



From Lecture Halls to Living Systems: Prioritising Planetary Health through Public Health Education in a Time of Turbulence

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ABSTRACT

Planetary health is a relatively new concept in health sciences. Although there are natural synergies between public health and planetary health, to date little has been written regarding the specific ways in which public health tertiary education might prioritise the teaching of planetary health within its curricular. In this discussion paper, we begin with an overview of the origins of planetary health and how it has been taken up by the health professions. We then move the discussion to consider how it might fit with a public health education agenda, and existing concepts and issues with respect to planetary health. Drawing on the literature and an overview of existing planetary health tertiary education and evaluation, we propose ways in which planetary health can be prioritised in the delivery of public health tertiary education, particularly within the context of Aotearoa New Zealand, to contribute to the health and well-being of both people and the planet.

Keywords: public health, tertiary education, planetary health, Indigenous knowledge, workforce development

INTRODUCTION

First coined in 2014, in *The Lancet* (Horton et al., 2014), planetary health is a relatively new concept in health sciences; more specifically, it is new to public health. Described as an “attitude towards life and a philosophy for living” (Horton et al., 2014, p. 847), planetary health analyses and addresses impacts of human society on earth’s natural systems, with its ongoing effects on human health. In this manner, a fundamental principle of planetary health is that human health and the health of the natural environment cannot be uncoupled (Prescott & Logan, 2019). Today planetary health has evolved into the Planetary Health Alliance (<https://planetaryhealthalliance.org>) which disseminates research; develops and curates education resources; and hosts communities of practice with organisational (universities, non-governmental organisations, research institutes, and government entities) and individual members spanning more than 80 countries. Given this global significance and holistic approach, we endorse an

imperative for under- and post-graduate tertiary education, specifically related to public health curriculum, to prioritise planetary health.

This discussion paper begins with a brief history of planetary health and the recognition it is receiving among professions within the health sector. Next, we broadly explore the interface between public health and planetary health, and the existing synergies in terms of values, public communication, and key contributions public health has made towards advancing planetary health thus far. We then take a closer look at public health tertiary education. Drawing on examples from AUT University in Aotearoa New Zealand, we consider how public health curricula might be transformed to better prepare students entering the health workforce in relation to our central topic; and what potential strengths, challenges, and opportunities may be encountered. As part of this discussion, we touch on four key points raised in the public health and planetary health literature. The first is how employing AI can revolutionise both public health and planetary health education. The second is the significance of sustainable activities on campuses and community engagement as actions for mobilising planetary health education. The third is the need to acknowledge and incorporate Indigenous knowledge and conceptualise planetary health as a holistic eco-centric approach. The fourth point is in respect to adopting an intersectoral stance in support of a collective approach amongst the health sciences and across broader disciplines to promote planetary health, including to what extent advanced science and technology must be acknowledged and incorporated. While the public health community has been noted to be slow in its response to the threat of climate change (Maibach et al., 2008), we argue that public health's foundational concepts and tools provide a sound basis to position the discipline to take an active role in championing planetary health.

Planetary Health and Health Professions

In 1997, Dr Trevor Hancock, a noted public health physician, described planetary health as the “ultimate determinant of human development” (Preston & Logan, 2019, p. 100). Despite these words, it was not until the Lancet Commission on Planetary Health published its report in 2015 (Whitmee et al., 2015) that the term ‘planetary health’ became popular. Yet, the concept of planetary health can be said to even pre-date Dr Hancock’s words. According to Preston and Logan (2019), planetary health has roots in the environmental and holistic health movements of the 1970s and 80s. During this time environmental activists and health services based in Indigenous and culturally rooted knowledge were beginning to become more widely known and talked about. There is, of course, some irony in the notion of an emergent Indigenous planetary health given that Indigenous communities typically have ancient attachments to nature and the planet which was largely decoupled during the recent colonisation and modernisation period (see, e.g., Jones et al. 2022).

