

Holding together Hope and despair: Transformative learning through virtual place-based education in Aotearoa, New Zealand

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Abstract

This article explores how virtual place-based education can foster transformative learning for distance students through a study of the Spatial Awareness Project, a digital storytelling film and podcast we co-created with faculty and students. We found that students engaged with the resources in complex ways, with three dominant themes emerging in qualitative surveys of their emotional engagement: feeling joy, feeling unsettled, and feeling empowered. We argue that digital media that leaves students simultaneously positively affected and unsettled can enable transformative learning through discomfort, creating space for imagining the world in new ways, and sparking new conversations and connections within and outside the classroom.

KEYWORDS

affect, digital storytelling, emotion, pedagogy of discomfort, virtual place-based education

1 | INTRODUCTION

We teach environment-focused social sciences at Massey University, where most of our students learn online. We struggle with how to engage online learners in difficult conversations about the climate crisis in ways that encourage learning without adding to students' anxiety. Environmental educators face a conundrum: Greater knowledge of environmental problems can induce hopelessness, apathy, and an inability to engage when students care but feel unable to do anything effective (Norgaard, 2011; Verlie et al., 2021). However, turning away from the gravity of the challenges is not an answer, and overemphasising optimistic messages or small actions may lead to cynicism if students do not believe their efforts will be effective (Hornsey & Fielding, 2016). Cultivating critical hope, finding the "pivot point of transformation"

(Hayes et al., 2018, 35), is recognised as crucial to inspiring collective change. This can emerge when students are challenged to question their current beliefs and values and make space for imagining the world in new ways (Nairn, 2019; Verlie et al., 2021).

Inspired by a rich literature on place-based education (PBE) and emotionally engaged pedagogies that reveal how experiential learning can engage students' hearts and hands as well as heads (Ivanaj et al., 2014), we wanted to understand how virtual PBE might enable transformative learning experiences. Much attention in environmental geography points to the benefits of engaging with 'pluriverse' viewpoints that understand nature as holistic (Escobar, 2018). However, for non-Indigenous, Western, students from settler-colonial contexts such as Aotearoa New Zealand (NZ), it can be difficult to engage with different worldviews in ways that do not frame them

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as ‘other’. Place-based experiential learning and field trips have been widely used as transformative mechanisms that can unsettle students’ established relationships with their environments, opening students to the possibilities of other ways of seeing (France & Haigh, 2018). Experiential learning is difficult, however, for the increasing number of educators who teach online courses.

In this article, we draw on qualitative surveys completed by students to analyse how virtual PBE enables transformative learning for online and blended learning students. We created the Spatial Awareness Project, a short film, and podcast series co-created with faculty and students to bring PBE to online students through digital storytelling pedagogies. We found that students engaged with the resources in complex ways, with three dominant themes emerging in qualitative surveys of their emotional engagement: feeling joy; feeling unsettled; and feeling empowered. We argue that digital media which leaves students simultaneously positively affected *and* unsettled can enable transformative learning through discomfort, creating space for imagining the world in new ways, and sparking new conversations and connections within and outside the classroom. Our study also suggests a tension for educators who seek to engage and empower online students through a pedagogy of discomfort, as giving students agency to engage with media on their own terms requires educators to cede some control.

2 | LITERATURE REVIEW

2.1 | Pedagogies of discomfort

Educators across multiple fields are working to engage students in transformative learning experiences. There is broad recognition that lecture-oriented learning focused on cognitive sense-making alone cannot evoke the deep responses that encourage students to re-examine beliefs, values and behaviour, and that transformative learning is an emotional process (Andrew et al., 2023; Ojala 2016). Yet, there is disagreement in the literature about how to evoke emotion and which emotions are useful for learning. While some authors encourage educators to focus on eliciting positive emotions to encourage student agency, others find that overly positive messaging can discourage students when they feel a disconnect between the optimistic stories and contemporary crises of unsustainability (Hornsey & Fielding, 2016; Verlie et al., 2021). Traditional notions in psychology categorise emotions into dichotomous categories: ‘positive’ emotions that are pleasant feeling (such as joy, love) and ‘negative’ emotions that are unpleasant feeling (such as fear, anger, sorrow), where ‘positive’ emotions are seen to enable action,

and ‘negative’ emotions to impede action (An et al., 2017). However, both positive emotions such as hope and awe, and other emotions ranging from fear and anger to grief, can motivate students’ empathy and action (Ojala 2016; Strife 2010). Skilling et al. (2022) argue that hope and despair are both valid and potentially productive responses to reality, and the goal is not to move from critique to possibility, but rather to hold them together.

This work of ‘holding together’ hope and despair can be discomfoting for students and teachers. Yet, if our goal is to enable transformative learning experiences, Zembylas (2017) claims that discomfort is necessary. We find Boler’s (1999) ‘pedagogy of discomfort’ a useful framework when considering transformative learning. This approach was designed to engage students and teachers with issues of difference by troubling their emotional comfort zones. Students are encouraged to critically engage with their values and beliefs and inhabit a more “ambiguous” sense of self, creating opportunities to reflexively examine social narratives which are rarely made explicit (Boler, 1999; Boler & Zembylas, 2003). In environmental education, encounters with other ecologies are seen to have the capacity for transformation through discomfoting learning (Rust, 2014; Winks, 2022). Winks (2022), for example, explores how the unpredictability of a forest field trip, where students unexpectedly encountered bugs and spiders, led to feelings of disgust and discomfort, yet in turn challenged students’ understandings and provoked feelings of empathy with the more-than-human world.

