# Protecting the nature within: Framing digital-downtime through Western and Indigenous approaches to preserving of nature.

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The role of digital technologies in outdoor and environmental education is contested and therefore educators should carefully consider their inclusion or exclusion of networked spaces. In addition, educators are asked to make their pedagogical intentions visible to students. We ask "How might we include our students in decisions about digital-downtime?" This article takes Western and Māori (Indigenous) approaches to preserving nature and applies them to looking after human-nature (the nature within). Learning lessons from the past about preserving nature offers a way for educators and students to discuss and consider the benefits of setting aside times and places to exclude networked spaces.. Simultaneously these discussions offer students a language and framework to support their intentionality about digital connectedness or disconnectedness in their wider lives.

Key words: Networked spaces, pedagogical decision-making, Indigenous; nature.

## Introduction

Twenty years ago, Higgins (2003) wrote that outdoor educators and leaders must be cognisant of the ways in which their practices are subject to wider societal or structural forces. Furthermore, a wide range of technologies were being "overwhelmingly and largely unproblematically adopted into outdoor education cultures" (Cuthbertson et al., 2004, p. 135). These sentiments were shared by Mullins (2014) who stated that educators should "explore questions related to how different skills, modes of travel, and tools and technologies combine to shape participants' perception of, and impact on, their surroundings" (p. 329). In the intervening years there has been a massive expansion in the use of technology and networked spaces in society. There is also a growing body of literature which debates the impacts of networked spaces on teaching and learning in outdoor education (OE) and how educators might respond. Simultaneously, there is a growing understanding that knowledges from outside the Western world provide valuable insights from diverse ontologies and epistemologies (Macfarlane & Macfarlane, 2019).

This article brings together questions about the use (or exclusion) of digital technologies in OE and draws on Indigenous (Māori) and Western traditions of protecting nature. Nature reserves (as seen in the establishment of national parks) derive from Western traditions and have arisen in response to unfettered deforestation and extraction of resources and are based on protecting nature from human interference. For example, permits are required for any person to cut, destroy, or take any indigenous plants in a national park (New Zealand Legislation, 1980). If humans were seen as part of nature, harvesting plants would be a natural process permitted in protected areas. The separation of humans from nature is therefore foundational in this articulation of land preservation. Rāhui is used by Māori as "A mark denoting a sacred spot, as a burial-place; a mark to indicate that shellfish, timber, flax, or any other commodity in the neighbourhood, is to be preserved" (Whaanga & Wehi, 2017,

p. 104) and is based on kinship between people and nature. These two traditions provide very different lenses to understand our relationships with nature which we apply to our human-nature and the use of digital technology in OE.

We base this article on an auto-ethnographic approach, grounded in our pedagogical experiences. We build on the literature about technology and OE to better understand the influence of networked spaces on the nature within (human-nature). Our intention is to provide educators with some tools to use together with their students to make decisions about targeted exclusion of networked spaces. We start by outlining the divergent positions outdoor educators have taken with respect to networked spaces and technology more generally. We then introduce our positionality as authors before covering the importance of making intentional and informed choices in OE. Examining the strengths and weaknesses of "nature", "human-nature", and Western and Indigenous approaches to preserving nature. Finally, we consider how these might inform discussions about how digital downtime could support the preservation of human-nature.

## Technology and Outdoor Education

Some traditional approaches position OE as detached from the rest of the learner's educational journey and wider life experiences (Wattchow & Brown, 2011). This nostalgic framing sees OE as harking back to a simpler time when people were more connected to nature because they had less technology (Cuthbertson et al., 2004; Neill & Gray, 2011). The use of networked spaces remains contested because of concerns at how these technologies might marginalise human-nature and human–human interactions in the outdoors and stand in the way of a direct and sensory experience of the natural world (Greenwood & Hougham, 2015; Smith et al., 2018). Van Kraalingen (2021) highlights various pitfalls in using networked spaces including technologies becoming the focal point in learning activities, a

decrease of learners' skill development without the use of technology and the interference with learners' direct experiences of nature. All these questions about the use of technology in OE focus on the ways in which technologies may hinder important learning objectives of outdoor education. It follows that excluding devices and disconnecting students from networked spaces would allow valuable learning and ways of being in the outdoors to be experienced in a direct and authentic way.

