, Mark is adamant that reducing student time at Bush School would undermine its effectiveness; the longer students spend on the programme, the greater the benefits.

Ashlee is firm on this as well. It takes students several sessions to understand the values and kaupapa of Bush School and to establish whanaungatanga with their kaiako. It can then take several sessions to support children to downregulate and relearn how to 'just be'. It's not until the last weeks of term that the unlearning of routines and adult expectations happen so the magic of child-led play trumps.

Each term Mark chats to the students personally about what it is about Bush School that works for them. In different ways students say that it works because it's hands on with nature, they are able to drive their learning, and they aren't rushed. The principal also suggests that it taps into the students and whānau's understanding of hauora and turangawaewae.

The kaiako at Bush School are skilled facilitators in promoting curiosity and exploration. They allow the students to get bored, and don't rush in with 'things to do' or solutions to their problems. As one young person reflected, being in nature gives them space to slow down and notice what's around them, leaving them "feeling chilled and ready for life." Another described the joy of creating and thinking without the constant interruption of bells or being told to hurry for the next lesson.

Bush School allows students to experience personalized learning where their identity as a learner is strengthened. Ashlee says that comes down largely to the passion and personal beliefs of the kaiako; their own connection to the land, to supporting and loving the children, and their understanding of neurodiversity, trauma, and behaviour management. They work together to foster connectedness and deliver care for the child, whānau and school, and also work on their own dynamic as a team with group first aid training (always a laugh), dinners, working bees and constant communication, earning them the 2024 Bay of Plenty Schools Initiative (BSI) Award for Team Culture Excellence.

With no bells and alarms and timetables, children begin to ease into rhythms. Without walls and expectations, they focus into their activity, which supports deeper learning. They begin to talk openly.

The two boys rerouting the stream begin to share more than just their ideas for the water flow. One quietly talks about the pain of losing a close friend and the worry that comes with it. The other reaches out, offering friendship and sharing how much he too has missed people he cares about after changes in his own family life. These are not two boys that play together at school. But the other one reaches out, and says, "I'll be your friend," and shares how much he misses his old friends, because he was shifted from his mum to his dad, one island to another.

Kaiako watch silently, ready to support if needed, but their intuition is that these two just need space. Where else can

they connect, learn, collaborate and just be, without someone constantly reminding them about time, moving to the next activity or getting dirty.

Some children arrive unsure how to join in with others, and they flourish when given the time and space to follow their own interests, whether that's making potions, building huts, or exploring quietly on their own. Over time, we see tamariki grow in confidence, finding their voice, forming friendships, and discovering that Bush School can be a place where everyone belongs. For many, it's where they finally feel they've found their tribe.

Some children arrive carrying trauma that shows up in big, challenging behaviours. At first, this might mean lashing out at others in their frustration or need for attention. With time, patience, cuddles, outdoor collaborative play and emotional coaching, those same children learn new ways to connect and express themselves. We've seen remarkable shifts—children who once struggled to manage their emotions now working alongside others with confidence and care.

But what, exactly, are we doing to create this magic?

The team call it, 'loving our children.' If each child is accepted and seen, then they feel safe to come. If they are supported and empowered, then they try new things. If they are celebrated, they extend themselves even more.

'Loving our children' uses a coach-approach rather than an adult-down approach. "What do you need? How could you get that? What are some other ways you could try?" shifts thinking to solving problems together. "How do you think Mary might be feeling now that you've taken the spade she was using?" and "I can see you're feeling very frustrated that Tom is using the hammer you wanted," supports emotional regulation.

This site is an easy five-minute walk into the bush, and there's a fire pit, a tin-roofed shelter, a composting toilet, and a fledgling orchard. The children go through stages of building huts, building creations with wood, making endless pancakes. They have access to saws and hammers, mud kitchen resources and open-play items like the pipes and wooden electrical reels.

But it's clear that all they really need is a lot of room, less adult input, and the outdoors. Can we replicate this in other spaces, all children's spaces? This is a question that Ashlee Sturme, board chair, and the principal, Mark Barratt, are constantly evaluating whilst planning play spaces in the school environment. Supervision, resources, funding, more opportunities are always under review.

We can supply the physical environment and carve aside uninterrupted time. The children bring the creativity and the ideas, and the learning happens.