Pedagogies of discomfort resonate with the work of decolonial environmental education, in which educators engage discomfoting learning with their students through critical re-storying of place, disrupting ‘zero point epistemologies’—those epistemologies that deny other perspectives and truths—and establishing different ways of knowing (Tuck et al., 2014). Tuck et al. (2014) call for environmental education that unsettles ‘settler futurities’ as the referent point for imagining the future in settler colonial contexts. This is difficult work. Making space for a pluriverse of imaginaries without setting these up as Other or overwhelming students requires approaching discomfoting learning with an ethics of care and empathy (Zembylas, 2017). This includes strategies that enable our students to place themselves in others’ circumstances, make genuine efforts to appreciate other perspectives, and tolerate ambivalence (Zembylas, 2017). One pedagogical strategy to unsettle students with an ethics of care and empathy is to engage with students’ ‘hands’ and ‘hearts’ as well as ‘heads’ (Ivanaj et al., 2014). For example, aesthetic inquiry through art, film, and other media (Ivanaj et al., 2014), developing trust in one’s own agency (Ojala 2016) and experiential learning that takes students out of

the classroom (Winks, 2022), are all shown to enable transformation. In online courses, these strategies can be more complex to undertake, but digital storytelling shows promise as a transformative learning tool.

2.2 | Virtual place-based education

Place-based education (PBE) uses the values, resources, and issues in local communities as a context for learning (Powers, 2004). It is about place knowing, and through knowing, developing a connection and commitment to that location and community. PBE is often achieved through experiential learning such as field trips, lab activities, or scenarios, and followed by reflection or application (Cowan, 1998; Healey & Jenkins, 2000). Taken together, PBE and experiential learning enable students to make connections between theory and real life, improve participation in community issues and increase engagement (Easton & Gilburn, 2012; Fuller et al., 2006). Creating opportunities for students to connect with issues occurring in communities can, however, be challenging, due to cost, time constraints, and ability to physically visit sites. Virtual place-based learning can mitigate some of these challenges while still offering valuable mechanisms for engaging with place.

Although virtual experiences may not provide the same sensory and affective experience of a physical field-trip, they do offer pedagogical benefits. Virtual field trips help overcome access and organisational barriers and can expand how students engage with sites using tools such as photospheres and immersive worlds (Moyley & Lazar, 2019). Creating 'digital books' of visual and audio materials from campaign groups, radio and television is shown to translate place-based experiential learning to a virtual environment and still allow for deep learning (Atchison & Kennedy, 2020). Unlike field trips, virtual experiences easily allow for repeat engagement while retaining the value of place-based learning: a class can develop a shared understanding that is investigated as part of course content (Leonard, 2019). Well-designed virtual place-based learning is increasingly understood, not as a replacement to field based learning, but as an effective way for students to connect to place (Atchison & Kennedy, 2020).

Digital storytelling and interactive video, as one mechanism for virtual place-based learning, provide an opportunity to 'acknowledge cultural and contextual realities, and reveal multiple perspectives' (Smithwick et al., 2018, p. 42) or explore a pluriverse. Digital storytelling's ability to benefit communities, empower marginalised voices and histories, connect generations, and enrich lives, has been well documented (Duffy et al., 2011). Digital storytelling can engage students from interdisciplinary perspectives, expanding

their viewpoint while facilitating critical thinking by activating both emotional and cognitive learning pathways (Hadzigeorgiou, 2012). They are particularly effective when grounded in local places and contexts (Duffy et al., 2011).

In the context of virtual place-based education, digital storytelling can enable local communities to communicate their own experiences and counter hegemonic narratives, providing a valuable learning resource (Marshall, 2021). Instructors in Australia who created virtual tours of country found that 'the invitation provided to students by Indigenous Elders and senior knowledge holders to virtually share their knowledges were welcomed as an engaging method of learning [...] not only because of its visual appeal, but also insofar as knowledge was contextualised on and to country' (Prehn et al., 2020, p. 17). Transformative learning through virtual place-based experiences still requires student reflection and a critical interrogation of how digital stories are mediated by different perspectives and through creative choices and production decisions (Rosalia, 2019). An effective digital approach might then mitigate some of the challenges with place-based experiential learning, namely: the time commitment, scheduling demands and difficulties, ensuring learning objectives are achieved in the field while still enabling opportunities for discomforting.

3 | CREATING A VIRTUAL PLACE-BASED EDUCATION TOOL: THE SPATIAL AWARENESS FILM AND PODCAST SERIES

We created the Spatial Awareness film¹ and podcast series with a group of undergraduate and postgraduate students at Massey University, drawing from our diverse perspectives including natural resource management, feminist sociology and Indigenous philosophy. Beyond our academic subjectivities, the team's diverse personal experiences as urbanites, covenanted forest caretakers, tangata whenua (local people), farm kids and outdoor enthusiasts also informed our work together. We came into this process highly critical of current land use practices. Yet, through the interviews and conversations, we found countless examples of sustainable practices aimed at conserving landscapes, plant, and animal life. We also encountered concern and defensiveness from rural participants who felt they were misunderstood by urban publics, which we believe points to broader tensions in NZ. These encounters encouraged us to move from an overly simple critique of land use, to questioning how the very process of categorising land shapes our understandings of our environment.