Around the same time as planetary health was appearing in the literature, the concept of ‘One Health’ emerged in the 1980s from within the field of veterinary medicine (Pettan-Brewer et al., 2021). Originally termed ‘One Medicine’ by Dr. Schwabe (1984), a veterinarian and public health scientist, One Health brought to the fore the understanding that human, animal, and environmental health are closely linked and inter-dependent. Thus, optimising the health of one requires the balance of all three. According to the World Health Organization (2017), One Health is “particularly important to prevent, predict,

detect, and respond to global health threats”, such as the COVID pandemic. With a similar focus as One Health, in the belief “that health concerns must be addressed at the human–animal interface within their broader natural and social environments” (Roger et al., 2016), EcoHealth is another concept that feeds into the broader notion of planetary health. Whereas it has been argued that One Health is driven more by positive assumptions and health science, EcoHealth tends to include more participatory and citizenship components (Roger et al., 2016), making it more constructivist in its approach.

It was the Lancet Commission on Planetary Health, however, that more explicitly called in to focus environmental issues, in particular climate change, and the potentially devastating effect for human health. Planetary health has been defined as “a solutions-oriented, transdisciplinary field and social movement focused on analysing and addressing the impacts of human disruptions to Earth’s natural systems on human health and all life on Earth” (Planetary Health Alliance, 2024). An example, as noted in the Lancet Commission report, is how reduced agricultural output and resulting declines in calorie availability will result from warming and declines in biodiversity (Whitmee et al., 2015). While there are still many who would argue that climate change is not a ‘real’ issue, there is documented evidence that continues to reveal the negative impacts that humans have had on the natural world (Steffen et al., 2004). The ideas put forth by Whitmee et al. (2015) are of particular importance given the power of the medical community in shaping health policy and policy more generally.

With a growing call from medical students through to practitioners and professional associations, the medical profession appears to have taken a lead when it comes to acknowledging the need for and integrating planetary health in medical education. This has resulted in the development of guidelines and frameworks to support knowledge development in this area (Guzmán et al., 2021; Shaw et al., 2021); although, Visser et al. (2024) have argued that the literature in this area remains fragmented. Their scoping review revealed that much of the literature, which comes predominantly from the West, focuses on why planetary health should be integrated in medical education and what topics should be covered. However, this review does not consider how it is actually being taught and what the outcomes are (Visser et al., 2024). While the medical profession, internationally, is recognising how patients’ health is impacted—directly and indirectly—by environmental changes and the role that medical professionals have in managing this situation (Bevan et al., 2023; Rieser et al., 2023; Wabnitz et al., 2023), Omrani et al.’s (2020) research revealed that only 15% of 2,817 medical schools in 108 countries included climate change and health in their curriculum.

Alongside medicine, nursing, has also been touted as having a role to play in mitigating health effects resulting from climate change (Leffers & Butterfield, 2018; Rosa et al., 2019; Vandenberg, 2023; Ward et al., 2025). One of the largest professions, comprising approximately 60% of the healthcare workforce (Cook et al., 2019), internationally undergraduate nursing curricular are undergoing changes to incorporate planetary health as part of the syllabus. The Australian Medical Council have incorporated climate change and planetary health into their medical school standards (Pendry et al., 2023), and the International Council of Nurses (2021) have embedded climate change in their Code of Ethics. In doing so, the nursing profession has signalled an opportunity to move from interventions that focus on the individual’s response to the environment towards

active interventions to minimise environmental disruption (Dillard-Wright et al., 2020; Martin et al., 2024).

Students training as future health professionals are also recognising they must be prepared to address the impacts of human-caused environmental changes on patients' health, and to understand and mitigate the negative environmental impacts of clinical care. Students are mobilising their voices and agency, holding universities accountable for educating health students on planetary health and education for sustainable healthcare. The Planetary Health Report Card (PHRC) (<https://phreportcard.org/>), a student-led initiative developed by medical students in 2019, has recently become an American non-profit and has now been adopted by at least 21 countries. The PHRC is an internationally generalisable metric-based tool designed to evaluate and improve planetary health content in health professional education and research (medicine, nursing, pharmacy, etc.). It reports across discrete metrics in five main categories, one of which is planetary health curriculum. Annual cycles of evaluation show varying uptake, success, and sustainability of planetary health curriculum within health professional education.