All they need from adults is acceptance, love, and then space to grow. Ashlee describes this as magic, while the principal sees it as results. What is clear from Edgecumbe School results is that children are calmer, more connected to themselves and others, and all battling for a spot in the Edgecumbe School van heading to Bush School and for a place around the fire pit with their favourite kaiako.

About the Authors

Ashlee Sturme is an Educational Wellbeing Coach and leads a one-day nature playgroup in the Eastern Bay of Plenty. She is a qualified and experienced health coach and educator and an advocate for neurodiversity, play-based learning and using the outdoors for healing and wellness.

Mark Barratt is an experienced principal of over 30 years across Aotearoa and the Middle East. He is an advocate for solutions that prioritise the child's wellbeing and learning, seeing each child with capacity and potential.

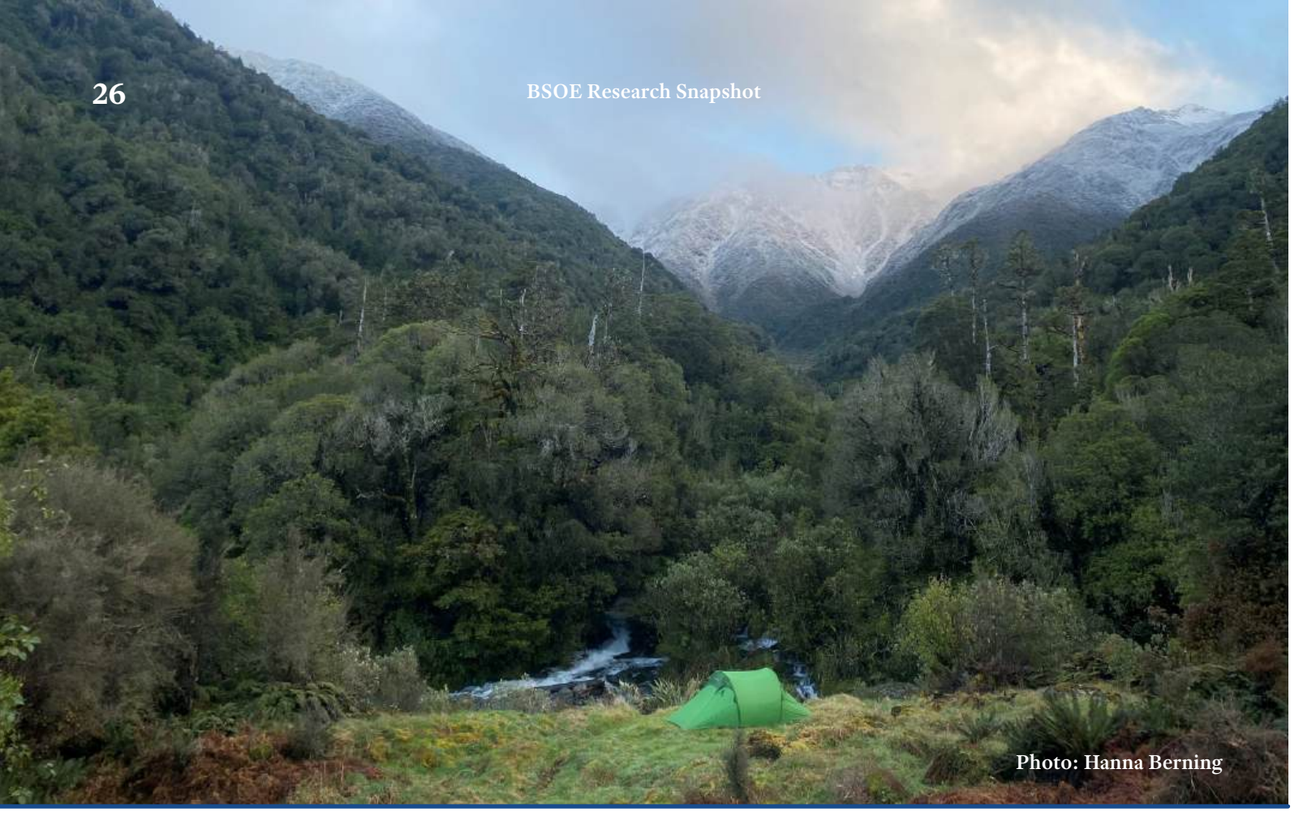


Photo: Hanna Berning

Research Snapshots from the Bachelor of Sustainability and Outdoor Education at Ara Institute of Canterbury