The seven-minute film begins by asking the viewer to open themselves to new perspectives, with shots panning

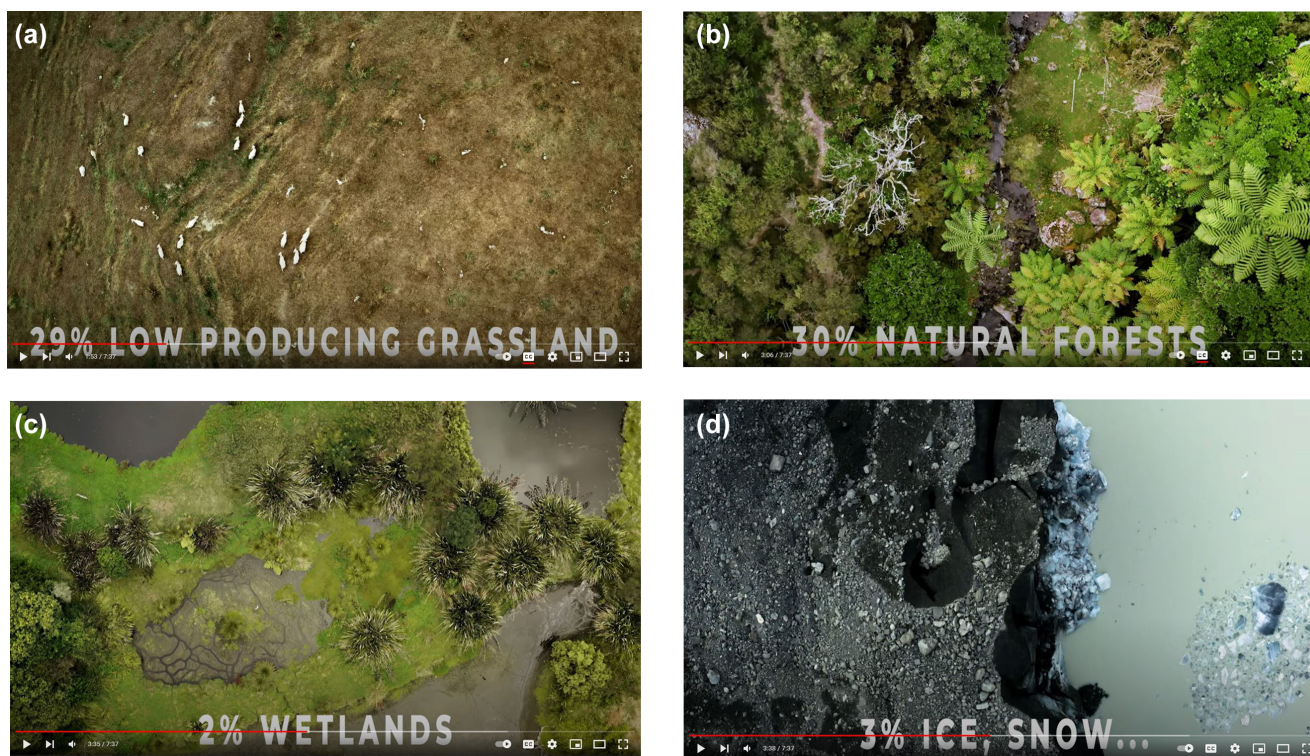


FIGURE 1 (a) Example of low producing grassland category of land use from the film. (b) Example of natural forests category of land use from the film. (c) Example of wetlands category of land use from the film. (d) Example of other category of land use from the film.

through a doorway to farm and forest land. Drone footage explores NZ at ‘100 metres in 100 seconds’, travelling through each of the country’s 12 land use categories, then moving along waterways from mountainous areas to urban settlements, highlighting the interconnections of our environment (Figure 1a–d).

The film aims to spark transformation through the affective experience of viewing the world from a drone’s perspective: An overview of networks and ecosystems beyond what the human eye can see. The voiceover, combining the multiple voices of the film’s co-creators, does not give any answers; rather it raises questions that seek to decentre Western knowledge as a referent point, and to open space for Mātauranga Māori (Māori knowledge) and holistic perspectives. These questions include: ‘What might we see if we change our perspective?’ and ‘What if our story were to begin with the reciprocal relationships among all living things and the natural world?’. The authors were guided in the use of Mātauranga Māori in the project by environmental philosopher A/Prof Krushil Watene² (Ngāti Manu, Te Hikutu, Ngāti Whātua o Ōrākei, Tonga), who offered generous guidance throughout the conceptualisation of the film.

The accompanying podcast series encourages students to engage with perspectives different from their own and to overturn preconceived ideas. During filming, Author 2 conducted 10 podcast interviews with 12 people about

their perspectives on the most pressing environmental issues facing NZ. Each podcast is about 10–15 min in length. Interviewees included the owner of a merino sheep station, four multigeneration beef and lamb station owners/families, two carbon farmers, an employee of Kāinga Ora (formerly Housing New Zealand), a fluvial geomorphologist (academic specialising in river systems), a kaitiaki and two members of non-profit conservation organisations that focus on fisheries and grasslands. In total, the film and podcast incorporate over 30 locations across New Zealand’s North and South Islands.

4 | METHODS

We piloted the resources in three courses ([Resource Conservation and Sustainability] [2nd year undergraduate course], Sociology of the Environment [3rd year undergraduate course], and Environmental Sociology [postgraduate course]). University ethics clearance required that data collection not be tied to course assessment, and that the study be conducted anonymously online at semester’s end, so as to mitigate the influence of unequal power relations between student and teacher. Working within these limitations, we used online survey instruments to capture students’ qualitative reflections. We wanted the surveys to capture students’ initial

emotional reactions, and to further deepen students' learning through reflection. Therefore, after viewing the film, students from the three courses in which we piloted the resources were invited to (1) write for 3 min about their initial reactions to the film (see Artioli et al., 2021 on the benefits of free writing for deep reflection and articulating emotions). We then asked: (2) How did the film challenge or affirm your views on human relations with the environment? and (3) What imagery, sounds, or message in the film (if any) most resonates with you? We were also interested in what kind of conversations, if any, the resources might spark between students and with students' families and friends. Therefore, a second survey prompted students to watch the film with students or others at home and asked them to write a reflection on 'what conversations did the film spark?'. Finally, the students could complete a third survey that asked about the podcast series. The survey asked: 'To what extent did the podcast series present perspectives that differed from yours? Please explain.'

