

This file was dowloaded from the institutional repository Brage NIH - brage.bibsys.no/nih

Quay, J., Gray, T., Thomas, G., Allan-Craig, S., Asfeldt, M., Andkjær, S., Beames, S., Cosgriff, M., Dyment, J., Higgins, P., Ho, S., Leather, M., Mitten, D., Morse, M., Neill, J., North, C., Passy, R., Gurholt, K. P., Polley, S., Stewart, A., Takano, T., Waite, S., Foley, D. (2020). What future/s for outdoor and environmental education in a world that has contended with COVID-19?. *Journal of Outdoor and Environmental Education (JOEE)*, 23(2), 93-117.

Dette er siste tekst-versjon av artikkelen, og den kan inneholde små forskjeller fra forlagets pdf-versjon. Forlagets pdf-versjon finner du her: http://dx.doi.org/10.1007/s42322-020-00059-2

This is the final text version of the article, and it may contain minor differences from the journal's pdf version. The original publication is available here: http://dx.doi.org/10.1007/s42322-020-00059-2

What future/s for outdoor and environmental education in a world that has contended with COVID-19?

Abstract

This is an unusual article in that it brings together the perspectives of many on this journal's editorial board, around the issue of contending with COVID-19. Twenty statements showcase a range of thoughts and experiences, highlighting the differences and similarities in the way the pandemic is impacting on the educational practice of outdoor and environmental education. The future is not yet written, of course, so it is worth thinking about how the current moment may impact on the months and years to come. The aim of this article is to influence and support such thinking.

Keywords: COVID-19; futures; perspectives; world; effects; impacts.

Introduction

The COVID-19 pandemic has had dramatic impacts across the world. The illness and death, the fear and trepidation, the domestic violence, the economic misery: the pandemic has had some very drastic and tragic consequences. For some the isolation has been disastrous, for others it has been a welcome slowing down of life and a chance to reconnect with aspects of living that seemed unachievable beforehand. The effects have not been equal.

For many involved with outdoor and environmental education the pandemic has been particularly difficult, with lockdowns meaning that programs have had to be cancelled, and in many places these lockdowns continue. But what does this all mean for the future of outdoor and environmental education? What are the possible futures that can be imagined once the pandemic has subsided? These questions cannot, of course, be separated from present experiences of the societal impacts of COVID-19. These are continually changing.

With this conundrum in mind, the editorial board of JOEE decided to call for personal statements from its members which responded to the title question above, in a maximum of 500 words; this was the extent of the instruction. Each statement is a short reflection, so that together the range of views proffered could provide a snapshot of perspectives from around the world. The international spread of the JOEE editorial board means that there are responses from Australia, Canada, Denmark, Japan, New Zealand, Norway, Singapore, the United Kingdom and the United States.

The responses are presented in alphabetical order, by way of the first author's surname. This was done because it offered a simple way of organising the contributions. The intention was not to categorise and analyse these statements, but rather to let them speak as the position of an author, expressed at a particular time and in a particular context.

When the mountains can't speak for themselves

Much has been written about how the world will be different post COVID 19, but for those whose passion is outdoor and environmental education, perhaps the most worrying concern will be if the world is not different, if we just end up reverting to the way things were. Will we talk about these times as a momentary "glow," where the non-human world has had a chance to breathe? Or will this be an opportunity for a different world for all living things?

Educators have been asked to re-invent our teaching and our courses. As educators, we have adapted creatively in the online world and our students have achieved the learning outcomes. The program costs were minimal and the risks almost nil. We have delivered in-depth and comprehensive content. And let's face it, we haven't missed the endless paperwork and risk assessments and lying awake the night before a fieldtrip listening to the wind howling and knowing that at first light we will have to make changes.

As outdoor and environmental educators who have had to modify and re-think our face to face classes and field work, there has been opportunity to refocus our attention closer to home. Our virtual field work has explored the nooks and crannies of our local terrain. For many it's a new discovery of local parks, beaches, trees and wildlife. No more endless miles and energy spent getting to the national parks, the distant mountains or the coast and surely there is value and learning to take from this.

But things in this virtual learning world are not quite right. There's no joy of learning. There's no "light bulb" moments nor witnessing of awakening when skills, knowledge and experience all come together to offer real life learning. It lacks the constant dialogue, chatter, the jousting of ideas, the growth, support and care. These couldn't penetrate the firewalls of our online worlds.

In the days to come we will be asked to justify the power of experienced based, student centred learning in natural environments. We will acknowledge what we've learnt from our online journey and we will put it to good use. Our pre-trip work content and front loading will be more purposeful, freeing up space for 'place', the adventure, the lived experience and the chance to be present, with their community, oneself and the natural world.

Our students say they feel imprisoned and have had enough of this virtual world. They want to jostle, laugh and hug their friends. They want to *feel* the presence of their class mates, the paddle in their hand and the tug of the wind. They want the real learning that occurs as it's lived in the moment *with others*. This is our post COVID 19 challenge: to ensure that outdoor and environmental education is not relegated to the virtual world, disconnected from mountains and forests, the natural tangible places where palpable learning can occur, where the mountains can speak for themselves.

Post COVID outdoor education: forwards or backwards?

As with many outdoor educators, I have devoted my career to providing students with rich outdoor learning experiences, primarily via expeditions. This has been a rewarding and challenging experience. In the Canadian post-secondary sector, outdoor education (OE) is a young discipline. The pioneers of OE in Canada, and globally I expect, are often motivated to create and build OE programs because they have experienced the powerful learning that can happen in well-designed outdoor experiences that engage students in holistic and purposeful learning. At their root, I believe OE programs are effective because they embrace good teaching practices (Asfeldt, Hvenegaard, & Purc-Stephenson, 2018); OE is not innovative, it is just good teaching.

One potential side-effect of COVID is that it may force a critical rethink in universities of the accepted rhetoric of innovative-active-engaged-learning that has been commonly embraced as achievable online. As we are forced to teach remotely, the strength of well-designed face-to-face teaching often seen in field-based OE (such as strong student-faculty connections, immersion in

the content and learning process, engagement in local environments, students seeing the relationship between what they are learning and their present and future lives) may be recognized and appreciated, and the shortcomings of online teaching highlighted.

In addition, COVID is also forcing universities to re-examine their budgets. In my situation, OE has been perceived as "expensive" because we take students off campus. Ironically, as we examine our budgets, we have realized that some non-OE courses are taking students on one day field trips for the same cost as taking 20 students on a 7-day OE experience. This may be an opportunity to debunk the cost myth.

On the downside, if faculty do a great job of online learning, it could be the demise of OE and other experience-based pedagogies. If universities can build a case that online teaching is as effective as in-person teaching, they stand so save millions of dollars by not having to build and maintain teaching space, faculty offices, and labs. While there are faculty who provide effective online OE learning experience (primarily at the graduate level, I think), it is difficult to imagine effective online undergraduate teaching where we are providing foundational experiences and knowledge (Smith, Dyment, Hill and Downing, 2016).

Having "paddled upstream" to build and support OE in post-secondary education, I hope that we can use the COVID experience to enhance OE. Therefore, I encourage us to watch for opportunities to demonstrate the power of traditional, expedition-based, OE practices and highlight the benefits for students. In this time, highlighting benefits related to wellbeing and mental health resulting from spending time outside in social learning situations might be particularly beneficial.

A Norwegian and Danish perspective

During the COVID-19 "lockdown," anecdotal reports and state media indicated that many Scandinavians had taken additional opportunities to recreate and exercise outdoors. While this may be the case, other reports have expressed concern for citizens who have not been able to access green spaces, and who have been living in close quarters with large groups of relatives (Reuters, 2020).