While there is growing recognition of the need to embed planetary health in medicine and nursing curricular, there is a paucity of literature that speaks to how allied health groups are addressing this issue. In a recent bibliometric analysis, Eustachio et al. (2024) argued that occupational therapists and physiotherapists have an important contribution to make in public health through incorporating interventions to improve patients' physical health while encouraging "eco-friendly lifestyles, emphasising exercise in natural settings and educating patients on environmental sustainability" (p. 435). Indeed, Hess and Rihtman (2023) highlighted the need to locate environmental and sustainability thinking at the centre of occupational therapy education. Further, Maric et al. (2021) noted that the Environmental Physiotherapy Agenda 2023 calls for educational institutions to integrate sustainability perspectives and planetary health into entry-level programmes. There have been similar calls for dietitians and nutritional professionals (MacKenzie-Shalders et al., 2023; McCormack et al., 2023; Rosenau et al., 2024) to take up the mantle of sustainability in their training and work. Researchers from the School of Nursing and the School of Pharmacy at the University of Auckland have been awarded a Health Research Council activation grant to explore the links between human health and planetary health. Interestingly though, there is a paucity of literature that directly addresses how public health tertiary education programmes are addressing planetary health in their curricular.

Current Status of Planetary Health within Health Education

A Google search and review of the database of planetary health programmes, courses, and certificates maintained by the Planetary Health Alliance ([Find a Planetary Health Course - Planetary Health Alliance](#)) shows many examples from across the globe of planetary health education, at both the pre-degree, under- and post-graduate levels, that are in-person, on-line, or blended. While some of this planetary health education arises out of science disciplines, many examples arise from traditional health professions or public health. Lokmic-Tomkins et al. (2024) provided case studies of how the Planetary Health Education Model is applied to selected University health profession education contexts in Australia and the United States.

The transparent inclusion of planetary health within Aotearoa New Zealand tertiary level health curricula remains disappointingly limited. Report cards produced by students from the Schools of Nursing and Pharmacy at the University of Auckland, and by medical school students from the University of Otago, report poorly on the extent to which planetary health is covered in both under- and post-graduate curricula. Inclusion of planetary health education within public health education is even more scarce. A Google search confirmed AUT university as the only tertiary institution to offer planetary health, at both under- and post-graduate levels, but limited to lectures within courses rather than as entire courses or integrated across a programme of study.

PUBLIC HEALTH: A PLANETARY HEALTH APPROACH

Traditionally, public health workers have sought to improve population health outcomes from within human-centric health systems. Planetary health, however, moves beyond the health system, drawing on connections between health, economic, social, and political systems to address the impacts of environmental changes on health—an eco-centric approach. Yet, unlike say clinical sciences, there are many synergies between the goals and values of both public health and planetary health, including a focus on collective actions among individuals and their communities to promote health and well-being (Horton et al., 2014), and influencing agendas on a societal and global scale. We argue that broadly understood principles of public health and social determinants of health are easily expanded for planetary health (see, e.g., Redvers et al., 2025). Iyer et al. (2021) described how the systems thinking of public health has a key role for planetary health; while Frumkin and McMichael (2008) posited that many basic concepts and tools of public health provide a sound basis for championing planetary health.

Public health initiatives often overlap with planetary health goals. For instance, promoting the use of walking and cycling or developing green spaces or nature-positive solutions in urban areas, often with vital community involvement, can both improve physical and mental health and reduce greenhouse gas emissions. Both public health and planetary health recognise the importance of empowering and engaging communities in decision-making processes to foster a sense of ownership over local environmental issues and improve health outcomes (Stein & Dorner, 2024). One strategy used to engage communities to bring about change is through communication and social marketing. As the public has become increasingly informed and recognised as holding knowledge that shapes their health, there has been a shift in the use of an ‘information deficit’ approach (Maibach, 2008) to communication at a community level that targets attitudes and knowledge to tackle population behaviour (Frumkin & McMichael, 2008). Both public health workers and planetary health advocates have been skilled at tailoring the type of communication to the respective target group (e.g., individual, community, government) to bring about change in practice and policy (Iyer et al., 2021). Yet, despite initial enthusiasm these attempts to change behaviour often have limited long-term success. Typically, it is difficult to bring about such ‘healthy’ behaviour change because of the less than healthy car-based society and general reluctance by stakeholders to embrace change. However, there are case studies around the

world of considerable success, such as Singapore (Tan et al., 2022) and Denmark (Cheshmehzangi et al., 2024), so it would be useful to understand how and why they differ.