In total, 12 students (four postgraduate and eight undergraduate) from the three courses completed the qualitative surveys; a 14% percent response rate. The number of respondents is small due to the constraints noted above (the instrument was virtual, not tied to assessment, and conducted at end of semester when engagement is lower). However, the responses extended several paragraphs to a page in length, and the rich data collected enable thematic analysis to be carried out. Using the grounded theory approach of Strauss and Corbin (1990), we inductively coded the data using Nvivo 12, focusing on capturing the range of emotions displayed in the student responses. While others' emotions are difficult to capture, coding emotions data from surveys and interviews is well established in fields such as psychology and feminist geography (Lustick, 2021). We included instances of explicit articulation of emotional states (e.g., discussions of fear, hope, confusion, etc.), and phrases and stories that showed the students engaging in an embodied, more-than-cognitive way. After individually analysing the responses, we compared emerging themes, generating new insights.

Given the small sample, our findings cannot be generalised, and we do not make claims about the student body as a whole. It is possible that only students who were positively affected by the resources were motivated to complete the online survey. Our reading of the responses is also shaped by our desire as environmentalists and feminist researchers to witness transformation in our students, and we may have been drawn to quotes that revealed positive change. However, through inductively coding for all emotional states, we sought to mitigate possible bias toward favouring positive emotional response, and it is notable

that our findings revealed more complex engagement with the resources than we had anticipated.

5 | RESULTS AND DISCUSSION

Three main interconnected themes emerged from our analysis of students' responses to the film: feeling hopeful; feeling unsettled; and feeling empowered.

5.1 | Feeling hopeful

Many students began their reflections by discussing the positive affect the film evoked in them through the cinematography and soundscapes. They described the scenery as 'stunning', 'seamless', 'beautiful', or 'majestic'. As one student mentioned, 'I found the imagery really powerful and beautiful. This made me much more likely to focus as I found the whole thing more captivating.' Soundscapes cultivated immersive environments: 'I particularly loved the music, coupled with the natural sounds in the background (like the stream running). I thought it really enhanced the emotive capacity of the film project, and really amplified the immersive impression of being out in nature (and not watching my desk).' A typical response from a postgraduate student compared this film with others they watched:

... other environmental videos tend to show polluted water, the scars of deforestation, and land ravaged by extreme weather events. While that type of video may motivate some people into action (or conversation) I don't think it implicates ourselves as guardians and caretakers to the same degree as this film project. That is, it motivates you not out of fear, but out of the recognition that humans are as much part of nature as the mountains and the streams which run through it, and as such, belong in a relationship of reciprocity with all we encounter.

This student's response goes to the heart of why our affective reactions to classroom resources are significant. While, as the student notes, people motivated out of fear (through viewing 'ravaged' environments) may still engage in action, being positively affected opens space for transformation in how the student sees themselves in relation to more-than-human nature. Other students who spoke similarly of being moved to see themselves as part of nature, or as guardians of nature, discussed the way the film's imagery, the moving landscape perspective, and narrated questions encouraged an attentiveness to different ways of seeing the world:

The aerial perspective that shows the expanse of open ranges and landscapes is amazing. For me, the moment that stirred me was around the 4 minute mark that talks



FIGURE 2 Series of shots and scripted text corresponding to the student's comment about disconnects.

about the various 'disconnects' between aspects of society and the environment that was overlaid with some majestic expansive imagery that ultimately (at least to me) poses the question 'why do we have such disconnects?'

This student's reflection on being 'stirred' by the film's juxtaposition of 'expansive imagery' as shown in the following screenshots (Figure 2a–d) and narration of environmental 'disconnects' resonates with literature on critical hope and moments of transformation (Nairn, 2019; Verlie et al., 2021).

While the imagery alone might have evoked positive affect without discomfort, and the narration alone might provoke discomfort without being 'stirred' affectively, the 'overlaid' effect engaged students and enabled them to pose new questions for themselves. The juxtapositions of the film's cinematography and voice-over is also seen in responses that drew attention to the narration. They called into question the way in which NZ environmental planning divides land into land use classifications, with the film showing examples of each land use type alongside headings like '30% Natural Forest', before presenting shots panning across connected landscapes. Some students connected the cinematography to questions it raised for them about how we categorise land:

Beautiful scenery of New Zealand. A part of it made me wonder about our past, our present and toward the end what our future might look like. I never gave land use classifications much thought but never liked the idea

of 'pigeon holing' our environment. It focuses on the 'use' of land and as though land has a carrying capacity which should be exploited. I think we haven't given it enough thought for New Zealand. It's focused on what is there now, rather than cumulative or future impacts. Working with the environment rather than from or within the environment.

As with the student responses above, this reflection suggests the film engaged the student to imagine different modes of conceptualising their relationship with the environment. This response is hopeful in both the positive affect (the 'beautiful scenery') and in the space that the film opened for the student to imagine a different way of relating to the environment in the future. The subtle language shift from working 'with' to 'within' the environment resonates with the call for future imaginaries of human/environment relations that go beyond 'settler futurity' to imagine 'indigenous futurities' (Tuck et al., 2014). These imaginaries conceive of humans as interconnected with agentic non-human nature and privilege long-term views of sustainability.

5.2 | Feeling unsettled

Alongside the positive affect the film evoked for students, they also indicated that the resources left them feeling unsettled and confused. The editing contributed to this

FIGURE 3 Still frame from the film showing an open doorway of an urban house leading to a vast rural landscape.



feeling. In the middle of the film, examples of land use classifications are shown for the number of seconds that correspond to the percentage of NZ's surface area characteristic of that classification (i.e. 1% settlement equalled 1 second of settlement footage). Sometimes the drone footage quickly shifts between landscapes, and at other moments settles for long pauses. The dichotomy between a human-focused start and lack of humans in the rest of the film, and changing drone shots, created confusion for some students:

We talked about the shot with the door opening. We needed to watch it multiple times to properly absorb the information. (See Figure 3).

