Council of Academic Public Health Institutions Australasia, Public health education for a sustainable future '*Call to Action*', 2021

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Our future, our challenge!

he leadership role of public health professionals in fields such as environmental health, health promotion, epidemiology and public health medicine has never been more critical. The multidimensional health effects of climate change and more recent disruption caused by the COVID-19 pandemic have exacerbated existing global health and education inequities and undermined progress towards the 2030 United Nations' Sustainable Development Goals (SDGs).¹ Public health educators are responsible for shaping the knowledge, skills and qualities of their graduates, and supporting professionals from all sectors to respond to the heightened complexity and urgency of the challenges society faces.² We need to do this in a dynamic environment characterised by reduced government funding, fluctuating enrolment patterns, digital transformation, the need for learners to be prepared for multiple career pathways, and a societal imperative to address both inter- and intragenerational inequity. Closing health and wellbeing outcome gaps between Indigenous and non-Indigenous communities is a prevailing public health priority across Australasia.³

This *Call to Action* is from and to public health educators across Australasia. Its purpose is to provoke critical discourse about how we collectively rise to the challenge of training a bold and adaptive workforce to catalyse action to achieve the SDGs by 2030.⁴ It calls for public health educators to embrace disruption and complexity as norms in the co-creation and delivery of public health curricula and continuing professional development that support a more sustainable and equitable future. This *Call to Action* was co-created following deliberations at the 2021 Council of Academic Public Health Institutions Australasia (CAPHIA) Learning and Teaching Forum⁵ and provides stimulus for public health educators to reflect on and explore its translation to practice. It aligns with the 2021 *Global governance for improved human, animal, and planetary health: the essential role of schools and programs of public health* statement, released by the Global Network for Academic Public Health, which highlights responsibility to train and upskill public health professionals for the future.⁶

CAPHIA public health education for a sustainable future *Call to Action*, 2021

We call on Australasian public health educators to realise the following *vision*:

To work as a community of practice to co-create public health curricula, that prepare a bold and adaptive workforce to lead public health action for a more sustainable and equitable future.

Key responsibilities of public health educators are to:

1. Equip current and future leaders, by developing and strengthening their critical and systems thinking capabilities.

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- 2. Foster employability through flexibility, by developing a bundle of key soft skills and capabilities that enable public health professionals to adapt to changing work environments.
- Model reciprocity, by establishing respectful and authentic partnerships with communities that value local Indigenous and other knowledges, perspectives and leadership.
- Empower future-focused change agents, by developing the political agency to shape policies that support an equitable and viable planetary future.

Public health curriculum priorities under the following three categories of attributes include the following:

- Knowledge—to learn from First Nations peoples' perspectives as traditional knowledge holders; engage with the SDGs as a lens to analyse and prioritise public health challenges and responses; understand the interactions between people, animals and their environments in pursuit of a sustainable planet; embrace complexity and irreducible uncertainty, and apply systems thinking to interpret and respond to public health priorities; and understand political systems and critical social theories to support strengthbased public health action.
- Skills—to develop and facilitate partnerships that support strengths-based public health action; work alongside local community leaders to co-create effective and culturally appropriate public health solutions; engage with politicians and policy processes through advocacy to drive and shape policies for improved public health outcomes; embrace and utilise current and emerging technologies to enhance data literacy, complex data and information analysis, and effective communication; and commit to a process of lifelong learning.
- Qualities—to respect First Nations peoples' knowledges and perspectives; embody cultural and intellectual humility through a greater understanding of self, biases and impacts on others; empathise with others and build authentic relationships; respond with creativity and positivity to disruptions; and live as "globosapians" (global citizens) who strive for intra- and intergenerational equity, and health for all.

Learning and teaching strategies to design and deliver robust public health curricula are as follows:

- Learning together—students, educators and professionals learning with and from one another to develop public health capabilities through fostering equality and the empowerment of communities.
- Balancing design and learn time—valuing and resourcing the construction and delivery of authentic, immersive learning experiences.
- Embedding and scaffolding curriculum priorities—systematic approach to horizontal and vertical alignment of public health curriculum priorities.
- Co-creating curriculum—valuing and including both top-down and bottom-up perspectives to deconstruct lived experiences and to contextualise and create new ways of knowing and being.
- Catering for diversity—creating accessible and inclusive learning opportunities and experiences to accommodate diverse learners.

• Facilitating responsive delivery—offering flexible modes of delivery to buffer against impacts of emergent and disruptive phenomena.

CAPHIA's role in this Call to Action'

CAPHIA is the peak organisation for universities delivering public health programs across Australasia. At its 2021 teaching and learning forum, CAPHIA prioritised the knowledge held by First Nations peoples, sustainability and innovative quality curricula within the broader theme of Public health education at a time of disruption.⁵ The forum was hosted by the University of the Sunshine Coast on the traditional lands of the Gubbi Gubbi/Kabi Kabi people. Consensus was reached that it was imperative to reflect on how all public health educators can develop the capabilities required to embed First Peoples knowledges and perspectives and the SDGs across public health curricula. Forum presentations and discussions provided the foundation for re-imagining the future roles of public health professionals, and the creative learning and teaching approaches needed to prepare graduates and professionals for these roles. A decision was made at the forum to synthesise key learnings and produce a Call to Action. The commentary below expands on the key themes that emerged from the forum, which provides further context for our Call to Action.