Authors: *Dr Hannah Berning, Bree Daffin, Jacob Wright, Libby Tyrrell*

Introduction

This research snapshot presents some of the latest student research projects from 2024 of the Bachelor of Sustainability and Outdoor Education (BSOE) at Ara Institute of Canterbury. The BSOE is Aotearoa New Zealand's only three-year bachelor's degree in the field of outdoor and environmental education. In their final year, students learn about research processes and, at the same time, plan and conduct a small research project which results in a 10,000-word research report. Most projects are qualitative, all involve primary data collection and receive formal ethics approval. Here we provide project headlines followed by a more detailed research snapshot.

Research Headlines

1. **Put away mobile phones to enable connection in outdoor and environmental education.** Are you worried about the impact of mobile phones on group dynamics and learning in outdoor and environmental education? Read more about how educators have been encouraging youth to disconnect from their phones in order to connect with each other and nature. Project by Bree Daffin.
2. **Developing bicultural competence and mātauranga Māori through haerenga | journeys.** Are you keen to engage more with Te Ao Māori worldview and knowledge, and build cultural competence in your students? Read about the ways that a multi-day, place-responsive haerenga| journey in the Southern Alps impacted on students learning. Project by Jacob Wright.
3. **Working in adventure tourism can be inspirational, but it comes at a cost.** Ever wondered how the seasonal and uncertain nature of work in adventure tourism impacts on the wellbeing of employees. Read about the upsides and challenges faced by people working in the adventure tourism sector in Aotearoa New Zealand. Project by Libby Tyrrell.

Disconnect to Reconnect: An exploration of the effects of Mobile Phones on Group Dynamics within Outdoor Education

By Bree Daffin

Purpose

The purpose of this research was to investigate the impacts of mobile phones on group dynamics within outdoor education. This is a growing concern as phones are prevalent in everyday life and can have a negative impact on mental health. Outdoor educators have been critical of mobile phones, whilst also recognising the usefulness of mobile technology for some applications (e.g. environmental interpretation).

The issue of mobile phones in school based outdoor education is situated within the context of new government policy banning all phones during school hours. Through better understanding how some teachers manage mobile phones with their classes or groups, this study can provide teachers with ideas about the pros and cons of mobile phones in outdoor experiences and an understanding of how mobile phones influence group dynamics.

Methodology

The research followed a qualitative approach, drawing on a constructivist worldview, and phenomenology. Data was collected through semi-structured interviews with four high school outdoor educators in the Canterbury region. All interviews took between 30-45 minutes and were audio recorded. Afterwards, data was analysed based on the six phases of reflexive thematic analysis (Braun and Clarke, 2022).

Key Readings

Beames, S. K., & Maher, P. T. (Eds.). (2024). *Routledge handbook of Mobile technology, social media and the outdoors*. Taylor & Francis Group.

Bolliger, D. U., McCoy, D., Kilty, T., & Shepherd, C. E. (2024). Smartphone use in outdoor education: a question of activity progression and place. *Journal of Adventure Education and Outdoor Learning*, 21(1), 53–66. https://doi.org/10.1080/14729679.2020.1730204

Kraalingen, I. (2021). A systematized review of the use of mobile technology in outdoor learning. *Journal of Adventure Education and Outdoor Learning*, https://doi.org/10.1080/14729679.2021.1984963

Key Findings

- Across the data, approaches to mobile phone use varied (from total bans to trust-based). All Educators aimed to foster student interactions.
- Some educators observed that students seemed to struggle with social interaction without phones during unstructured time. Although other (sport) equipment was provided "kids were bored, asking 'what to do'". And thus, had to rediscover play and social connections.
- Educators noted that students struggled to disconnect from their phones and be present, even in remote settings, which raised concerns about the compatibility of phone with core OE values and signature pedagogies.
- Educators acknowledged utilising mobile phones as an educational tool (e.g., for navigation, plant identification, skill analysis, and communication), reflecting on a pragmatic approach that integrates phones in outdoor learning environments rather than generalised bans.