Not having time to comprehend the wetlands etc. as it was so small. Could contribute to disconnect between grasslands and urban areas feeling so removed, villifying farmers.

Some comments also indicated confusion about the film's message:

We weren't sure how the film showed us how the classifications didn't work.

Some quotes also highlighted a common difference between this film and the many environmental issue films and documentaries which end with a statement of action, i.e. what viewers should now do. Instead, the Spatial Awareness Project ends with a set of questions:

This leaves us with a collective challenge: how might we shift our understanding to recognise the long-term and geographically far-reaching impact of what we do now ... and what we might do together ... What would it take to reimagine living better lives on this planet? How can richer perspectives create opportunities to realise new human-environment futures?

Ending with a statement that articulates clear action points for what people and societies should do to solve the problem presented in the film is a common device in

environmental-themed documentaries (Bieniek-Tobasco et al., 2019). Having a clear action point makes the viewer feel settled, comfortable and in control (Bieniek-Tobasco et al., 2019). Through the film, however, we suggest unsettling is needed. This strategy of ending with questions that sought to spark imagination rather than clear action points appeared to evoke 'learning through discomfort' (Boler, 1999), with students showing frustration and confusion at the lack of answers:

In terms of the key message, I was left wondering if I had fully grasped that. I think the message I was meant to be getting was [whether the] current system of land classification [is] actually useful at representing what our country actually is. And instead we should recognise the interconnectivity of our different environments. But what would this look like? Abolish the whole system of land cover measurements? Or is there a preferred solution being offered up?

Our intent with ending by raising questions was to prompt viewers to imagine possibilities, and this is evident in the quote above, where the student imagines ways forward ('abolish land classification?') and asks, 'is there a preferred solution being offered up?'. Student responses also suggest a tension within a pedagogy of discomfort, between *learning through* discomfort and *sitting in* discomfort; that is students may find themselves confused, frustrated, or overwhelmed, but unable to work through these feelings. This tension is well recognised in the scholarship; as Millner (2023, p. 806) notes, 'a pedagogy of discomfort is not about making everything uncomfortable, but about how to make it possible to experience and learn from discomfort productively and safely'. Millner (2023) argues that there is a need to scaffold discomforting learning so students can process their feelings. In our case, while the film's rapid shots and questions worked to unsettle students, whether this

dislocation leads to learning depends upon subsequent ability to process these feelings through guided reflection and conversation.

If the first element of a pedagogy of discomfort is to encourage students to get out of their comfort zones and question their assumptions, the second element challenges them to be open to Others' values and ontological understandings of the world through genuine, empathetic engagement (Zembylas, 2017). Through the questions the film posed, we sought to engage students with Mātauranga Māori onto-epistemologies of land and people as interconnected, and to imagine what the present and future might look like from these perspectives. Student responses suggested that they were encouraged to engage with different ontological understandings. Many students indicated the film affirmed that the environment is 'interconnected', that people 'like to categorise things into neat little boxes', and that '[i]t is easier for people to view the environment as a resource, separate from ourselves. This enables people to take advantage of or damage said resources without feeling guilty for doing so.' For others, their views were challenged by the notion of interconnection:

For me personally, it challenged my views completely because I always saw humanity and the environment as two separate entities. In moving forward to reduce environmental issues, the understanding and awareness that the environment is a part of our make is fundamental.

When the podcasts were integrated into the learning experience, we found that the empathetic learning was deepened, as students were able to engage with multiple viewpoints of people in their own words and through a lengthy conversation. Reflections on the podcasts clearly communicated the value of this activity with students remarking that the episodes presented perspectives different from their own:

The Spatial Awareness Project podcasts presented many different perspectives that differed from my own. Many of the perspectives held greater contextual knowledge on issues, which I was only just learning. Though throughout the series my own perspective was changing and evolving with the new perspectives being shared.

Being open to other views is not limited to humans. Students also reflected on how the film enabled them to see familiar places from a different perspective (visually or conceptually). Those who recognised landscapes they physically visited or had personal connections to places and experiences expressed surprise at how they looked from above: 'I found seeing images that I recognized really powerful, as it was seeing them from a different (birds-eye) perspective'. Others said the juxtaposition of different ecosystems in quick succession made them think in new ways about comparisons and connections

between landscapes. Reflecting on the drone shots of rivers and accompanying grasslands along the riparian margins, one student noted:

There's something about the comparison between rivers and grassland that resonates with me. Probably that rivers and freshwater ecosystems are particularly vulnerable to land use.

Responses such as this suggested an empathy with the land as students saw familiar places in unfamiliar ways.

Enabling students' agency over their learning through raising questions rather than answers was, however, unsettling at times for us as educators. Underpinning comments about the aesthetics and imagery in the film, several students linked their affective reaction to a sense of national pride or nostalgia, noting, for example, 'the cinematography is gorgeous. I'm moving back to NZ at the end of this year, having been overseas for 12 years, and this certainly elicited feelings of being homesick!'. There is a tendency in NZ to take pride in our clean, green environment that can make people reluctant to accept challenges to this narrative (Coyle & Fairweather, 2005), and we worried that students' pride of place and depictions of wilderness was an uncritical engagement with the film. Another student pointed to the lack of people in the film: 'huge expanse of land much of which seems not to be permanently inhabited by humanity'. This was unsettling for us, as the student was invoking the trope of wilderness as untouched pristine nature without human interference (Cronon, 1996), whereas the shots and voiceover spoke about the historic and contemporary shifts in land use. This is even more concerning when coupled with a second student's reflection that 'the absence of humans in the second part might seem to reinforce this separation we experience with nature.' We asked each other: Is what some students are taking from the film that there is no human impact on the landscape? While this was by no means a dominant theme in the responses, even outliers are valuable in small sample sizes.