Norway's *Children living in poverty* strategic document (2015) highlights how children from 'an immigrant background now make up over half of all children in financially vulnerable families' (p. 14), and 'generally participate much less in traditional Norwegian leisure activities' (p. 14). The research in Denmark is similar, with studies showing that citizens with lower educational backgrounds are less active in sport, and that adult immigrants are less active in friluftsliv when compared to adults born in the country (Schipperijn et al., 2010). Norwegian and Danish state policy has promoted 'friluftsliv for all' as a means to addressing issues of equalities and diversity. An extended review of literature reveals an under-researched area of study featuring widespread environmental inequality, with lower income and minority groups much less likely to use greenspaces for recreational purposes.

Globally, we know that outdoor recreation practices are strongly linked to positive mental and physical health outcomes. Indeed, a 2019 paper in *Nature* concludes that a growing body of evidence strongly links greater contact with natural environments to better health and well-being (White et al., p. 1). The paper strongly connects the benefits of living in greener areas with lower

probabilities of cardiovascular disease, obesity, diabetes, mental distress, and higher levels of self-reported health and well-being.

History tells us that pandemics hit society's most vulnerable citizens the hardest, and it is no surprise that COVID-19 has disadvantaged people in countries without a social welfare safety net, and in countries where there is no universal health care. While Scandinavian governments have a reputation for providing for their citizens, reports are emerging that show how the influence of COVID-19 in Scandinavia is racialised and linked to lower socio-economic power (see for example, Reuters, 2020). While friluftsliv has been historically distinguished by the Scandinavian cultural feature of free public access to private and public land¹, important discussions need to be had, and subsequent actions taken, to address the socio-cultural and economic barriers that co-exist with the 'friluftsliv for all' policies in Norway and Denmark.

An international think-tank recently highlighted how existing 'inequalities in the uptake of ecosystem services' and the 'unequal socio-spatial distribution of urban green space' will likely be exacerbated by the Corona lockdown (Barton et al., 2020, para 4). It seems clear that the Corona pandemic has amplified existing patterns of inequalities in use of the natural outdoor spaces. We support a growing chorus of calls for research to investigate the ways in which certain socio-cultural factors have enabled or constrained the ability of specific populations to access nearby natural spaces, and the health benefits that come with them.

Aotearoa New Zealand amidst a pandemic lockdown

The nationwide level four lockdown response to COVID-19 in Aotearoa New Zealand began one second shy of midnight on Wednesday 25 March, 2020. Other than for "essential" workers and services, the government message to our so-called "team of 5 million," was to "stay home in our bubbles," and to "be kind." ² Amidst the upheavals, uncertainties, and the blanket of silence (and for some, birdsong) that descended on many urban neighbourhoods nationwide, it became apparent that the ripple effects of COVID-19 were being experienced very differently in different communities. Some, like myself, have been privileged enough to retain employment, blending home and work lives in generally manageable ways. This has meant maintaining "socially distant" activity in local neighbourhoods (many blessed with access to beaches and parks), all the while knowing that whanau (family) were safe. Others, both here and internationally, have experienced the opposite on a scale that is hard to fathom.

For me, any re-imagining of possible futures for outdoor and environmental education in a world contending with COVID 19 must necessarily keep in sight the understanding that this has been a deeply personal experience. However it has also been firmly enmeshed in longstanding social, political, ecological, and economic conditions and inequities. If I had just one proposition to offer about the futures of outdoor and environmental education, it would be that I/we work steadfastly in our own backyards to eschew understandings and practices that are blind to the social, health, economic and environmental disparities that have been further escalated by this pandemic.

¹ Land access is managed differently in the three Scandinavian countries

² In Aotearoa New Zealand, a four level response to COVID-19 was implemented nationwide by the Government. On May 29, 2020 we remain in Level 2. For details about what life has 'looked like' for New Zealanders, see https://covid19.govt.nz/

Looking forward, I'm not exactly sure what this might mean for my professional practice. I suspect that some questions have become even more important: about who we are working alongside (students, colleagues, peers), and what grappling with COVID 19 has meant for their individual and collective sense of who they are *and* where they are. And in addition, how are the lands, seas, trees, and other more-than-human entities and elements we are entangled with in outdoor and environmental education – our version of "essential" workers and services – part of these conversations?

One thing that has struck me over the past two months in my own neighbourhood is the sense of wellbeing, sustenance, and enjoyment that I and others have drawn from simply being able to be out and about: in-place(d), and sometimes making a contribution to, local communities and environs. Little to no cost or 'footprint' involved, and firmly grounded in the places and beings around our doorsteps. Maybe this is suggestive of the first steps I'll take in moving forward.

Leadership in a pandemic: brave work

In 2019, I made the big decision to return "home" to Canada after 20 years of living in Australia. Personally and professionally, the timing was right. So I took on the role of leading a School of Education. When my job started in January, I was delighted that it was so easy to find resonance between leadership applications in OE and teacher education.

The arrival of COVID-19 changed my job in profound ways. I was tasked with supporting my new team to move to remote delivery, in a liberal arts university that prides itself on having small oncampus classes in sandstone buildings. I had to move away from being a leader committed to long term visionary and purposeful planning to more immediate crisis management. This shift was supported by the countless crisis moments in my OE career — be it near drowning incidents on northern Canadian rivers; to broken legs in remote Tasmania; to suicidal ideations from students in urban contexts. I'd like to comment on the three leadership attributes from OE that have left me in good standing in this new role.

First, I have gotten very good at planning for uncertainty and for worst-case scenarios. For my school, this means imaging this university offering everything in a remote mode, while awaiting instructions from our province and senior administrators. I'm having to plan and lead when I don't have all the information I need. Planning for uncertainty also means expecting the unexpected and priming myself for surprises. I go into my day thinking that there will be something that happens that I have never dealt with before. This mindset helps me become calmer in a crisis because the surprise doesn't cause as much stress. I find my calmness helps others be calm and leads to less anxiety and overall panic.

Second, I practice overcommunicating with empathy and clarity, something I did regularly in OE crises. I have set up regular communication practices with all the stakeholders in my work. This practice has been tricky at times, yet I find that everyone is looking for direction. This type of communication reminds me of my communication strategies when I have been managing a crisis in outdoor education contexts. Clarity and empathy in and around what is known and unknown (and being transparent in both) has been vital.

Finally, I am reminded of the power of being a leader who is bold and brave and willing to make tough decisions. These skills, too, were called on regularly in my OE crises times.

Suffice to say, I'm grateful for the OE experiences that I leaned into during the first few months of meeting my team and beginning my six year term. Although I never thought I'd say this, I'm also deeply indebted for the crises I have navigated as an outdoor educator and the ways in which these experiences have informed and strengthened my COVID-19 response.

Navigating unchartered terrains

This wasn't the 2020 most imagined: devastating droughts, climate-induced bushfires, and currently the COVID-19 pandemic. The latter has crippled economies nationally and globally and given rise to myriad societal transformations (Australian Government Department of Health, 2020). In Australia, the poor, marginalised and vulnerable are most at risk. Working collaboratively, listening to scientists and valuing health experts, our nation averted the health disaster – for now anyway. Some countries fared better than others which begs the question *Why the disparity and what can we learn?* Nations already experiencing a state of dissonance and decline, did not navigate COVID-19 well. As American journalist George Packer (2020) reported, "Coronavirus did not break America. It revealed what was already broken."

Countries traversing the COVID-19 crisis with finesse have something in common: they "demanded a response that was swift, rational, and collective" (Packer, 2020). Lessons learnt during the pandemic are pertinent to the philosophical and operational underpinnings of outdoor and environmental education (OEE). Recovery post-COVID-19 will be inextricably linked to reclaiming our resilience, adaptability and humanistic skills. These attributes are not only tantamount to OEE's realization, but skills required going forward.

Humanity and natural world

Amidst any crisis we must "change the way we live and relate to both the human and non-human world ... we need to reimagine and respect the things we value" (Dunn, 2019). During these tumultuous times, we should prioritise people and planet above profit. The mantra for OEE is building relationships with self, others and the natural environment. This must come to the fore. During lockdowns we saw oil prices drop, airplanes sit idle on tarmacs, water and air pollution at all-time lows. We witnessed how easy restoration of natural ecosystems can be, and the planet rejoiced. Humanity stands at a crossroad; we have deluded ourselves into assuming human progress and civilization depends on dominating and transcending nature.