Others identify how technology in OE has been used very effectively for a variety of learning experiences including skill development (Thomas & Munge, 2017) and connecting with both people and places (Bolliger & Shepherd, 2017). Still others question whether outdoor education can be conducted with minimal or no digital connectivity (Jandrić et al., 2018; Reed, 2021). In fact, the pervasiveness of networked spaces and digital connectivity have led to the term "post-digital society" because there is no longer the need to even refer to "digital" as a descriptor (Reed, 2021). Reed argues compellingly that even if students are not permitted to use digital technology on a field trip, they are immersed before and after OE experiences in networked spaces which inevitably mediate the experience and the learning. Furthermore, whether educators affirm the use of networked spaces or attempt to eliminate them, their pedagogical decisions are still premised on the existence and influence of this technology (Wattchow, 2001). In either case, the networked spaces are determining pedagogical decision-making.

Networked spaces can augment our ability to engage with the learning in OE in a particular way and this inevitably reduces our ability to engage with the learning in OE in other ways (van Kraalingen, 2021). This is true of most pedagogical tools including the learning intentions behind solo time, minimalist approaches and blindfolded activities in OE and we briefly examine each of these. Firstly, solo time is used intentionally to allow a quiet stillness and introspective focus by eliminating interpersonal and (often) also the movement

aspects of OE. The solitude and lack of physical activity promotes reflection and is intended to prompt students to consider some of the bigger life questions which are often drowned out in the busy-ness of social and physical nature of OE (Maxted, 2011). Similarly, minimalist approaches to OE reduce the level of specialised outdoor equipment. OE often inherently supports the purchase and consumption of products already made by others (e.g., high-tech synthetic tents and clothing). Through minimalizing equipment, the skills of crafting can bring about a pedagogy of production (Cuthbertson et al., 2004; Wattchow, 2001), nurturing creativity and independence from industrial systems. Finally, blindfolded activities are used frequently in adventure-based learning to direct attention away from our dominant sense of sight and onto other senses such as hearing. Blindfolding naturally modifies an activity to emphasise listening- a key component of communication.

Similar to these three examples, removing access to the networked spaces will allow a focus on particular elements of OE. Obviously blindfolded, minimalist or solo experiences have not come to dominate OE but rather have become part of the suite of offerings depending on the learning intentions. The chief focus of the literature has now become the implications of technological immersion for learning in OE (Hills & Thomas, 2020; van Kraalingen, 2022). Again, there are a range of recommended approaches to the use of networked spaces in OE which ask educators to consider the affordances that technologies may bring to their pedagogical efforts and not simply eliminate technologies based on uninformed fears (Hills & Thomas, 2020). Van Kraalingen (2021) calls for the OE field to engage with technology in a more nuanced way. We agree and argue that OE should provide a rich range of experiences across the technological spectrum. We focus particularly on the justifications for pedagogical decisions about digital technologies and networked spaces and what benefits might arise from thoughtful, targeted and negotiated exclusion.

### *Defining networked spaces*

This article uses the term digital technologies for devices used for communication, the recording of information and access to online resources (van Kraalingen, 2021; Hills & Thomas, 2020). Digital technologies are part of the sociotechnical systems (Knox, 2019) which have become a significant societal force. The connected nature of digital technologies allows them to create public arenas where collections of people interact in networked spaces (boyd, 2011). While boyd used "networked publics", the term "networked spaces" emphasises the technical architecture as important in the construction of a public (J. Reed, personal communication, September 22, 2022). Networked spaces are now so pervasive they shape society and influence students' experiences of education in ways which Higgins (2003), Cutherbertson et al. (2004) and Mullins (2014) argue is worthy of deeper analysis.

Further complicating the use of networked spaces discussion is that they are not neutral tools but have powerful agendas behind them. For example, there is a massive financial motivation for businesses to gain and maintain people's attention, because rather than the user of the service being the product, the user's attention is the product which is then sold on to advertisers or other buyers. In brief, the social media businesses design their platforms to be addictive (Bhargava & Velasquez, 2021). This is not to suggest that all networked spaces are attempting to attract and retain users' attention to the same degree, but rather that educators should be aware of wider corporate and political currents circulating beneath networked spaces.

Use of networked spaces permeates society, our lives and the lives of our students in education more broadly and outdoor education is no exception. The technology offers opportunities for new and engaging pedagogical approaches and for distraction and complicity in reinforcing addictive behaviours. The question remains as to how educators can respond to the pedagogical decision-making about networked spaces.