Yet, student reflections, both upon initial viewing and after viewing and discussing the film with others, revealed a deeper engagement (and sometimes critique of) the film. For example, students connected pride of place with questions about the politics of responsibility for the environment:

...did a wonderful job of showcasing the diverse landscapes we are lucky enough to enjoy in our relatively small country. The film gave a powerful sense of the care and responsibility we should be showing to our home, and how currently policy and thinking is inadequate.

This video made me feel proud to be of this place but also made me feel slightly disheartened thinking about the enormity of the issues our country faces environmentally. It also gave me an appreciation for spaces we have the privilege of exploring like our national parks and

made me think how they might be better preserved for future generations.

The response above indicates that even when this student felt 'disheartened', they did not disengage (as can occur with resources that focus entirely on "doom and gloom" messages), but rather felt prompted to ask themselves new questions that imagined a longer temporality beyond their lifetime.

5.3 | Feeling empowered

In online learning environments, it is difficult to foster collaborative learning experiences. To foster collaboration, we asked students to view the film with others, either in zoom class, or at home with their family, housemates, or friends. We hoped that viewing as a social event would be a way for students to work through being unsettled, by talking through the film and its messages with others and helping each other to locate themselves and the meanings they take from the film rather than being guided by the teacher (Pearce & Learmonth, 2013). Responses to the second survey showed that some students were able to engage in conversation that connected the film with other course material and contemporary issues in their local areas. In this way, they were empowered to discuss the material and its links with other issues.

We discussed the urban/rural divide. The discussion centered around the July Farmers protest and how we can negotiate with these groups.

Although not our intention when we designed the collective viewing exercise, the collaborative viewing activity enabled students to have leadership in their learning. Student responses showed the agency they experienced as communicators and teachers and revealed how collective viewing can empower and deepen student learning as students discuss and explain the concepts to others. One student noted: 'there was definitely a sense of new knowledge being obtained, especially when I iterated some of the points being made further'. Several students also sent feedback to course instructors over email, sharing stories about the conversations with family members and changes in their lives that occurred after viewing the film collectively. One student in her 20s said she viewed the film at home with her 'conservative parents', and this sparked a discussion about environmental policy in NZ, with the student able to draw on concepts from the film and podcast to make a persuasive case for stronger environmental policy. Another student noted that watching the film with her husband was transformational for both:

I watched the film with my husband, and we had lots of conversations after, this has led to change within our

lives. I feel that this has been a trigger, I have for a long time felt a dissonance between values and action.

We were heartened to see responses like this, that showed how collective viewing with others in a student's immediate household and family circles could trigger conversations that may have been implicitly felt 'for a long time' and could lead to behavioural change.

Alongside responses such as this one, though, are the reflections from students who said they felt unsettled and who did not complete the second activity (of viewing the film with others), as well as students who did not submit a response. This raises ethical questions about the implications of using resources that unsettle students in an online-learning setting. Our students do not come to us ready to be filled with emotion; they bring their own emotions and existential questions about the environment to the classroom (Pihkala 2018), and activities designed to co-create hope can provoke a wide range of responses from students (Skilling et al., 2022). With online education, the possibility of students engaging with material that may evoke complex emotions, and then being left to 'languish in despair' without the opportunity to 'share their hope and make connection' (Burns 2015) may be greater as they often complete the tasks individually and it is more difficult for educators to follow up with them. There may be students who felt unsettled and did not have any guidance to work through these feelings in a productive way.

Upon reflection, we see the benefits students gained in the undergraduate geography class which scaffolded the film with activities to help students work through their feelings of discomfort in class groups. This could be done via synchronous zoom group sessions for online students. We suggest pairing this kind of media intervention with scaffolded activities such as short reflective writing activities, the strategic incorporation of podcasts, and forum provocations that help students make sense of their responses.

6 | CONCLUSION

The Spatial Awareness Project film and podcast invite students to ask questions rather than promoting answers. Our pilot study indicates that this virtual place-based education (PBE) resource, designed for online and blended-learning courses, provided a 'pivot point of transformation' for some students (Hayes et al., 2018, p. 35). Through this resource, students were challenged to question their current values, and to make space for imagining the world in new ways. Student responses revealed that the power of the resources to engage rather than overwhelm lay with the emotions the film evoked. The hopefulness inspired by these aesthetic elements seemed to foster a deep

engagement with the material, empowering students to confront rather than avoid complex environmental issues.

Importantly, this resource did not appear to instil a naive hope that ignored socio-environmental problems; rather, positive affect coexisted with visual and spoken discussions of ecological degradation, social tensions, and questions about the unsustainability of dominant land use practices, and enabled students to feel unsettled by the resources. This combination of affective response—feeling both hopeful and unsettled—appeared to support a transformative process, enabling students to question their values, initiate new conversations, and adopt new behaviours.

These findings align with existing research showing that learning is deeply intertwined with feeling, thinking, and doing, and that hope can be a catalyst for environmental action (Geiger 2021). However, we also know that too much focus on crisis discourses can cause people to disengage from learning and action (Norgaard, 2011). Our approach contributes to research on aesthetic inquiry by revealing how digital media can elicit affective responses that engage students in difficult learning. Moreover, it advances the literature on place-based and experiential learning by showing how students learning online can experience place in new ways through emotionally engaging digital resources.