Discussion/ Conclusion

Findings from this study, supported by literature showcase that managing technology within high school outdoor education classes remain a challenge. With no set guidelines or rules for educators to follow around the management of mobile phones they are left to decide whether the benefits outweigh the challenges. While some educators use mobile phones as valuable tools others express concerns about their ability to cause distraction and take away from the immersive experiences in the natural world.

In what ways can journey support the learning of mātauranga Māori and the development of bicultural competency? A case study of Haerenga

By Jacob Wright

Purpose

The purpose of this study was to explore the ways in which "journey" can support the learning of mātauranga Māori and the development of bicultural competence. This area of study is significant due to the increased need for educators in Aotearoa to meaningfully incorporate mātauranga Māori into their practice. This research uses Haerenga, a nine-day journey over the Southern Alps, that serves as a keystone component in the Bachelor of Sustainability & Outdoor Education degree. Findings highlight three key pillars of place, time, and community, provide a strong basis for the inclusion of cultural narrative, whakawhanaungatanga, and Māori pedagogical learning theories in the context of journeying.

Methodology

The research question was approached through a post-humanist worldview, reflecting on the interaction with mātauranga Māori as a non-Māori educator. This worldview was selected because post-humanism provides a worldview that allowed to focus on the critical analysis of taken-for-granted knowledge. Data was collected through semi-structured interviews with two past students and two current tutors to capture diverse perspectives. Half the participants were female and the other male. Half of the participants identify as Pākehā, while one identifies as Tauiwi and another as Kiwi, but has both European and Māori whakapapa. While educators a return to the area every year, for students it is the first time they experience haerenga in this format. Therefore, before the interviews, students were asked to reread the journals they wrote during haerenga and then, during the interview, we explored the perceived outcomes of haerenga, with questions focusing on the impact the journey has had on students' bicultural competency development (such as, in what ways has participating in haerenga influences your understanding of place and mātauranga Māori?).

Key Readings

Brown, M. (2012). A changing landscape: Place responsive pedagogy. *Outdoor Education in Aotearoa New Zealand: A New Vision for the Twenty First Century*, 104–124.

Crawford, H. S. (2016). A Pakeha journey towards bicultural practice through guilt, shame, identity and hope. *Aotearoa New Zealand Social Work*, 28(4), 80–88. https://doi.org/10.11157/anzswj-vol28iss4id300

Low, N. (2021). *Uprising: Walking the Southern Alps of New Zealand*. The Text Publishing Company.

Key Findings

- Place as teacher: Nōti Taramakau/Hurunui can act as a co-teacher when engaging with the place on a historical, cultural, and spiritual level. Participants have mentioned that practicing tīkanga, cultural narratives, and place names can generate deep conversations and foster bicultural awareness and competency.

- Time when traveling: Slowing down during haerenga can present a different approach to western, marginalising construction of time within education and aligns with Māori approaches to learning and journeying. Yet, educator-participants identified pressures around curriculum structure, measurable results, and justifications for long periods of time spend away, in the field.

- Community| whakawhanaungatanga: Educators noted that haerenga supported students and tutors to learn and grow within the bicultural space. Thus, greater emphasis was placed on creating open, trusting environments, where learners can be vulnerable and grow together. "We have this space there, for so long and so far away, and we [try to] create this culture... where everyone's happy to share stuff, their insecurities as well as their expertise" (Leopold). Haerenga itself, can support the learning culture and outcomes as it removes people from unhelpful structured that the built environment often creates. Finally, Leopold saw sharing kai, "karakia, singing, waiata, haka, fires/ahi" as integral to the development of community and enhancing one's bicultural competence.

Discussion and Conclusion

Firstly, place has a significant role in learning mātauranga Māori and developing bicultural competencies through haerenga. Nōti Taramakau/ Hurunui was instrumental in this journey for both students and educators. Through physical interaction with this place, participants were better able to understand and relate to the cultural narratives and historical context of the pass

Secondly, the long duration (9-days) and slow pace of haerenga helped participants to build a strong sense of community and opens up space for the employment of Māori world views, ways of knowing, and indigenous learning pedagogies that are not as compatible with the fast pace of their day-to-day learning.