### *Approach*

Auto-ethnographic research links personal experiences with larger societal and cultural issues (Carter, 2016). A strength of autoethnographic research its use of evocative accounts to make visible practices and phenomena and thereby challenge assumptions and established ways of being (Goode et al., 2023). However, there is the danger that autoethnographic research focuses overly on the ethnographer, to the detriment of the ethnography (Atkinson, 2006). To avoid too much focus on ourselves as ethnographers, and to link strongly to wider societal issues, in this article, we use our reflections as a point of departure to explore the intersection between students and networked spaces in OE. Our experiences as authors and researchers shape our thinking; from questions, theoretical framings and to proposed solutions. There are challenges in bringing together personal experiences from different cultures, especially when the Western culture has colonised the other creating concerns about appropriation and exploitation (Smith, 2021). We take an approach which is becoming more widely adopted in Aotearoa New Zealand known as the He Awa Whiria (a braided rivers) metaphor (Macfarlane & Macfarlane, 2019). This approach brings together Māori and Western knowledge "streams" into a single workable whole, while at the same time maintaining the autonomy and the integrity of both knowledge streams. We are also drawing from our own cultural backgrounds. To make this transparent for readers, we now identify our positionality in this work and thereby hold true to the centrality of personal experience in autoethnography.

### *Author positioning*

#### *Author 1*

I am a European New Zealander. I find it challenging to have my students use devices when on field trips because I design the field trips to emphasise learning with and from each place

and the people who are present physically. I am grateful that my field trips generally go into areas with no reception and I was disappointed to hear that Starlink will eliminate all gaps in coverage in Aotearoa New Zealand by the end of 2024. My aversion to devices can make me feel uncomfortable even when students use cues and notes on their phones to support their presentations, despite rationally knowing it is no different to using paper notes. I am not completely opposed to networked spaces and have used social media to connect with researchers around the world as well as family and friends. I have used software such as Coaches' Eye ™ for skill development in kayaking, canoeing and rock-climbing courses. In terms of technology as a distraction from being present, I admit that I can get overly focused on taking photos to the point where people have told me that I should live more in the moment and less through the lens of a device. I find photography a more acceptable way for students to use their devices because I think it helps them to look more closely at different elements of places.

*Author 2*

I am a Māori teacher educator and a mindful fence sitter when it comes to networked spaces. This position is the result of having experienced both the advantages and disadvantages of device use on field trips. My most recent approach attempts to implement a protocol developed in collaboration with the learners as to the use of devices while on trips. Of course, this doesn't always work, but it always works better than not having any prior agreement in place before embarking on trips where connection to people and places is a primary goal. This position, on the one hand, is a consequence of having been too heavy handed in the past with rules on device use – with negative results for student engagement. On the other hand, this positioning is informed by experiences where students with unfettered device use may struggle to be present, to engage with people and place and miss the point of field experience

altogether. My connections with my culture's oral traditions help me to unpack difficult concepts with my students through metaphor and meanings behind the oral traditions.

As authors, we are torn between the potential for OE to be relevant and contemporary for our students using networked spaces, and on the other hand, our sense that both students and we (when in networked spaces) are often not fully present with our peers and the places where OE happens. This article focuses on providing some time in OE when we disconnect from networked spaces. To this end, we need to co-construct our decisions about the use of networked spaces with students.

***Articulating our teaching decisions to students***

Hattie (2012) states strongly that visible learning (making it clear what the intentions are for a particular learning experience) is needed so that students can come to be active participants in the educational endeavour. In a similar vein but in teacher education, talking aloud about our intentions in the act of teaching allows pre-service teachers to access the thinking behind the pedagogical decision-making (North, 2020). This approach develops a shared language for discussing professional knowledge more broadly. When we engage our students in the processes behind the decision-making, we also invite them to gain insights into their potential future roles as outdoor leaders and educators. In the case of networked spaces, we agree with the various authors outlined above that networked spaces should be part of the rich and diverse opportunities for learning in outdoor education. We also argue that among those opportunities, there should also be some experiences which exclude networked spaces.

We now draw on the traditions of preservation of nature, which we believe can be used as a metaphor for how we might conceptualise a similar approach for preserving the nature within (human nature). Central to this work is the metaphorical connection between preserving the more than human natural world, and preserving the nature within, which can

be used to promote insights into the benefits (and limitations) of digital downtime. First, we examine the concept of nature, then we look at human-nature and how there are some potential similarities between these terms. Throughout we use the context of Aotearoa New Zealand and both Western and Indigenous approaches.

**Existing approaches to preserving nature**

> The sad fact of New Zealand's lowlands is that they were found, possessed and gutted by a foreign culture at a point in its history when what Thomas Berry calls the mystique of industry entranced it more that the mystique of nature...resulted in unprecedented devastation of natural ecosystems. Only now are those of us who dwell in its aftermath beginning to attach value to the vestiges that survived (Park, 1995, p. 307).