Leveraging outdoor learning

Epidemiologists learned that Coronavirus does not last for extended periods outdoors. Danish schools returned in April after lockdown with recommendations to "hold classes outside so that children can be outdoors as much as possible" (Mulvahill, 2020). In Scotland, the pandemic may "push parents and teachers to embrace the benefits of education in the outdoors" (Brooks, 2020). OEE must seize this global momentum towards embracing outdoor learning and leverage the "sweet-spot" to help politicians, policy-makers and key stakeholders become aware of our modus operandi. Failing to capture this opportunistic moment and advocating for OEE, we fail to leverage this historical event for the betterment of our future.

Our blind spots

Data exists about Coronavirus, but little explores the impact on First Nations communities. Indigenous communities, especially those in remote areas, are at greater risk due to high rates of underlying chronic disease, overcrowded housing, and under-resourced health services, exacerbating COVID-19. It is imperative our profession looks beyond our White privilege to truly

see how this pandemic affects people from radically different life backgrounds. Moving ahead, OEE needs to widen its aperture, see through a renewed lens, and acknowledge the diverse human-nature perspectives COVID-19 has afforded.

Waddayaknow ... kids *can* learn outdoors - when they have to! The role of outdoor and environmental education in supporting "blended" and "hybrid" learning in Coronavirus recovery in Scotland's schools

Sitting in my garden, and uncharacteristically for Scotland, in warm sunny weather, it is difficult to imagine that seven months or so after the Coronavirus outbreak started, Scottish schools will return in August; fundamentally changed. Classes have been cancelled, exams too, and after at least a decade of trying to get kids "off their screens" learning has become primarily on-line. It may be that we have all had enough of being in "lockdown" and working on-line, but people seem desperate to "get out" into the garden, countryside or beach, This may be a factor stimulating interest in the role outdoor learning can play in post-Coronavirus school recovery. Whilst "social distancing," class sizes, limitations of the school estate, etc., may be driving factors, interest in outdoor learning amongst policy makers is palpable, and there is growing recognition of its potential learning, health and well-being benefits.

The Scottish Government and previous administrations have supported policy development in learning outdoors, as an "entitlement" for all learners in two key policies. The national curriculum (Curriculum for Excellence, CfE) has specific guidance outlined in "Curriculum for Excellence through Outdoor Learning" (Higgins and Nicol, 2018); and "Learning for Sustainability" (LfS) brings together education for sustainable development (ESD), global citizenship (GC) and outdoor learning, as an entitlement of all learners and a requirement of all teachers (Higgins and Christie, 2018). Scottish Government commissioned research has recently highlighted the broader educational benefits of LfS, and specifically the role of outdoor learning (Christie and Higgins, 2020). There is also significant policy commitment to the value of the growing network of outdoor nurseries.

In the short term it seems that schools will be encouraged to pragmatically "take learning outdoors"; with some support available through enlisting outdoor professionals and some funding. However, if schools are to flourish in the "new normal" and learning outdoors is to be respected for its contribution, there are several issues policy-makers, teachers and academics might consider:

- What are the long-term educational benefits of (and limitations to) learning outdoors?
- How can outdoor learning support the curriculum, and at the same time compensate for and challenge its limitations (e.g., in areas such as interdisciplinarity, critical thinking)?
- Can a model of local outdoor learning support a greater sense of community in schools and beyond?
- What are the longer-term benefits of school-based outdoor learning on health and wellbeing?
- Can outdoor learning help learners and their communities to develop a thoughtful national identity, grounded in place?
- How can this sense-of-place help learners to understand, commit to and act to address the twin climate and biodiversity emergencies?

Eisner (1985) famously pointed out that that the "null curriculum" is tricky to address, as by definition people cannot see what is missing. The "outdoors" has long since been such, and as

schools move towards "blended" and "hybrid" learning (conceptualised as in-school and on-line), it seems pertinent to argue for the outdoors to be added to the "blend" – not simply to respond to Coronavirus, but because it is in the long-term interests of learners, and the planet.

A lesson on what matters most

In Singapore, the character and citizenship education (CCE) curriculum has been the mainstay of its education system. It articulates a set of socio-emotional competencies and national values that are being taught over time (Ho, 2014). The COVID-19 situation presented itself at the dawn of a refreshed CCE curriculum and put to the test the nation's years of values and citizenship inculcation. The emergence of the COVID-19 crisis has brought to the fore the values and attitudes of Singaporeans and put us in a hurry to navigate a new normal, from how we teach to how we interact and function as a society at large.

How the nation responds to the crisis is indeed a litmus test of its character and whether the CCE curriculum has indeed been effective. COVID-19 is an opportunity for us all, especially in education to reflect more deeply about curricular content and pedagogies that influence humanity. Well-being literacy and e-pedagogies are just two of the many that come to mind.

Moving forward, blended learning approaches would be more prevalent in a post- COVID world, even for outdoor education that used to be assumed as not being easily replicated in the classroom. Therefore, more outdoor educators would need to equip themselves with e-pedagogy. Common principles for e-pedagogy would be a crucial step in aiding understanding of e-learning (Simuth and Sarmany-Schuller, 2012). Instead of rejecting its emergence, blended teaching principles of outdoor and e-pedagogies will require a focus on what might best be done in the physical field, and what could best be done online. The latter may take the form of flexible provision and wide access to learning resources. This will also entail a re-thinking of current teaching and learning practices.

Well-being literacy, in addition to numeracy and literacy, would gain emphasis in the Singaporean curriculum. The "circuit breaker" saw an increase in the number of individuals coming forward for financial help as well as calls to mental health helplines. Mutz and Müller (2016) presented two pilot studies that both demonstrate that outdoor adventures have mental health benefits for youths and young adults. Hence, improving accessibility of outdoor experiences for adolescents should continue to be a critical component of social policies, such as, the full integration of outdoor adventure programmes into the future school curriculum.

A right old adventure!

As we entered lockdown, I recall the last conversations I had with my anxious and uncertain students and in my best reassuring/London tones stated, "Well this is gonna be a right old adventure isn't it? Big elements of risk and definitely an uncertainty of outcome." I intended these words to be reassuring, as much for myself as them, drawing on the knowledge that as outdoor educators this is exactly what we're used to, and who better to survive the coming storm! We are creative problem-solvers in the field, tough and resilient, able to reflect on emotions, taking care of ourselves and the whole group.

³ Singapore's language for a what is known more commonly as a lockdown.

The boating metaphor is useful, especially for me as a sailor (how I miss the sea and boating!). But the "we are all in this together mantra" is clearly not accurate – as we see the already deep inequalities in society magnified through the covid-19 lens. We may all be in the same storm, but some have already drowned, tossed in the water, some thrown a lifebelt while others enjoy the security of a modern lifeboat – lockdown privilege safe at home.

I know I was scared and angry (my government slow to react to an obvious international crisis) and feeling like an extra in a dystopian science fiction movie. I am still angry, anxious, and feeling a little lost. Roller coaster days of emotions and the exhaustion of using new technologies to support students and colleagues. I am a people person – and I miss people – especially the informal and accidental encounters. I also embrace that this is hard. That's OK! Brene Brown's (2013) work is useful. We're going to be OK, the storm will pass, as our adventure becomes the "new normal."

Where am I now? Feeling more connected than ever before. More regular team meetings, numerous tutorials and fantastic international conversations with creative and thoughtful friends/colleagues. This is a wonderful sense of connection. I have no doubt that as we exit the pandemic our society will look and be different. I am certain that the neoliberal management of the academy will see the benefits, economies and efficiencies of online working. Currently, as the academic year ends and assessments require grading, I am enjoying the creative construction of new online teaching. I have argued elsewhere how technology can give us greater affordances with nature (Leather and Gibson, 2019) and see the opportunities that this can provide. It is also massively time consuming and reminds me of the start of my teaching career – years ago in B.G. time (Before Google).