Seasonal employment: Its impact on the wellbeing of adventure tourism employees

By Libby Tyrrell

Purpose

This research aimed to address the issue of high staff turnover in New Zealand's adventure tourism industry by researching impacts of seasonal work on the well-being of adventure tourism employees. While adventure tourism has been well-researched in relation to the customer experiences and sustainability, the literature review revealed a gap in employee's perspectives, especially during off- or shoulder-seasons (Buckley,2011). According to Pearson (2012), seasonal workers prioritise lifestyle over financial stability. The research introduces Self-Determination Theory (SDT), which emphasises the importance of autonomy, competence, and relatedness in relation to wellbeing, which is often impacted by the adventure tourism lifestyle that tends to blur lines between work and play (Ryan & Deci, 2000).

Methodology

A social constructivist worldview was applied to phenomenological methodology, enabling this qualitative study to explore a variety of impacts on well-being in adventure tourism work. Participants were recruited through personal connections within the seasonal adventure tourism industry. They must have worked one New Zealand season, to keep the study locally relevant. Their experience varied, with one participant on their second season, two in their eighth season, and one had completed eighteen seasons. Their roles included ski patroller, ski resort lift assistant, whitewater rafting guide, and whitewater kayaking instructor, with many having switched roles and countries throughout their seasonal careers. Semi-structured, online interviews were audio-recorded and lasted between 45-60 minutes.

Key Readings

Ainsworth, S., & Purss, A. (2009). Same time, next year? *Personnel Review*, 38(3), 217–235. https://doi.org/10.1108/00483480910943304

Carnicelli-Filho, S. (2013). The emotional life of adventure guides. *Annals of Tourism Research, 43*, 192–209. https://doi.org/10.1016/j.annals.2013.05.003

Sharpe, E. K. (2005). "Going Above and Beyond:" The Emotional Labor of Adventure Guides. *Journal of Leisure Research*, 37(1), 29–50. https://doi.org/10.1080/00222216.2005.11950039

Key Findings

- A Blurred Line Between Work and Personal Time: Participants interviews showed a deep motivation and passion towards their work, which in all cases aligned with their personal interests. Thus, common interest enhanced a feeling of belonging and communities amongst colleagues. Additional, work locations provided opportunities for recreation outside the job. Yet, participants also expressed downsides of blurred boundaries when personal time gets lost.

- Personal growth through experience: Participants highlighted great social skills due to consistently changing locations and meeting new people, as well as increased environmental values, self-confidence and adaptability. At the same time, transient lifestyle made it difficult to maintain long-term relationships; resulted in distress due to frequent goodbyes and missing important family events.

- Instability in work and life: Participants expressed concerns about financial stability (e.g., due to weather changes and global events (such as COVID-19). At the same time, employees have high travel and moving costs. Thus, many felt stress and lack of (employer) support.

Discussion/ Conclusion

While seasonal adventure tourism work offers enriched work experience in an area of personal interest and passion, it also entails significant trade-off in financial and social stability. Within this research these trade-offs became increasingly important for participants over time, often leading to leaving the seasonal workforce. Knowing the importance of social connectedness for well-being and that transience impacts the stability of connections, can assist the collective industry in providing additional support for workers as demand drops, and co-workers begin to leave. This may improve staff retention for the following year, consequently reducing the impacts of social instability on seasonal employees.

If you would like to read the full research report, please feel free to email me under: Hannah.Berning@ara.ac.nz

Support for Educators: Resources and Professional Learning

Becky McCormack and Sophie Hoskins

We're here to help you access relevant and effective resources, support and professional learning opportunities. Both EONZ and NZAEE receive funding through the Networks of Expertise initiative, with a focus on peer-to-peer delivery to build capability and support kaiako throughout Aotearoa.

In this section we outline and provide links to the support available from our organisations and highlight some recommended resources to read, watch and listen to.

New Zealand Association for Environmental Education

Visit our website www.nzaee.org.nz to find resources and support for teaching environmental and sustainability education including:

- **Resource Catalogue**
  Find teaching resources for all levels, across a range of learning contexts, with a focus on environmental and sustainability teaching and learning in Aotearoa. You can search using keywords, or use the filters for education level, context and region.

- **Professional Learning Resources**
  Access research, articles, webinars, books and guides to support your personal and professional learning. These are updated regularly and include collections related to current issues or priorities, such as local curriculum and climate education.