Between 1840 and 1920, European settlers cleared eight million hectares of forest to create pasture for farms (Dawson, 2007). The 1890s saw a particularly rapid period of land clearance, after which people noted the silence that had replaced the previously raucous dawn chorus. Park's quote above reflects the regret at that loss, and the need to care for those forests that remain. The period of deforestation in Aotearoa New Zealand coincided with the emergence of the Romantic movement which advocated for nature as more than a commercial resource or obstacle to development; Romantics valued nature for its spiritual and aesthetic attributes (Thoreau, 1861). The combined impetus of regret at the loss of native forests and the Romantic movement spawned a series of natural and scenic reserves to protect some of the remaining forests. This project of protecting natural areas from exploitation continues and has helped maintain habitat internationally (Vaughan, 2016). The Romantic concept of nature has done some valuable work in this regard.

There are echoes of these same concerns to the use of digital technologies in OE. For example in the sense of loss at the disappearance of people's direct sensory engagement with each other and with the places where we are physically present. These same Romantic ideals

are visible in the desire to protect young people's unmediated experiences of nature unfiltered by networked spaces. Romantics continue to speak strongly for the importance of nature both outside us and within.

There are also significant weaknesses to Romantic framings of "nature". For example, protecting some areas of land can reinforce a dualism which allows humans to simultaneously create national parks and reserves while exploiting, polluting and poisoning other areas (Cronon, 1995; Park, 1995). In addition, the creation of these protected areas also resulted in the interruption of Indigenous practices of harvesting foods and resources. Tragically, the creation of nature reserves saw Indigenous peoples being evicted from their ancestral lands. This was doubly ironic because the presence of Indigenous peoples had frequently helped protect the area. The social injustices perpetrated in the name of preserving Romantic nature are extensive and a naïve romantic view of nature has proven destructive and xenophobic (McPhie & Clarke, 2020; North, 2015). Applying a Western approach to nature preservation to preserving human-nature might well suffer from also creating an unhelpful binary, in that there are times or places where networked spaces are excluded, but outside of these times there are no restrictions resulting in "bingeing". It is therefore worth a closer look at alternatives.

The literature indicates Indigenous cultures around the world hold different views from Romantic Western ideas of nature because many Indigenous cultures view people as part of nature (Fletcher et al., 2021). For example, Sedawi et al. (2021) investigate cultural framing of the term "nature" and "nature-connectedness" for Indigenous Bedoin children who are almost constantly outdoors in their subsistence farming practices. Bedoin children found questions about nature frustrating and confusing because in their lived experiences, there was no concept of a Romanticised nature, only the daily reality of their life. Māori (the Indigenous people of Aotearoa New Zealand) also find the term "nature" challenging because

their origin stories show humans are the result of the procreation act of primordial parents and places humans within the "family" of creation. This relationship with nature has been described as "usness" (Whaanga & Wehi, 2017). From a Māori perspective, it is nonsensical to talk about a "nature" that is separate from the self. In the context of digital technologies and OE, Indigenous views are more aligned with post-digital ideas that technology is around us and a part of us.

There can be a danger of falling into an "Indigenous good, non-Indigenous bad" dichotomy (Zink, 2007). It is important to note that, prior to European arrival in Aotearoa New Zealand, Indigenous people destroyed around 6.7 million hectares of forest which did not regenerate and was replaced by short grassland, shrubland and fern land (Dawson, 2007). However, over the ensuing centuries, Māori developed a more sustainable relationship with the forests which included various protocols including rāhui (temporary restriction on human activities such as harvesting, in order to allow regeneration).

The received concept of nature is problematic for many reasons, some of which have been outlined above. McPhie and Clarke (2020) ask "how can we justify using a concept that has the potential to perform atrocities? And, even if we do excuse the terms of possible oppression, how can we use them as a counter-measure to revive or free-up alternative, less problematic meanings?" (p.1518). Nature as a term is still widely used and appears to have some enduring cultural cache but is rarely unpacked and therefore potentially ripe with opportunities for learning. McPhie and Clarke (2020) encourage others to play with the term nature with learners to ask what the term "nature" can do, and even what it might prevent.

Acknowledging these shortcomings and challenges, but also the possibilities, we pick up the term nature at this point and play with combining it with another term; human-nature. Human-nature is defined as "The inherent character or nature of human beings; the sum of traits, characteristics, and predispositions attributed to or associated with human beings."

(Oxford University Press, 2022). Given the augmented nature of the connected human, this definition does little to provide guidance as to what human-nature is or is not, given our hyper-networked society (Reed, 2021) which blurs the boundaries of the human and the more-than-human. Human-nature is somewhat of a tautology, particularly when many argue that humans are fundamentally natural.