While I can see how to connect with students and teach outdoor education online, there are some experiences identifiable as classic outdoor education that cannot be replicated: canoe expeditions, sailing trips, shared meals, campfires, handshakes and hugs, the embodied and the visceral. The decisions we need to make moving forward will involve determining which of those we wish to hang onto and which experiences we need to let go. The next stage of the adventure awaits!

Where is the community? Where are the helpers?

As hundreds of US cities burn over race, our failure to create a compassionate society is evident. COVID-19 offers opportunities to re-evaluate: self-reflection, a hallmark of OEE, is necessary. Rachel Carson rings true, humankind "is challenged, as it has never been challenged before, to prove its maturity and its mastery—not of nature, but of itself" (cited in Lear, 1997, p. 450). This is not a time to think about war on a virus, each other, or any other part of nature. Mother earth is a source of life—not a resource; not a testing ground. Nature is not a setting; it is us. Believe Indigenous people, and current research, that we are part of a system where one change affects everything else in intended and unintended ways.

Anthropologist Margaret Mead interpreted a broken and healed femur in a grave as a first sign of civilization (as cited in Byock, 2013). It meant people demonstrated compassion and helped each other. To contribute to a society where all can thrive, OEE educators should be the helpers and support more helpers. Tending to compassion and community is part of the solution.

Consider giving up old stories. For example, question the leader-follower model. Pushing individual accomplishments ignores that we are co-regulated into humanity and continue to co-regulate throughout our lives.

Courageous engagement is required to change cultural consciousness and patterns, including the Western propensity sometimes referred to as hurry sickness. Healing with a pause, intention, patience, shared space, helps create resilience—the ability and capacity to adapt. Strength of leadership comes through vulnerability and openness. Having a spacious mind increases one's ability to be nimble and flexible.

Many humans have a disordered attachment or an estrangement from nature—we are and always have been connected to nature—it is about the quality of our relationship (Mitten, 2017). To live in harmony and reciprocity with nature, OEE practitioners, after examining their nature attachment and relationships, can help others be in healthy relationships. Secure attachment begets healthier relationships.

Through thoughtfully designed programs that support, encourage, and model healthy relationships with the nature, participants experience healthier ways of relating with themselves, others, and the environment. Interrupt violent relationships with nature so that participants can attach healthily, which in turn helps participants regulate their emotions. The psychology of the individual is reflected in the psychology of the nation. We have the opportunity to help attitudinal changes in individuals, which can initiate changing the psychology of the nation. Success means participants creating and repairing psychological safety with others.

Having compassion, care, and an understanding of mutualistic interdependence as key program concepts helps create and reinforce wellbeing, which is correlated with kindness, compassion, and cooperation. Seeing a kind act increases the likelihood of the viewer doing a kind act; when receiving a kind act, they are even more likely to then act kindly. When people treat themselves with kindness, they can't exploit others.

How we reboot, rebuild, relate, re-regulate, helps us prepare for the climate crisis and more.

Community, interdependence and building alliances

COVID-19 highlights our need for community. It should come as no surprise: in times of crisis we rely on our community networks for support. Yet the current pandemic is not only a crisis, it requires the temporary suspension of many physical networks. So, we have adapted; like the flow of water downstream around a boulder, we have changed course, altering our physical communities. For many, COVID-19 restrictions have meant re-establishing community supports by reaching out, finding new ways to engage with others and spending time getting to know places closer to home.

We have, as well, adapted outdoor and environmental education communities. In universities this has included developing online networks, working with students to engage in their local communities and reaching out virtually to support those students disadvantaged by the crisis. Such engagements have proved to be generative experiences we can carry forward as we emerge from COVID-19 restrictions. But absent from current community shaping, and sorely missed by many, is the ability to be outdoors with each other; to include people and places in our shared experience of community.

Contending with COVID-19 draws attention to our implicit involvement within human and more-than-human communities in particular ways. Decisions around safety in outdoor experience, for example, are informed by transmission concerns for vulnerable communities as much as for individual participants. COVID-19, as well, has laid bare our interdependence and permeability within a more-than-human world. We are, each of us, aware of ways in which our bodies constantly intermingle with other organisms, including viruses. The rapid rate of transmission of COVID-19 in many communities has seen the uptake of face masks, social distancing and handwashing – constant reminders of the reality of our interconnection within broader communities.

How does highlighting community inform future practices? As we emerge from COVID-19 we might sharpen our attention towards enhancing community connection, by expanding alliances with groups concerned with social and ecological justice, health and well-being, and Indigenous ways of knowing; to reach out and enlarge our outdoor and environmental education community in productive ways. Connections make us all stronger, and we will benefit from such networks as we work to promote outdoor learning within institutions that may seek to remain in the virtual world.

Communities exist in multiple forms but can be taken for granted or neglected in cultures that actively work to foreground the individual (Crex Crex Collective, 2018). COVID-19 provides an opportunity to refocus on communities and community building, to work with students to recognise alliances with each other, local communities and the more-than-human world, and to act responsibly for those communities in times of crisis.

Bringing outdoor, environmental, and Indigenous education closer together

In response to COVID-19, outdoor, environmental, and indigenous education could come closer together and use the opportunity for re-growth to develop pathways into a sustainable future. Let's consider.

Nothing has changed due to COVID-19

Mountains, rivers, plants, animals, etcetera, are unaffected by COVID-19 and may even have benefited by humans limiting their frenzied activity. Most outdoor organisations in Australia and New Zealand have been eligible for wage subsidies whilst in hibernation. Industry guidelines have been developed to limit potential spread of COVID-19 (Outdoor Council of Australia, 2020). So, the upshot is that, when organised groups are ready, there are no inherent issues in returning to outdoor learning activities.

On the other hand, everything has changed

The Anthropocene is well and truly upon us (Steffen et al., 2011). Coming on the back of the 2019-2020 Australian bushfires and the broader threats and impacts of climate change, COVID-19 brings us to an existential crossroads. The path ahead could be difficult. The outdoor sector's seasonal nature, thin margins, and reliance on short-term casual employees (who aren't eligible for wage subsidies) will impact organisations' chances of survival. Organisations which survive will need to adapt to rapidly dawning 21st century realities.

However, COVID-19 also presents opportunities. Lockdown has heightened people's appreciation of the natural world (Crossley, 2020). More flexible working arrangements have been embraced.

Families have conducted their own educational experiments. And educators around the world have explored new ways of engaging students with outdoor learning (e.g., Teaton, 2020). With all options on the table, maybe we can use the COVID-19 hiatus to foster a more holistic, integrated style of outdoor and environmental learning.

Bringing outdoor, environmental, and indigenous education closer together

Outdoor education split from environmental education and largely ignored indigenous education over the past 100 or so years. Outdoor education often uses physical adventure to learn the capabilities of our minds and bodies. However, tearing through an environment without seeking to understand it, doesn't make sense. Arguably just as much might be learnt by sitting in place and observing and interacting with that place over time, or by listening to an Indigenous creation story and participating in a yarning circle, or by learning how to work with nature (e.g., foraging, hunting, gardening, and sustainable farming) to harvest sustenance. Such eco-integrated outdoor activities could provide novel learning experiences for post-industrial societies whose citizens have largely lost touch with the activities of deeply-rooted subsistence living.

Beyond COVID-19, towards sustainable human living systems

Developing sustainable living and planetary stewardship skills could be at the nexus of a next generation of outdoor-environmental-indigenous education for a post-COVID-19 world. How about embracing the Sustainable Development Goals (United Nations, 2015) and equipping people with the wherewithal to respond to the demands of our time? How can outdoor and environmental education learn from, and contribute to, Indigenous knowledge and reconciliation? Essentially, the challenge is this: How are we going to provide people with the skills, experiences, and motivation to build sustainable living systems?