- **Providers Database**
  With over 300 listings for organisations, programmes and groups around Aotearoa, you can filter by location and learning context to find support near you.

- **Spotlights: Stories and Curated Collections**
  We also share inspiring stories and highlight providers and resources related to seasonal events and other relevant themes.

- **Events**
  We have a dedicated space to promote events that are relevant for educators, including online and in person opportunities. Please get in touch if you'd like us to share your event (contact@nzaee.org.nz).

To stay in the loop about new content and upcoming webinars or networking events, you can sign up to our newsletter through our website or follow us on Facebook

Education Outdoors New Zealand (EONZ)

EONZ Website

On the recently updated EONZ website, you can access a range of wonderful resources, including: EOTC templates and tool kits; gender equity in the outdoors; materials to support revisioning school camps; video interviews sharing good practice stories; EOTC research; Te Ao Māori; Unit Standard assessment materials; and much more.

Visit https://eonz.org.nz/ to sign up for PLD, access resources, and find out how EONZ can support you with education outside the classroom.

We offer a range of Professional Learning Development (PLD) opportunities including:

- **Revisioning School Camps and DIY camping**
  Our popular 'Revisioning school camps' (RSC) and 'DIY camping' DIY PLD have now been rolled into one PLD package. During the RSC workshop, you will learn about four important concepts that will help your school to develop localised, place-responsive, and student-centred school camps. The DIY workshop brings the ideas shared in the first workshop to life.

- **Mātauranga Māori in Outdoor Education**
  This PLD is for Outdoor Education teachers wanting to develop their understanding of mātauranga Māori. It has a focus on exploring significant local places, their history and pūrakau, along with gaining a deeper understanding of some Te Ao Māori concepts. Support is given to help with planning programmes to intertwine mātauranga Māori and Outdoor Education.

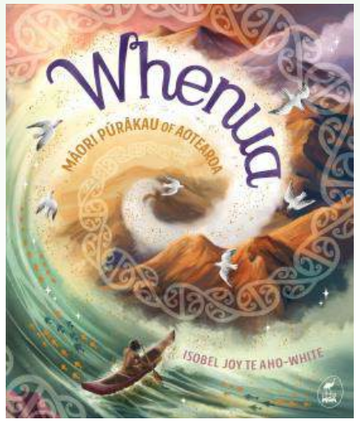
- **EOTC and Effective Safety Management Systems**
  The PLD supports school staff in understanding and implementing good practice processes in EOTC and embedding these processes in programmes and school-wide safety systems.

- **Embedding Good Practice Systems for EOTC**
  This one-day workshop drills down and critiques participant schools' EOTC processes using self-review and the sharing of practice. There is a strong focus on three key areas: Testing your system, refining your system, and supporting your system.

- **Explore more at eonz.org.nz**

Spring and Summer Reading List

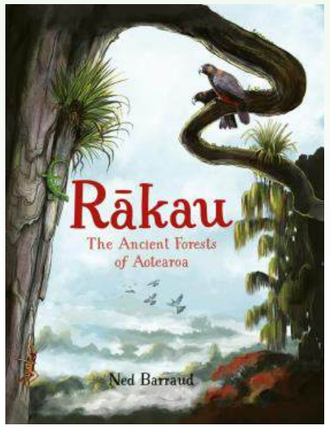
We've pulled together some of our favourite books from this year, including some new books that have just been published this spring. Find inspiration for family gifts or add them to your own stack that's waiting for the summer months! The text provided below is from the publishers' websites, but all come highly recommended from our educators.



Whenua: Māori Pūrākau of Aotearoa

By Isobel Joy Te Aho-White

From sleeping giants to battling mountains, fiery sisters to adventurous trees, dig into Whenua and discover eleven tales of how Aotearoa was formed beneath our feet.Whenua takes readers back in time with each pūrākau, exploring the ways in which Aotearoa's land was formed and introducing children to legendary Māori figures and atua. A beautifully illustrated collection that will delight the whole whānau, from award-winning illustrator Isobel Joy Te Aho-White.