What does combining these two terms offer in addition to the use of the term human? One addition is a view of a human-nature (natural-human) which has been lost and which we wistfully recall. This version provides alluring and nostalgic narrative because we (the authors) do find ourselves worrying about a contemporary childhood dominated by digital technologies. There is some truth in this as evidenced by the increasing rates of mental health concerns associated with the use of networked spaces (Brushe et al., 2022; Griffioen et al., 2021). This narrative pushes towards a "things were simpler (better) when I was a child" trope which has been a common refrain throughout the ages (such as when the printing press was invented). These romanticised versions of childhood may never have existed (Taylor, 2011). Yet we believe that human-nature still has some productive work which it can do. We do spend our lives within our arguably biologically bounded yet interconnected bodies in the more-than-human world. Relevant for this article are the pedagogical affordances of a focus on human-nature. We suggest that opportunities to explore our inner capabilities and capacities contained within our human-natures appear to be fostered through time for reflection without the distractions of networked spaces. These aspects include our capacity to connect with our own feelings, our connections with others who are physically present, and the greater questions about our place and purpose in the non-networked world.

Here we have argued that some of the ways in which we have viewed nature outside of the human body, can also be applied to the human-nature within. Taking a pedagogical turn, we also believe that students and leaders in OE can benefit from discussions based in

the idea that human nature is worthy of preservation. In order to stimulate pedagogical insights, we encourage others to play with ideas such as wifi-wilderness, digital-downtime, and human-nature reserves. Given that an educator may intentionally choose to restrict or eliminate digital technology from a part of an OE experience, a metaphorical connection to nature preservation may enhance understandings and insights for teachers and students. We turn first to a Western approach before looking at Indigenous approaches.

**Nature preservation through National Parks**

In 1980, the New Zealand National Parks Act stated that "Parks are to be maintained in natural state" and that the purpose of national parks was "to preserve in perpetuity for their intrinsic worth and for the benefit use and enjoyment of the public those parts of the country that contain scenery of such distinctive quality, *ecological systems*, or natural features so *beautiful*, *unique*, or *scientifically* important that their preservation is in the national interest" (New Zealand Legislation, 1980, Section 4, Part (1), emphasis added). Some of the benefits of the national parks are so that people "may receive in full measure the *inspiration, enjoyment, recreation*, and other benefits that may be derived from mountains, forests, sounds, seacoasts, lakes, rivers, and other natural features." (New Zealand Legislation, 1980, Section 4, Part (2), emphasis added). There is a focus on preserving "ecological systems" for their beauty, uniqueness or scientific importance, and it seems that this will allow the public to be inspired, enjoy and recreate alongside other (unnamed) benefits. Applying this to our preservation of human-nature, we do see the potential for exploitation, not of the natural resources of an area, but rather of our attention, our mindfulness and our personal information. Similar to the desired outcomes from the National Parks Act, it could be that providing digital-downtime will preserve human-nature for its beauty, uniqueness and scientific importance and thus provide for inspiration, enjoyment and recreation for the

future. While we are uncertain what the scientific importance of "pristine" human-nature might be, we do see parallels between the concerns at the exploitation of nature for commercial gain, and the exploitation of our attention by networked spaces. Holding conversations with students can highlight the strengths and limitations of applying nature preservation to caring for human nature, digital downtime and the benefits that might arise.

Having looked at the National Parks Act which draws on Romantic traditions, and ideals of wild nature which tend to separate people from nature, we now turn to an alternative view through an Indigenous lens.

**Indigenous approaches to protection and restoration**

The pūrākau or the traditional story is a tool for the teaching and transmission of Māori values, culture, language, history and protocols. The following pūrakau is one example of working appropriately with nature:

> Rata decided to build a waka (oceangoing canoe) to help his people sail across the sea because their village was constantly battered by storms. He found the tallest, straightest tree in the forest for the waka, but he forgot to offer prayers to Tāne, the god of the forest, before cutting the tree down. The children of Tāne (the birds, insects and other forest dwellers) were outraged and decide to teach him a lesson.
> When Rata returned for the tree the next day, it was standing upright and magically restored. Puzzled, he again chopped down the tree – and again returned to find the tree upright. So he cut down the tree a third time. He then returned at night to watch what happened, and he saw all the insects and birds putting the tree back together. Rata asked, "What do you think you are doing?" They told him he has disrespected Tāne by not offering incantations.
> Rata was ashamed of his actions and asked for forgiveness. The children of Tāne decided not to punish Rata, because he was trying to help his village, and the next day they carried the gift of a hollowed-out waka to Rata's village. Rata became a respected leader for his community (plot summary adapted from *Rata and the Tree/Rata Me Te Rākau*, 2017).