(Creative Commons Attribution International 4.0 https://creativecommons.org/licenses/by/4.0/)

"Doing" field trips from a distance

Field trips are a central part of outdoor education (OE) (Thomas , 2015) and I believe particularly critical in exploring the myriad relationships between people and land. Under COVID-19, my field trips were cancelled and students dispersed to their "homes" around the country and around the world. I needed to re-create the field trip (learning about cultural and ecological histories, skills and safety, and direct experiences of a place with a skilled outdoor educator) in a version accessible from a distance. In this I was inspired by Simon Beames' experience during another disruptive episode; he and his students were in Norway when the Icelandic volcanic eruption halted all flights (Beames and Brown, 2016). Beames felt that the learning of his students was deeper in the authentic problem of finding the way back to Scotland than the ski-touring journey. Always the optimist, I hoped this new "distance" field trip could be authentic in ways I could not imagine.

Enactment

I grouped ten students together with an educator via google docs. In this document, students created links to a field trip safety plan, had the trip approved by their instructor, completed the trip, took photos and recorded a short presentation on an aspect of a place. Students then watched each other's presentations and provided feedback.

Opportunities and limitations

I noted an inversion of expertise and familiarity; instead of educators having knowledge of the field trip area, students introduced us to their localities. Students also needed to undertake the educator's role of selecting a location with rich opportunities for exploring a particular topic. Through these experiences, students examined the places within the immediate vicinity of their homes more closely; and by viewing presentations from others, they could come to see connections nationally and globally. These aspects were new and placed the voices of fellow students front and centre in the learning.

However, I felt concerned about the lack of emergent learning from being *together* in a *physical place* and students missing out on the modelling and facilitation of skilled educators. Initial student feedback generally supports this analysis.

The future of field trips done from a distance

There were some unexpected affordances and also some limitations of the "distance" field trip. I plan to incorporate student-led exploration of their home localities and build in closer connections to their field trip instructors earlier in the course (through online meetings). I worry that with the global shift towards online learning currently occurring, educational institutions could potentially consider field trips as an unnecessary and costly relic of the past. Others have explored taking elements of OE online (Dyment, Downing, Hill, and Smith, 2018), but in-person and in-place field trips remain at the heart of OE. This global disruption has forced me to look at my established practices with fresh eyes, it has also reinforced for me the power of field trips.

Hope in England at a testing time

It's tempting to think of the neoliberal capitalist system in terms of a Pandora's box – offering the promise of a Golden Age of prosperity, it has also unleashed untold destruction across the globe and, in 2020, a new form of Illness and Misery in COVID-19 (Fry, 2018, p.137). For the residential centres and outdoor professionals in England, the pandemic has been a disaster. A survey by the Institute of Outdoor Learning (IOL, 2020) reports that "Many organisations expect to close and many more may not recover in time"; the loss of income in the sector is estimated at £275 million until mid-2021, and the workforce is likely to be substantially reduced.

Other consequences will take longer to become apparent, in particular relating to mental health issues (Roxby, 2020). We know that being outdoors supports health and wellbeing (e.g., Department for the Environment, Food and Rural Affairs et al., 2017) and, at this time of year, the outdoor residential/adventure sector generally offers outdoor activities to around 90,000 young people a day (IOL, 2020). These will be missed this year. Schools have been shut since March 23rd for all except children of key workers, restricting the lives of many more. Gradually, as schools and centres re-open, we can assess the impact of disruption enforced by COVID-19.

So where is Hope in all this? Metaphor – *meta phora* – is a carrying across; we can carry across the effects of the pandemic in re-starting the old system, or choose to embrace the new way of working that is forced upon us. Difficulties with social distancing suggest that taking learning outdoors is a practical solution for schools, and in England we have a sector that is experienced in supporting schools with this. While the diversity within schools makes generalisations difficult, research shows that an increasing number of teachers are including outdoor learning in their practices, signifying an openness to different ways of working.

More profoundly, the choices we face offer the opportunity to re-think the system by supporting the development of citizens ready to face twenty-first century challenges – such as environmental degradation – that require informed, open-minded and democratically-engaged citizens. Outdoor learning should be centre stage in such an endeavour; we know that it has a positive effect on children's engagement with and enjoyment of learning, connection to nature and their social skills (Waite et al, 2016). Equally we know that the expertise to support teachers in outdoor learning is readily available, although to date it has had limited traction with the school sector. The UK's Council for Learning Outside the Classroom are now seeking to mobilise the relevant sectors to support schools re-opening. By helping providers to work better together, the Council aims to create a more coherent and extensive service for schools to take their learning beyond the classroom and embed it in their practice. The challenge is to scale up and coordinate delivery from a provider sector that is at the same time severely hit by school closures and travel restrictions. Watch this space.

The glass half full

As outlined in the introduction to this article, the broader global social and health impact of COVID-19 is almost beyond comprehension. In local outdoor environmental education (OEE) communities, COVID -19 has devastated the highly casualised livelihoods of sessional OEE educators and private business owners. Fee-paying schools relying on the significant fee contributions to provide their flagship OEE programs may also be devastated as parents experience economic hardship. Government schools may struggle to meet restrictive guidelines and expected funding cuts. For many in OEE, things are looking pretty grim.

However, outdoor educators are a resilient lot, love a challenge and know that adversity can bring opportunity. Outdoor education has a long history of overcoming significant personal, structural and political challenges (costs, staffing, regulations, access, qualifications, ratios, environment, curriculum, timetable, and so it goes on). Somehow, OEE exists in schools in Australia (up until March 2020). COVID-19 social restrictions and changes may stimulate schools to value OEE even more, as the gift of being in nature is realised.

COVID-19 social management has provided the gift of time for privileged OEE academics to consider the future. "CSIRO Futures" (Hajkowicz, Cook, and Littleboy, 2012) identified six "megatrends" globally, which in Australia highlight a "shift in environmental, economic and social conditions that will play out over the coming decades" (p. 2). Four of these megatrends in the COVID-19 world will need attention by outdoor educators. (1) "More from less" is the trend to rapid consumption of the earth's resources as a result of increased population and population growth. (2) "Going, going, gone" is the trend of increasing pressure from human activity on the world's ecosystems. Conversely, there is a trend to increased pressure to arrest this decline and to manage the environment more sustainably. (3) "Virtually there" is the trend towards online and digital media transforming the way people live. (4) "Great expectations" is the trend towards higher expectations of human experience as a panacea to increased digitization. Futurist McCrindle (2019) expects educational trends in the directions of: rising parent engagement; increasing focus on wellbeing and holistic development; creating opportunities to learn from distinctly human characteristics; making space for positive risk.

OEE, with its potential for simple living, attention to the environment, experiential learning, strong relationships with students, student engagement, reflection on social justice, critical

thinking and ways of being in nature, may be even more relevant to help our students develop awareness and capabilities to attend to these trends.

Postscript: during the time I prepared this article I responded to three emails "desperately" seeking staff for postponed programs. Hopefully a sign of things to come

Learning from COVID-19 and outdoor education, as experiential events

COVID-19 has changed many things, at least temporarily. This is what outdoor education does, too, but on a smaller scale. An outdoor education program is a temporary event, a "temporary community" (Slater 1984), which changes things for participants.

COVID-19 and outdoor education have other similarities.

COVID-19 has forced many people to slow down and shift their focus to more local happenings amongst family and friends, while at the same time being aware of broader occurrences, like spread of the virus itself. Outdoor education slows things down too, with the focus primarily on the immediate group and its tasks. However, attention is also drawn to the impact of wider happenings, like climate change and habitat destruction.

COVID-19 has created an urgent need to make changes in order to care for self and others. For many this has meant more time spent with family, with pets, with gardens. There is a similar motive operating during an outdoor education program, where participants learn to care for themselves, others and the environment.

COVID-19 has forced many to stay at home, to retreat indoors and not venture far. Like COVID-19, outdoor education necessitates a significant movement too, asking participants to leave home and venture outdoors. Even though these movements are in opposite directions (indoor and outdoor), it is the *movement* which is similar here, leading to changes.

Outdoor education and COVID-19 both enforce changes which necessitate learning.