Globally, there has been an emphasis on the need for policies that align public health objectives with climate change and planetary health (Bowen et al., 2021). Examples include Social Determinants of Health (World Health Organization, 2008), Sustainable Development Goals (United Nations, 2020), and the Paris Agreement. These policies have often not been followed and it is important to understand the resistance or barriers to compliance, particularly as these challenges are likely the same ones that have led to the climate change problems that the world is currently experiencing. Further, these policies necessitate the adoption of intersectoral and interdisciplinary focus to tackle both public health crises and environmental challenges through improving and protecting the environments in which people live and work, as well as the social conditions that contribute to health. Such an approach has underpinned several public health achievements. Within planetary health this approach has supported two major initiatives: adopting sustainable food systems (Conn et al., 2020; Iyer et al., 2021) and transforming healthy cities (Conn et al., 2021a; Iyer et al., 2021). But these are largely aspirational, especially for the mega cities around the globe, such as the [C40 Cities hub](#), with several barriers and enablers that need to be considered for trying to move in a more planetary health direction. Keim (2008) argued that through promoting “healthy people, healthy homes and healthy communities” (p. 511), public health has an active role to play in supporting human health in the face of environmental disasters. Implementing this work, however, requires a public health workforce that has sound knowledge of, and appreciation for, planetary health. Equally a much more planetary health focused society includes sectors such as urban planners, politicians etc., not public health alone. Participants in the International Union for Health Promotion and Education (IUHPE) conference held in Rotorua, Aotearoa New Zealand in 2023 developed two statements: a general conference statement (IUHPE, 2019a) and a separate Indigenous peoples’ statement (IUHPE, 2019b), both calling “on the global community to urgently act to promote planetary health and sustainable development for all, now and for the sake of future generations”.

PRIORITISING PLANETARY HEALTH IN PUBLIC HEALTH TERTIARY EDUCATION

In dealing with population health, public health has adopted a long-term approach to planning and intervention. However, Frumkin and McMichael (2008) contended that the size and complexity of planetary health requires a “far longer time frame than has been customary in health planning, and it needs a systems approach that extends well beyond the current boundaries of the health sciences and the formal health sector” (p. 403). We also see a lack of consistency in a way forward, from the more degrowth and reduced footprint approaches of some European countries to the high-tech approaches of nations such as Singapore and China. Then, there are some countries, such as the United States and, sadly, Aotearoa New Zealand, that are retreating from climate action altogether. This inconsistency is compounded by further variations within countries. Thus, any measures that are taken to prioritise and embed planetary

health into public health tertiary education programmes are not going to be a ‘one-size-fits-all’ and will require a place-based approach. Planetary health education will also not be a ‘quick fix’ within an environment of rapid change—delay or taking too long will, in itself, be problematic. Nevertheless, these challenges can be reframed as opportunities and possibilities.

In this section, we consider four pertinent areas that would be valuable for public health programmes in Aotearoa New Zealand to implement. These include:

- making use of Artificial Intelligence (AI),
- campus sustainability and community engagement,
- incorporating Indigenous knowledge, and
- adopting a more active intersectoral approach.

A summary of the strengths, opportunities, and challenges of prioritising planetary health in public health tertiary education curricular, as discussed in this section, can be found in Table 1.

Table 1. *Prioritising planetary health in public health tertiary education – a summary*

Strengths	Challenges	Opportunities
Shared values of social justice and health and well-being for all (people and environment)	Moving away from classroom/online based learning towards collaborative groups, industry and community engagement	Intersectoral approach to support public health students to practice alongside other professionals (e.g., economists, environmentalists, scientists, technologists) from a planetary health perspective
Indigenous knowledge within Aotearoa New Zealand offers lived experiences of planetary health	Moving away from immediate/short term interventions to targeting longer timeframes and more complex and rapidly changing systems	Develop projects on campus to model sustainability that can then be implemented in the wider community
Community engagement through social marketing and multilayered communication		Foster research and innovation by engaging students in real-world problems and support them in using the findings to influence policy
		Use of AI developments across a range of projects, to harness big data to develop targeted interventions which incorporate planetary health goals, and increasing digital literacy and empowerment for all stakeholders (e.g., students and communities)