Rata's pūrākau may be unpacked in myriad ways, but for this article, we consider the pedagogical value for understanding a Māori perspective of the protective and restorative power of rāhui. Rāhui is as much a spiritual restriction as a physical one. In the Rata pūrākau, although there is no suggestion of a rāhui being in place, there are clear spiritual sanctions in effect, with consequences for the failure to be aware of, and responsive to Tāne (god and personification of the forest) and his children (the forest creatures). Rata's thoughtlessness showed a lack of care and respect for Tāne and caused offense. By contrast, the benefits of being mindful of and responsive to Tāne are shown in the gift given to Rata in the form of a hollowed-out waka. This serves to symbolise and elevate Rata's mana (status, power and respect) as leader for his people. The central theme is that human mana and wellbeing are as one with the wellbeing of the environment. The personification of the forest god, Tāne (also an ancestor), means there is a direct relationship with the forest as a being, and a relative. The mechanism for maintaining wellness is the awareness of the "usness" of the environment (meaning our interdependent relationship) (Whaanga & Wehi, 2017)). A rāhui therefore is a set of cultural protocols which allows a period of regeneration for the benefit of the environment and the people (nature and human-nature as one family).

To this understanding of rāhui we now bring the questions: what is a networked spaces rāhui? and what could it offer educators and students? A rāhui on networked spaces may be seen as a specific strategy in the modern context to preserve and maintain mindfulness and responsivity to the environment and to understand our place within it. This is further encouraged through the personification of the environment and can be enacted by asking permission to be in the place and to carry out the planned activities (traditionally through karakia (incantations and/or ritual). From a Māori perspective, rāhui is a protocol with clear political, spiritual, and social dimensions and we explore each of these in turn.

Environmental education has been accused of depoliticising issues (such as protecting nature) by "erasing the political dimension in favour of social cohesion" (Slimani et al., 2021, p. 355). Ignoring political dimensions leaves students with the mistaken belief that conflict between diverse belief systems are best avoided in the interests of getting along harmoniously. Instead, dialogue which reveals different ideologies and values is critical to becoming active citizens who are versed in democratic and political processes (Slimani et al., 2021). Because rāhui articulates a clear political dimension, rāhui directs educators and students to exercise their agency and make use of technology in ways that are appropriate to their contexts. This should be a collaborative and empowering process of setting ground rules and protocols for a particular experience, with a particular group of students in a particular place. Awareness of the political dimension of rāhui could also foster a critique of the agendas of corporations behind networked spaces and potentially lead to more conscious decision-making regarding device use (or restriction) beyond the context of OE.

Spirituality is central to Indigenous health and wellbeing because, according to Durie (2013):

> [there is a] spiritual element that connects human wellness with cosmic, terrestrial and water environments. A central element of indigeneity is the close association between people and their accustomed environments – land, waterways, the air, beaches, harbours and the sea, native flora and fauna. Good health is compromised where there is atmospheric pollution, contaminated water supplies, smog, random mining activities, or commercial developments that exploit the land they cover; or where access to traditional sites is barred. (p. 197)

In the context of rāhui, the spiritual dimension accepts that all things are connected and therefore the unconscious abuse of one part of natural world (including ourselves and our bodies) will have implications for all other parts of nature (as with Rata's act of removal of a tree from the forest). As Durie (2013) notes, exploitation or contamination of nature can

result in reduced wellbeing. When we consider humans as part of the environment or nature, then we can also consider how networked spaces can at times work to contaminate our human-nature which in turn compromises our health (Brushe et al., 2022). Creating some digital-downtime through a rāhui can likely promote spiritual renewal and refreshment.

The social dimension of a digital rāhui will require careful thought about which social skills or abilities are enhanced or diminished through restrictions placed on networked spaces. For example, networked spaces allow for communications with friends and relatives who are further away to keep a sense of family connectedness and may reduce homesickness (Neill & Gray, 2011) and anxiety (Reed, 2021). On the other hand, connecting with those further away raises concerns about the ability to connect with the people who are present here and now (Hills & Thomas, 2020; van Kraalingen, 2021). The concept of rāhui challenges educators to consider these three dimensions carefully along with their students and to develop bespoke solutions together.