Commentary on forum themes

1. The work environment is not static

Preparing professionals for a dynamic public health career is more important than readiness for a specific position, which requires shifting our focus from employment to employability. This requires educators to "engage students in their cognitive and social development as capable, informed individuals, professionals and social citizens."⁷ Public health professionals require new skills to adjust to the future of their work and will spend more time re-skilling across their professional journey. Educators need to normalise "complex work" and focus on elevating "learner self-management" as an explicit skill that students learn, practice and are assessed on throughout their learning journey. To futureproof professionals to respond to labour market disruptions, learners will need to be informed, agentic and agile.⁷ Encouraging this agency through a strength-based approach and engaging learners to think about how they can be drivers of their own careers is critical. Public health educators are influenced by the heightened politicisation of public health priorities including Closing the Gap, meeting the SDGs by 2030 and preparing for the challenges of public health responses to global pandemics. Consequently, we need to engage with others in political discourse and actions to shape decisions that nurture healthy sustainable communities. Preparing current and future public health professionals to engage in the policy process as influential policy actors will require solid political science knowledge and welldeveloped advocacy skills.

2. Adaptive but robust curricula

Adaptive curricula are required to cater for the diversity of "higher education experiences" of both learners and educators. These experiences can be fragmented, characterised by changing and disrupted cohorts and learning environments,⁸ and more recently,

conflated by a series of compounding events (e.g. bushfires, floods, pandemics), global financial crises, and political and social unrest (e.g. humanitarian crises arising from conflict). To ensure robust curricula, educators must continue their focus on developing core public health attributes while refining them to incorporate emergent knowledges, skills and qualities. Curriculum design is iterative and the reflective loop between design time (what you intended to happen, what we aspire to) and learn time (things learners do and experience) is essential. Educators must juggle the sequencing of learning, invite and respond to feedback, and consider any digital impacts on learners' cognitive loads.⁸ Applying pedagogical principles that vertically and horizontally scaffold content, support social and peer interaction, and ensure the suitability, accessibility and quality of learning materials and environments, is vital. Universal learning design principles can help, by fostering an inclusive and equitable learning and teaching environment through their focus on engagement, representation, action and expression.^{8,9} Tailoring these principles to align with public health and First Nations peoples' core competencies will ensure a more robust and resilient curriculum in the face of ongoing disruption.

3. Value First Nations' knowledges and perspectives

Public health curricula that value First Nations peoples need to embody their knowledges and perspectives through a rights-based pedagogy. For too long, public health curricula have been written and revised through a colonial lens without acknowledging the role of non-Indigenous people in perpetuating intra- and intergenerational inequities. Such curricula need to be co-created and Indigenous led to safeguard and enable First Nations peoples to be protectors and provocateurs of their knowledge through genuine relationships. In this co-creation work, context is everything and requires local resonance alongside its wider relevance, so that partners are not exploited. This requires universities to allocate appropriate intellectual, financial and staffing resources, and intellectual property protections, to ensure knowledge ownership remains within communities. Co-created curricula also require an integrated approach (both top-down and bottom-up) and teaching and learning strategies that consider country/place, culture and people, and Indigenous knowledge-sharing practices such as storytelling and experiential learning to embed Indigenous ways of learning.

Public health educators must practice and promote cultural humility,¹⁰ and recognise the sovereignty of First Nations peoples' knowledges and perspectives, so that learning and teaching about First Nations peoples' health and wellbeing becomes core business. Educators need to be confident in the truth telling of Indigenous histories, ensure cultural safety and acknowledge the strength and resilience of Indigenous peoples and cultures.¹¹ We must also reorient deficit discourse about communities, replacing stigmatising terms such as "vulnerable" and "marginalised" with respectful terms such as "priority communities.¹² Adopting health and wellbeing models that embody First Nations' knowledges and perspectives, and the attributes of complex systems will help to normalise their use in professional practice.¹³

4. SDGs validate and elevate core public health principles

The COVID-19 pandemic has had a significant impact on the prospect of achieving SDG targets by 2030. At the start of 2023, many SDG

targets seem further away than ever, particularly those underpinning climate change action (SDG 13).¹⁴ Given the close alignment between the SDGs, the ecological public health paradigm, and Indigenous knowledges and perspectives, there is a clear mandate for public health educators to push this agenda more vigorously. The integrated framework for SDGs, referred to as the "Wedding Cake," is particularly useful as it allocates each of the 17 SDGs to one of three nested, prioritised layers-with the top, smallest layer representing the "Economy" (SDG 8,9,10,12); the middle layer "Society" (SDG 1,2,3,4,7,11,16); and the largest bottom layer the "Biosphere" (SDG 6,13,14,15). Public health educators must train professionals to identify and respond to health issues at the local level by considering impacts on people, places and the planet. Learning and teaching resources about the SDGs are available. However, they need to be tailored to public health education, in order to foster mainstreaming their implementation, and to ensure both graduates and professionals have the agency to address the SDGs. Professionals also need to be trained in systems ways of thinking and working, ensuring they have the capability and skills to engage with and work across sectors with multiple partners, recognising that public health does not have all the answers and solutions will be found through this collaboration (SDG 17). While public health professionals need a global mindset, local contextualisation is essential. We need to be willing to share our expertise and recognise that experts include those with lived experience in their own communities. The best outcomes can be achieved through harnessing the richness of the lived experience, wisdom, strengths and leadership within communities.

We recommend the establishment of a *Public Health Educators Community of Practice* to enact this *Call to Action*. Participants from **all** CAPHIA Institutions, from **all** public health disciplines and across **all** academic levels will be needed for this *Call to Action* to have impact.

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Conflicts of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Appendix A Supplementary data

Supplementary data to this article can be found online at https://doi. org/10.1016/j.anzjph.2023.100042.