New knowledge is required. Listening intently to news reports about the most recent changes to COVID-19 rules is not unlike listening to an outdoor education teacher briefing the group about an activity. The importance, however, is not just with knowing, but with doing. These are changes to how one does things in the circumstances. New ways of doing things must be learned.

But then the temporary event ends.

Moving back to life as previously lived is not as simple as perhaps first thought. This is because it is not just new knowledge and practices that have been learned. If so, these could just be put aside and the old ones taken up again. More than this, new ways of knowing and new ways of doing come together in new ways of being. The *movement* is a significant change in being: in the meaning of self, others, environment. This is no simple movement to make, and it is experienced when going into an outdoor education program, but more vividly when coming out of one.

The learning that has occurred, then, is not just new knowledge and new practices, but new ways of being-doing-knowing that become part of who one is in engaging with life (Quay, 2016). It is to this growing repertoire of ways of being-doing-knowing that events like outdoor education and

COVID-19 contribute. Outdoor education is not just a subject, not just a pedagogy: it is an event. This is the future.

Climate change and neoliberalisation of higher education: two wicked problems that are reshaping OEE

It is unlikely that OEE in higher education (HE) in Australia will ever return to its pre- COVID-19 operations, approaches to pedagogy or curricula design for two intersecting reasons: the impacts of climate change and the intensification of neoliberalistion of HE. Climate change has been the elephant in the room for OEE for some time; COVID-19 might be the catalyst the field needs to shift attention.

In Australia, the impacts of climate change are not of the distant future; they are occurring already (Hennessy, 2011), impacting communities and consequently OEE. The summer bushfires of 2019-2020, for example, burnt nearly 19 million hectares, killing more than a billion animals and at least 34 people. The fires caused the widespread cancellation or deferral of OEE programs across southeastern parts of the country. As the fires were nearing an end concerns over their impact were quickly displaced by COVID-19.

University management within Australia is increasingly corporatized and driven by neoliberal ideology (Sims, 2019). Declining government funding of HE over the last 30+ years has encouraged universities to seek funding from other sources, notably full fee-paying international students. The COVID-19 disruptions to international travel have resulted in dire financial circumstances for most universities in Australia, the ramifications of which are still unfolding at the time of writing. The sector will likely experience considerable hardship for many years to come. The COVID-19 crisis will be used to pursue reforms in the guise of efficiency. The implications for OEE will include high proportions of content delivered online, reductions or cessation of field-based teaching and increased casualisation of the workforce. The impacts will likely include a loss of expertise in research, curricula design and pedagogical innovation. All of these combined brings into question the role of universities in the production of knowledge.

In times of crisis, while communities are distracted, governments and institutions quietly go about furthering their agendas without close scrutiny. Klein (2014) has observed that governments frequently use emergencies, such as extreme weather events, as an opportunity to make changes that directly benefit individual office holders, their family members, or lobby groups and companies with whom they are closely aligned. COVID-19 creates a substantial risk that attention on the interrelated issues of climate change and the neoliberal enterprise that dominates HE will be severely eroded at a time when communities can least afford it.

Climate change disruptions require considerable re-thinking of OEE pedagogy and curricula at a time when HE management is likely to be less sympathetic toward relatively small niche fields. Paradoxically, COVID-19 disruptions also provide an opportunity for reconsideration within OEE of how it stays viable and relevant in increasingly uncertain times.

Life's new challenge: to avoid the three "Cs"

As of the end May, people in Japan are starting life outside home, exploring what the "new normal" expects of us, having passed through the first wave of COVID-19. Japan's state of

emergency lasted about 5 weeks for most areas of the nation under mild governmental measures, with a relatively low number of deaths and cases of infection compared to some other nations.

Nonetheless, self-isolation created by fear of the virus has done much damage to society, including: an economic downturn with people losing their jobs or experiencing diminished incomes, students missing school time, health issues afflicting the elderly, troubled families, etc. People are now expected to change their behaviors to avoid the "three Cs"- confined and crowded spaces, and close human contact. Notably, the third "C" is particularly difficult to integrate into daily life, let alone environmental/outdoor education where direct experiences and working closely with others are fundamental for learning.

Guidelines for the "new normal" list details such as having 2m between people, wearing face-masks all the time (except on hot summer days outside), not sitting across but side-by-side when eating with friends, being quiet while eating, not taking food off the same plate as someone else, etc. These guidelines are understandable in terms of stopping the spread of the virus, but they largely ignore the fundamental point that humans are social animals, and children develop themselves and their five senses by physically contacting each other as well as other-than-humans.

If this "new normal" constitutes part of our lasting social practices, I believe we should do our best to also develop safe forms of direct experience with others, including close contact.

I fear that people may grow to feel awkward with being close to each other, afraid of being touched and spending time in close proximity to others, such as in a tent or walking in a group where someone may be a silent carrier.

Since March all programs and activities in outdoor/environmental education across Japan have stopped and been cancelled, except limited activities in afterschool programs. New guidelines for safely conducting outdoor programs are being developed, and all programs have to be looked at in ways different to before COVID-19. We will need to test out new ways of doing things for a while, but must keep searching for ways to enable both social and physical interaction, so that learning and other outcomes become more meaningful.

Freedom for international travel may take time to return, but in the meantime, we should continue experimenting within our own places and keep on talking, exchanging ideas. In fact, there are countless possibilities for collaborative work and programs on-line!

Rethinking courses to cope with new restrictions

In 2020, travel restrictions to limit the spread of COVID-19 have impacted Australian universities in many ways. Less international student income has had major budget implications. At the University of the Sunshine Coast, all programs were required to find significant budget savings. These budget cuts, along with requirements for social distancing, forced a major rethink of how we manage fieldwork within our Bachelor of Recreation and Outdoor Environmental Studies program.

We teach five, core Outdoor Environmental Studies (OES) courses within our program, with combined enrolments of around 350 each year. Across these courses, students complete 26 days of outdoor fieldwork in the wider Sunshine Coast region. The highlight has been visiting the World Heritage Area – K'gari (Fraser Island) – but it is expensive and difficult to get there. It takes four

hours, requiring the use of two-wheel drive buses, four-wheel-drive vehicles, a vehicular ferry, and a fleet of "fat-bikes" for the beach.

When faced with the requirement to find budget savings, we were reluctant to reduce the number of fieldwork days. The threshold concepts that have been identified for graduates of Australian university outdoor education programs (Thomas et al., 2019) require students to be capable of leading outdoor fieldwork. So, if the number of fieldwork days didn't change, the nature of our trips would need to.

From 2020, we will no longer make the long treks to K'gari (Fraser Island), but will instead use the closer Bribie Island. For safety reasons, we usually provide transport from the university for all fieldwork trips, however with social distancing requirements this is complicated. All of our trips to Bribie Island will start from a location that is only 20 minutes from the university, allowing students to organize their own transport. Our third-year students will complete an 85km, 5-day paddling and walking expedition circumnavigating the island. This expedition will explore the cultural and natural history of the island and highlight how the tides and weather can shape travel on and around the island. The island has a rich Indigenous history with the Gubbi Gubbi people, some quirky world war 2 infrastructure, and is part of the internationally important Moreton Bay RAMSAR wetlands. After this expedition, third-year students will lead first-year students on a shorter three day trip exploring Bribie Island drawing on the benefits of near-peer teaching (Bester, Muller, Munge, Morse, and Meyers, 2017).

Across their program, students will visit Bribie Island three times, and learn how an outdoor education program can build a knowledge and connection with a place. Our OES staff will miss leading fieldwork on K'gari (Fraser Island), but we value the opportunity to run a similar program closer to the university which aligns better with the signposts of place-responsive outdoor education, as espoused by Wattchow and Brown (2015). Our students will have the chance to dwell in, and connect with, a place that is closer to home, engage their senses and learn the stories of the island, and to consider how they will re-present this place to their own students.