Rākau: The Ancient Forests of Aotearoa

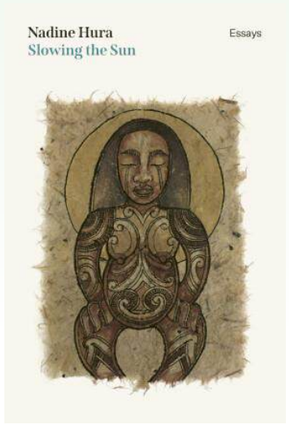
By Ned Barraud

Beautifully illustrated hardcover guide to the evolution, habitats and variety of the rākau (trees) and ngahere (forests) of Aotearoa. Featuring gatefolds and framed by mātauranga Māori and the expertise of curators at Te Papa, Rākau takes young readers from pre-history to the present day. It introduces key species and highlights the significance and use of different native trees and the impact of humans on their vitality.

Ngā Kupenga a Nanny Rina | Nanny Rina's Amazing Nets

By Qiane Matata-Sipu and Isobel Joy Te Aho-White

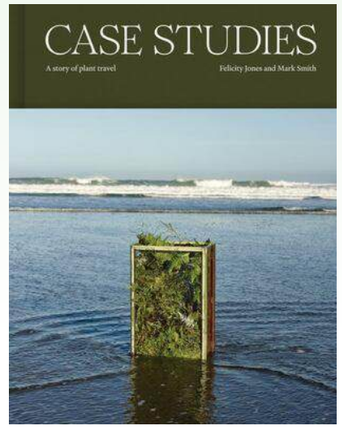
A heartwarming story originated in te reo Māori (and later translated into an English version) about aroha, whānau, passing down traditional knowledge and welcoming in the new year. This delightful story for tamariki includes step-by-step instructions to weave a net. It is written by the award-winning Māori-Pasifika storyteller Qiane Matata-Sipu, and illustrated by the acclaimed Māori artist Isobel Joy Te Aho-White.



Slowing the Sun

By Nadine Hura

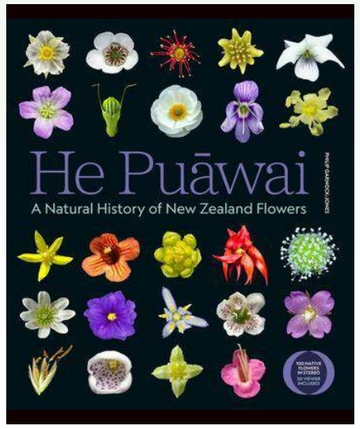
In the midst of grief, Nadine Hura works through science, pūrākau, poetry and back again. Seeking to understand climate change in relation to whenua and people, she asks: how should we respond to what has been lost? Her many-sided essays explore environmental degradation, social disconnection and Indigenous reclamation, insisting that any meaningful response must be grounded in Te Tiriti and anti-colonialism. Slowing the Sun is a karanga to those who have passed on, as well as to the living, to hold on to ancestral knowledge for future generations.



Case Studies: A Story of Plant Travel

By Felicity Jones and Mark Smith

Includes photography and six essays by Gregory O'Brien, Dame Anne Salmond, Luke Keogh, Mark Carine, Markman Ellis and Huhana Smith. This book considers not only the scientific and colonial ambitions that drove botanical exchange, but also its consequences: ecological disruption, the spread of invasive species, and the marginalisation of Indigenous knowledge systems. Case Studies also gives space to other voices — those speaking to mātauranga Māori, to tino rangatiratanga over native species, and to the ongoing work of conservation and reclamation.



He Puāwai | A Natural History of NZ Flowers

By Phillip Garnock-Jones

One hundred native flowers of Aotearoa revealed in extraordinary 3D photography. Each flower's text describes and explains its structure and functions, alongside over 500 remarkable photographs that enable the reader (with the viewer included in the book) to view the flowers miraculously in 3D. For gardeners and foragers, for bush walks and coffee tables, He Puāwai is an inspirational natural history of the native flowers of Aotearoa.

Research News

Check out some of the latest cutting-edge research and news from the Journal of Adventure Education and Outdoor Learning.

Over the last six months, outdoor education research has sparked a wave of new thinking, from campfires and field trips to resilience-building adventures, sustainability in play, and therapeutic programs. These studies highlight how outdoor experiences foster growth, connection, and belonging in ways that classrooms alone cannot. They also reveal the challenges—such as resources, access, and shifting practices—that educators must navigate to keep these opportunities alive. Taken together, these fantastic open-access articles show how over the last 6 months, outdoor education has been evidenced as a vital, evolving force shaping how we learn, live, and care for the world. Enjoy!