Unsettling and empowering students through digital media created tensions for us as educators teaching online. Giving students agency to engage with media on their own terms, and to share and discuss with their family and friends outside the classroom requires educators to let go of some control. Rather than framing answers for students, we sought to provoke a reframing of the questions they ask and encourage them to take these questions out of the course and into conversations with their family and friends. This methodological approach to encouraging socialisation of online learning through collective viewing and discussion with family/friends, is an area that we found to be under-explored in the environmental education literature. There is evidence that sharing learning with family and friends through digital resources can deepen learning and empower students to feel they are part of larger conversations beyond the ivory tower (Pearce & Learmonth, 2013); this deserves further research in environmental education.

This project has also expanded our pedagogical and research horizons. While producing podcast interviews and engaging in conversations with landowners, we became aware of tensions both within rural communities and between rural and urban populations, as well as misunderstandings between these groups and the government. For instance, some rural interviewees expressed feeling unfairly targeted by public discourse (see Korson et al., 2022). This prompted us to explore whether

these tensions are more broadly experienced across New Zealand. To this end, we recently conducted a study examining public perceptions of farming in New Zealand, identifying key points of divergence and connection that could inspire new strategies for fostering dialogue between farmers and diverse publics (see Beban et al., 2024). This work highlights the potential of pedagogical tools—such as shared narratives, food, and personal relationships—as opportunities for strengthening connections and understanding that can build on the work we began in the film and podcast series.

Overall, we aim to show through our film and our emerging work that what is needed is not more information on destruction, nor clear answers that ignore the complexity of the problems we face, but rather an unsettling. We do not have all the answers yet, indeed, the answer is not the most important part—the most important part is how we arrive at that answer.

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ENDNOTES

¹ The Spatial Awareness Project film can be viewed on YouTube: https://www.youtube.com/watch?v=HXe-xY1kA-8&ab_channel=CadeyKorson.

² A/Prof Krushil Watene was a Senior Lecturer at Massey University at that time, and is now an Associate Professor at Waipapa Taumata Rau/University of Auckland.

REFERENCES

- An, S., Ji, L., Marks, M., & Zhang, Z. (2017). Two sides of emotion: Exploring positivity and negativity in six basic emotions across cultures. *Frontiers in Psychology*, 8(610), 1–14. <https://doi.org/10.3389/fpsyg.2017.00610>
- Andrew, M. B., Dobbins, K., Pollard, E., Mueller, B., & Middleton, R. (2023). The role of compassion in higher education practices. *Journal of University Teaching and Learning Practice*, 20(3), 1–12. <https://doi.org/10.53761/1.20.3.01>
- Artioli, G., Deiana, L., De Vincenzo, F., Raucci, M., Amaducci, G., Bassi, M. C., Di Leo, S., Hayter, M., & Ghirotto, L. (2021). Health Professionals and Students' Experiences of Reflective Writing in Learning: A Qualitative Meta-Synthesis. *BMC Medical Education*, 21(1), 394. <https://doi.org/10.1186/s12909-021-02831-4>
- Atchison, J., & Kennedy, J. (2020). Being on country as protest: Designing a virtual geography fieldtrip guided by Jindaola. *Journal of University Teaching and Learning Practice*, 17(4), 1–9.
- Beban, A., Korson, C., Reid, J., Procter, J., Halley, J., & Mackenzie, K. (2024). Building a place-based social license to