**Bringing together the Western and Indigenous braids of knowledge**

He Awa Whiria (the braided river) is a metaphor for bringing together different knowledges to inform each other. The cultural frameworks that led to the National Parks Act (1980) and to the concept of rāhui are exemplified in a more recently established national park based on the bicultural treaty between British and Māori partners. Providing a more contemporary view, the Te Urewera (area of land) Act (New Zealand Legislation, 2014) offers an alternative lens into protecting a cultural and ecological landscape with the local tribe, the Tūhoe:

> The purpose of this Act is to establish and preserve in perpetuity a legal identity and protected status for Te Urewera for its intrinsic worth, its distinctive natural and cultural values, the integrity of those values, and for its national importance, and in particular to—

> (a) strengthen and maintain the connection between Tūhoe and Te Urewera; and
> (b) preserve as far as possible the natural features and beauty of Te Urewera, the integrity of its Indigenous ecological systems and biodiversity, and its historical and cultural heritage; and
> (c) provide for Te Urewera as a place for public use and enjoyment, for recreation, learning, and spiritual reflection, and as an inspiration for all. (New Zealand Legislation, 2014, Section 4).

Although the term "natural" is still present, important differences are evident in this newer articulation of land preservation. In particular, the addition of "strengthening the connection between the tribe and their lands", the emphasis on historical and cultural heritage, indigenous ecosystems, and spiritual reflection are significant. The Western wording of both the 1980 and the 2014 Acts emphasise preservation for future generations and for nature to be given a permanent space to exist without undue human interference. The permanence of the words "in perpetuity" reflect concerns about the rapacious appetite of people for the resources of natural areas; concerns which continue to be expressed (Watson et al., 2018).

Having unpacked the evolving ideas about land protection we now shift these ideas to digital technologies and human-nature. Again, inviting students to see the metaphorical connections between protecting natural areas, and protecting the nature within from exploitation, could be used to facilitate discussions about our use of networked spaces. Questions we pose include what might it mean to preserve human-nature for its "its intrinsic worth, its distinctive natural and cultural values, the integrity of those values"? We see some potentially fruitful areas for consideration around the cultural connections between people and the land, and the spiritual reflection which might be enabled through digital downtime. We also see opportunities for students to think about connecting with their own human-nature which may be hidden by the overwhelmingly outward-facing networked spaces. However, the wording of these Acts presents some challenges in transferring to networked spaces as "perpetuity" fails to recognise any good that might come from the use of technology. This

complete disconnection from networked spaces will eliminate many pedagogical or other affordances. A hierarchically imposed restriction may reinforce unhelpful binaries whereby during digital downtime students come to view unlimited access to networked spaces as more desirable in their own time. Unpacking these questions with students in the context of learning asks them to consider "what is lost and what is gained from this digital downtime?", and secondly, "what is highlighted and what is hidden by applying ideas of land protection to human-nature and digital technologies?" We see these lines of enquiry being productive in the project to understand what work that the framing of the elimination of digital technologies in OE though ideas of land protection could do and what it could prevent. We return to this in the implications section.

***Summary of findings***

Western-based approaches to nature preservation are often established through a hierarchical legal system, enacted through acts of law. By contrast, Indigenous approaches to preservation are based in oral traditions. While the Western system of land preservation is inherently a political process, often achieved through protests, activists and advocacy, from a distance it can look like a disempowering process whereby a decision has been made, and there is an expectation that the public will comply. In the context of networked spaces in OE, there will be times and places where clear expectations about mobile device use are made by programme leaders or educators and these expectations are communicated to students. This can reduce the agency of students to either following the expectations or complying. However, the political elements of this system are often hidden, resulting in critiques that education does not prepare students to be politically active (Slimani et al. 2021).

The example of rāhui based in a Māori approach, is built on oral traditions which are often metaphorical in nature and require unpacking and application. This process should

acknowledge the political, spiritual and social dimensions of the relationship with the environment. The concept of “usness” (Whaanga & Wehi, 2017) offers an empowering approach to developing shared protocols particularly for longer programmes and for those working towards becoming outdoor educators themselves.

The Te Urewera Act was based on a Western approach to nature protection through the creation of national parks and modified by the Indigenous people’s approach. For some this may appear an awkward melding of two disparate worldviews which ultimately does neither justice. We see this blending as somewhat clumsy, but a necessary part of working through what it means to bring together knowledge systems in a Western legal system. The same is true of our use of digital downtime, we will need to bring initial solutions which are likely to be somewhat clumsy. We believe that this work has important implications for outdoor educators.