Making Use of AI

In the last few years AI has come to increasingly dominate every walk of life, including that of public health systems. AI is known for its capacity to harness big data management and ability to capture data that enables identification of community patterns of ill health which can then inform policy. Wang and Li (2024) provided one analysis of the prospects and challenges for AI to revolutionise public health education. Currently AI technologies are being employed to monitor environmental changes and assess their impacts on public health. For instance, predictive models for climate-related events, like floods and heatwaves, are being developed to enhance preparedness and response strategies. The Planetary Health Informatics Lab (University of Oxford, 2024) involves a group of interdisciplinary collaborators from across the globe who are currently working on projects that combine climate data with health information to address inequities in health outcomes related to environmental factors and develop more equitable global health solutions.

Conn et al. (2021b) have previously discussed how the growth of AI has the potential to change how public health is taught, communicated, and enacted in Aotearoa New Zealand. As noted earlier, communication and social marketing have been a strength of public health and AI can assist in many ways, including greater use of social media and social marketing. There are increasingly many examples of ways in which AI can assist with stepping beyond the confines of the health sector. Public health programmes might consider inviting collaboration with computer science programmes so that students can work together to plan campaigns that “motivate constructive engagement and support wise policy choices” (Frumkin & McMichael, 2021, p. 403) regarding planetary health messaging.

Campus Sustainability and Community Engagement

Tertiary institutions themselves can serve as models of sustainability and resilience. By adopting environmentally friendly practices on campus—such as reducing waste, conserving energy, and promoting sustainable transportation—universities can demonstrate their commitment to planetary health and provide practical learning experiences for students. Cleveland (2022) wrote about the unhealthy and environmentally unsustainable food environments on higher education institution campuses stemming from the prioritisation of short-term revenue. Engaging public health students to address this sort of issue is one way in which to bring alive planetary health as an issue that can have immediate bearing on people’s and the planet’s health. AUT University’s strategy (Te Kete) is to promote health and well-being of people and planet—planetary health. To support this strategic goal, AUT University has recently taken up organisational membership of the Planetary Health Alliance and is formulating performance indicators and actions to align with [Nature Positive Universities](#).

Community engagement is another important aspect of integrating planetary health into education. Universities can partner in place-based collaborations with local communities to address environmental and health issues, thereby translating academic knowledge into actionable solutions. These partnerships can enhance the relevance of academic programmes and foster a sense of social responsibility among students. Given the uncertainty of the future, along with the legacy of slow organisational change, emphasis is needed on

partnership with the community and industry to create and nurture symbiotic relationships, and ensure future students and their families are part of, and aware of, the change conversation. This is particularly important when considering whether public health higher education is preparing people for employment in the long-term. Community engagement can and must also extend beyond the health sector. For instance, in working with local city councils and public health, students can contribute to policy discussions by providing evidence-based recommendations and advocating for sustainable practices. By participating in policy development and public discourse, universities can help drive systemic changes that benefit both human health and the environment.

Incorporating Indigenous Knowledge and Taking an Ecosystem Approach

Prescott and Logan (2019) contended that discourse on planetary health “requires cultural competency, critical consciousness and a greater appreciation of marginalized voices” (p. 78). Globally, the acknowledgement of Indigenous communities as holders of systems of knowledge, ecological philosophy, and cultural and social practices that are necessary for both justice and well-being is on the rise (Di-Prete Brown et al., 2020; Huambachano, 2018; Redvers et al., 2023). Jones et al. (2022) and Martens (2024) have called for planetary health to have a shift from an anthropocentric paradigm to a more ecosystem approach, supported by the incorporation of Indigenous knowledge. Given the focus of planetary health more locally on both people and populations, as well as more broadly encompassing the within which humans exist, Di-Prete Brown et al. (2020) have claimed that “local and Indigenous knowledge ... can help [planetary health] to articulate its aims in terms of survival and preservation in more place-based historically contextualized ways” (p. 19). Redvers et al. (2023) took an Indigenous consensus approach to identify 10 determinants of health: two for Mother Earth, four for collaboration, and four for Indigenous people.