Ensuring socially just and sustainable access to natural benefits

The rush to greenspace and coastlines in the UK at the outbreak of COVID-19 perhaps indicates our innate recognition that natural environments are a source of human wellbeing. But variability in access has been equally striking, so that many urban dwellers and low socioeconomic groups struggle to gain such benefits from nature during lockdown. These impulses and inequalities highlight a stark challenge to outdoor and environmental education to ensure that everyone can reap natural health and wellbeing and other benefits in the future.

However, simply making sure that infrastructure for biodiversity and wellbeing are planned into urban development is insufficient. The *Monitoring Engagement in Natural Environment* report shows that although there have been substantial increases in the use of urban parks over the last decade, some groups (the elderly, lower socioeconomic and black and minority ethnic) are still significantly underrepresented in accessing greenspace (Natural England, 2019). It seems access needs to be facilitated to build engagement with nature for human *and* other species wellbeing (Natural England, n.d.). Outdoor and environmental education research can make significant contributions in designing appropriate programmes. For example, Resilience through Nature, a large-scale intervention led by the Wildlife Trusts, provides training from environmental

organisations to mediate curriculum outdoor learning in disadvantaged areas for schoolchildren's health and wellbeing.

Threats to health and wellbeing from COVID-19 and social distancing measures taken to restrict its spread will have long lasting impacts on adults and children. Tactile social contact is a fundamental need (Cascio, Moore and McGlone, 2019) and experiencing lack of control over our lives affects confidence and mental health (WHO, 2014). On the other hand, opportunities to be an active contributor through volunteering and being creative have been notable throughout the crisis. Furthermore, the human-focus of COVID-19 and its aftermath must not divert attention from the continuing crisis of climate change impacts within the more-than-human world. These challenges and qualities can be addressed and fostered through outdoor and environmental education.

The highlighting of societal inequities during the pandemic may offer opportunities, even in severely economically straitened conditions post-COVID, for diverse and nuanced forms of outdoor learning (Malone and Waite, 2016, p. 15) to ensure that their potential for a more socially just and sustainable future are maximised as new ways of living are explored. We must be sure not to miss them.

Conclusion

The twenty statements in this article showcase a range of perspectives and experiences engendered by the COVID-19 pandemic. The educational practice of outdoor and environmental education has been challenged by the many restrictions placed on social contact, however the thinking continues, as expressed here. There are many possible futures which may emerge over time.

Some of the statements presented here argue strongly for the benefits of OEE that may be highlighted by way of COVID-19 experiences. This position is strongly in favour of a quick return, when possible, to what is known and accepted in OEE as relevant pedagogical practice. Other statements take a different approach and highlight what can be learned from these COVID-19 experiences that may help OEE to further evolve, at least in how OEE may be understood. This broad position tends to affirm what currently takes place, while acknowledging that more can be learned.

No account of the COVID-19 experience will ever be exhaustive. These statements are an attempt to share thoughts and feelings expressed while embedded in the midst of the uncertainty and change that COVID-19 has brought to what was once thought to be normal. We, the editorial board of this journal, wish all involved the very best in the months and years to come. We hope that the thoughts and experiences shared here may support others in their particular circumstances.

References

Asfeldt, M., Hvenegaard, G., Purc-Stephenson, R. (2018). Group writing, reflection, and discovery: A model for enhancing learning on wilderness educational expeditions. *Journal of Experiential Education*, *41*(3), 241-260.

Australian Government Department of Health. (2020). *COVID-19 support*. Retrieved from https://headtohealth.gov.au/covid-19-support/covid-19

Barton, D., Haase, D., Mascarenhas, A., Langemeyer, J., Baro, F., Kennedy, C., Grabowski, Z., McPhearson, T., Hjertager Krog, N., Venter, Z., Gundersen, V. & Andersson, E. (2020). *Enabling access to greenspace during the COVID-19 pandemic: Perspectives from five cities*. Retrieved from https://www.thenatureofcities.com/2020/05/04/enabling-access-to-greenspace-during-the-covid-19-pandemic-perspectives-from-five-cities/

Bester, L., Muller, G., Munge, B., Morse, M., & Meyers, N. (2017). Those who teach learn: Near-peer teaching as outdoor environmental education curriculum and pedagogy. *Journal of Outdoor and Environmental Education*, 20(1), 35-46.

Beames, S., & Brown, M. (2016). *Adventurous learning: A pedagogy for a changing world*. New York, NY: Routledge.

Brooks, L. (2020, May 10). Scotland eyes outdoor learning as model for reopening of schools. *The Guardian*. Retrieved from https://www.theguardian.com/uk-news/2020/may/10/scotland-eyes-outdoor-learning-as-model-for-reopening-of-schools?CMP=share_btn_tw

Brown, B. (2013). *The power of vulnerability*. [Video file]. Retrieved from https://www.ted.com/talks/brene brown the power of vulnerability/

Byock, I. (2013). The best care possible: A physician's quest to transform care through the end of life. New York: Avery Publishing.

Cascio, C.J., Moore, D. & McGlone, F. (2019). Social touch and human development. *Developmental Cognitive Neuroscience*, *35*, 5–11.

Christie, B., & Higgins, P. (2020). *The educational outcomes of learning for sustainability: A brief review of literature*. Edinburgh: Scottish Government Learning Directorate. Retrieved from https://www.gov.scot/publications/educational-outcomes-learning-sustainability-brief-review-literature/pages/1/

Crex Crex Collective. (2018). Six touchstones for wild pedagogies in practice. In B. Jickling, S. Blenkinsop, N. Timmerman, & M. D. Sitka-Sage (Eds.), *Wild pedagogies: Touchstones for renegotiating education and the environment in the Anthropocene*. London, UK: Palgrave Macmillan.

Crossley, E. (2020). Ecological grief generates desire for environmental healing in tourism after COVID-19. *Tourism Geographies*, Advance online publication. https://doi.org/10.1080/14616688.2020.1759133

Department for the Environment, Food and Rural Affairs, European Centre for Environment and Human Health & University of Exeter (2017). *Evidence statement on the links between natural environments and human health*. Retrieved from

https://beyondgreenspace.files.wordpress.com/2017/03/evidence-statement-on-the-links-between-natural-environments-and-human-health1.pdf

Dunn, C. (2019, December 3). Weaving back into the web. *Dumbo Feather*. Retrieved from https://www.dumbofeather.com/articles/weaving-back-into-the-web/

Dyment, J., Downing, J., Hill, A., & Smith, H. (2018). 'I did think it was a bit strange taking outdoor education online': Exploration of initial teacher education students' online learning experiences in a tertiary outdoor education unit. *Journal of Adventure Education and Outdoor Learning*, 18(1), 70-85. https://doi.org/10.1080/14729679.2017.1341327

Eisner, E. (1985). The three curricula that all schools teach. In E. Eisner (Ed.), *The educational imagination* (pp. 87-108). New York: Macmillan.

Fry, S. (2018) Mythos: The Greek myths retold, London: Penguin Books.

Hajkowicz, S.A., Cook, H. & Littleboy, A., (2012). *Our future world: Global megatrends that will change the way we live (the 2012 revision)*. Australia: CSIRO. Retrieved from https://publications.csiro.au/rpr/download?pid=csiro:EP126135&dsid=DS2

Hennessy, K. (2011). Climate change impact. In H. Cleugh, M. Stafford Smith, M. Battaglia, & P. Graham (Eds.), *Climate change: Science and solutions for Australia* (pp. 45-57). Collingwood, VIC: CSIRO.

Higgins, P. & Christie, E. (2018). Learning for sustainability. In T. Bryce, W. Humes, D. Gillies D., & A. Kennedy (Eds.), *Scottish education* (pp. 554-564). Edinburgh: Edinburgh University Press.