## Implications

The concerns that initiated this article were raised by Higgins (2003), Cuthbertson et al. (2004) and Mullins (2014) who asked that we be alert to the ways in which our practices are influenced by wider societal changes, and who also noted that we often unproblematically adopt technologies into OE. This article has drawn on our personal experiences and the tensions we experience in our OE contexts to highlight some of these influences and we hope prompted educators to be more aware of the implications of networked spaces in OE. We argue that discussions of the pedagogical decision-making about the inclusion or exclusion of networked spaces should become an integral part of OE programmes. One way to frame up these discussions is to examine the ways in which people have protected nature and apply this to protecting the nature within (human-nature). We now identify three key implications of this work for exploring decision-making with our students.

First, Western approaches to the protection of nature such as national parks seek to exclude human interference for a range of benefits including the distinctive quality and beauty of these places. Transferring this approach to human-nature in discussion with students might support the decision to have some digital downtime to protect the distinctive quality and beauty of our human-natures. Also worthy of consideration are the temporal dimensions of these acts (in perpetuity). The articulation of these benefits brings students into the discussion so they can consider the affordances and limitations of this approach for their own learning. Students are then better able to focus on the types of learning that digital downtime promotes, including ideas of greater connections with self, other people and the place. Simultaneously, students and educators can think more carefully about the use of networked spaces, the types of learning that these offer and when to make use of these affordances.

Second, the Māori use of rāhui adds strong political dimensions to nature preservation. Choosing to exclude networked spaces for a period could be considered as an act of political agency and enacting our "mana" (power) over our own human-nature. An approach that considers political dimensions will allow students to understand that many networked spaces have economic and political agendas which seek to exploit their information and harvest their attention for commercial gain; something which is often not well understood among our students.

Third, in understanding digital downtime as a collaborative, conscious, inclusive action, teachers and students could apply this approach and the shared language to their own lives and be more intentional about how and when they use networked spaces. In the New Zealand context, rāhui creates a space for an informed pedagogy underpinned by a Māori perspective of humans as being part of the environment and not existing as separate from it. Furthermore, the personification of nature suggests that students and educators could ask

“how would these places (mountain, river, beach, urban, rural area...) like me to interact with them?” Similar to human-to-human encounters, long periods of intense connection are not necessarily ideal for everyone, however, to offer our full attention to a friend is a sign of respect and which is best achieved without the distractions of networked spaces.

We are not suggesting that Māori or Western approaches to digital downtime should be adopted in diverse contexts around the world as this could be considered colonisation or appropriation (Smith, 2021). Rather, we hope that this work will inspire OE leaders and educators to draw on their own cultural backgrounds to share their intentions for the OE experience, and invite their students to consider how best to achieve these intentions either with or without the use of networked spaces.

## Conclusion

OE has a history of adopting new technologies without due consideration of the benefits and drawbacks (Cuthbertson et al., 2004; Higgins, 2003; Mullins, 2014). Effective pedagogy requires educators to make intentional decisions and, importantly, work with our students to understand the justifications for these decisions (Hattie, 2012). To justify and articulate the decision to exclude (for a targeted period) networked spaces from OE, this article has drawn from Western and Indigenous approaches to preserving nature. Considering that humans are part of nature, nature must therefore exist within us as seen by the term “human-nature”. Based on this rationale we invite learners and educators together to ask what the term “nature” can do, and even what it might prevent as recommended by McPhie and Clarke (2020). From a Western perspective, the National Parks Act is hierarchically defined and sets out clear ideals about preserving areas in their “natural state” and fostering greater connections with self, other people and the environment. Restricting access to networked spaces allows us to use our biological senses to connect to the people and the nature which

are physically present. Western approaches also emphasise that these restrictions should exist in perpetuity. An Indigenous (Māori) approach to preservation (rāhui) adds political, spiritual and social dimensions which highlight the importance of using our agency to actively decide when to use networked spaces, rather than unproblematically adopting or rejecting networked spaces. We see some restrictions on access to networked spaces as an important part of OE offerings, however, we do not argue for their wholesale exclusion; the growing body of evidence highlights the benefits of networked spaces for students and their learning. By exploring these concepts with our students, we hope that they can be better prepared to make decisions about their use or non-use of networked spaces in other aspects of their lives.

History shows repeatedly how our thoughtless actions have resulted in the extinction of species and destroyed ecosystems and it is only with hindsight have we come to realise the value of what has been lost. Our internal nature (human-nature) is potentially also vulnerable to exploitation through networked spaces and the powerful extractive industries that vie for our online attention. As educators, we have benefitted from examining how Western and Māori cultures have attempted to protect nature and considering how these might transfer to protecting our human-natures. We encourage other educators to work with their students and draw on their cultural traditions to consider these approaches might be applied to networked spaces in OE. This work is critical as we collectively become more aware of the influence of networked spaces on learning in OE and in society more generally.

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