Incorporating Indigenous knowledge in education, particularly within the context of Aotearoa New Zealand, is a fundamental aspect of any approach to planetary health. There are considerable opportunities to be gained from drawing on mātauranga Māori, and especially kaitiakitanga traditions and values, in supporting and enhancing the role of human guardianship—both in relation to human society and more widely and significantly in relation to the planet. Māori, as with other Indigenous communities around the world, have long recognised an interconnectedness and kinship between humans and the natural environment (Iisahunter et al., 2024; Tu’itahi et al., 2021). From within Maoridom comes the term ‘kaitiakitanga’, meaning “guardianship, protection preservation or sheltering” (Te Ara, 2024); a way of managing the environment. There are considerable opportunities to be gained from drawing on kaitiakitanga traditions and values in promoting the role of human guardianship both over the health of human society and more widely and significantly in the 21st century over the planet. These interconnections have been acknowledged in Vision Mātauranga, a framework that recognises the significance of Indigenous knowledge systems and seeks to unlock the innovative potential of Māori knowledge, resources, and people to create a better future for New Zealanders (Ministry of Research, Science + Technology, 2007). Such a document is significant when considering the implications for research to the wider environment. By recognising and honouring the diverse cultural perspectives and

knowledge systems of Māori, Pacific peoples, and other communities, planetary health education can contribute to a more comprehensive and culturally responsive approach to health research and policymaking in the Pacific region. Jones et al.'s (2022) personal views toward a decolonial relational vision have paved the way for an Indigenous and ecocentric approach to planetary health in Aotearoa New Zealand.

Current public health curricula in Aotearoa New Zealand aim to be driven by Indigenous knowledge brought into the classroom from the external environment. For example, AUT delivers under- and post-graduate public and environmental health programmes that incorporate Māori health and well-being models such as te Whare Tapa Whā (a model for understanding Māori health that uses the wharehau [meeting house] as a symbol for the four cornerstones of Māori health and well-being: family, physical, mental, and spiritual) (Durie, 1985); te Wheke (Pere, 1991); and te Pae Māhutonga (Durie, 1999). Inherent in these models is the understanding that the health of people—their physical, mental, social health, and well-being—is intertwined with the natural environment (Ministry of Health/Manatū Hauora, 2002). Yet is classroom-based learning enough?

According to Filho et al. (2022), planetary health involves “the application of knowledge in the world, about the species and environments that form it” (p. 5). Public health education in Aotearoa New Zealand has “relied mainly on analogue ways of teaching and learning; that is, using ‘chalk and board’ lectures ... with a limited online, interactive presence” (Conn et al., 2021b, p. 2). The COVID-19 pandemic transformed the higher education sector, bringing about a shift in education delivery from in classroom to online learning. We argue that for public health students to begin to understand and appreciate the value of Indigenous knowledge in working towards planetary health, it is important that they move out of the classroom, or from behind the computer screen, and into the natural environment to find ways to discuss the intersection between green spaces and healthy systems and to actually be a part of cultivating this connection (Tu’itahi et al., 2021). Some examples include “land-based learning, ... environmental sustainability, cultural and linguistic integrity” (Ratima et al., 2019). By actively engaging with the land (e.g., being part of a community garden, see e.g., Hond et al., 2019), Ratima et al. (2019) have argued there is the opportunity for hands-on-learning regarding connections between past, present, and future generations; identity and spiritual sustenance; community participation and cohesion; environmental sustainability and, therefore, planetary health.

An Intersectoral Approach

While planetary health is increasingly recognised as a global problem, and a ‘wicked problem’ at that, in its unbelievable complexity and the considerable size of the challenge, it is interesting that approaches towards recognising and incorporating concepts, such as sustainability, and issues, such as climate change, are still very much siloed within individual health professions (i.e., medicine and nursing). To some extent this is not surprising, given that each profession has its own curriculum. It is refreshing to observe that The PHRC can now be completed by each University as an interdisciplinary collaboration. However, as the World Health Organization (2017) noted in respect to One Health, it is an approach that “mobilizes multiple sectors, disciplines and communities at varying levels of

society to work together”. We argue the same applies to planetary health. This way, new and better ideas are developed that address root causes and create long-term, sustainable solutions. However, it has always been difficult to work across health siloes let alone intersectorally; thus, the planetary health challenge comes up against a legacy that creates a real challenge going forward. Iyer et al. (2021) noted that the foundational knowledge of public health draws from numerous academic disciplines. Public health as a discipline that works across communities and populations is well placed to take a leadership role in uniting health professions to work together in an intersectoral approach to address planetary health. This process begins with students training to be health professionals as part of their entry-level programmes.