- operate. *AgResearch*. <https://ourlandandwater.nz/wp-content/uploads/2023/10/Building-a-Place-based-Social-Licence-to-Operate-Report-Oct-2023.pdf>
- Bieniek-Tobasco, A., McCormick, S., Rimal, R. N., et al. (2019). Communicating Climate Change Through Documentary Film: Imagery, Emotion, and Efficacy. *Climatic Change*, 154, 1–18. <https://doi.org/10.1007/s10584-019-02408-7>
- Boler, M. (1999). A pedagogy of discomfort: Witnessing and the politics of anger and fear. In M. Boler (Ed.), *Feeling Power* (pp. 175–202). Taylor and Francis.
- Boler, M., & Zembylas, M. (2003). Discomforting truths: The emotional terrain of understanding differences. In P. Trifonas (Ed.), *Pedagogies of difference: Rethinking education for social justice* (pp. 110–136). Routledge.
- Burns, H. L. (2015). Transformative Sustainability Pedagogy: Learning From Ecological Systems and Indigenous Wisdom. *Journal of Transformative Education*, 13(3), 259–276. <https://doi.org/10.1177/1541344615584683>
- Cowan, J. (1998). *On becoming an innovative university teacher: Reflection in action*. Open University.
- Coyle, F., & Fairweather, J. (2005). Challenging a place myth: New Zealand's clean green image meets the biotechnology revolution. *Area*, 37(2), 148–158.
- Cronon, W. (1996). The trouble with wilderness. *Environmental History*, 1(1), 7–28.
- Duffy, L., Godduhn, A., Fabbri, C., van Muelken, M., Nicholas-Figueroa, L., & Middlecamp, C. (2011). Engaging students in science courses: Lessons of change from the Arctic. *Interchange*, 42(2), 105–136.
- Easton, E., & Gilburn, A. (2012). The field course effect: Gains in cognitive learning in undergraduate biology students following a field course. *Journal of Biological Education*, 46, 29–35.
- Escobar, A. (2018). *Designs for the Pluriverse*. Duke University Press.
- France, D., & Haigh, M. (2018). Fieldwork@40: Fieldwork in geography higher education. *Journal of Geography in Higher Education*, 42(4), 498–514.
- Fuller, I., Edmondson, S., France, D., Higgitt, D., & Ratinen, I. (2006). International perspectives on the effectiveness of geography fieldwork for learning. *Journal of Geography in Higher Education*, 30, 89–101.
- Geiger, N. (2021). How Do I Feel When I Think About Taking Action? Hope and Boredom, Not Anxiety and Helplessness, Predict Intentions to Take Climate Action. *Journal of Environmental Psychology*, 76, 101649.
- Hadzigeorgiou, Y. P. (2012). Fostering a sense of wonder in the science classroom. *Research in Science Education*, 42(5), 985–1005.
- Hayes, K., Blashki, G., Wiseman, J., Burke, S., & Reifels, L. (2018). Climate change and mental health: Risks, impacts and priority actions. *International Journal of Mental Health Systems*, 12(1), 28–40.
- Healey, M., & Jenkins, A. (2000). Kolb's experiential learning theory and its application in geography in higher education. *Journal of Geography*, 99(5), 185–195.
- Hornsey, M., & Fielding, K. (2016). A cautionary note about messages of hope. *Global Environmental Change*, 39, 26–34.
- Ivanaj, V., Poldner, K., & Shrivastava, P. (2014). Hand/heart/head: Aesthetic practice pedagogy for deep sustainability learning. In M. McIntosh, N. Barter, & H. Tregidga (Eds.), *Storytelling: Beyond the Academic Article—Using Fiction, Art and Literary Techniques to Communicate* (pp. 23–46). Routledge.
- Korson, C., Beban, A., Ashley, N., & Stanley, R. (2022). The spatial awareness project: A Co-created interdisciplinary educational film and podcast. *GeoHumanities*, 8(2), 620–629. <https://doi.org/10.1080/2373566X.2022.2041457>
- Leonard, A. E. (2019). Information literacy in place-based interdisciplinary teaching and learning. In R. D. Lansiquot & S. P. MacDonald (Eds.), *Interdisciplinary perspectives on virtual place-based learning* (pp. 53–68). Palgrave Pivot.
- Lustick, H. (2021). Our Data, Ourselves: A Framework for Using Emotion in Qualitative Analysis. *International Journal of Qualitative Studies in Education*, 34(4), 353–366. <https://doi.org/10.1080/09518398.2020.1760393>
- Marshall, D. J. (2021). Digital storytelling as community-based intercultural learning in cultural/historical geography. In J. E. Wessell (Ed.), *Experiential learning in geography*. Springer.
- Millner, N. (2021). Unsettling Feelings in the Classroom: Scaffolding Pedagogies of Discomfort as Part of Decolonising Human Geography in Higher Education. *Journal of Geography in Higher Education*, 47(5), 805–824. <https://doi.org/10.1080/03098265.2021.2004391>
- Moysey, S. M., & Lazar, K. B. (2019). Using virtual reality as a tool for field-based learning in the earth sciences. In R. D. Lansiquot & S. P. MacDonald (Eds.), *Interdisciplinary perspectives on virtual place-based learning* (pp. 99–126). Palgrave Pivot.
- Nairn, K. (2019). Learning from young people engaged in climate activism: The potential of collectivizing despair and hope. *Young*, 27(5), 435–450. <https://doi.org/10.1177/1103308818817603>
- Norgaard, K. (2011). *Living in Denial*. MIT Press.
- Ojala, M. (2016). Facing Anxiety in Climate Change Education: From Therapeutic Practice to Hopeful Transgressive Learning. *Canadian Journal of Environmental Education*, 21, 41–56.
- Pearce, N., & Learmonth, S. (2013). Learning beyond the classroom: Evaluating the use of pinterest in learning and teaching in an introductory anthropology class. *Journal of Interactive Media in Education*, 12, 1–10.
- Pihkala, P. (2018). Eco-Anxiety, Tragedy and Hope: Psychological and Spiritual Dimensions of Climate Change. *Zygon*, 53, 545–569. <https://doi.org/10.1111/zygo.12407>
- Powers, A. (2004). An evaluation of four place-based education programs. *The Journal of Environmental Education*, 35(4), 17–32.
- Prehn, J., Peacock, H., Guerzoni, M. A., & Walter, M. (2020). Virtual tours of country: Creating and embedding resource-appropriate aboriginal pedagogy at Australian universities. *Journal of Applied Learning & Teaching*, 3, 1–9.
- Rosalia, C. (2019). Non-fiction virtual reality stories of emigration: Points of viewing and creating for the classroom. In R. D. Lansiquot & S. P. MacDonald (Eds.), *Interdisciplinary perspectives on virtual place-based learning* (pp. 127–146). Palgrave Pivot.
- Rust, M. (2014). Eros, animal, and earth. *Self & Society*, 41, 38–43.
- Skilling, P., Hurd, F., Lips-Wiersma, M., & McGhee, P. (2022). Navigating hope and despair in sustainability education: A reflexive roadmap for being with eco-anxiety in the classroom. *Management Learning*, 54(5), 655–679.
- Smithwick, E., Baxter, E., Kim, K., Edel-Malizia, S., Rocco, S., & Blackstock, D. (2018). Interactive videos enhance learning about socio-ecological systems. *Journal of Geography*, 117, 40–49.

- Strauss, A., & Corbin, J. M. (1990). *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Sage.
- Tuck, E., McKenzie, M., & McCoy, K. (2014). Land education: Indigenous, post-colonial, and decolonizing perspectives on place and environmental education research. *Environmental Education Research*, 20(1), 1–23.
- Verlie, B., Clark, E., Jarrett, T., & Supriyono, E. (2021). Educators' experiences and strategies for responding to ecological distress. *Australian Journal of Environmental Education*, 37(2), 132–146. <https://doi.org/10.1017/ae.2020.34>
- Winks, L. (2022). Uncomfortable learning and ethical tensions: Animal butchery and environmental education. In R. Cutting & R. Passy (Eds.), *Contemporary approaches to outdoor learning* (pp. 1–12). Palgrave Macmillan.
- Zembylas, M. (2017). Practicing an ethic of discomfort as an ethic of care in higher education teaching. *Critical Studies in Teaching and Learning*, 5(1), 1–17.

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