Dr David Hills

Sustainability as a relational value in early childhood - the power of nature play, joy and local place identity

Merete Lund Fasting, Jannicke Høyem & Christina Ergler:

This article explores how young children, aged three to five in Norway and New Zealand, express and enact sustainability through nature play, movement, imagination, and emotional engagement—revealing that sustainability should be understood relationally, rooted in embodied and sensory experiences. It argues for a more holistic approach to sustainability, one that emphasizes everyday, bodily interactions with places and the more-than-human world as foundational to children's capacity to act as agents of change.

Exploring teachers' and students' views and experiences of field trips

Raymond Lynch, Orla McCormack, Jennifer Hennessy:

This article investigates both teachers' and students' perspectives on school field trips, exploring how these experiential learning opportunities can bridge classroom concepts with real-world ecological applications, while acknowledging the potential challenges and costs involved. It highlights the contested pedagogical utility of field trips—valued for their ability to connect ideas to ecological contexts, yet scrutinized for logistical and resource-related constraints

Promoting resilience in female youth through outdoor adventure activities: what works, why, and in which contexts?

Rebecca Pearson, Michael Owen, Joanne Inman, Nicola Relph:

This article reports on a realist review examining how Outdoor Adventure Activities (OAA) can enhance resilience among female youth, noting that despite positive impacts, resilience-specific theoretical frameworks for such interventions remain underdeveloped. It finds that the most effective OAA interventions are multisystemic, involve participants within shared social settings, and include components like regular sessions, nature-based physical activity, engaging tasks in remote environments, small female-only groups, and reflective practices

Campfires as aesthetic experience: a time and space to linger and reflect

Hannah Berning, Chris North, Susannah Smith, Te Hurinui Karaka-Clarke:

This article examines the educational opportunities and challenges of including campfires in outdoor education programs, noting that while fire has long been integral to human experience, campfires are becoming increasingly absent from educational settings. Through interviews with educators and students, along with student video logs and researcher field notes from a tertiary institution in Aotearoa New Zealand, it identifies both the potential benefits and practical barriers of reintroducing campfires into outdoor learning contexts

"Helps me reframe some of my ways of thinking": professional and personal learnings of activity instructors immersedin a therapeutic recreation mental health camp

Abigail Leplaw, Stewart Alford & Lorna Moxham:

This article explores the experiences of instructors in Recovery Camp, a therapeutic recreation program for mental health, and how participation enhanced both their professional and personal growth. Four core themes revealed the essence of positive change, demonstrating the program's strong impact on knowledge and skills in therapeutic recreation and mental health. Aotearoa New Zealand, it identifies both the potential benefits and practical barriers of reintroducing campfires into outdoor learning contexts

The Journal of Adventure Education and Outdoor Learning (Taylor & Francis) and the *Journal of Outdoor and Environmental Education* (Springer) are leading international journals that publish rigorous research in this dynamic field. Both journals foster scholarship that not only advances academic understanding but also supports educators, researchers, and policymakers in promoting effective and transformative outdoor educational practices worldwide. Thinking of publishing an article in 2025? Check out the author guidelines for the *JAEOL* and *JOEE* and stay in touch with us for all of the latest research. Written by *Dr David Hills*

CALL FOR ARTICLES

TE WHAKATIKA

The Aotearoa New Zealand Professional Practice Journal for Outdoor and Environmental learning.

Call for Articles: Autumn 2026 Issue

Submissions Open: NOW until 28th February 2026

Articles should be focused on how you and others are learning in, with and for the outdoors | te taiao, which could include stories, research, case studies, innovative resources or pedagogy.

Key Audience: Teachers and educators working in the primary and secondary Aotearoa education sector.

Process

- Fill out the Expressions of Interest form
- Our editor will be in touch to discuss your idea
- You'll get clear guidelines and support to shape your piece
- Submit final article (600—1500 words) with photos

email **editor@eonz.org.nz** or fill in expressions of interest.

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Te Whakatika (formerly known as Out and About) describes the start of a journey (to set out), but also means to make correct (to amend and prepare).
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