Higgins, P. & Nicol, R. (2018). Outdoor learning. In T. Bryce, W. Humes, D. Gillies D., & A. Kennedy (Eds.), *Scottish education* (pp. 538-544). Edinburgh: Edinburgh University Press

Ho, S. (2014). The purposes outdoor education does, could and should serve in Singapore, *Journal of Adventure Education and Outdoor Learning*, *14*(2), 153-171, https://doi.org/10.1080/14729679.2013.798587

Institute of Outdoor Learning. (2020). *Outdoor Learning COVID-19 Impact Surveys for Organisations and Outdoor Professionals: Sector Report, 12 May.* Retrieved from https://www.outdoor-learning.org/Portals/0/IOL%20Documents/ COVID-19/COVID-19%20IMPACT%20SURVEY%20REPORT%2012MAY2020.pdf?ver=2020-05-12-140350-380

Klein, N. (2014). *This changes everything: Capitalism vs. the climate*. New York: Simon & Schuster Paperbacks.

Lear, L. J. (1997). Rachel Carson: Witness for nature. New York: Henry Holt.

Leather, M., & Gibson, K. (2019). The consumption and hyperreality of nature: Greater affordances for Outdoor Learning. *Curriculum Perspectives*, *39*(1), 79-83. https://doi.org/10.1007/s41297-019-00063-7

Malone, K. & Waite, S. (2016). *Student outcomes and natural schooling: Pathways from evidence to impact report*. Retrieved from

https://www.plymouth.ac.uk/uploads/production/document/path/6/6811/Student outcomes and natural schooling pathways to impact 2016.pdf

McCrindle, M. (2019). *The future of education: Exploring rising parent engagement, the wellbeing focus and school complexity*. Baulkham Hills, NSW: Education Future Forum. Retrieved from

https://educationfuture.com.au/wp-content/uploads/2019/09/Education-Future-Report 2019.pdf.

Mitten, D. (2017). Connections, compassion, and co-healing: The ecology of relationship. In K. Malone, S. Truong, & T. Gray (Eds.), *Reimagining sustainability in precarious times* (pp. 173-186). London: Springer.

Mulvahill, E. (2020, April 23). *Danish schools are heading back to school: Here's what it looks like*. Retrieved from https://www.weareteachers.com/denmark-reopening-schools/?utm_content=1587657561&utm_medium=social&utm_source=facebook,linkedin&fbclid=lwAR14fwbspvDfkOUKkGWLP6e3so0RKqpJYGxG5Si9mxN553fxos4m_SdAM4g

Mutz, M., & Müller, J. (2016). Mental health benefits of outdoor adventures: Results from two pilot studies, *Journal of Adolescence*, 49, 105-114.

Natural England (n.d.). *Minority ethnic communities and the natural environment: Access to nature early findings*. Retrieved from http://publications.naturalengland.org.uk/file/10637194

Natural England. (2019). *Monitor of engagement with the natural environment: The national survey on people and the natural environment, Headline report 2019*. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/828552/Monitor_Engagement_Natural_Environment_2018_2019_v2.pdf

Norwegian Ministry of Children, Equality and Social Inclusion. (2015). *The government's strategy* (2015–2017): Children living in poverty. Retrieved from https://www.regjeringen.no/contentassets/ff601d1ab03d4f2dad1e86e706dc4fd3/children-living-in-poverty q-1230-e.pdf

Outdoor Council of Australia. (2020). *Outdoor Council of Australia (OCA) framework for rebooting outdoor activities in a COVID-19 environment*. Retrieved from http://www.outdoorcouncil.asn.au/news/oca-framework-for-rebooting-outdoor-activities-in-a-covid-19-environment/

Parker, G. (2020, June). We are living in a failed state: The coronavirus didn't break America. It revealed what was already broken. *The Atlantic*. Retrieved from https://www.theatlantic.com/magazine/archive/2020/06/underlying-conditions/610261/

Quay, J. (2016). Outdoor education and school curriculum distinctiveness: More than content, more than process. *Journal of Outdoor and Environmental Education*, 19(2), 42-50.

Reuters. (2020). *COVID-19 takes unequal toll on immigrants in Nordic regions*. Retrieved from https://www.reuters.com/article/us-health-coronavirus-norway-immigrants/covid-19-takes-unequal-toll-on-immigrants-in-nordic-region-idUSKCN2260XW

Slater, T. (1984). *The temporary community: Organized camping for urban society*. Sutherland, NSW: Albatross Books.

Thomas, G. (2015). Signature pedagogies in outdoor education. *Asia-Pacific Journal of Health, Sport & Physical Education, 6*(2), 113-126.

Roxby, P. (2020, 16 April). Coronavirus: 'Profound' mental health impact prompts calls for urgent research. *BBC News*. Retrieved from https://www.bbc.co.uk/news/health-52295894

Schipperijn, J., Ekholm, O., Stigsdotter, U., Toftager, M., Bentsen, P., Kamper-Jørgensen, F., & Randrup, T. (2010). Factors influencing the use of green space: Results from a Danish national representative survey. *Landscape and Urban Planning*, *95*, 130–137.

Sims, M. (2019). Neoliberalism and new public management in an Australian university: The invisibility of our take-over. *Australian Universities' Review*, *61*(1), 22-30.

Simuth, J., & Sarmany-Schuller, I. (2012). Principles for e-pedagogy. *Procedia Social and Behavioural Sciences*, 46, 4454–4456. https://doi.org/10.1016/j.sbspro.2012.06.274

Smith, H. A., Dyment, J. E., Hill, A., & Downing, J. (2016). "You want us to teach outdoor education where?" Reflections on teaching outdoor education online. *Journal of Adventure Education & Outdoor Learning*, 16(4), 303–317. http://doi.org/10.1080/14729679.2016.1147966

Steffen, W., Persson, Å., Deutsch, L., Zalasiewicz, J., Williams, M., Richardson, K., Crumley, C., Crutzen, P., Folke, C., Gordon, L., Molina, M., Ramanathan, V., Rockström, J., Scheffer, M., Schellnhuber, H. J., & Svedin, U. (2011). The Anthropocene: From global change to planetary stewardship. *AMBIO*, *40*(7), 739. https://doi.org/10.1007/s13280-011-0185-x

Teaton, B. (2020). *Outdoor education message* [video]. Retrieved from https://www.youtube.com/watch?v=tlJHcmsGOhl

Thomas, G. (2015). Signature pedagogies in outdoor education. *Asia-Pacific Journal of Health, Sport & Physical Education*, 6(2), 113-126. https://doi.org/10.1080/18377122.2015.1051264

Thomas, G. J., Grenon, H., Morse, M., Allen-Craig, S., Mangelsdorf, A., & Polley, S. (2019). Threshold concepts for Australian university outdoor education programs: Findings from a Delphi research study. *Journal of Outdoor and Environmental Education*, *22*, 169-186. https://doi.org/10.1007/s42322-019-00039-1

United Nations (2015). *Transforming our world: The 2030 agenda for sustainable development*. Retrieved from https://sustainabledevelopment.un.org/post2015/transformingourworld

Waite, S., Passy, R., Gilchrist, M., Hunt, A. & Blackwell, I. (2016). *Natural connections demonstration project, 2012-2016: Final Report*. Natural England Commissioned Reports, Number 215. Retrieved from http://publications.naturalengland.org.uk/publication/6636651036540928

Wattchow, B., & Brown, M. (2015). Programming for place-responsiveness: Enhancing adventure learning and outdoor travel. In R. Black & K. S. Bricker (Eds.), *Adventure programming and travel for the 21st century,* (pp. 35-48). State College, PA: Venture Publishing, Inc.

White, M., Alcock, I., Grellier, J., Wheeler, B., Hartig, T., Warber, S., Bone, A., Depledge, M. & Fleming, L. (2019). Spending at least 120 minutes a week in nature is associated with good health and wellbeing. *Scientific Reports*, *9*, 7730. https://doi.org/10.1038/s41598-019-44097-3

World Health Organization and Calouste Gulbenkian Foundation. (2014). *Social determinants of mental health*. Geneva: World Health Organization. Retrieved from https://apps.who.int/iris/bitstream/handle/10665/112828/9789241506809 eng.pdf; jsessionid=1 https://apps.who.int/iris/bitstream/handle/106