In an interdisciplinary public health education, students from diverse backgrounds (e.g., ethnicity, age, gender, personal interests) could be encouraged to focus on topics and assessment processes according to their preferences and context (Conn et al., 2021b). This may include focusing on specific populations and their health needs in relation to aspects of the environment that may not necessarily be best understood within the four walls of a classroom. For instance, integration of planetary health into public health frameworks can stimulate broader understandings of health determinants such as how reducing air pollution can mitigate respiratory diseases while also addressing climate goals. In Aotearoa New Zealand, as with many regions of the world, public health education has been dominated by biomedical and western health system norms (Coombe et al., 2020). Greater choice to explore subjects and paradigms allows for those which have been excluded, such as Māori and Pasifika models of health and equity.

Research is a cornerstone of tertiary education and can significantly advance the field of planetary health. Universities are well-positioned to conduct interdisciplinary research that addresses complex environmental and health issues. Collaborative research initiatives that bring together experts from diverse fields—such as climate scientists, epidemiologists, and ecologists—can lead to innovative solutions and policies. Furthermore, by encouraging student involvement from these different disciplines, within research projects related to planetary health, institutions can foster innovation that both enhances learning experiences and empowers students to contribute to meaningful solutions. Engaging students in real-world problems and research can inspire them to pursue careers in fields that address planetary health challenges.

MOVING FORWARD

Currently there is a paucity of literature, particularly within the Australasian context, that specifically addresses how public health programmes within tertiary institutions are prioritising and integrating planetary health into their curricular. Visser et al. (2024) argued that research and education development with respect to planetary health in medical education needs to be conducted and reported on and would benefit from perspectives beyond those that come from the West. We contend that this statement holds true within the public health context. Building a strong public health workforce that can be leaders in championing planetary health across health professions, and perform in complex, intersectoral spaces is now, more than ever, a necessity.

Integrating planetary health into public health tertiary education is essential for addressing the complex and interconnected challenges facing the world. Yet challenges persist for planetary health educators. Despite the development of guidelines and frameworks within the medical profession, there is a lack of material and real-world examples in planetary health for existing health systems to draw on. In prioritising planetary health within public health curricular, there are opportunities to develop interdisciplinary curricula, foster research and innovation, model sustainability, engage with communities, and influence policy. In Aotearoa New Zealand, drawing on Indigenous knowledge and values can provide a holistic planetary health perspective. In taking on board these opportunities, public health programmes can play a pivotal role in educating future public health practitioners who are equipped with the skills and knowledge needed to advance planetary health, able to tackle pressing environmental and health issues, and lead efforts towards a more sustainable and equitable future. Moving forward, it is crucial that public health tertiary education continues to embrace planetary health as a fundamental component of its mission; thereby, contributing to the well-being of both people and the planet.

RECOMMENDATIONS

Engage with Planetary Health Alliance for global reach

- Tertiary institutions apply for acceptance as organisational membership of Alliance
- Academics/students become individual members of the Alliance and work with their regional hub
- Academics and students contribute to and draw on Alliance's educational resources and case studies

Activate a cross-institutional and transdisciplinary commitment to planetary health

- Tertiary institutions align their strategies, plans, indicators, and actions to planetary health
- Institutions create spaces for students to mobilise their voices and agency for planetary health
- Planetary health becomes a transdisciplinary endeavour, not relying on public health alone

Expand the strengths of public health education to incorporate planetary health

- Planetary health becomes a core and scaffolded component of public health education
- Research supports the scholarship of planetary health education

Prioritise Indigenous knowledge and engagement with local communities

- Engage with local community/industry stakeholders to scope relevant planetary health careers and graduate profiles

- Local communities, industries, and students co-design curriculum and assessments; and co-teach/co-learn within living classrooms
- Establish place-based Indigenous determinants of planetary health, through an ecocentric (not anthropocentric) lens

Maximise the possibilities of AI and other technologies to promote planetary health

- Carefully balance the benefits of rapidly-advancing AI and other technologies, with a clear understanding of the potential detrimental impacts of such technologies on people and the planet.

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